



národní  
úložiště  
šedé  
literatury

**Soupis publikovaných prací paní RNDr. Věry Kůrkové, DrSc. zpracovaný v listopadu 2013 knihovnou Ústavu informatiky AV ČR, v. v. i. k příležitosti životního jubilea autorky**

Nývltová, Ludmila  
2013

Dostupný z <http://www.nusl.cz/ntk/nusl-166138>

Dílo je chráněno podle autorského zákona č. 121/2000 Sb.

Tento dokument byl stažen z Národního úložiště šedé literatury (NUŠL).

Datum stažení: 11.07.2024

Další dokumenty můžete najít prostřednictvím vyhledávacího rozhraní [nusl.cz](http://nusl.cz) .



**Institute of Computer Science**  
**Academy of Sciences of the Czech Republic**

## **Soupis publikovaných prací paní RNDr. Věry Kůrkové, DrSc.**

zpracovaný v listopadu 2013  
knihovnou Ústavu informatiky AV ČR, v. v. i.  
k příležitosti životního jubilea autorky

Technical report No. 1190

Listopad 2013

## Obsah

Soupis publikovaných prací .....	1
Soupis citovaných prací .....	27
Soupis nejvíce citovaných prací .....	66
Rejstřík spoluautorů .....	67
Seznam časopisů .....	68
Bibliografie v číslech .....	69
Klíčová slova .....	70
WOS v číslech .....	71
WOS vizualizace .....	72
WOS citační mapa .....	74
SCOPUS v číslech .....	75
SCOPUS vizualizace .....	76
MathSciNet .....	77
Zentralblatt .....	78
DBLP .....	79
Použité zdroje .....	80

## Soupis publikovaných prací tříděný podle roku, typu dokumentu a názvu

### 186. Kůrková, Věra

Accuracy of surrogate solutions of integral equations by feedforward networks.  
*Issues and Challenges of Intelligent Systems and Computational Intelligence*. Berlin : Springer, 2014 - (Kóczy, L.; Pozna, C.; Kacprzyk, J.), in print. ISBN 978-3-319-03205-4. - (Studies in Computational Intelligence. 530)

## 2013

### 185. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.

Approximating Multivariable Functions by Feedforward Neural Nets.  
*Handbook on Neural Information Processing*. Berlin : Springer, 2013 - (Bianchini, M.; Maggini, M.; Jain, L.), s. 143-181. ISBN 978-3-642-36656-7. - (Intelligent Systems Reference Library. 49)  
[DOI: 10.1007/978-3-642-36657-4\\_5](https://doi.org/10.1007/978-3-642-36657-4_5)

### 184. Kůrková, Věra - Sanguineti, M.

Can Two Hidden Layers Make a Difference?  
*Adaptive and Natural Computing Algorithms*. Berlin : Springer, 2013 - (Tomassini, M.; Antonioni, A.; Daolio, F.; Buesser, P.), s. 30-39. ISBN 978-3-642-37212-4. ISSN 0302-9743. - (Lecture Notes in Computer Science. 7824).  
 [ICANNGA'2013 /11./. Lausanne (PT), 04.04.2013-06.04.2013]  
[DOI: 10.1007/978-3-642-37213-1\\_4](https://doi.org/10.1007/978-3-642-37213-1_4)  
<http://hdl.handle.net/11104/0220361>

### 183. Kůrková, Věra

Capabilities of Radial and Kernel Networks.  
*MENDEL 2013*. Brno : University of Technology, 2013 - (Matoušek, R.), s. 233-238  
 [MENDEL 2013. International Conference on Soft Computing /19./. Brno (CZ), 26.06.2013-28.06.2013]

### 182. Kůrková, Věra

Gaussian Radial and Kernel Networks with Varying and Fixed Widths.  
*SOFSEM 2013: Theory and Practice of Computer Science. Vol. II*. Prague : Institute of Computer Science AS CR, 2013 - (van Emde Boas, P.; Groen, F.; Italiano, G.; Nawrocki, J.; Sack, H.), s. 95-102. ISBN 978-80-87136-15-7.  
 [SOFSEM 2013. Conference on Current Trends in Theory and Practice of Computer Science /39./. Špindlerův Mlýn (CZ), 26.01.2013-31.01.2013]

### 181. Kůrková, Věra

Representations of highly-varying functions by perceptron networks.  
*ITAT 2013: Information Technologies - Applications and Theory Workshops, Posters, and Tutorials*. CreateSpace Independent Publishing Platform, 2013 - (Vinař, T.; Holeňa, M.; Lexa, M.; Peška, L.; Vojtáš, P.), s. 73-76. ISBN 978-1490952086.  
 [ITAT 2013. Conference on Theory and Practice of Information Technologies. Donovaly (SK), 11.09.2013-15.09.2013]

### 180. Kůrková, Věra

Tractability of representations of highly-varying functions by shallow networks.  
 Prague : ICS AS CR, 2013. - (Technical Report, V-1187)

## 2012

**179. Gnecco, G. - Kůrková, Věra - Sanguineti, M.**

Accuracy of approximations of solutions to Fredholm equations by kernel methods.  
*Applied Mathematics and Computation*. Roč. 218, č. 14 (2012), s. 7481-7497. ISSN 0096-3003  
 Impakt faktor: 1.349, rok: 2012  
[DOI: 10.1016/j.amc.2012.01.015](https://doi.org/10.1016/j.amc.2012.01.015)  
<http://hdl.handle.net/11104/0206253>

**178. Kůrková, Věra**

Complexity estimates based on integral transforms induced by computational units.  
*Neural Networks*. Roč. 33, September (2012), s. 160-167. ISSN 0893-6080  
 Impakt faktor: 1.927, rok: 2012  
[DOI: 10.1016/j.neunet.2012.05.002](https://doi.org/10.1016/j.neunet.2012.05.002)  
<http://hdl.handle.net/11104/0209360>

**177. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**

Dependence of Computational Models on Input Dimension: Tractability of Approximation and Optimization Tasks.  
*IEEE Transactions on Information Theory*. Roč. 58, č. 2 (2012), s. 1203-1214. ISSN 0018-9448  
 Impakt faktor: 2.621, rok: 2012  
[DOI: 10.1109/TIT.2011.2169531](https://doi.org/10.1109/TIT.2011.2169531)  
<http://hdl.handle.net/11104/0202846>

**176. Kůrková, Věra**

Guest editorial: Adaptive and natural computing algorithms.  
*Neurocomputing*. Roč. 96, - (2012), s. 1-1. ISSN 0925-2312  
 Impakt faktor: 1.634, rok: 2012  
[DOI: 10.1016/j.neucom.2012.03.009](https://doi.org/10.1016/j.neucom.2012.03.009)  
<http://hdl.handle.net/11104/0209202>

**175. Kůrková, Věra**

Accuracy Estimates for Surrogate Solutions of Integral Equations by Neural Networks.  
*SOFSEM 2012: Theory and Practice of Computer Science. Vol. II*. Prague : Institute of Computer Science AS CR, 2012 - (Bieliková, M.; Friedrich, G.; Gottlob, G.; Katzenbeisser, S.; Špánek, R.; Turán, G.), s. 95-102. ISBN 978-80-87136-13-3.  
 [SOFSEM 2012. Conference on Current Trends in Theory and Practice of Computer Science /38./ Špindlerův Mlýn (CZ), 21.01.2012-27.01.2012]

**174. Kůrková, Věra**

Learning from Data as an Optimization and Inverse Problem.  
*Computational Intelligence*. Heidelberg : Springer, 2012 - (Madani, K.; Correia, A.; Rosa, A.; Filipe, J.), s. 361-372. ISBN 978-3-642-27533-3. ISSN 1860-949X. - (Studies in Computational Intelligence. 399). [IJCCI 2010. International Joint Conference on Computational Intelligence. Valencia (ES), 24.10.2010-26.10.2010]  
[DOI: 10.1007/978-3-642-27534-0\\_24](https://doi.org/10.1007/978-3-642-27534-0_24)

**173. Kůrková, Věra**

Model Complexity of Neural Networks in High-Dimensional Approximation.  
*Recent Advances in Intelligent Engineering Systems*. Berlin : Springer, 2012 - (Fodor, S.; Klempous, J.; Suárez Araujo, C.), s. 151-160. ISBN 978-3-642-23228-2. ISSN 1860-949X. - (Studies in Computational Intelligence. 378).  
[DOI: 10.1007/978-3-642-23229-9\\_7](https://doi.org/10.1007/978-3-642-23229-9_7)

**172. Kůrková, Věra**

Some Comparisons of Networks with Radial and Kernel Units.

*Artificial Neural Networks and Machine Learning – ICANN 2012*. Berlin : Springer, 2012 - (Villa, A.; Duch, W.; Érdi, P.; Masulli, F.; Palm, G.), s. 17-24. ISBN 978-3-642-33265-4. ISSN 0302-9743. - (Lecture Notes in Computer Science. 7553).

[ICANN 2012. International Conference on Artificial Neural Networks /22./. Lausanne (CH), 11.09.2012-14.09.2012]

 DOI: [10.1007/978-3-642-33266-1\\_3](https://doi.org/10.1007/978-3-642-33266-1_3)

<http://hdl.handle.net/11104/0210297>

**171. Kůrková, Věra**

Surrogate Modelling of Solutions of Integral Equations by Neural Networks.

*Artificial Intelligence Applications and Innovations*. Heidelberg : Springer, 2012 - (Iliadis, L.; Maglogiannis, I.; Papadopoulos, H.), s. 88-96. ISBN 978-3-642-33408-5. ISSN 1868-4238. - (IFIP Advances in Information and Communication Technology. 381).

[AIAI 2012. IFIP WG 12.5 International Conference /8./. Halkidiki (GR), 27.09.2012-30.09.2012]

 DOI: [10.1007/978-3-642-33409-2\\_10](https://doi.org/10.1007/978-3-642-33409-2_10)

<http://hdl.handle.net/11104/0210655>

**170. Kůrková, Věra**

Surrogate solutions of Fredholm equations by feedforward networks.

*Information Technologies - Applications and Theory*. Seňa : PONT s.r.o., 2012 - (Horváth, T.), s. 49-54. ISBN 978-80-971144-0-4.

[ITAT 2012. Conference on Theory and Practice of Information Technologies. Ždiar (SK), 17.09.2012-21.09.2012]

 <http://ceur-ws.org/Vol-990/paper8.pdf>

<http://hdl.handle.net/11104/0007335>

**169. Kůrková, Věra**

Some Comparison of Capabilities of Radial and Kernel Networks.

*Workshop on Computational Intelligence*. Budapest, 2012, s. 15-15.

[Workshop on Computational Intelligence in Honor of László T. Kóczy on his 60th Birthday. 22.11.2012, Budapest]

**168. Kůrková, Věra**

Surrogate Solutions of Inverse Problems Defined by Fredholm Equations.

*Abstracts of the 6th International Conference "Inverse Problems: Modeling and Simulation"*. Izmir : Izmir University, 2012 - (Hasanoglu, A.; Dulikravich, G.; Kabanikhin, S.), s. 57-58

**167. Kůrková, Věra - Kainen, P.C.**

Fixed and Variable-Width Gaussian Networks.

Prague : ICS AS CR, 2012. 5 s. - (Technical Report, v-1174)

<http://hdl.handle.net/11104/0222357>

## 2011

**166. Gnecco, G. - Kůrková, Věra - Sanguineti, M.**

Can Dictionary-based Computational Models Outperform the Best Linear Ones?

*Neural Networks*. Roč. 24, č. 8 (2011), s. 881-887. ISSN 0893-6080

Impakt faktor: 2.182, rok: 2011

 DOI: [10.1016/j.neunet.2011.05.014](https://doi.org/10.1016/j.neunet.2011.05.014)

<http://hdl.handle.net/11104/0197874>

- 165. Gnecco, G. - Kůrková, Věra - Sanguineti, M.**  
 Some Comparisons of Complexity in Dictionary-Based and Linear Computational Models.  
*Neural Networks*. Roč. 24, č. 2 (2011), s. 171-182. ISSN 0893-6080  
 Impakt faktor: 2.182, rok: 2011  
[DOI: 10.1016/j.neunet.2010.10.002](https://doi.org/10.1016/j.neunet.2010.10.002)  
<http://hdl.handle.net/11104/0190434>
- 164. Gnecco, G. - Kůrková, Věra - Sanguineti, M.**  
 Bounds for Approximate Solutions of Fredholm Integral Equations Using Kernel Networks.  
*Artificial Neural Networks and Machine Learning - ICANN 2011. Part I*. Berlin : Springer, 2011 -  
 (Honkela, T.; Duch, W.; Girolami, M.; Kaski, S.), s. 126-133. ISBN 978-3-642-21734-0. ISSN 0302-9743.  
 - (Lecture Notes in Computer Science. 6791).  
 [ICANN 2011. International Conference on Artificial Neural Networks /21./. Espoo (FI), 14.07.2011-  
 17.07.2011]  
[DOI: 10.1007/978-3-642-21735-7\\_16](https://doi.org/10.1007/978-3-642-21735-7_16)  
<http://hdl.handle.net/11104/0197284>
- 163. Kůrková, Věra - Kainen, P.C.**  
 Kernel Networks with Fixed and Variable Widths.  
*Adaptive and Natural Computing Algorithms. Part I*. Heidelberg : Springer, 2011 - (Dobnikar, A.;  
 Lotrič, U.; Šter, B.), s. 12-21. ISBN 978-3-642-20281-0. ISSN 0302-9743. - (Lecture Notes in Computer  
 Science. 6593).  
 [ICANN'2011. International Conference /10./. Ljubljana (SI), 14.04.2011-16.04.2011]  
[DOI: 10.1007/978-3-642-20282-7\\_2](https://doi.org/10.1007/978-3-642-20282-7_2)  
<http://hdl.handle.net/11104/0195612>
- 162. Kůrková, Věra**  
 Some Comparisons of Radial and Kernel Computational Models.  
*Informačné technológie - aplikácie a teória*. Seňa : PONT s.r.o., 2011 - (Lopatková, M.), s. 11-16.  
 ISBN 978-80-89557-01-1.  
 [ITAT 2011. Conference on Theory and Practice of Information Technologies. Ždiar (SK), 17.09.2011-  
 21.09.2011]

## 2010

- 161. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Integral Combinations of Heavisides.  
*Mathematische Nachrichten*. Roč. 283, č. 6 (2010), s. 854-878. ISSN 0025-584X  
 Impakt faktor: 0.653, rok: 2010  
[DOI: 10.1002/mana.200710029](https://doi.org/10.1002/mana.200710029)  
<http://hdl.handle.net/11104/0136577>
- 160. Kůrková, Věra**  
 Comparison of Approximation Capabilities of Neural Networks and Linear Models.  
*Informačné Technológie - Aplikácie a Teória*. Seňa : Pont, 2010 - (Pardubská, D.), s. 31-36.  
 ISBN 978-80-970179-3-4.  
 [ITAT 2010. Conference on Theory and Practice of Information Technologies. Smrekovica (SK),  
 21.09.2010-25.09.2010]

- 159. Kůrková, Věra**  
 Inverse Problems in Learning from Data.  
*ICNC 2010. Proceedings of the International Conference on Neural Computation*. Setúbal : SciTePress, 2010 - (Filipe, J.; Kacprzyk, J.), s. 316-321. ISBN 978-989-8425-32-4.  
 [ICNC 2010. International Conference on Neural Computation. Valencia (ES), 24.08.2010-26.08.2010]
- 158. Gnecco, G. - Kůrková, Věra - Sanguineti, M.**  
 Some Comparisons of Model Complexity in Linear and Neural-Network Approximation.  
*Artificial Neural Networks – ICANN 2010*. Berlin : Springer, 2010 - (Diamantaras, K.; Duch, W.; Iliadis, L.), s. 358-367. ISBN 978-3-642-15824-7. ISSN 0302-9743. - (Lecture Notes in Computer Science. 6354).  
 [ICANN 2010. International Conference on Artificial Neural Networks /20./. Thessaloniki (GR), 15.09.2010-18.09.2010]  
[DOI: 10.1007/978-3-642-15825-4\\_48](https://doi.org/10.1007/978-3-642-15825-4_48)  
<http://hdl.handle.net/11104/0187103>
- 157. Kůrková, Věra - Neruda, Roman - Koutník, J. (eds.)**  
 The 18th International Conference on Artificial Neural Networks, ICANN 2008.  
*Neural Networks*. Roč. 23, č. 4 (2010), s. 465-582. ISSN 0893-6080.  
 [ICANN 2008. International Conference on Artificial Neural Networks /18./. Prague (CZ), 03.09.2008-06.09.2008]  
<http://www.sciencedirect.com/science/journal/08936080/23/4>
- 156. Kůrková, Věra**  
 Integral Transforms Induced by Computational Units.  
*ICAFS 2010*. Baku, 2010, s. 15-15.  
 [ICAFS 2010. International Conference on Application of Fuzzy Systems and Soft Computing /9./. 26.08.2010-27.08.2010, Prague]
- 155. Kůrková, Věra**  
 Integral Transforms Induced by Computational Units.  
*Inverse Problems in Data Driven Modelling*. Linz : RICAM, 2010. nestr.  
 [Mini Special Semester on Inverse problems. 20.07.2010-22.07.2010, Linz]
- 154. Kůrková, Věra**  
 Learning as an Inverse Problem in Reproducing Kernel Hilbert Spaces.  
*Abstracts of the 5th International Conference "Inverse Problems: Modeling and Simulation"*. Izmir : Izmir University, 2010 - (Hasanov, A.; Hofmann, B.; Kabanikhin, S.), s. 9-10. ISBN 978-605-88696-0-8.  
 [Inverse Problems: Modeling and Simulation. International Conference /5./. 24.05.2010-29.05.2010, Antalya]
- 153. Kůrková, Věra**  
 Learning as an Inverse Problem in Reproducing Kernel Hilbert Spaces.  
 Prague : ICS AS CR, 2010. 17 s. - (Technical Report, V-1094)  
<http://hdl.handle.net/11104/0190458>



## 2009

- 152. Kůrková, Věra**  
 Estimates of Model Complexity in Neural-Network Learning.  
*Innovations in Neural Information Paradigms and Applications*. Berlin : Springer, 2009 -  
 (Bianchini, M.; Maggini, M.; Scarselli, F.; Jain, L.), s. 97-111. ISBN 978-3-642-04002-3. - (Studies in  
 Computational Intelligence. 247)  
[DOI: 10.1007/978-3-642-04003-0\\_5](https://doi.org/10.1007/978-3-642-04003-0_5)  
<http://hdl.handle.net/11104/0174795>
- 151. Kainen, P.C. - Kůrková, Věra**  
 An Integral Upper Bound for Neural Network Approximation.  
*Neural Computation*. Roč. 21, č. 10 (2009), s. 2970-2989. ISSN 0899-7667  
 Impakt faktor: 2.175, rok: 2009  
[DOI: 10.1162/neco.2009.04-08-745](https://doi.org/10.1162/neco.2009.04-08-745)  
<http://hdl.handle.net/11104/0174736>
- 150. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**  
 Complexity of Gaussian-Radial-Basis Networks Approximating Smooth Functions.  
*Journal of Complexity*. Roč. 25, č. 1 (2009), s. 63-74. ISSN 0885-064X  
 Impakt faktor: 1.227, rok: 2009  
[DOI: 10.1016/j.jco.2008.08.001](https://doi.org/10.1016/j.jco.2008.08.001)  
<http://hdl.handle.net/11104/0165396>
- 149. Kůrková, Věra**  
 Model Complexity of Neural Networks and Integral Transforms.  
*Artificial Neural Networks - ICANN 2009*. Berlin : Springer, 2009 - (Alippi, C.; Polycarpou, M.;  
 Panayiotou, C.; Ellinas, G.), s. 708-717. ISBN 978-3-642-04273-7. - (Lecture Notes in Computer  
 Science. 5768).  
 [ICANN 2009. International Conference on Artificial Neural Networks /19./. Limassol (CY),  
 14.09.2009-17.09.2009]  
[DOI: 10.1007/978-3-642-04274-4\\_73](https://doi.org/10.1007/978-3-642-04274-4_73)  
<http://hdl.handle.net/11104/0174737>
- 148. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**  
 On Tractability of Neural-Network Approximation.  
*Adaptive and Natural Computing Algorithms*. Berlin : Springer, 2009 - (Kolehmainen, M.; Toivanen,  
 P.; Beliczynski, B.), s. 11-21. ISBN 978-3-642-04920-0. - (Lecture Notes in Computer Science. 5495).  
 [ICANN'2009. International conference /9./. Kuopio (FI), 23.04.2009-25.04.2009]  
[DOI: 10.1007/978-3-642-04921-7\\_2](https://doi.org/10.1007/978-3-642-04921-7_2)  
<http://hdl.handle.net/11104/0173683>
- 147. Kůrková, Věra**  
 Tractability of Approximation by Connectionistic Models.  
*Informačné technológie - Aplikácie a teória*. Seňa : Pont, 2009 - (Vojtáš, P.), s. 105-106.  
 ISBN 978-80-970179-1-0.  
 [ITAT 2009. Conference on Theory and Practice of Information Theory. 25.09.2009-29.09.2009,  
 Kráľova studňa]

## 2008

**146. Kůrková, Věra - Sanguineti, M.**

Approximate Minimization of the Regularized Expected Error over Kernel Models.  
*Mathematics of Operations Research*. Roč. 33, č. 3 (2008), s. 747-756. ISSN 0364-765X  
 Impakt faktor: 1.086, rok: 2008  
[DOI: 10.1287/moor.1080.0317](https://doi.org/10.1287/moor.1080.0317)  
<http://hdl.handle.net/11104/0136579>

**145. Kůrková, Věra - Sanguineti, M.**

Geometric Upper Bounds on Rates of Variable-Basis Approximation.  
*IEEE Transactions on Information Theory*. Roč. 54, č. 12 (2008), s. 5681-5688. ISSN 0018-9448  
 Impakt faktor: 3.793, rok: 2008  
[DOI: 10.1109/TIT.2008.2006383](https://doi.org/10.1109/TIT.2008.2006383)  
<http://hdl.handle.net/11104/0166141>

**144. Kůrková, Věra**

Minimization of Error Functionals over Perceptron Networks.  
*Neural Computation*. Roč. 20, č. 1 (2008), s. 252-270. ISSN 0899-7667  
 Impakt faktor: 2.378, rok: 2008  
[DOI: 10.1162/neco.2008.20.1.252](https://doi.org/10.1162/neco.2008.20.1.252)  
<http://hdl.handle.net/11104/0136054>

**143. Kainen, P.C. - Kůrková, Věra**

Estimates of Network Complexity and Integral Representations.  
*Artificial Neural Networks - ICANN 2008*. Berlin : Springer, 2008 - (Kůrková, V.; Neruda, R.; Koutník, J.), s. 31-40. ISBN 978-3-540-87535-2. - (Lecture Notes in Computer Science. 5163).  
 [ICANN 2008. International Conference on Artificial Neural Networks /18./. Prague (CZ), 03.09.2008-06.09.2008]  
[DOI: 10.1007/978-3-540-87536-9\\_4](https://doi.org/10.1007/978-3-540-87536-9_4)  
<http://hdl.handle.net/11104/0162939>

**142. Kůrková, Věra - Sanguineti, M.**

Geometric Rates of Approximation by Neural Networks.  
*SOFSEM 2008. Theory and Practice of Computer Science. Vol. II*. Berlin : Springer, 2008 - (Geffert, V.; Karhumäki, J.; Bertoni, A.; Preneel, P.; Návrat, P.; Bieliková, M.), s. 541-550. ISBN 978-3-540-77565-2. - (Lecture Notes in Computer Science. 4910).  
 [SOFSEM 2008. Conference on Current Trends in Theory and Practice of Computer Science /34./. Nový Smokovec (SK), 19.01.2008-25.01.2008]  
[DOI: 10.1007/978-3-540-77566-9\\_47](https://doi.org/10.1007/978-3-540-77566-9_47)  
<http://hdl.handle.net/11104/0150147>

**141. Kůrková, Věra**

Integral Representations in the Form of Neural Networks with Infinitely Many Units.  
*Informačné technológie - Aplikácie a teória*. Košice : Prírodovedecká fakulta, Univerzita P.J. Šafárika, 2008 - (Vojtáš, P.), s. 63-66. ISBN 978-80-969184-8-5.  
 [ITAT 2008. Conference on Theory and Practice of Information Theory. Hrebienok (SK), 22.09.2008-26.09.2008]

- 140. Kůrková, Věra**  
 Model Complexity in Learning from High-Dimensional Data.  
*SOFSEM 2009: Theory and Practice of Computer Science*. Prague : Matfyzpress, 2008 - (Bieliková, M.; Nielsen, M.; Kučera, A.; Miltersen, P.; Palamidessi, C.; Tůma, P.; Valencia, F.), s. 121-124. ISBN 978-80-7378-059-3.  
 [SOFSEM 2009. Conference on Current Trends in Theory and Practice of Computer Science /35./ Špindlerův Mlýn (CZ), 24.01.2009-30.01.2009]
- 139. Kůrková, Věra - Neruda, Roman - Koutník, J. (eds.)**  
 Artificial Neural Networks - ICANN 2008. Part I.  
 Berlin : Springer, 2008. 1026 s. (Lecture Notes in Computer Science, 5163). ISBN 978-3-540-87535-2.  
 [ICANN 2008. International Conference on Artificial Neural Networks /18./ Prague (CZ), 03.09.2008-06.09.2008]  
[DOI: 10.1007/978-3-540-87536-9](https://doi.org/10.1007/978-3-540-87536-9)
- 138. Kůrková, Věra - Neruda, Roman - Koutník, J. (eds.)**  
 Artificial Neural Networks - ICANN 2008. Part II.  
 Berlin : Springer, 2008. 986 s. (Lecture Notes in Computer Science, 5164). ISBN 978-3-540-87558-1.  
 [ICANN 2008. International Conference on Artificial Neural Networks /18./ Prague (CZ), 03.09.2008-06.09.2008]  
[DOI: 10.1007/978-3-540-87559-8](https://doi.org/10.1007/978-3-540-87559-8)
- 137. Kůrková, Věra**  
 Integral Transforms Induced by Neural Networks.  
*Proceedings of 9th International Symposium of Hungarian Researchers on Computational Intelligence and Informatics*. Budapest : Budapest Tech, 2008, s. 37-37. ISBN 978-963-7154-82-9.  
 [CINTI 2008. International Symposium of Hungarian Researchers on Computational Intelligence and Informatics /9./ 06.11.2008-08.11.2008, Budapest]
- 136. Kainen, P.C. - Kůrková, Věra**  
 An integral upper bound for neural-network approximation.  
 Prague : ICS AS CR, 2008. 14 s. - (Technical Report, V-1023)  
<http://hdl.handle.net/11104/0167341>

## 2007

- 135. Kůrková, Věra**  
 Generalization in Learning from Examples.  
*Challenges for Computational Intelligence*. Berlin : Springer, 2007 - (Duch, W.; Mandziuk, J.), s. 343-363. ISBN 978-3-540-71983-0. - (Studies in Computational Intelligence. 63)  
[DOI: 10.1007/978-3-540-71984-7\\_13](https://doi.org/10.1007/978-3-540-71984-7_13)
- 134. Kůrková, Věra**  
 Učení neuronových sítí se schopností generalizace.  
 [Neural Network Learning with Generalization Capability.]  
*Myseľ, inteligencia a život*. Bratislava : Slovenská technická univerzita, 2007 - (Kvasnička, V.; Trebatický, P.; Pospíchal, J.; Kelemen, J.), s. 275-286. ISBN 978-80-227-2643-6

**133. Kainen, P.C. - Kůrková, Věra - Vogt, A.**

A Sobolev-Type Upper Bound for Rates of Approximation by Linear Combinations of Heaviside Plane Waves.

*Journal of Approximation Theory*. Roč. 147, č. 1 (2007), s. 1-10. ISSN 0021-9045

Impakt faktor: 0.697, rok: 2007

[DOI: 10.1016/j.jat.2006.12.009](https://doi.org/10.1016/j.jat.2006.12.009)

<http://hdl.handle.net/11104/0136063>

**132. Kůrková, Věra - Sanguineti, M.**

Estimates of Covering Numbers of Convex Sets with Slowly Decaying Orthogonal Subsets.

*Discrete Applied Mathematics*. Roč. 155, č. 15 (2007), s. 1930-1942. ISSN 0166-218X

Impakt faktor: 0.625, rok: 2007

[DOI: 10.1016/j.dam.2007.04.007](https://doi.org/10.1016/j.dam.2007.04.007)

<http://hdl.handle.net/11104/0136055>

**131. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**

Estimates of Approximation Rates by Gaussian Radial-Basis Functions.

*Adaptive and Natural Computing Algorithms*. Berlin : Springer, 2007 - (Beliczynski, B.; Dzieliński, A.; Iwanowski, M.; Ribeiro, B.), s. 11-18. ISBN 978-3-540-71590-0. - (Lecture Notes in Computer Science. 4432).

[ICANN'GA'2007 /8./. Warsaw (PL), 11.04.2007-14.04.2007]

[DOI: 10.1007/978-3-540-71629-7\\_2](https://doi.org/10.1007/978-3-540-71629-7_2)

<http://hdl.handle.net/11104/0183298>

**130. Kůrková, Věra**

Estimates of Data Complexity in Neural-Network Learning.

*SOFSEM 2007: Theory and Practice of Computer Science*. Berlin : Springer, 2007 - (van Leeuwen, J.; Italiano, G.; van der Hoek, W.; Meinel, C.; Sack, H.; Plášil, F.), s. 377-387. ISBN 978-3-540-69506-6. - (Lecture Notes in Computer Science. 4362).

[SOFSEM 2007. Conference on Current Trends in Theory and Practice of Computer Science /33./. Harrachov (CZ), 20.01.2007-26.01.2007]

[DOI: 10.1007/978-3-540-69507-3\\_32](https://doi.org/10.1007/978-3-540-69507-3_32)

<http://hdl.handle.net/11104/0183315>

**129. Kůrková, Věra**

Complexity of Data with Respect to a Type of Neural-Network Computational Units.

*AIRO 2007*. Genova : University of Genova, 2007, s. 29-29. ISBN 978-88-7544-110-4.

[AIRO 2007. Annual Conference of the Italian Operational Research Society /38./. 05.09.2007-08.09.2007, Genova]

**128. Kůrková, Věra**

Complexity of Training Data in Neural-Network Learning.

*Informačné technológie - Aplikácie a Teória*. Seňa : PONT, 2007 - (Vojtáš, P.), s. 31-32.

ISBN 978-80-969184-6-1.

[ITAT 2007. Conference on Theory and Practice of Information Theory. 21.09.2007-27.09.2007, Poľana]

## 2006





**127. Kůrková, Věra**

Inverse Problems in Data Analysis.

*Przeglad Elektrotechniczny*. Roč. 82, č. 4 (2006), s. 41-48. ISSN 0033-2097

- 126. Kůrková, Věra**  
 Inverse Problems in Learning from Data.  
*Information Technologies - Applications and Theory*. Košice : Přírodovědecká fakulta, Univerzita P. J. Šafárika, 2006 - (Vojtáš, P.), s. 3-8. ISBN 80-969184-4-3.  
 [ITAT 2006. Workshop on Theory and Practice of Information Theory. Bystrá dolina (SK), 26.09.2006-01.10.2006]
- 125. Kůrková, Věra**  
 Matematické modelování generalizace.  
 [Mathematical Modelling of Generalization.]  
*Kognice a umělý život*. Opava : Slezská univerzita, 2006 - (Kelemen, J.; Kvasnička, V.), s. 229-232. ISBN 80-7248-355-2.  
 [Kognice a umělý život /6./ Třešť (CZ), 28.05.2006-01.06.2006]
- 124. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Integral Combinations of Heavisides.  
 Prague : ICS AS CR, 2006. 26 s. - (Technical Report, V-968)  
<http://hdl.handle.net/11104/0132973>
- 123. Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**  
 Rates of Approximation of Smooth Functions by Gaussian Radial-Basis Networks.  
 Prague : ICS AS CR, 2006. 10 s. - (Technical Report, V-976)  
<http://hdl.handle.net/11104/0145254>

## 2005


- 122. Kůrková, Věra - Sanguinetti, M.**  
 Error Estimates for Approximate Optimization by the Extended Ritz Method.  
*SIAM Journal on Optimization*. Roč. 15, č. 2 (2005), s. 461-487. ISSN 1052-6234  
 Impakt faktor: 1.238, rok: 2005  
 DOI: [10.1137/S1052623403426507](https://doi.org/10.1137/S1052623403426507)  
<http://hdl.handle.net/11104/0125220>
- 121. Kůrková, Věra - Sanguinetti, M.**  
 Learning with Generalization Capability by Kernel Methods of Bounded Complexity.  
*Journal of Complexity*. Roč. 21, č. 3 (2005), s. 350-367. ISSN 0885-064X  
 Impakt faktor: 1.186, rok: 2005  
 DOI: [10.1016/j.jco.2004.11.002](https://doi.org/10.1016/j.jco.2004.11.002)  
<http://hdl.handle.net/11104/0125406>
- 120. Kůrková, Věra**  
 Neural Network Learning as an Inverse Problem.  
*Logic Journal of the IGPL*. Roč. 13, č. 5 (2005), s. 551-559. ISSN 1367-0751  
 Impakt faktor: 0.382, rok: 2005  
 DOI: [10.1093/jigpal/jzi041](https://doi.org/10.1093/jigpal/jzi041)  
<http://hdl.handle.net/11104/0125645>
- 119. Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**  
 Rates of Minimization of Error Functionals over Boolean Variable-Basis Functions.  
*Journal of Mathematical Modelling and Algorithms*. Roč. 4, č. 4 (2005), s. 355-368. ISSN 1570-1166  
 DOI: [10.1007/s10852-005-1625-z](https://doi.org/10.1007/s10852-005-1625-z)  
<http://hdl.handle.net/11104/0125053>

**118. Kůrková, Věra**

Minimization of Empirical Error over Perceptron Networks.

*Adaptive and Natural Computing Algorithms*. Wien : Springer-Verlag, 2005 - (Ribiero, B.; Albrecht, R.; Dobnikar, A.; Pearson, D.; Steele, N.), s. 46-49. ISBN 3-211-24934-6.

[ICANN'2005 /7./. Coimbra (PT), 21.03.2005-23.03.2005]

 DOI: [10.1007/3-211-27389-1\\_12](https://doi.org/10.1007/3-211-27389-1_12)

<http://hdl.handle.net/11104/0125610>

**117. Kůrková, Věra**

Strojové učení se schopností generalizace.

[Machine Learning with Generalization Capability.]

*Kognice a umělý život*. Ostrava : Slezská univerzita, 2005 - (Kelemen, J.; Kvasnička, V.; Pospíchal, J.), s. 293-298. ISBN 80-7248-310-2.

[Kognice a umělý život /5./. Smolenice (SK), 30.05.2005-02.06.2005]

**116. Kůrková, Věra**

Aproximace vysokodimenzionálních dat pomocí perceptronových sítí.

[Approximation of High-Dimensional Data by Perceptron Networks.]

*ITAT 2005. Information Technologies - Applications and Theory*. Košice : Přírodovědecká fakulta, Univerzita P. J. Šafárika, 2005 - (Vojtáš, P.), s. 303-304. ISBN 80-7097-609-8.

[ITAT 2005. 20.09.2005-25.09.2005, Račkova dolina]

**115. Sanguineti, M. - Kůrková, Věra**

Estimates of Covering Numbers of Convex Hulls.

*AIRO 2005*. Camerino : UNICAM, 2005, s. 159-159.

[AIRO 2005. Annual Conference of the Italian Operational Research Society /36./. 06.09.2005-09.09.2005, Camerino]

**114. Kůrková, Věra**

Learning from Data by Kernel Methods as an Inverse Problem.

*AIRO 2005*. Camerino : UNICAM, 2005, s. 7-7.

[AIRO 2005. Annual Conference of the Italian Operational Research Society /36./. 06.09.2005-09.09.2005, Camerino]

## 2004

**113. Kůrková, Věra**

Učení neuronových sítí jako inverzní úloha.

[Neural-networks Learning as an Inverse Problem.]

*Pokroky matematiky, fyziky & astronomie*. Roč. 49, č. 3 (2004), s. 218-225. ISSN 0032-2423

<http://dml.cz/handle/10338.dmlcz/141231>

<http://hdl.handle.net/11104/0012495>

**112. Kůrková, Věra**

Learning from Data as an Inverse Problem.

*Computational Statistics*. Heidelberg : Physica Verlag, 2004 - (Antoch, J.), s. 1377-1384.

ISBN 3-7908-1554-3.

[COMPSTAT 2004. Symposium /16./. Prague (CZ), 23.08.2004-27.08.2004]

- 111. Kůrková, Věra**  
 Mappings between High-Dimensional Representations in Connectionistic Systems.  
*Machine Intelligence Quo Vadis?* New Jersey : World Scientific, 2004 - (Sinčák, P.; Vaščák, J.; Hirota, K.), s. 31-45. ISBN 981-238-751-X. - (Advances in Fuzzy Systems - Applications and Theory. 21).  
 [European Symposium on Computational Intelligence. Košice (SK), 16.06.2002-19.06.2002]  
[DOI: 10.1142/9789812562531\\_0002](https://doi.org/10.1142/9789812562531_0002)
- 110. Kůrková, Věra**  
 Učení neuronových sítí se schopností generalizace.  
 [Neural Network Learning with Generalization Capability.]  
*Kognice a umělý život*. Ostrava : Slezská univerzita, 2004 - (Kelemen, J.; Kvasnička, V.), s. 291-297.  
 ISBN 80-7248-232-7.  
 [Kognice a umělý život /4./. Hradec nad Moravicí (CZ), 26.05.2004-30.05.2004]
- 109. Kůrková, Věra**  
 Learning from Data as an Inverse Problem.  
*Mathematical Foundations of Learning Theory*. Centre de Recerca Matematica : Barcelona, 2004.  
 s. 19-20.  
 [MFLT 2004. 18.06.2004-23.06.2004, Barcelona]
- 108. Kůrková, Věra**  
 Learning from Data with Generalization Capability by Neural Networks and Kernel Methods.  
*Engineering of Intelligent Systems EIS'2004*. Canada : ICSC Academic Press, 2004, s. 18-18.  
 ISBN 3-906454-35-5.  
 [International ICSC Symposium /4./. 29.02.2004-02.03.2004, Madeira]
- 107. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 A Sobolev-Type Upper Bound for Rates of Approximation by Linear Combinations of Plane Waves.  
 Prague : ICS AS CR, 2004. 11 s. - (Technical Report, V-900)  
<http://hdl.handle.net/11104/0132858>
- 106. Kůrková, Věra**  
 Supervised Learning as an Inverse Problem.  
 Prague : ICS AS CR, 2004. 7 s. - (Technical Report, V-906)  
<http://hdl.handle.net/11104/0010622>

## 2003

- 105. Kůrková, Věra**  
 Aproximace funkcí neuronovými sítěmi.  
 [Approximation of Functions by Neural Networks.]  
*Umělá inteligence 4*. Praha : Academia, 2003 - (Mařík, M.; Štěpánková, O.; Lažanský, J.), s. 254-275.  
 ISBN 80-200-1044-0
- 104. Kůrková, Věra**  
 High-Dimensional Approximation by Neural Networks.  
*Advances in Learning Theory: Methods, Models and Applications*. Amsterdam : IOS Press, 2003 -  
 (Suykens, J.; Horváth, G.; Basu, S.; Micchelli, C.; Vandewalle, J.), s. 69-88. ISBN 1-58603-341-7. -  
 (NATO Science Series. 190)



- 103. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Best Approximation by Linear Combinations of Characteristic Functions of Half-Spaces.  
*Journal of Approximation Theory*. Roč. 122, č. 2 (2003), s. 151-159. ISSN 0021-9045  
 Impakt faktor: 0.528, rok: 2003  
[DOI: 10.1016/S0021-9045\(03\)00072-8](https://doi.org/10.1016/S0021-9045(03)00072-8)  
<http://hdl.handle.net/11104/0124577>
- 102. Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**  
 Minimization of Error Functionals over Variable-basis Functions.  
*SIAM Journal on Optimization*. Roč. 14, č. 3 (2003), s. 732-742. ISSN 1052-6234  
 Impakt faktor: 1.757, rok: 2003  
[DOI: 10.1137/S1052623402401233](https://doi.org/10.1137/S1052623402401233)  
<http://hdl.handle.net/11104/0012506>
- 101. Kůrková, Věra**  
 Learning from Data as an Optimization Task.  
*Kognícia, umelý život a počítačová inteligencia*. Košice : ELFA, 2003 - (Sinčák, P.; Kvasnička, V.; Pospíchal, J.; Kelemen, J.; Návrat, P.), s. 73-75. ISBN 80-89066-64-X.  
 [Slovensko-Český seminár Kognícia a umelý život /3./. Stará Lesná (SK), 14.05.2003-16.05.2003]
- 100. Kůrková, Věra - Sanguinetti, M.**  
 Learning from Data by Neural Networks with a Limited Complexity.  
*Artificial Neural Networks in Pattern Recognition*. Florence : University of Florence, 2003 - (Gori, M.; Marinai, S.), s. 146-151  
 [IAPR TC3 Workshop /1./. Florence (IT), 12.09.2003-13.09.2003]
- 99. Kůrková, Věra - Sanguinetti, M.**  
 Neural Network Learning as Approximate Optimization.  
*Artificial Neural Nets and Genetic Algorithms*. Wien : SpringerVerlag, 2003 - (Pearson, D.; Steele, N.; Albrecht, R.), s. 53-57. ISBN 3-211-00743-1.  
 [ICANN'2003 /6./. Roanne (FR), 23.04.2003-25.04.2003]
- 98. Kůrková, Věra - Sanguinetti, M.**  
 Learning with Generalization Capability by Kernel Methods of Bounded Complexity.  
 Prague : ICS AS CR, 2003. 16 s. - (Technical Report, V-901)  
<http://hdl.handle.net/11104/0125385>

## 2002

- 97. Kůrková, Věra**  
 Universal Approximators.  
*The Handbook of Brain Theory and Neural Networks*. 2nd ed. Cambridge : The MIT Press, 2002 - (Arbib, M.), s. 1180-1183. ISBN 0-262-01197-2
- 96. Kůrková, Věra - Sanguinetti, M.**  
 Comparison of Worst Case Errors in Linear and Neural Network Approximation.  
*IEEE Transactions on Information Theory*. Roč. 48, č. 1 (2002), s. 264-275. ISSN 0018-9448  
 Impakt faktor: 2.045, rok: 2002  
[DOI: 10.1109/18.971754](https://doi.org/10.1109/18.971754)  
<http://hdl.handle.net/11104/0124045>



- 95. Kůrková, Věra**  
 Approximation by Perceptron Networks.  
*Algorithms for Approximation IV. Proceedings of the International Symposium.* Huddersfield :  
 University of Huddersfield, 2002 - (Levesley, J.; Anderson, I.; Mason, J.), s. 454-460  
 [International Symposium on Algorithms for Approximation /4./. Huddersfield (GB), 16.07.2001-  
 20.07.2001]
- 94. Kůrková, Věra**  
 Universality and Complexity of Approximation of Multivariable Functions by Feedforward Networks.  
*Soft Computing and Industry. Recent Applications.* London : Springer, 2002 - (Roy, R.; Köppen, M.;  
 Ovaska, S.; Furuhashi, T.; Hoffmann, F.), s. 13-24. ISBN 978-1-4471-1101-6.  
 [Online World Conference on Soft Computing in Industrial Applications /6./. On the Internet,  
 10.10.2001-24.10.2001]  
[DOI: 10.1007/978-1-4471-0123-9\\_2](https://doi.org/10.1007/978-1-4471-0123-9_2)
- 93. Kůrková, Věra**  
 High-Dimensional Approximation by Neural Networks.  
*Abstracts of the Sixth International Conference Neural Networks and Soft Computing.* Czestochova :  
 Polish Neural Network Society, 2002, s. 64-64. ISBN 83-908587-3-8.  
 [ICNNS. International Conference on Neural Networks and Soft Computing /6./. 11.06.2002-  
 15.06.2002, Zakopane]
- 92. Kůrková, Věra**  
 Neural Networks as High-Dimensional Approximators.  
*Between Data Science and Everyday Web Practice. Abstracts.* Mannheim : Universität Mannheim,  
 2002, s. 124-124.  
 [GfKL - Annual Conference of the German Classification Society /26./. 22.07.2002-24.07.2002,  
 Mannheim]
- 91. Kůrková, Věra - Sanguineti, M.**  
 Error Estimates for Approximate Optimization by the Extended Ritz Method.  
 Prague : ICS AS CR, 2002. 17 s. - (Technical Report, V-882)  
<http://hdl.handle.net/11104/0125222>
- 90. Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**  
 Minimization of Error Functionals over Variable-Basis Functions.  
 Prague : ICS AS CR, 2002. 17 s. - (Technical Report, V-864)  
<http://hdl.handle.net/11104/0124951>

## 2001

- 89. Kůrková, Věra - Sanguineti, M.**  
 Bounds on Rates of Variable-Basis and Neural-Network Approximation.  
*IEEE Transactions on Information Theory.* Roč. 47, č. 6 (2001), s. 2659-2665. ISSN 0018-9448  
 Impakt faktor: 2.077, rok: 2001  
[DOI: 10.1109/18.945285](https://doi.org/10.1109/18.945285)  
<http://hdl.handle.net/11104/0124240>

- 88. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Continuity of Approximation by Neural Networks in  $L^p$  Spaces.  
*Annals of Operations Research*. Roč. 101, č. 1-4 (2001), s. 143-147. ISSN 0254-5330  
 Impakt faktor: 0.255, rok: 2001  
[DOI: 10.1023/A:1010916406274](https://doi.org/10.1023/A:1010916406274)  
<http://hdl.handle.net/11104/0123984>
- 87. Kůrková, Věra - Sanguinetti, M.**  
 Tight Bounds on Rates of Neural-Network Approximation.  
*Artificial Neural Networks - ICANN'2001*. Berlin : Springer-Verlag, 2001 - (Dorffner, G.; Bischof, H.; Hornik, K.), s. 277-282. ISBN 3-540-42486-5. ISSN 0302-9743. - (Lecture Notes in Computer Science. 2130).  
 [ICANN 2001 International Conference on Artificial Neural Networks /11./. Vienna (AT), 21.08.2001-25.08.2001]  
[DOI: 10.1007/3-540-44668-0\\_40](https://doi.org/10.1007/3-540-44668-0_40)
- 86. Kůrková, Věra - Sanguinetti, M.**  
 Tightness of Upper Bounds on Rates of Neural-Network Approximation.  
*Artificial Neural Nets and Genetic Algorithms. Proceedings of the International Conference*. Wien : Springer, 2001 - (Kůrková, V.; Steele, N.; Neruda, R.; Kárný, M.), s. 35-38. ISBN 3-211-83651-9.  
 [ICANN'2001 /5./. Praha (CZ), 22.04.2001-25.04.2001]
- 85. Kůrková, Věra - Steele, N.C. - Neruda, Roman - Kárný, Miroslav (eds.)**  
 Artificial Neural Nets and Genetic Algorithms. Proceedings of the International conference.  
 Wien : Springer, 2001. 504 s. ISBN 3-211-83651-9.  
 [ICANN'2001 /5./. Praha (CZ), 22.04.2001-25.04.2001]
- 84. Kůrková, Věra - Sanguinetti, M.**  
 Covering Numbers and Rates of Neural-Network Approximation.  
 Prague : ICS AS CR, 2001. 7 s. - (Technical Report, V-830)  
<http://hdl.handle.net/11104/0124875>
- 83. Kůrková, Věra - Sanguinetti, M.**  
 Tight Bounds on Rates of Variable-Basis Approximation via Estimates of Covering Numbers.  
 Prague : ICS AS CR, 2001. 12 s. - (Technical Report, V-865)  
<http://hdl.handle.net/11104/0124952>

## 2000

- 82. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 An Integral Formula for Heaviside Neural Networks.  
*Neural Network World*. Roč. 10, č. 3 (2000), s. 313-319. ISSN 1210-0552.  
 [Neural Network World 2000. Prague, 09.07.2000-12.07.2000]
- 81. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Best Approximation by Heaviside Perceptron Networks.  
*Neural Networks*. Roč. 13, č. 7 (2000), s. 695-697. ISSN 0893-6080  
 Impakt faktor: 1.221, rok: 2000  
[DOI: 10.1016/S0893-6080\(00\)00056-3](https://doi.org/10.1016/S0893-6080(00)00056-3)  
<http://hdl.handle.net/11104/0124048>





- 80. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Geometry and Topology of Continuous Best and Near Best Approximations.  
*Journal of Approximation Theory*. Roč. 105, č. 2 (2000), s. 252-262. ISSN 0021-9045  
 Impakt faktor: 0.556, rok: 2000  
[DOI: 10.1006/jath.2000.3467](https://doi.org/10.1006/jath.2000.3467)  
<http://hdl.handle.net/11104/0123961>
- 79. Kůrková, Věra - Sanguinetti, M.**  
 Comparison of Rates of Linear and Neural Network Approximation.  
*IJCNN 2000. Proceedings of the IEEE-INNS-ENNS International Joint Conference on Neural Networks*.  
 Los Alamitos : IEEE Computer Society, 2000, s. 277-282. ISBN 0-7695-0619-4.  
 [IJCNN 2000. Como (IT), 24.07.2000-27.07.2000]  
[DOI: 10.1109/IJCNN.2000.857848](https://doi.org/10.1109/IJCNN.2000.857848)  
<http://hdl.handle.net/11104/0124098>
- 78. Kůrková, Věra - Sanguinetti, M.**  
 Dimension-Independent Approximation by Neural Networks: How Can we Cope With the Curse of Dimensionality?  
*Nonlinear Problems in Aviation and Aerospace. Vol. 1*. Cambridge : European Conference Publications, 2000 - (Sivasundaram, S.), s. 355-364  
 [ICNPAA International Conference /3./. Daytona Beach (US), 10.05.2000-12.05.2000]
- 77. Kůrková, Věra**  
 Neural Networks as Nonlinear Approximators.  
*Proceedings of the ICSC Symposia on Neural Computation*. ICSC, 2000 - (Bothe, H.; Rojas, R.), s. 29-35.  
 ISBN 3-906454-21-5.  
 [NC'2000. ICSC Symposium on Neural Computation /2./. Berlin (DE), 23.05.2000-26.05.2000]
- 76. Kůrková, Věra**  
 Rates of Approximation by Neural Networks.  
*Quo Vadis Computational Intelligence? New Trends and Approaches in Computational Intelligence*.  
 Heidelberg : PhysicaVerlag, 2000 - (Sinčák, P.; Vaščák, J.), s. 23-36. ISBN 3-7908-1324-9.  
 ISSN 1434-9922. - (Studies in Fuzziness and Soft Computing. 54).  
 [ISCI'2000 International Symposium on Computational Intelligence. Košice (SK), 30.08.2000-01.09.2000]
- 75. Kůrková, Věra - Sanguinetti, M.**  
 Some Comparisons of the Worst-Case Errors in Linear and Neural Network Approximation.  
*Proceedings CD of the Fourteenth International Symposium of Mathematical Theory of Networks and Systems*. Perpignan : Université de Perpignan, 2000, nestr.  
 [MTNS'2000. International Symposium of Mathematical Theory of Networks and Systems /14./. Perpignan (FR), 19.06.2000-23.06.2000]

## 1999

- 74. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Approximation by Neural Networks is not Continuous.  
*Neurocomputing*. Roč. 29, č. 1-3 (1999), s. 47-56. ISSN 0925-2312  
 Impakt faktor: 0.360, rok: 1999  
[DOI: 10.1016/S0925-2312\(99\)00111-3](https://doi.org/10.1016/S0925-2312(99)00111-3)  
<http://hdl.handle.net/11104/0123694>




- 73. Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Best Approximation by Linear Combinations of Characteristic Functions of Half-Spaces.  
 Prague : ICS AS CR, 1999. 6 s. - (Technical Report, V-795)  
<http://hdl.handle.net/11104/0124040>
- 72. Kůrková, Věra - Sanguineti, M.**  
 Dimension-Independent Approximation by Neural Networks and Its Comparison with Linear Approximation.  
 Prague : ICS AS CR, 1999. 16 s. - (Technical Report, V-789)  
<http://hdl.handle.net/11104/0124021>

## 1998


- 71. Kůrková, Věra**  
 Incremental Approximation by Neural Networks. Chapter 12.  
*Dealing with Complexity: a Neural Networks Approach.* London : Springer, 1998 - (Kárný, M.; Warwick, K.; Kůrková, V.), s. 177-188. ISBN 3-540-76160-8. - (Perspectives in Neural Computing)  
 [DOI: 10.1007/978-1-4471-1523-6\\_12](https://doi.org/10.1007/978-1-4471-1523-6_12)
- 70. Kůrková, Věra - Savický, Petr - Hlaváčková, Kateřina**  
 Representations and Rates of Approximation of Real-Valued Boolean Functions by Neural Networks.  
*Neural Networks.* Roč. 11, č. 4 (1998), s. 651-659. ISSN 0893-6080  
 Impakt faktor: 1.017, rok: 1998  
 [DOI: 10.1016/S0893-6080\(98\)00039-2](https://doi.org/10.1016/S0893-6080(98)00039-2)  
<http://hdl.handle.net/11104/0123562>
- 69. Kůrková, Věra**  
 A Geometric Characterization of Sets of Functions with Dimension-Independent Rates of Approximation by Neural Networks.  
*Computer-Intensive Methods in Control and Data Processing. Can We Beat the Curse of Dimensionality?* Prague : Institute of Information Theory and Automation AC CR, 1998 - (Rojíček, J.; Valečková, M.; Kárný, M.; Warwick, K.), s. 199-203  
 [European IEEE Workshop CMP'98 /3./, Prague (CZ), 07.09.1998-09.09.1998]
- 68. Kůrková, Věra**  
 Approximation of Functions by Neural Networks.  
*Proceedings of the International ICSC/IFAC Symposium on Neural Computation.* Zurich : ICSC, 1998 - (Heiss, M.), s. 29-35. ISBN 3-906454-15-0.  
 [NC'98. Vienna (AT), 23.09.1998-25.09.1998]
- 67. Kůrková, Věra**  
 Rates of Approximation of Multivariable Functions by One-Hidden-Layer Neural Networks.  
*Neural Nets WIRN VIETRI-97. Proceedings of the 9th Italian Workshop on Neural Nets.* Berlin : Springer, 1998 - (Marinaro, M.; Tagliaferri, R.), s. 147-152. ISBN 3-540-76157-8.  
 [WIRN'97. Salerno (IT), 22.05.1997-24.05.1997]  
 [DOI: 10.1007/978-1-4471-1520-5\\_9](https://doi.org/10.1007/978-1-4471-1520-5_9)
- 66. Hlaváčková, Kateřina - Kůrková, Věra - Savický, Petr**  
 Upper Bounds on the Approximation Rates of Real-Valued Boolean Functions by Neural Networks.  
*Artificial Neural Nets and Genetic Algorithms.* Wien : Springer, 1998 - (Smith, G.; Steele, N.; Albrecht, R.), s. 495-499. ISBN 3-211-83087-1.  
 [ICANNGA'1997 /3./, Norwich (GB), 02.04.1997-04.04.1997]  
 [DOI: 10.1007/978-3-7091-6492-1\\_109](https://doi.org/10.1007/978-3-7091-6492-1_109)


65. **Kůrková, Věra**  
 Aproximace funkcí neuronovými sítěmi.  
 Prague : ICS AS CR, 1998. 18 s. - (Technical Report, V-770)  
<http://hdl.handle.net/11104/0123934>
64. **Kainen, P.C. - Kůrková, Věra - Vogt, A.**  
 Geometry and Topology of Continuous Best and Near Best Approximations.  
 Prague : ICS AS CR, 1998. 9 s. - (Technical Report, V-769)  
<http://hdl.handle.net/11104/0123962>
63. **Kůrková, Věra**  
 Aproximace funkcí neuronovými sítěmi.  
 [Approximation of Functions by Neural Networks.]  
 ICS AS CR. Obhájeno: Praha. 14.01.1999. - Praha : UI AV ČR, 1998. - (Doktorská disertační práce)

## 1997


62. **Kárný, Miroslav - Warwick, K. - Kůrková, Věra (eds.)**  
 Dealing with Complexity. A Neural Networks Approach.  
 Berlin : Springer, 1997. 308 s. - (Perspectives in Neural Computing.). ISBN 3-540-76160-8  
 [DOI: 10.1007/978-1-4471-1523-6](https://doi.org/10.1007/978-1-4471-1523-6)
61. **Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**  
 Estimates of the Number of Hidden Units and Variation with Respect to Half-Spaces.  
*Neural Networks*. Roč. 10, č. 6 (1997), s. 1061-1068. ISSN 0893-6080  
 Impakt faktor: 1.019, rok: 1997  
 [DOI: 10.1016/S0893-6080\(97\)00028-2](https://doi.org/10.1016/S0893-6080(97)00028-2)  
<http://hdl.handle.net/11104/0123159>
60. **Kůrková, Věra**  
 Dimension-Independent Rates of Approximation by Neural Networks.  
*Computer-Intensive Methods in Control and Signal Processing : The Curse of Dimensionality*. Boston : Birkhäuser, 1997 - (Warwick, K.; Kárný, M.), s. 261-270. ISBN 0-8176-3989-6.  
 [European IEEE Workshop on Computer-Intensive Methods in Control and Signal Processing: Can We Beat the Curse of Dimensionality? /2./]. Prague (CR), 28.08.1996-30.08.1996  
 [DOI: 10.1007/978-1-4612-1996-5\\_16](https://doi.org/10.1007/978-1-4612-1996-5_16)
59. **Beliczynski, B. - Kůrková, Věra**  
 Incremental Orthogonal Projection Learning of Radial-Basis-Function Networks.  
*Proceedings of the Fourth International Symposium on Methods and Models in Automation and Robotics. Control Engineering. Neural Networks. Vol. 2*. Szczecin : Szczecin University of Technology, 1997 - (Domek, S.; Emirsajlow, Z.; Kaszynski, R.), s. 717-722. ISBN 83-87423-30-0.  
 [MMAR'97. Miedzzydroje (PL), 26.08.1997-29.08.1997]

## 1996

58. **Kůrková, Věra - Kainen, P.C.**  
 Singularities of Finite Scaling Functions.  
*Applied Mathematics Letters*. Roč. 9, č. 2 (1996), s. 33-37. ISSN 0893-9659  
 Impakt faktor: 0.346, rok: 1996  
 [DOI: 10.1016/0893-9659\(96\)00008-0](https://doi.org/10.1016/0893-9659(96)00008-0)  
<http://hdl.handle.net/11104/0122718>

- 57. Kůrková, Věra**  
Trade-off Between the Size of Parameters and the Number of Units in One-Hidden-Layer Networks.  
*Neural Network World*. Roč. 6, č. 2 (1996), s. 191-200. ISSN 1210-0552.  
[Neurofuzzy'96. Prague, 16.04.1996-18.04.1996]
- 56. Kůrková, Věra - Kainen, P.C.**  
A Geometric Method to Obtain Error-Correcting Classification by Neural Networks with Fewer Hidden Units.  
*ICNN. The 1996 IEEE International Conference on Neural Networks*. Piscataway : IEEE, 1996, s. 1227-1232. ISBN 0-7803-3210-5.  
[ICNN. Washington (US), 03.06.1996-06.06.1996]  
 [DOI: 10.1109/ICNN.1996.549073](https://doi.org/10.1109/ICNN.1996.549073)  
<http://hdl.handle.net/11104/0123151>
- 55. Kůrková, Věra**  
Dimension-Independent Rates of Approximation by Neural Networks.  
*Computer-Intensive Methods in Control and Signal Processing. Can We Beat the Curse of Dimensionality?* Prague : Institute of Information Theory and Automation AS CR, 1996 - (Berec, L.; Rojíček, J.; Kárný, M.; Warwick, K.), s. 97-101  
[CMP'96. European IEEE Workshop /2./. Prague (CZ), 28.08.1996-30.08.1996]
- 54. Hlaváčková, Kateřina - Kůrková, Věra**  
Rates of Approximation of Real-Valued Boolean Functions by Neural Networks.  
*ESANN'96. European Symposium on Artificial Neural Networks*. Brussels : D facta, 1996 - (Verleysen, M.), s. 167-172. ISBN 2-9600049-6-5.  
[ESANN'96. Bruges (BE), 24.04.1996-26.04.1996]
- 53. Kůrková, Věra**  
Subsymbolic Representation of Natural Patterns in Artificial Neural Networks and Fractals.  
*Actes du Symposium Echo. Emergence - Complexité Hiérarchique - Organisation: Modeles de la boucle évolutive*. Amiens : Université de Picardie Jules Verne, 1996 - (Ehresmann, A.; Farre, G.; Vanbreemsch, J.), s. 115-120  
[Symposium ECHO. Amiens (FR), 21.08.1996-23.08.1996]
- 52. Kůrková, Věra**  
Trade-off Between the Size of Weights and the Number of Hidden Units in Feedforward Networks.  
Prague : ICS AS CR, 1996. 17 s. - (Technical Report, V-695)  
<http://hdl.handle.net/11104/0123270>



## 1995

- 51. Kůrková, Věra**  
Kolmogorov's Theorem.  
*The Handbook of Brain Theory and Neural Networks*. Cambridge : MIT Press, 1995 - (Arbib, M.), s. 501-502. ISBN 0-262-01148-4
- 50. Kůrková, Věra**  
Approximation of Functions by Perceptron Networks with Bounded Number of Hidden Units.  
*Neural Networks*. Roč. 8, č. 5 (1995), s. 745-750. ISSN 0893-6080  
Impakt faktor: 1.262, rok: 1995  
 [DOI: 10.1016/0893-6080\(95\)00027-W](https://doi.org/10.1016/0893-6080(95)00027-W)  
<http://hdl.handle.net/11104/0122569>

- 49. Kůrková, Věra - Beliczynski, B.**  
 An Incremental Learning Algorithm for Gaussian Radial-Basis-Function Approximation.  
*Proceedings of the Second International Symposium on Methods and Models in Automation and Robotics*. Warsaw, 1995 - (Banka, S.; Domek, S.; Emirsajlow, Z.), s. 675-680  
 [MMAR'95. Miedzyzdroje (PL), 30.08.1995-02.09.1995]
- 48. Kůrková, Věra**  
 Approximation of Functions by Gaussian RBF Networks with Bounded Number of Hidden Units.  
*ESANN'95. 3rd European Symposium on Artificial Neural Networks. Proceedings*. Brussels : D facta, 1995 - (Verleysen, M.), s. 321-326. ISBN 2-9600049-3-0.  
 [ESANN'95. European Symposium on Artificial Neural Networks /3./. Brussels (BE), 19.04.1995-21.04.1995]
- 47. Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**  
 Dimension-Independent Rates of Approximation by Neural Networks and Variation with Respect to Half-Spaces.  
*Proceedings of World Congress on Neural Networks 1995. Vol. 1*. Washington : INNS Press, 1995, s. 54-57. ISBN 0-8058-2125-2.  
 [WCNN'95. Washington (US), 17.07.1995-21.07.1995]
- 46. Kůrková, Věra**  
 Emergence of Patterns in Neurocomputing.  
*Advances in Synergetics. Vol 2. Systems Research on Emergence*. Windsor : International Institute for Advanced Studies in Systems Research and Cybernetics, 1995 - (Lasker, G.; Farre, G.), s. 31-36.  
 ISBN 0-921836-27-9.  
 [InterSymp'95. Baden-Baden (DE), 17.08.1995-19.08.1995]  
<http://hdl.handle.net/11104/0122721>
- 45. Sirisaengtaksin, O. - Kainen, P.C. - Kreinovich, V. - Kůrková, Věra**  
 For Neural Networks, Even Approximate Function Determines Form.  
*Proceedings of Neural, Parallel and Scientific Computations*. Dynamic Publishers Inc, 1995 - (Aityan, S.; Grujic, L.; Hathaway, R.; Ladde, G.; Medhin, N.; Sambandham, M.), s. 424-426  
 [International Conference on Neural, Parallel, and Scientific Computations /1./. Atlanta (US), 28.05.1995-31.05.1995]
- 44. Kůrková, Věra - Beliczynski, B.**  
 Incremental Approximation by One-Hidden-Layer Neural Networks.  
*ICANN'95. International Conference on Artificial Neural Networks. NEURONIMES'95. Scientific Conference*. Paris : EC2 & Cie, 1995 - (Fogelman-Soulié, F.; Gallinari, P.), s. 505-510.  
 ISBN 2-910085-19-8.  
 [ICANN'95 /5./. Paris (FR), 09.10.1995-13.10.1995]
- 43. Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**  
 Dimension-Independent Rates of Approximation by Neural Networks and Variation with Respect to Half-spaces.  
 Prague : ICS AS CR, 1995. 6 s. - (Technical Report, V-626)  
<http://hdl.handle.net/11104/0123168>
- 42. Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**  
 Estimates of the Number of Hidden Units and Variation with Respect to Half-Spaces.  
 Prague : ICS AS CR, 1995. 12 s. - (Technical Report, V-645)  
<http://hdl.handle.net/11104/0122693>



## 1994

- 41. Kůrková, Věra - Kainen, P.C.**  
Functionally Equivalent Feedforward Neural Networks.  
*Neural Computation*. Roč. 6, č. 3 (1994), s. 543-558. ISSN 0899-7667  
Impakt faktor: 3.139, rok: 1994  
 DOI: [10.1162/neco.1994.6.3.543](https://doi.org/10.1162/neco.1994.6.3.543)  
<http://hdl.handle.net/11104/0122423>
- 40. Kainen, P.C. - Kůrková, Věra - Kreinovich, V. - Sirisaengtaksin, O.**  
Uniqueness of Network Parametrization and Faster Learning.  
*Neural, Parallel & Scientific Computations*. Roč. 2, č. 4 (1994), s. 459-465. ISSN 1061-5369
- 39. Kůrková, Věra - Kainen, P.C.**  
Affinely Recursive Functions and Neural Networks.  
*Proceedings of the 14th IMACS World Congress on Computation and Applied Mathematics. Vol. 2. Applications of Computing, Fluid Mechanics, Acoustics, Solid Mechanics, Neural Networks*. Atlanta : Georgia Institute of Technology, 1994 - (Ames, W.), s. 776-779  
[IMACS World Congress /14./. Atlanta (US), 11.07.1994-15.07.1994]
- 38. Kůrková, Věra - Šmíd, J.**  
An Incremental Architecture Algorithm for Feedforward Neural Nets.  
*Computer-Intensive Methods in Control and Signal Processing. Can We Beat the Curse of Dimensionality?* Prague : Institute of Information Theory and Automation AS CR, 1994 - (Kulhavá, L.; Kárný, M.; Warwick, K.), s. 15-19  
[CMP' 94. Prague (CZ), 07.09.1994-09.09.1994]
- 37. Kůrková, Věra - Hlaváčková, Kateřina**  
Approximation of Continuous Functions by RBF and KBF Networks.  
*ESANN'94. European Symposium on Artificial Neural Networks*. Brussels : D Facto, 1994 - (Verleysen, M.), s. 167-174. ISBN 2-9600049-1-4.  
[ESANN'94. Brussels (BE), 20.04.1994-22.04.1994]
- 36. Kůrková, Věra**  
Optimal Weight Spaces for Feedforward Neural Networks.  
*Computer-Intensive Methods in Control and Signal Processing. Can We Beat the Curse of Dimensionality?* Prague : Institute of Information Theory and Automation AS CR, 1994 - (Kulhavá, L.; Kárný, M.; Warwick, K.), s. 9-14  
[CMP' 94. Prague (CZ), 07.09.1994-09.09.1994]
- 35. Kůrková, Věra - Neruda, Roman**  
Uniqueness of Functional Representations by Gaussian Basis Function Networks.  
*ICANN' 94. Proceedings of the International Conference on Artificial Neural Networks*. London : Springer Verlag, 1994 - (Marinero, M.; Morasso, P.), s. 471-474. ISBN 978-3-540-19887-1.  
[ICANN' 94 /4./. Sorrento (IT), 26.05.1994-29.05.1994]  
 DOI: [10.1007/978-1-4471-2097-1\\_111](https://doi.org/10.1007/978-1-4471-2097-1_111)
- 34. Kůrková, Věra**  
Approximation of Functions by Neural Networks with Local and Non-Local Units.  
Prague : ICS AS CR, 1994. 9 s. - (Technical Report, V-585)




- 33. Kůrková, Věra**  
 Approximation of Functions by Perceptron Networks with Bounded Number of Hidden Units.  
 Prague : ICS AS CR, 1994. 8 s. - (Technical Report, V-600)  
<http://hdl.handle.net/11104/0122568>

## 1993


- 32. Kainen, P.C. - Kůrková, Věra**  
 Quasiorthogonal Dimension of Euclidean Spaces.  
*Applied Mathematics Letters*. Roč. 6, č. 3 (1993), s. 7-10. ISSN 0893-9659  
 Impakt faktor: 0.304, rok: 1993  
 DOI: [10.1016/0893-9659\(93\)90023-G](https://doi.org/10.1016/0893-9659(93)90023-G)  
<http://hdl.handle.net/11104/0122333>
- 31. Kůrková, Věra - Kainen, P.C.**  
 Error-Correcting Classification by Feedforward Networks.  
*World Congress on Neural Networks. Vol. IV*. New Jersey : Lawrence Erlbaum Associates, 1993,  
 s. 80-83. ISBN 0-8058-1479-3.  
 [WCNN'93. World Congress on Neural Networks. Portland-Hillsdale (US), 11.07.1993-15.07.1993]
- 30. Kůrková, Věra - Hlaváčková, Kateřina**  
 Uniform Approximation by KBF Networks.  
*NEURONET'93. Proceedings of the International Scientific Conference on New Information Technology and Their Applications in Trade, Industry, Banking, Energetics, Ecology and Medicine*. Prague : ICS AS CR, 1993, nestr.  
 [NEURONET'93. Prague (CZ), 20.09.1993-25.09.1993]
- 29. Kainen, P.C. - Kůrková, Věra**  
 Affinely Recursive Functions and Neural Networks.  
 Prague : ÚIVT AV ČR, 1993. 6 s. - (Technical Report, V-576)
- 28. Kainen, P.C. - Kůrková, Věra - Kreinovich, V. - Sirisengtaksin, O.**  
 Uniqueness of Network Parametrizations and Faster Learning.  
 Prague : ICS AS CR, 1993. 8 s. - (Technical Report, V-575)

## 1992

- 27. Kůrková, Věra**  
 Are Sigmoidals the Best Activation Functions in Multilayer Feedforward Networks?  
*Neural Network World*. Roč. 2, č. 1 (1992), s. 27-34. ISSN 1210-0552
- 26. Kůrková, Věra - Kainen, P.C.**  
 Equivalent Weight Vectors in Perceptron Type Networks.  
*Neural Network World*. Roč. 2, č. 6 (1992), s. 685-692. ISSN 1210-0552.  
 [PASE '92. Prague, 07.12.1992-08.12.1992]
- 25. Kůrková, Věra**  
 Kolmogorov's Theorem and Multilayer Neural Networks.  
*Neural Networks*. Roč. 5, č. 3 (1992), s. 501-506. ISSN 0893-6080  
 Impakt faktor: 2.221, rok: 1992  
 DOI: [10.1016/0893-6080\(92\)90012-8](https://doi.org/10.1016/0893-6080(92)90012-8)

- 24. Kůrková, Věra**  
Fraktály a přírodní tvary.  
*SYNERGETIKA '92. Zborník z celoštátnej konferencie.* Košice : ÚEF SAV, 1992, s. 37-45.  
[SYNERGETIKA'92. Stará Lesná (CS), 01.06.1992-04.06.1992]
- 23. Kůrková, Věra**  
Universal Approximation Using Feedforward Neural Networks with Gaussian Bar Units.  
*Proceedings of ECAI 92.* Chichester : John Wiley & Sons, 1992 - (Neumann, B.), s. 193-197.  
ISBN 978-0-471-93608-4.  
[ECAI'92. Vienna (AT), 03.08.1992-07.08.1992]
- 22. Kůrková, Věra - Hecht-Nielsen, R.**  
Quasiorthogonal Sets.  
San Diego : University of California, 1992. 9 s. - (Technical Report, INC-9204)
- 21. Kůrková, Věra - Kainen, P.C.**  
Semigroups of Function Preserving Weight Transformations.  
Prague : ÚIVT ČSAV, 1992. 14 s. - (Technical Report, V-538)

## 1991

- 20. Kůrková, Věra**  
13th Hilbert's Problem and Neural Networks.  
*1st Annual Report of the Czechoslovak Neural Networks Society.* Prague : Institute of Computer and Information Science CAS, 1991, s. 170-173
- 19. Kůrková, Věra**  
Kolmogorov's Theorem is Relevant.  
*Neural Computation.* Roč. 3, č. 4 (1991), s. 617-622. ISSN 0899-7667  
 DOI: [10.1162/neco.1991.3.4.617](https://doi.org/10.1162/neco.1991.3.4.617)  
<http://hdl.handle.net/11104/0122161>
- 18. Kůrková, Věra**  
13th Hilbert's Problem and Neural Networks.  
*Theoretical Aspects of Neurocomputing. Selected Papers from the Symposium on Neural Networks and Neurocomputing (NEURONET '90).* Singapore : World Scientific, 1991 - (Novák, M.; Pelikán, E.), s. 213-216. ISBN 981-02-0549-X.  
[NEURONET'90. Prague (CS), 10.09.1990-14.09.1990]

## 1990

- 17. Kůrková, Věra**  
13th Hilbert's Problem and Neural Networks.  
*NEURONET'90. Proceedings of the International Symposium on Neural Networks and Neural Computing.* Prague : Czechoslovak Academy of Sciences, 1990, s. 214-216.  
[NEURONET'90. Prague (CS), 10.09.1990-14.09.1990]
- 16. Kůrková, Věra**  
Dynamické systémy, fraktály a počítačová grafika.  
*Hledání společného jazyka.* Praha : SVI, Fyziologický ústav ČSAV, 1990 - (Šetlík, I.), s. 156-159  
[Symposium Hledání společného jazyka. Chlum u Třeboně (CS), 08.10.1988-13.10.1988]

15. **Kůrková, Věra**  
 Modelování přírodních tvarů pomocí fraktálů.  
*MOP '90. Moderní programování.* Žilina : ČSVTS, 1990, s. 65-86.  
 [MOP'90. Valkov (CS), 27.05.1990-01.06.1990]


## 1989

14. **Kůrková, Věra**  
 Epistemologická noční můra. Z knihy Smullyan, Raymond M 5000 B.C. and other philosophical fantasie se svolením St. Martin's Press, New York 1983, přeložila V. K., s odborným doslovem.  
 [Epistemological nightmare.]  
*Pokroky matematiky, fyziky & astronomie.* Roč. 34, č. 3 (1989), s. 143-151. ISSN 0032-2423  
<http://dml.cz/handle/10338.dmlcz/139189>  
<http://hdl.handle.net/11104/0224183>
13. **Kůrková, Věra**  
 Fraktální geometrie.  
*Pokroky matematiky, fyziky a astronomie.* Roč. 34, č. 5 (1989), s. 267-277. ISSN 0032-2423  
<http://dml.cz/handle/10338.dmlcz/138364>  
<http://hdl.handle.net/11104/0121902>
12. **Kůrková, Věra**  
 Fraktály a dynamické systémy.  
*Geometrie živého. Sborník přednášek podzimní školy Matematické modely morfogenese.* Praha : ZP ČSVTS při Fgú ČSAV, 1989, s. 145-174. ISBN 80-02-99236-9.  
 [Podzimní škola. Bechyně (CS), 26.09.1988-30.09.1988]
11. **Kůrková, Věra**  
 Fraktály a počítačová grafika.  
*Moderní programování '89. Díl 1.* Žilina : ČSVTS, 1989, s. 133-200.  
 [MOP'89. Vinné (CS), 28.05.1989-02.06.1989]

## 1988

10. **Kůrková, Věra**  
 Mandelbrotova fraktální geometrie.  
*Vesmír.* Roč. 67, č. 8 (1988), s. 458-464. ISSN 0042-4544

## 1982

9. **Kůrková, Věra**  
 Cardinal Functions on Modifications of Uniform Spaces and Fine Uniform Spaces.  
*Proceedings of AMS.* Roč. 84, č. 4 (1982), s. 593-600. ISSN 0002-9939  
<http://www.ams.org/journals/proc/1982-084-04/S0002-9939-1982-0643756-4/>  
 DOI: [10.2307/2044042](https://doi.org/10.2307/2044042)  
<http://hdl.handle.net/11104/0123440>

## 1980

8. **Kůrková-Pohlová, Věra**  
Fineness in the Category of Uniform Spaces.  
*Topology. Vol. 2.* Amsterdam : North Holland, 1980 - (Császár, A.), s. 729-734. ISBN 963-8021-37-3. - (Colloquia Mathematica Societatis János Bolyai. 23)

## 1979

7. **Kůrková, Věra**  
Jemné uniformní prostory.  
Praha : MFF UK, 1979. 14 s. - (Kandidátská disertační práce - autoreferát)

## 1975

6. **Kůrková-Pohlová, Věra**  
Concerning Products of Proximally Fine Uniform Spaces.  
*Seminar Uniform Spaces 1973-1974.* Praha : Matematický ústav ČSAV, 1975, s. 159-171
5. **Kůrková-Pohlová, Věra**  
Fine and Simply Fine Uniform Spaces.  
*Seminar Uniform Spaces 1973-1974.* Praha : Matematický ústav ČSAV, 1975, s. 127-137

## 1974

4. **Kůrková-Pohlová, Věra - Koubek, V.**  
When a Generalized Algebraic Category is Monadic.  
*Commentationes Mathematicae Universitatis Carolinae.* Roč. 15, č. 4 (1974), s. 577-587.  
ISSN 0010-2628  
<http://dml.cz/handle/10338.dmlcz/105582>  
<http://hdl.handle.net/11104/0123436>

## 1973

3. **Pohlová, Věra**  
Factorization and non-algebraic categories.  
*Commentationes Mathematicae Universitatis Carolinae.* Roč. 14, č. 2 (1973), s. 241-262.  
ISSN 0010-2628  
<http://dml.cz/handle/10338.dmlcz/105489>  
<http://hdl.handle.net/11104/0211113>
2. **Pohlová, Věra**  
On Sums in Generalized Algebraic Categories.  
*Czechoslovak Mathematical Journal.* Roč. 23, č. 2 (1973), s. 235-251. ISSN 0011-4642  
<http://dml.cz/handle/10338.dmlcz/101163>  
<http://hdl.handle.net/11104/0123435>

## 1972

1. **Adámek, J. - Koubek, V. - Pohlová, Věra**  
The Colimits in the Generalized Algebraic Categories.  
*Acta Universitatis Carolinae*. Roč. 13, č. 2 (1972), s. 29-40. ISSN 0001-7140  
<http://dml.cz/handle/10338.dmlcz/142277>  
<http://hdl.handle.net/11104/0123434>

## Soupis citovaných prací doplněný seznamem citačního ohlasu

### 2012

#### **Kůrková, Věra**

Complexity estimates based on integral transforms induced by computational units.

*Neural Networks*. Roč. 33, (2012), s. 160-167. ISSN 0893-6080

Impakt faktor: 1.927, rok: 2012

[DOI: 10.1016/j.neunet.2012.05.002](https://doi.org/10.1016/j.neunet.2012.05.002)

Citováno: 1 x

--- COSTARELLI, D. - SPIGLER, R. Approximation results for neural network operators activated by sigmoidal functions. *NEURAL NETWORKS*. ISSN 0893-6080, AUG 2013, vol. 44, p. 101-106. [WOS]

#### **Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**

Dependence of Computational Models on Input Dimension: Tractability of Approximation and Optimization Tasks.

*IEEE Transactions on Information Theory*. Roč. 58, č. 2 (2012), s. 1203-1214. ISSN 0018-9448

Impakt faktor: 2.621, rok: 2012

[DOI: 10.1109/TIT.2011.2169531](https://doi.org/10.1109/TIT.2011.2169531)

Citováno: 1 x

--- NICOLAU, V. - ANDREI, M. Estimation Aspects of Signal Spectral Components Using Neural Networks. *SOFT COMPUTING APPLICATIONS*. ISSN 2194-5357, 2013, vol. 195, p. 521-530. [WOS]

### 2009

#### **Kainen, P.C. - Kůrková, Věra**

An Integral Upper Bound for Neural Network Approximation.

*Neural Computation*. Roč. 21, č. 10 (2009), s. 2970-2989. ISSN 0899-7667

Impakt faktor: 2.175, rok: 2009

[DOI: 10.1162/neco.2009.04-08-745](https://doi.org/10.1162/neco.2009.04-08-745)

Citováno: 3 x

--- ZHOU, S. - JI, G.L. - YANG, Z.J. - CHEN, W. Hybrid intelligent control scheme of a polymerization kettle for ACR production. *KNOWLEDGE-BASED SYSTEMS*. ISSN 0950-7051, OCT 2011, vol. 24, no. 7, p. 1037-1047. [WOS]

--- GNECCO, G. - SANGUINETI, M. On a Variational Norm Tailored to Variable-Basis Approximation Schemes. *IEEE TRANSACTIONS ON INFORMATION THEORY*. ISSN 0018-9448, JAN 2011, vol. 57, no. 1, p. 549-558. [WOS]

--- COSTARELLI, D. - SPIGLER, R. Approximation results for neural network operators activated by sigmoidal functions. *NEURAL NETWORKS*. ISSN 0893-6080, AUG 2013, vol. 44, p. 101-106. [WOS]

#### **Kainen, P.C. - Kůrková, Věra - Sanguineti, M.**

Complexity of Gaussian-Radial-Basis Networks Approximating Smooth Functions.

*Journal of Complexity*. Roč. 25, č. 1 (2009), s. 63-74. ISSN 0885-064X

Impakt faktor: 1.227, rok: 2009

[DOI: 10.1016/j.jco.2008.08.001](https://doi.org/10.1016/j.jco.2008.08.001)

Citováno: 4 x

--- DECHERCHI, S. - PARODI, M. - RIDELLA, S. A Neural Model Approach for Regularization in the Mean Estimation Case. 2010 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS IJCNN 2010. ISSN 1098-7576, 2010. [WOS]

--- XIE, T.F. - CAO, F.L. The rate of approximation of Gaussian radial basis neural networks in continuous function space. *ACTA MATHEMATICA SINICA-ENGLISH SERIES*. ISSN 1439-8516, FEB 2013, vol. 29, no. 2, p.

295-302. [WOS]

--- CHEN, Z.X. - CAO, F.L. - HU, J.J. Error estimates of quasi-interpolation and its derivatives. JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS. ISSN 0377-0427, JUL 2012, vol. 236, no. 13, p. 3137-3146. [WOS]

--- CHEN, Z.X. - CAO, F.L. The construction and approximation of neural networks operators with Gaussian activation function. MATHEMATICAL COMMUNICATIONS. ISSN 1331-0623, MAY 2013, vol. 18, no. 1, p. 185-207. [WOS]

### **Kůrková, Věra**

Model Complexity of Neural Networks and Integral Transforms.

*Artificial Neural Networks - ICANN 2009*. Berlin : Springer, 2009 - (Alippi, C.; Polycarpou, M.; Panayiotou, C.; Ellinas, G.), s. 708-717. ISBN 978-3-642-04273-7. - (Lecture Notes in Computer Science. 5768).

[ICANN 2009. International Conference on Artificial Neural Networks /19./ Limassol (CY), 14.09.2009-17.09.2009]

 [DOI: 10.1007/978-3-642-04274-4\\_73](https://doi.org/10.1007/978-3-642-04274-4_73)

Citováno: 1 x

--- GNECCO, G. - SANGUINETI, M. On a Variational Norm Tailored to Variable-Basis Approximation Schemes. IEEE TRANSACTIONS ON INFORMATION THEORY. ISSN 0018-9448, JAN 2011, vol. 57, no. 1, p. 549-558.

[WOS]

## **2008**

### **Kůrková, Věra - Sanguinetti, M.**

Approximate Minimization of the Regularized Expected Error over Kernel Models.

*Mathematics of Operations Research*. Roč. 33, č. 3 (2008), s. 747-756. ISSN 0364-765X

Impakt faktor: 1.086, rok: 2008

 [DOI: 10.1287/moor.1080.0317](https://doi.org/10.1287/moor.1080.0317)

Citováno: 2 x

--- GNECCO, G. Functional optimization by variable-basis approximation schemes. 4OR-A QUARTERLY JOURNAL OF OPERATIONS RESEARCH. ISSN 1619-4500, MAR 2011, vol. 9, no. 1, p. 103-106. [WOS]

--- NAUMOVA, V. - PEREVERZYEV, S.V. - SIVANANTHAN, S. A meta-learning approach to the regularized learning-Case study: Blood glucose prediction. NEURAL NETWORKS. ISSN 0893-6080, SEP 2012, vol. 33, p. 181-193. [WOS]

### **Kůrková, Věra - Sanguinetti, M.**

Geometric Upper Bounds on Rates of Variable-Basis Approximation.

*IEEE Transactions on Information Theory*. Roč. 54, č. 12 (2008), s. 5681-5688. ISSN 0018-9448

Impakt faktor: 3.793, rok: 2008

 [DOI: 10.1109/TIT.2008.2006383](https://doi.org/10.1109/TIT.2008.2006383)

Citováno: 2 x

--- WANG, S.N. - HUANG, X.L. - YAM, Y. A Neural Network of Smooth Hinge Functions. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, SEP 2010, vol. 21, no. 9, p. 1381-1395. [WOS]

--- DECHERCHI, S. - PARODI, M. - RIDELLA, S. A Neural Model Approach for Regularization in the Mean Estimation Case. 2010 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS IJCNN 2010. ISSN 1098-7576, 2010. [WOS]

### **Kůrková, Věra**

Minimization of Error Functionals over Perceptron Networks.

*Neural Computation*. Roč. 20, č. 1 (2008), s. 252-270. ISSN 0899-7667

Impakt faktor: 2.378, rok: 2008

 [DOI: 10.1162/neco.2008.20.1.252](https://doi.org/10.1162/neco.2008.20.1.252)

Citováno: 2 x

--- ITO, Y. Simultaneous Approximations of Polynomials and Derivatives and Their Applications to Neural

Networks. NEURAL COMPUTATION. ISSN 0899-7667, NOV 2008, vol. 20, no. 11, p. 2757-2791. [WOS]  
 --- BIANCHINI, M. - MAGGINI, M. - SCARSELLI, F. - JAIN, L.C. Advances in Neural Information Processing Paradigms. INNOVATIONS IN NEURAL INFORMATION PARADIGMS AND APPLICATIONS. ISSN 1860-949X, 2009, vol. 247, p. 1-7. [WOS]

**Kainen, P.C. - Kůrková, Věra**

Estimates of Network Complexity and Integral Representations.  
*Artificial Neural Networks - ICANN 2008*. Berlin : Springer, 2008 - (Kůrková, V.; Neruda, R.; Koutník, J.), s. 31-40. ISBN 978-3-540-87535-2. - (Lecture Notes in Computer Science. 5163).  
 [ICANN 2008. International Conference on Artificial Neural Networks /18./. Prague (CZ), 03.09.2008-06.09.2008]

 [DOI: 10.1007/978-3-540-87536-9\\_4](https://doi.org/10.1007/978-3-540-87536-9_4)

Citováno: 1 x

--- GNECCO, G. - SANGUINETI, M. Estimates of Variation with Respect to a Set and Applications to Optimization Problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, APR 2010, vol. 145, no. 1, p. 53-75. [WOS]

## 2007

**Kainen, P.C. - Kůrková, Věra - Vogt, A.**

A Sobolev-Type Upper Bound for Rates of Approximation by Linear Combinations of Heaviside Plane Waves.  
*Journal of Approximation Theory*. Roč. 147, č. 1 (2007), s. 1-10. ISSN 0021-9045

Impakt faktor: 0.697, rok: 2007


 [DOI: 10.1016/j.jat.2006.12.009](https://doi.org/10.1016/j.jat.2006.12.009)

Citováno: 1 x

--- KONOVALOV, V.N. - LEVIATAN, D. - MAIOROV, V.E. Approximation of Sobolev classes by polynomials and ridge functions. JOURNAL OF APPROXIMATION THEORY. ISSN 0021-9045, JUL 2009, vol. 159, no. 1, Sp. Iss. SI, p. 97-108. [WOS]

**Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**

Estimates of Approximation Rates by Gaussian Radial-Basis Functions.  
*Adaptive and Natural Computing Algorithms*. Berlin : Springer, 2007 - (Beliczynski, B.; Dzielinski, A.; Iwanowski, M.; Ribeiro, B.), s. 11-18. ISBN 978-3-540-71590-0. - (Lecture Notes in Computer Science. 4432).  
 [ICANGA'2007 /8./. Warsaw (PL), 11.04.2007-14.04.2007]

 [DOI: 10.1007/978-3-540-71629-7\\_2](https://doi.org/10.1007/978-3-540-71629-7_2)

Citováno: 3 x

--- HOLENA, M. - STEINFELDT, N. IMPROVING NEURAL NETWORK APPROXIMATIONS IN APPLICATIONS: A CASE STUDY IN MATERIALS SCIENCE. NEURAL NETWORK WORLD. ISSN 1210-0552, 2009, vol. 19, no. 2, p. 165-190. [WOS]

--- HOLENA, M. Identification versus generalization comment on the criticism of indeterminacy of artificial neural networks. APPLIED CATALYSIS A-GENERAL. ISSN 0926-860X, JAN 2008, vol. 334, no. 1-2, p. 381-385. [WOS]

--- HOLENA, M. - LINKE, D. - RODEMERCK, U. - BAJER, L. Neural Networks as Surrogate Models for Measurements in Optimization Algorithms. ANALYTICAL AND STOCHASTIC MODELING TECHNIQUES AND APPLICATIONS, PROCEEDINGS. ISSN 0302-9743, 2010, vol. 6148, p. 351-366. [WOS]

**Kůrková, Věra**

Estimates of Data Complexity in Neural-Network Learning.  
*SOFSEM 2007: Theory and Practice of Computer Science*. Berlin : Springer, 2007 - (van Leeuwen, J.; Italiano, G.; van der Hoek, W.; Meinel, C.; Sack, H.; Plášil, F.), s. 377-387. ISBN 978-3-540-69506-6. - (Lecture Notes in Computer Science. 4362).  
 [SOFSEM 2007. Conference on Current Trends in Theory and Practice of Computer Science /33./. Harrachov (CZ), 20.01.2007-26.01.2007]



[DOI: 10.1007/978-3-540-69507-3\\_32](https://doi.org/10.1007/978-3-540-69507-3_32)

Citováno: 1 x

--- HOLENA, M. Identification versus generalization comment on the criticism of indeterminacy of artificial neural networks. APPLIED CATALYSIS A-GENERAL. ISSN 0926-860X, JAN 2008, vol. 334, no. 1-2, p. 381-385. [WOS]

## 2005

### **Kůrková, Věra - Sanguineti, M.**

Error Estimates for Approximate Optimization by the Extended Ritz Method. *SIAM Journal on Optimization*. Roč. 15, č. 2 (2005), s. 461-487. ISSN 1052-6234  
 Impakt faktor: 1.238, rok: 2005

[DOI: 10.1137/S1052623403426507](https://doi.org/10.1137/S1052623403426507)

Citováno: 11 x

- WAN, Z. - WU, S.Y. - TEO, K.L. Some properties on quadratic infinite programs of integral type. APPLIED MATHEMATICS LETTERS. ISSN 0893-9659, JUN 2007, vol. 20, no. 6, p. 676-680. [WOS]
- ZOLEZZI, T. Condition numbers and Ritz type methods in unconstrained optimization. CONTROL AND CYBERNETICS. ISSN 0324-8569, 2007, vol. 36, no. 3, p. 811-822. [WOS]
- IVALDI, S. - BAGLIETTO, M. - METTA, G. - ZOPPOLI, R. An Application of Receding-Horizon Neural Control in Humanoid Robotics. NONLINEAR MODEL PREDICTIVE CONTROL: TOWARDS NEW CHALLENGING APPLICATIONS. ISSN 0170-8643, 2009, vol. 384, p. 541-550. [WOS]
- ALESSANDRI, A. - BOLLA, R. - GAGGERO, M. - REPETTO, M. Identification of freeway traffic dynamics using fluid and black-box nonlinear models. PROCEEDINGS OF THE 46TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-14. ISSN 0191-2216, 2007, p. 2711-2716. [WOS]
- CERVELLERA, C. - MACCIO, D. - MUSELLI, M. Functional Optimization Through Semilocal Approximate Minimization. OPERATIONS RESEARCH. ISSN 0030-364X, SEP-OCT 2010, vol. 58, no. 5, p. 1491-1504. [WOS]
- IVALDI, S. - BAGLIETTO, M. - DAVOLI, F. - ZOPPOLI, R. Optimal control of communication in energy constrained sensor networks through team theory and Extended Ritz Method. IJCNN: 2009 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1- 6. ISSN 1098-7576, 2009, p. 1684-1691. [WOS]
- GUTJAHR, G. - BRANNATH, W. - BAUER, P. An Approach to the Conditional Error Rate Principle with Nuisance Parameters. BIOMETRICS. ISSN 0006-341X, SEP 2011, vol. 67, no. 3, p. 1039-1046. [WOS]
- GNECCO, G. Functional optimization by variable-basis approximation schemes. 4OR-A QUARTERLY JOURNAL OF OPERATIONS RESEARCH. ISSN 1619-4500, MAR 2011, vol. 9, no. 1, p. 103-106. [WOS]
- IVALDI, S. - FUMAGALLI, M. - NORI, F. - BAGLIETTO, M. - METTA, G. - SANDINI, G. Approximate optimal control for reaching and trajectory planning in a humanoid robot. IEEE/RSJ 2010 INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS 2010). ISSN 2153-0858, 2010, p. 1290-1296. [WOS]
- CERVELLERA, C. - GAGGERO, M. - MACCIO, D. Efficient kernel models for learning and approximate minimization problems. NEUROCOMPUTING. ISSN 0925-2312, NOV 15 2012, vol. 97, p. 74-85. [WOS]
- GNECCO, G. A Comparison between Fixed-Basis and Variable-Basis Schemes for Function Approximation and Functional Optimization. JOURNAL OF APPLIED MATHEMATICS. ISSN 1110-757X, 2012. [WOS]

### **Kůrková, Věra - Sanguineti, M.**

Learning with Generalization Capability by Kernel Methods of Bounded Complexity. *Journal of Complexity*. Roč. 21, č. 3 (2005), s. 350-367. ISSN 0885-064X  
 Impakt faktor: 1.186, rok: 2005

[DOI: 10.1016/j.jco.2004.11.002](https://doi.org/10.1016/j.jco.2004.11.002)

Citováno: 6 x

- NERUDA, R. - VIDNEROVA, P. Supervised Learning Errors by Radial Basis Function Neural Networks and Regularization Networks. 2008 SECOND INTERNATIONAL CONFERENCE ON FUTURE GENERATION COMMUNICATION AND NETWORKING SYMPOSIA, VOLS 1-5, PROCEEDINGS. 2008, p. 360-363. [WOS]
- ZWICKNAGL, B. Power Series Kernels. CONSTRUCTIVE APPROXIMATION. ISSN 0176-4276, FEB 2009, vol.

29, no. 1, p. 61-84. [WOS]

--- VIDNEROVA, P. - NERUDA, R. Hybrid Learning of Regularization Neural Networks. ARTIFICIAL INTELLIGENCE AND SOFT COMPUTING, PT II. ISSN 0302-9743, 2010, vol. 6114, p. 124-131. [WOS]

--- STROFFEK, J. - MARSALEK, P. Short-term potentiation effect on pattern recall in sparsely coded neural network. NEUROCOMPUTING. ISSN 0925-2312, FEB 1 2012, vol. 77, no. 1, p. 108-113. [WOS]

--- ALESSANDRI, A. - CERVELLERA, C. - MACCIO, D. - SANGUINETI, A. Design of parameterized state observers and controllers for a class of nonlinear continuous-time systems. PROCEEDINGS OF THE 45TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-14. ISSN 0191-2216, 2006, p. 5388-5393. [WOS]


--- MA, J.Y. - ZHAO, J. - TIAN, J.W. - BAI, X. - TU, Z.W. Regularized vector field learning with sparse approximation for mismatch removal. PATTERN RECOGNITION. ISSN 0031-3203, DEC 2013, vol. 46, no. 12, p. 3519-3532. [WOS]

### **Kůrková, Věra**

Neural Network Learning as an Inverse Problem.

*Logic Journal of the IGPL*. Roč. 13, č. 5 (2005), s. 551-559. ISSN 1367-0751

Impakt faktor: 0.382, rok: 2005

 DOI: [10.1093/jigpal/jzi041](https://doi.org/10.1093/jigpal/jzi041)

Citováno: 4 x

--- HLAVACKOVA-SCHINDLER, K. Tikhonov Regularization Parameter in Reproducing Kernel Hilbert Spaces with Respect to the Sensitivity of the Solution. ARTIFICIAL NEURAL NETWORKS - ICANN 2008, PT I. ISSN 0302-9743, 2008, vol. 5163, p. 215-224. [WOS]

--- BELICZYNSKI, B. Properties of the hermite activation functions in a neural approximation scheme. Adaptive and Natural Computing Algorithms, Pt 2. ISSN 0302-9743, 2007, vol. 4432, p. 46-54. [WOS]


--- GNECCO, G. - SANGUINETI, M. Regularization Techniques and Suboptimal Solutions to Optimization Problems in Learning from Data. NEURAL COMPUTATION. ISSN 0899-7667, MAR 2010, vol. 22, no. 3, p. 793-829. [WOS]

--- BELICZYNSKI, B. A method of multivariable Hermite basis function approximation. NEUROCOMPUTING. ISSN 0925-2312, NOV 1 2012, vol. 96, SI, p. 12-18. [WOS]

### **Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**

Rates of Minimization of Error Functionals over Boolean Variable-Basis Functions.

*Journal of Mathematical Modelling and Algorithms*. Roč. 4, č. 4 (2005), s. 355-368. ISSN 1570-1166

 DOI: [10.1007/s10852-005-1625-z](https://doi.org/10.1007/s10852-005-1625-z)

Citováno: 1 x

--- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]

## **2004**

### **Kůrková, Věra**

Learning from Data as an Inverse Problem.

*Computational Statistics*. Heidelberg : Physica Verlag, 2004 - (Antoch, J.), s. 1377-1384. ISBN 3-7908-1554-3. [COMPSTAT 2004. Symposium /16./. Prague (CZ), 23.08.2004-27.08.2004]

Citováno: 13 x

--- DE VITO, E. - ROSASCO, L. - CAPONNETTO, A. - DE GIOVANNI, U. - Odone, F. Learning from examples as an inverse problem. JOURNAL OF MACHINE LEARNING RESEARCH. ISSN 1532-4435, MAY 2005, vol. 6, p. 883-904. [WOS]

--- HLAVACKOVA-SCHINDLER, K. Tikhonov Regularization Parameter in Reproducing Kernel Hilbert Spaces with Respect to the Sensitivity of the Solution. ARTIFICIAL NEURAL NETWORKS - ICANN 2008, PT I. ISSN 0302-9743, 2008, vol. 5163, p. 215-224. [WOS]

--- NERUDA, R. - VIDNEROVA, P. Supervised Learning Errors by Radial Basis Function Neural Networks and Regularization Networks. 2008 SECOND INTERNATIONAL CONFERENCE ON FUTURE GENERATION

- COMMUNICATION AND NETWORKING SYMPOSIA, VOLS 1-5, PROCEEDINGS. 2008, p. 360-363. [WOS]
- ENACHESCU, C. Using prior information to improve the approximation performances of neural networks. Numerical Analysis and Applied Mathematics. ISSN 0094-243X, 2007, vol. 936, p. 170-173. [WOS]
- DE VITO, E. - ROSASCO, L. - CAPONNETTO, A. - DE GIOVANNINI, U. - ODONE, F. Learning from examples as an inverse problem. JOURNAL OF MACHINE LEARNING RESEARCH. ISSN 1532-4435, MAY 2005, vol. 6, p. 883-904. [WOS]
- NGUYEN, T.T. Layered Approximation Approach to Knowledge Elicitation in Machine Learning. ROUGH SETS AND CURRENT TRENDS IN COMPUTING, PROCEEDINGS. ISSN 0302-9743, 2010, vol. 6086, p. 446-455. [WOS]
- GNECCO, G. - SANGUINETI, M. Regularization Techniques and Suboptimal Solutions to Optimization Problems in Learning from Data. NEURAL COMPUTATION. ISSN 0899-7667, MAR 2010, vol. 22, no. 3, p. 793-829. [WOS]
- NERUDA, R. - VIDNEROVA, P. Genetic Algorithm with Species for Regularization Network Metalearning. ADVANCES IN INFORMATION TECHNOLOGY. ISSN 1865-0929, 2010, vol. 114, p. 192-201. [WOS]
- KRUGLOV, I. - MISHULINA, O. - BAKIROV, M. Quantile based decision making rule of the neural networks committee for ill-posed approximation problems. NEUROCOMPUTING. ISSN 0925-2312, NOV 1 2012, vol. 96, SI, p. 74-82. [WOS]
- VIDNEROVA, P. - NERUDA, R. Evolving Sum and Composite Kernel Functions for Regularization Networks. ADAPTIVE AND NATURAL COMPUTING ALGORITHMS, PT I. ISSN 0302-9743, 2011, vol. 6593, p. 180-189. [WOS]
- VIDNEROVA, P. - NERUDA, R. Evolutionary Learning of Regularization Networks with Multi-kernel Units. ADVANCES IN NEURAL NETWORKS - ISSN 2011, PT I. ISSN 0302-9743, 2011, vol. 6675, p. 538-546. [WOS]
- GNECCO, G. - SANGUINETI, M. Regularization and Suboptimal Solutions in Learning from Data. INNOVATIONS IN NEURAL INFORMATION PARADIGMS AND APPLICATIONS. ISSN 1860-949X, 2009, vol. 247, p. 113-154. [WOS]
- KRUGLOV, I.A. - MISHULINA, O.A. Neural network modeling of vector multivariable functions in ill-posed approximation problems. JOURNAL OF COMPUTER AND SYSTEMS SCIENCES INTERNATIONAL. ISSN 1064-2307, JUL 2013, vol. 52, no. 4, p. 503-518. [WOS]

#### **Kůrková, Věra**

Supervised Learning as an Inverse Problem.

Prague : ICS AS CR, 2004. 7 s. - (Technical Report, V-906)

<http://hdl.handle.net/11104/0010622>

Citováno: 2 x

- HLAVACKOVA-SCHINDLER, K. Tikhonov Regularization Parameter in Reproducing Kernel Hilbert Spaces with Respect to the Sensitivity of the Solution. ARTIFICIAL NEURAL NETWORKS - ICANN 2008, PT I. ISSN 0302-9743, 2008, vol. 5163, p. 215-224. [WOS]
- ENACHESCU, C. Using prior information to improve the approximation performances of neural networks. Numerical Analysis and Applied Mathematics. ISSN 0094-243X, 2007, vol. 936, p. 170-173. [WOS]

## **2003**

#### **Kůrková, Věra**

Aproximace funkcí neuronovými sítěmi.

[Approximation of Functions by Neural Networks.]

*Umělá inteligence 4*. Praha : Academia, 2003 - (Mařík, M.; Štěpánková, O.; Lažanský, J.), s. 254-275.

ISBN 80-200-1044-0

Citováno: 1 x

- Havel I.M. Přirozené a umělé myšlení jako filozofický problém. in : *Umělá inteligence*. Praha : Academia, vol. 3, (2001), pp. 17-75

**Kůrková, Věra**

High-Dimensional Approximation by Neural Networks.

*Advances in Learning Theory: Methods, Models and Applications*. Amsterdam : IOS Press, 2003 -

(Suykens, J.; Horváth, G.; Basu, S.; Micchelli, C.; Vandewalle, J.), s. 69-88. ISBN 1-58603-341-7. - (NATO Science Series. 190)

Citováno: 2 x

--- GNECCO, G. - SANGUINETI, M. Regularization and Suboptimal Solutions in Learning from Data.

INNOVATIONS IN NEURAL INFORMATION PARADIGMS AND APPLICATIONS. ISSN 1860-949X, 2009, vol. 247, p. 113-154. [WOS]

--- MA, J.Y. - ZHAO, J. - TIAN, J.W. - BAI, X. - TU, Z.W. Regularized vector field learning with sparse approximation for mismatch removal. PATTERN RECOGNITION. ISSN 0031-3203, DEC 2013, vol. 46, no. 12, p. 3519-3532. [WOS]

**Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**

Minimization of Error Functionals over Variable-basis Functions.

*SIAM Journal on Optimization*. Roč. 14, č. 3 (2003), s. 732-742. ISSN 1052-6234

Impakt faktor: 1.757, rok: 2003

 [DOI: 10.1137/S1052623402401233](https://doi.org/10.1137/S1052623402401233)

Citováno: 3 x

--- GNECCO, G. Functional optimization by variable-basis approximation schemes. 4OR-A QUARTERLY JOURNAL OF OPERATIONS RESEARCH. ISSN 1619-4500, MAR 2011, vol. 9, no. 1, p. 103-106. [WOS]

--- GNECCO, G. A Comparison between Fixed-Basis and Variable-Basis Schemes for Function Approximation and Functional Optimization. JOURNAL OF APPLIED MATHEMATICS. ISSN 1110-757X, 2012. [WOS]

--- GUTJAHR, G. - BRANNATH, W. - BAUER, P. An Approach to the Conditional Error Rate Principle with Nuisance Parameters. BIOMETRICS. ISSN 0006-341X, SEP 2011, vol. 67, no. 3, p. 1039-1046. [WOS]

**Kůrková, Věra - Sanguinetti, M.**

Learning with Generalization Capability by Kernel Methods of Bounded Complexity.

Prague : ICS AS CR, 2003. 16 s. - (Technical Report, V-901)

<http://hdl.handle.net/11104/0125385>

Citováno: 1 x

--- KAINEN, P.C. Replacing points by compacta in neural network approximation. JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS. ISSN 0016-0032, JUL 2004, vol. 341, no. 4, p. 391-399. [WOS]

**2002**

**Kůrková, Věra**

Universal Approximators.

*The Handbook of Brain Theory and Neural Networks*. 2nd ed. Cambridge : The MIT Press, 2002 - (Arbib, M.), s. 1180-1183. ISBN 0-262-01197-2

Citováno: 2 x

--- HOLENA, M. - STEINFELDT, N. IMPROVING NEURAL NETWORK APPROXIMATIONS IN APPLICATIONS: A CASE STUDY IN MATERIALS SCIENCE. NEURAL NETWORK WORLD. ISSN 1210-0552, 2009, vol. 19, no. 2, p. 165-190. [WOS]

--- FAVOROV, O.V. - KURSUN, O. Neocortical layer 4 as a pluripotent function linearizer. JOURNAL OF NEUROPHYSIOLOGY. ISSN 0022-3077, MAR 2011, vol. 105, no. 3, p. 1342-1360. [WOS]

**Kůrková, Věra - Sanguinetti, M.**

Comparison of Worst Case Errors in Linear and Neural Network Approximation.

*IEEE Transactions on Information Theory*. Roč. 48, č. 1 (2002), s. 264-275. ISSN 0018-9448

Impakt faktor: 2.045, rok: 2002

 [DOI: 10.1109/18.971754](https://doi.org/10.1109/18.971754)

Citováno: 20 x

- XU, Z.B. - WANG, J.J. - MENG, D.V. Approximation bound of mixture networks in  $L$ - $\omega(p)$  spaces. ADVANCES IN NEURAL NETWORKS - ISSN 2006, PT 1. ISSN 0302-9743, 2006, vol. 3971, Part 1, p. 60-65. [WOS]
- BAGLIETTO, M.B. - DAVOLI, F. - MARCHESE, M. - MONGELLI, M. Neural approximation of open-loop feedback rate control in satellite networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, SEP 2005, vol. 16, no. 5, p. 1195-1211. [WOS]
- MA, W.M. - CHEN, G.Q. Improvement on the approximation bound for fuzzy-neural networks clustering method with Gaussian membership function. ADVANCED DATA MINING AND APPLICATIONS, PROCEEDINGS. ISSN 0302-9743, 2005, vol. 3584, p. 225-231. [WOS]
- RESENDIZ, J. - YU, W. - FRIDMAN, L. Two-Stage Neural Observer for Mechanical Systems. IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-EXPRESS BRIEFS. ISSN 1549-7747, OCT 2008, vol. 55, no. 10, p. 1076-1080. [WOS]
- BARRON, A.R. - COHEN, A. - DAHMEN, W. - DEVORE, R.A. Approximation and learning by greedy algorithms. ANNALS OF STATISTICS. ISSN 0090-5364, FEB 2008, vol. 36, no. 1, p. 64-94. [WOS]
- BAGLIETTO, M. - DAVOLI, F. - MARCHESE, M. - MONGELLI, M. Neural approximation of open-loop feedback rate control in satellite networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, SEP 2005, vol. 16, no. 5, p. 1195-1211. [WOS]
- WANG, J.J. - XU, Z.B. - XU, W.J. Approximation bounds by neural networks in  $L$ - $w(P)$ . ADVANCES IN NEURAL NETWORKS - ISSN 2004, PT 1. ISSN 0302-9743, 2004, vol. 3173, p. 1-6. [WOS]
- MHASKAR, H.N. When is approximation by Gaussian networks necessarily a linear process?. NEURAL NETWORKS. ISSN 0893-6080, SEP 2004, vol. 17, no. 7, p. 989-1001. [WOS]
- MHASKAR, H.N. On the tractability of multivariate integration and approximation by neural networks. JOURNAL OF COMPLEXITY. ISSN 0885-064X, AUG 2004, vol. 20, no. 4, p. 561-590. [WOS]
- ALESSANDRI, A. Fault diagnosis for nonlinear systems using a bank of neural estimators. COMPUTERS IN INDUSTRY. ISSN 0166-3615, DEC 2003, vol. 52, no. 3, p. 271-289. [WOS]
- CAO, F.L. - ZHANG, Y.Q. - XU, Z.B. Lower estimation of approximation rate for neural networks. SCIENCE IN CHINA SERIES F-INFORMATION SCIENCES. ISSN 1009-2757, AUG 2009, vol. 52, no. 8, p. 1321-1327. [WOS]
- WANG, S.N. - HUANG, X.L. - YAM, Y. A Neural Network of Smooth Hinge Functions. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, SEP 2010, vol. 21, no. 9, p. 1381-1395. [WOS]
- TOKAT, S. - IPLIKCI, S. - ULUSOY, L. Output Feedback Sliding Mode Control with Support Vector Machine Based Observer Gain Adaptation. PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS'09). 2009, p. 63-68. [WOS]
- ALESSANDRI, A. - BAGLIETTO, M. - BATTISTELLI, G. - GAGGERO, M. Moving-Horizon State Estimation for Nonlinear Systems Using Neural Networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAY 2011, vol. 22, no. 5, p. 768-780. [WOS]
- GNECCO, G. A Comparison between Fixed-Basis and Variable-Basis Schemes for Function Approximation and Functional Optimization. JOURNAL OF APPLIED MATHEMATICS. ISSN 1110-757X, 2012. [WOS]
- ALESSANDRI, A. - GAGGERO, M. - ZOPPOLI, R. Feedback Optimal Control of Distributed Parameter Systems by Using Finite-Dimensional Approximation Schemes. IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS. ISSN 2162-237X, JUN 2012, vol. 23, no. 6, p. 984-996. [WOS]
- WANG, J.J. - YANG, C.Y. - JING, J. Estimation of Approximating Rate for Neural Network in  $L$ - $w(p)$  Spaces. JOURNAL OF APPLIED MATHEMATICS. ISSN 1110-757X, 2012. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - CUNEO, M. - GAGGERO, M. Nonlinear Predictive Control for the Management of Container Flows in Maritime Intermodal Terminals. 47TH IEEE CONFERENCE ON DECISION AND CONTROL, 2008 (CDC 2008). ISSN 0191-2216, 2008, p. 2800-2805. [WOS]
- MA, J.Y. - ZHAO, J. - TIAN, J.W. - BAI, X. - TU, Z.W. Regularized vector field learning with sparse approximation for mismatch removal. PATTERN RECOGNITION. ISSN 0031-3203, DEC 2013, vol. 46, no. 12, p. 3519-3532. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - GAGGERO, M. Predictive Control of Container Flows in Maritime Intermodal Terminals. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. ISSN 1063-6536, JUL 2013, vol. 21, no. 4, p. 1423-1431. [WOS]



**Kůrková, Věra**

Universality and Complexity of Approximation of Multivariable Functions by Feedforward Networks.

*Soft Computing and Industry. Recent Applications.* London : Springer, 2002 - (Roy, R.; Köppen, M.; Ovaska, S.; Furuhashi, T.; Hoffmann, F.), s. 13-24. ISBN 978-1-4471-1101-6.

[Online World Conference on Soft Computing in Industrial Applications /6./. On the Internet, 10.10.2001-24.10.2001]

[DOI: 10.1007/978-1-4471-0123-9\\_2](https://doi.org/10.1007/978-1-4471-0123-9_2)

Citováno: 2 x

--- SIDLOFOVA, T. Bounds on rates of approximation by neural networks in L-p-spaces. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS, PROCEEDINGS. 2003, p. 23-27. [WOS]

--- HLAVAKOVA-SCHINDLER, K. - SANGUINETI, M. Bounds on the complexity of neural-network models and comparison with linear methods. INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING. ISSN 0890-6327, MAR 2003, vol. 17, no. 2, p. 179-194. [WOS]

**Kainen, P.C. - Kůrková, Věra - Sanguinetti, M.**

Minimization of Error Functionals over Variable-Basis Functions.

Prague : ICS AS CR, 2002. 17 s. - (Technical Report, V-864)

<http://hdl.handle.net/11104/0124951>

Citováno: 1 x

--- MULERO-MARTINEZ, J.I. Best approximation of Gaussian neural networks with nodes uniformly spaced. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, FEB 2008, vol. 19, no. 2, p. 284-298. [WOS]

**2001**

**Kůrková, Věra - Sanguinetti, M.**

Bounds on Rates of Variable-Basis and Neural-Network Approximation.

*IEEE Transactions on Information Theory.* Roč. 47, č. 6 (2001), s. 2659-2665. ISSN 0018-9448

Impakt faktor: 2.077, rok: 2001

[DOI: 10.1109/18.945285](https://doi.org/10.1109/18.945285)

Citováno: 6 x

--- MHASKAR, H.N. When is approximation by Gaussian networks necessarily a linear process?. NEURAL NETWORKS. ISSN 0893-6080, SEP 2004, vol. 17, no. 7, p. 989-1001. [WOS]

--- MHASKAR, H.N. On the tractability of multivariate integration and approximation by neural networks. JOURNAL OF COMPLEXITY. ISSN 0885-064X, AUG 2004, vol. 20, no. 4, p. 561-590. [WOS]

--- ALESSANDRI, A. Fault diagnosis for nonlinear systems using a bank of neural estimators. COMPUTERS IN INDUSTRY. ISSN 0166-3615, DEC 2003, vol. 52, no. 3, p. 271-289. [WOS]

--- BARRON, A.R. - COHEN, A. - DAHMEN, W. - DEVORE, R.A. Approximation and learning by greedy algorithms. ANNALS OF STATISTICS. ISSN 0090-5364, FEB 2008, vol. 36, no. 1, p. 64-94. [WOS]

--- CAO, F.L. - ZHANG, Y.Q. - XU, Z.B. Lower estimation of approximation rate for neural networks. SCIENCE IN CHINA SERIES F-INFORMATION SCIENCES. ISSN 1009-2757, AUG 2009, vol. 52, no. 8, p. 1321-1327. [WOS]

--- XIE, T.F. - CAO, F.L. The Ridge Function Representation of Polynomials and an Application to Neural Networks. ACTA MATHEMATICA SINICA-ENGLISH SERIES. ISSN 1439-8516, NOV 2011, vol. 27, no. 11, p. 2169-2176. [WOS]

**Kainen, P.C. - Kůrková, Věra - Vogt, A.**

Continuity of Approximation by Neural Networks in  $L^p$  Spaces.

*Annals of Operations Research.* Roč. 101, č. 1-4 (2001), s. 143-147. ISSN 0254-5330

Impakt faktor: 0.255, rok: 2001

[DOI: 10.1023/A:1010916406274](https://doi.org/10.1023/A:1010916406274)

Citováno: 1 x

--- CASTEJON-LIMAS, M. - ORDIERES-MERE, J. - GONZALEZ-MARCOS, A. - GONZALEZ-CASTRO, V. Effort estimates through project complexity. ANNALS OF OPERATIONS RESEARCH. ISSN 0254-5330, JUN 2011, vol. 186, no. 1, p. 395-406. [WOS]

## 2000

### **Kainen, P.C. - Kůrková, Věra - Vogt, A.**

An Integral Formula for Heaviside Neural Networks.

*Neural Network World*. Roč. 10, č. 3 (2000), s. 313-319. ISSN 1210-0552.

[Neural Network World 2000. Prague, 09.07.2000-12.07.2000]

Citováno: 1 x

--- SIDLOFOVA, T. Bounds on rates of approximation by neural networks in L-p-spaces. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS, PROCEEDINGS. 2003, p. 23-27. [WOS]

### **Kainen, P.C. - Kůrková, Věra - Vogt, A.**

Best Approximation by Heaviside Perceptron Networks.

*Neural Networks*. Roč. 13, č. 7 (2000), s. 695-697. ISSN 0893-6080

Impakt faktor: 1.221, rok: 2000

[DOI: 10.1016/S0893-6080\(00\)00056-3](https://doi.org/10.1016/S0893-6080(00)00056-3)

Citováno: 2 x

--- MULERO-MARTINEZ, J.I. Best approximation of Gaussian neural networks with nodes uniformly spaced. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, FEB 2008, vol. 19, no. 2, p. 284-298. [WOS]

--- HAN, M. - XI, J.H. Efficient clustering of radial basis perceptron neural network for pattern recognition. PATTERN RECOGNITION. ISSN 0031-3203, OCT 2004, vol. 37, no. 10, p. 2059-2067. [WOS]

### **Kainen, P.C. - Kůrková, Věra - Vogt, A.**

Geometry and Topology of Continuous Best and Near Best Approximations.

*Journal of Approximation Theory*. Roč. 105, č. 2 (2000), s. 252-262. ISSN 0021-9045

Impakt faktor: 0.556, rok: 2000

[DOI: 10.1006/jath.2000.3467](https://doi.org/10.1006/jath.2000.3467)

Citováno: 1 x

--- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]

### **Kůrková, Věra - Sanguineti, M.**

Comparison of Rates of Linear and Neural Network Approximation.

*IJCNN 2000. Proceedings of the IEEE-INNS-ENNS International Joint Conference on Neural Networks*. Los Alamitos : IEEE Computer Society, 2000, s. 277-282. ISBN 0-7695-0619-4.

[IJCNN 2000. Como (IT), 24.07.2000-27.07.2000]

[DOI: 10.1109/IJCNN.2000.857848](https://doi.org/10.1109/IJCNN.2000.857848)

Citováno: 1 x

--- BRODERICK, D.J. - BEVLY, D.M. - HUNG, J.Y. An Adaptive Non-linear State Estimator for Vehicle Lateral Dynamics. IECON: 2009 35TH ANNUAL CONFERENCE OF IEEE INDUSTRIAL ELECTRONICS, VOLS 1-6. 2009, p. 1355-1360. [WOS]

### **Kůrková, Věra**

Neural Networks as Nonlinear Approximators.

*Proceedings of the ICSC Symposia on Neural Computation*. ICSC, 2000 - (Bothe, H.; Rojas, R.), s. 29-35.

ISBN 3-906454-21-5.

[NC'2000. ICSC Symposium on Neural Computation /2./. Berlin (DE), 23.05.2000-26.05.2000]

Citováno: 4 x

--- ALESSANDRI, A. - SANGUINETI, M. - MAGGIORE, M. Batch-mode identification of black-box models using feedforward neural networks. PROCEEDINGS OF THE 2002 AMERICAN CONTROL CONFERENCE, VOLS 1-6. ISSN 0743-1619, 2002, p. 406-411. [WOS]

--- ALESSANDRI, A. - SANGUINETI, M. On the design of approximate state estimators for nonlinear systems. PROCEEDINGS OF THE 40TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-5. ISSN 0191-2216, 2001, p. 3372-3377. [WOS]

- ALESSANDRI, A. - SANGUINETI, M. - MAGGIORE, M. Optimization-based learning with bounded error for feedforward neural networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAR 2002, vol. 13, no. 2, p. 261-273. [WOS]
- ANDREJKOVA, G. Incremental approximation by layer neural networks. STATE OF THE ART IN COMPUTATIONAL INTELLIGENCE. ISSN 1615-3871, 2000, p. 15-20. [WOS]

### Kůrková, Věra

Rates of Approximation by Neural Networks.

*Quo Vadis Computational Intelligence? New Trends and Approaches in Computational Intelligence.*

Heidelberg : PhysicaVerlag, 2000 - (Sinčák, P.; Vaščák, J.), s. 23-36. ISBN 3-7908-1324-9. ISSN 1434-9922. - (Studies in Fuzziness and Soft Computing. 54).

[ISCI'2000 International Symposium on Computational Intelligence. Košice (SK), 30.08.2000-01.09.2000]

Citováno: 4 x

- HOLENA, M. McNaughton theorem of fuzzy logic from a data-mining point of view. NEURAL NETWORK WORLD. ISSN 1210-0552, 2007, vol. 17, no. 3, p. 189-212. [WOS]
- HOLENA, M. Piecewise-linear neural networks and their relationship to rule extraction from data. NEURAL COMPUTATION. ISSN 0899-7667, NOV 2006, vol. 18, no. 11, p. 2813-2853. [WOS]
- VIET, N.H. - MANDZIUK, J. Neural and fuzzy neural networks for natural gas consumption prediction. 2003 IEEE XIII WORKSHOP ON NEURAL NETWORKS FOR SIGNAL PROCESSING - NNSP'03. 2003, p. 759-768. [WOS]
- VIET, N.H. - MANDZIUK, J. Prediction of natural gas consumption with feed-forward and fuzzy neural networks. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS, PROCEEDINGS. 2003, p. 107-114. [WOS]

## 1999

### Kainen, P.C. - Kůrková, Věra - Vogt, A.

Approximation by Neural Networks is not Continuous.

*Neurocomputing.* Roč. 29, č. 1-3 (1999), s. 47-56. ISSN 0925-2312

Impakt faktor: 0.360, rok: 1999

 DOI: [10.1016/S0925-2312\(99\)00111-3](https://doi.org/10.1016/S0925-2312(99)00111-3)

Citováno: 13 x

- Hlaváčková-Schindler K. On the Rates of Nonlinear and Linear Approximation. Preprints of the 3rd European IEEE Workshop CMP'98. Prague : Inst. Inf. Theory and Automat. AS CR, p. 211-216
- Sanguineti M, Hlaváčková-Schindler K. Some Comparisons Between Linear Approximation and Approximation by Neural Networks. Artificial Neural Nets and Genetic Algorithms. Wien : Springer-Verlag, 1999, p. 172-177
- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. Acta Numerica, 1999, p. 1-52
- HOLENA, M. Piecewise-linear neural networks and their relationship to rule extraction from data. NEURAL COMPUTATION. ISSN 0899-7667, NOV 2006, vol. 18, no. 11, p. 2813-2853. [WOS]
- MULERO-MARTINEZ, J.I. Best approximation of Gaussian neural networks with nodes uniformly spaced. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, FEB 2008, vol. 19, no. 2, p. 284-298. [WOS]
- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]
- BELIC, I. Neural networks and modelling in vacuum science. VACUUM. ISSN 0042-207X, AUG 3 2006, vol. 80, no. 10, p. 1107-1122. [WOS]
- TIKK, D. - KOCZY, L.T. - GEDEON, T.D. A survey on universal approximation and its limits in soft computing techniques. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING. ISSN 0888-613X, JUN 2003, vol. 33, no. 2, p. 185-202. [WOS]
- HLAVAKOVA-SCHINDLER, K. - SANGUINETI, M. Bounds on the complexity of neural-network models and comparison with linear methods. INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING. ISSN 0890-6327, MAR 2003, vol. 17, no. 2, p. 179-194. [WOS]
- ZOPPOLI, R. - SANGUINETI, M. - PARISINI, T. Approximating networks and extended Ritz method for the solution of functional optimization problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS.



ISSN 0022-3239, FEB 2002, vol. 112, no. 2, p. 403-440. [WOS]

--- BELIC, L.I. - BELIC, I. - ERJAVEC, B. - SETINA, J. Neural network modelling of cold-cathode gauge parameters. VACUUM. ISSN 0042-207X, JUL 25 2003, vol. 71, no. 4, p. 505-515. [WOS]

--- BELIC, I. - BELIC, L.I. - ERJAVEC, B. The approximation of the CCG characteristics - Comparison of log and segmentation techniques. STROJARSTVO. ISSN 0562-1887, JAN-APR 2006, vol. 48, no. 1-2, p. 5-12. [WOS]

--- KANNAN, S. - GIRAUD-AUDINE, C. - PATOOR, E. Application of Laguerre based adaptive predictive control to Shape Memory Alloy (SMA) Actuator. ISA TRANSACTIONS. ISSN 0019-0578, JUL 2013, vol. 52, no. 4, p. 469-479. [WOS]

## 1998

### Kůrková, Věra

Incremental Approximation by Neural Networks. Chapter 12.

*Dealing with Complexity: a Neural Networks Approach*. London : Springer, 1998 - (Kárný, M.; Warwick, K.; Kůrková, V.), s. 177-188 ISBN 3-540-76160-8. - (Perspectives in Neural Computing)

 DOI: [10.1007/978-1-4471-1523-6\\_12](https://doi.org/10.1007/978-1-4471-1523-6_12)

Citováno: 7 x

--- Hlaváčková K, 1998, Sanguineti M. Algorithm of Incremental Approximation Using Variation of a Function with Respect to a Subset. Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98. Zurich : ICSC, p. 878-884

--- Craddock R, 1998, Warwick K. Dealing with Complexity: An Overview of the Neural Networks Approach. UKACC International Conference on Control'98, 1-4 September 1998, Conf. Publ. No. 455. : IEE, p. 705-708

--- ROMERO, E. Selection of weights for sequential Feed-forward Neural Networks: An experimental study. COMPUTATIONAL INTELLIGENCE AND BIOINSPIRED SYSTEMS, PROCEEDINGS. ISSN 0302-9743, 2005, vol. 3512, p. 225-232. [WOS]

--- ROMERO, E. - ALQUEZAR, R. Heuristics for the selection of weights in sequential feed-forward neural networks: An experimental study. NEUROCOMPUTING. ISSN 0925-2312, OCT 2007, vol. 70, no. 16-18, p. 2735-2743. [WOS]

--- ANDREJKOVA, G. Incremental approximation by layer neural networks. STATE OF THE ART IN COMPUTATIONAL INTELLIGENCE. ISSN 1615-3871, 2000, p. 15-20. [WOS]

--- ROMERO, E. - ALQUEZAR, R. A new incremental method for function approximation using feed-forward neural networks. PROCEEDING OF THE 2002 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-3. ISSN 1098-7576, 2002, p. 1968-1973. [WOS]


--- BELICZYNSKI, B. - GRZESIAK, L. Induction motor speed estimation: neural versus phenomenological model approach. NEUROCOMPUTING. ISSN 0925-2312, MAR 2002, vol. 43, p. 17-36. [WOS]

### Kůrková, Věra - Savický, Petr - Hlaváčková, Kateřina

Representations and Rates of Approximation of Real-Valued Boolean Functions by Neural Networks.

*Neural Networks*. Roč. 11, č. 4 (1998), s. 651-659. ISSN 0893-6080

Impakt faktor: 1.017, rok: 1998

 DOI: [10.1016/S0893-6080\(98\)00039-2](https://doi.org/10.1016/S0893-6080(98)00039-2)

Citováno: 10 x

--- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method in stochastic functional optimization: An example of dynamic routing in traffic networks. HIGH PERFORMANCE ALGORITHMS AND SOFTWARE FOR NONLINEAR OPTIMIZATION. ISSN 1384-6485, 2003, vol. 82, p. 23-56. [WOS]

--- LAVRETSKY, E. On the geometric convergence of neural approximations. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAR 2002, vol. 13, no. 2, p. 274-282. [WOS]

--- ITO, Y. What can a neural network do without scaling activation function?. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS. 2001, p. 1-6. [WOS]

--- KAINEN, P.C. Convex geometry and nonlinear approximation. IJCNN 2000: PROCEEDINGS OF THE IEEE-INNS-ENNS INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOL I. ISSN 1098-7576, 2000, p. 299-302. [WOS]

--- GNECCO, G. - SANGUINETI, M. Estimates of Variation with Respect to a Set and Applications to

- Optimization Problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, APR 2010, vol. 145, no. 1, p. 53-75. [WOS]
- GNECCO, G. - SANGUINETI, M. On a Variational Norm Tailored to Variable-Basis Approximation Schemes. IEEE TRANSACTIONS ON INFORMATION THEORY. ISSN 0018-9448, JAN 2011, vol. 57, no. 1, p. 549-558. [WOS]
- CHEN, H. - SUN, J.T. A new approach for global controllability of higher order Boolean control network. NEURAL NETWORKS. ISSN 0893-6080, MAR 2013, vol. 39, p. 12-17. [WOS]
- GNECCO, G. - SANGUINETI, M. Accuracy of suboptimal solutions to kernel principal component analysis. COMPUTATIONAL OPTIMIZATION AND APPLICATIONS. ISSN 0926-6003, MAR 2009, vol. 42, no. 2, p. 265-287. [WOS]
- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]
- GNECCO, G. - SANGUINETI, M. Regularization and Suboptimal Solutions in Learning from Data. INNOVATIONS IN NEURAL INFORMATION PARADIGMS AND APPLICATIONS. ISSN 1860-949X, 2009, vol. 247, p. 113-154. [WOS]

#### **Kůrková, Věra**

A Geometric Characterization of Sets of Functions with Dimension-Independent Rates of Approximation by Neural Networks.

*Computer-Intensive Methods in Control and Data Processing. Can We Beat the Curse of Dimensionality?*

Prague : Institute of Information Theory and Automation AC CR, 1998 - (Rojíček, J.; Valečková, M.; Kárný, M.; Warwick, K.), s. 199-203

[European IEEE Workshop CMP'98 /3./. Prague (CZ), 07.09.1998-09.09.1998]

Citováno: 1 x

- FOSUMPAUR, P. Application of artificial neural networks to represent the rainfall-runoff process for flow forecasting. STATE OF THE ART IN COMPUTATIONAL INTELLIGENCE. ISSN 1615-3871, 2000, p. 256-261. [WOS]

#### **Kůrková, Věra**

Approximation of Functions by Neural Networks.

*Proceedings of the International ICSC/IFAC Symposium on Neural Computation. Zurich : ICSC, 1998 -*

(Heiss, M.), s. 29-35. ISBN 3-906454-15-0.

[NC'98. Vienna (AT), 23.09.1998-25.09.1998]

Citováno: 4 x

- SZABO, T. - HORVATH, G. An efficient hardware implementation of feed-forward neural networks. APPLIED INTELLIGENCE. ISSN 0924-669X, SEP-OCT 2004, vol. 21, no. 2, p. 143-158. [WOS]
- SZABO, T. - HORVATH, G. Improving the generalization capability of the binary CMAC. IJCNN 2000: PROCEEDINGS OF THE IEEE-INNS-ENNS INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOL III. ISSN 1098-7576, 2000, p. 85-90. [WOS]
- DUCH, W. - DIERCKSEN, G.H.F. FEATURE SPACE MAPPING AS A UNIVERSAL ADAPTIVE SYSTEM. COMPUTER PHYSICS COMMUNICATIONS. ISSN 0010-4655, JUN 1995, vol. 87, no. 3, p. 341-371. [WOS]
- DUCH, W. - DIERCKSEN, G.H.F. NEURAL NETWORKS AS TOOLS TO SOLVE PROBLEMS IN PHYSICS AND CHEMISTRY. COMPUTER PHYSICS COMMUNICATIONS. ISSN 0010-4655, SEP 1994, vol. 82, no. 2-3, p. 91-103. [WOS]


#### **Kůrková, Věra**

Rates of Approximation of Multivariable Functions by One-Hidden-Layer Neural Networks.

*Neural Nets WIRN VIETRI-97. Proceedings of the 9th Italian Workshop on Neural Nets. Berlin : Springer, 1998*

- (Marinaro, M.; Tagliaferri, R.), s. 147-152. ISBN 3-540-76157-8.

[WIRN'97. Salerno (IT), 22.05.1997-24.05.1997]

 DOI: [10.1007/978-1-4471-1520-5\\_9](https://doi.org/10.1007/978-1-4471-1520-5_9)

Citováno: 1 x

--- Kainen P. Recent Results and Mathematical Methods for Functional Approximation by Neural Networks. Chapter 15. Dealing with Complexity. London : Springer, (1998), pp. 220-237

## 1997

### **Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**

Estimates of the Number of Hidden Units and Variation with Respect to Half-Spaces.

*Neural Networks*. Roč. 10, č. 6 (1997), s. 1061-1068. ISSN 0893-6080

Impakt faktor: 1.019, rok: 1997

 [DOI: 10.1016/S0893-6080\(97\)00028-2](https://doi.org/10.1016/S0893-6080(97)00028-2)

Citováno: 25 x

--- Hlaváčková K. Rates of Approximation in Feedforward Network Depend on the Type of the Computational Unit. Chapter 14. Dealing with Complexity: a Neural Network Approach. London : Springer, p. 205-219

--- Beiu V. 2D Neural Hardware Versus 3D Biological Ones. Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98. Zurich : ICSC, p. 36-42

--- Hlaváčková K, 1998, Sanguineti M. Algorithm of Incremental Approximation Using Variation of a Function with Respect to a Subset. Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98. Zurich : ICSC, p. 878-884

--- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. Acta Numerica, 1999, p. 1-52

--- XU, Z.B. - WANG, J.J. The essential order of approximation for nearly exponential type neural networks. SCIENCE IN CHINA SERIES F-INFORMATION SCIENCES. ISSN 1009-2757, AUG 2006, vol. 49, no. 4, p. 446-460. [WOS]

--- DING, C.M. - CAO, F.L. - XU, Z.B. The essential approximation order for neural networks with trigonometric hidden layer units. ADVANCES IN NEURAL NETWORKS - ISSN 2006, PT 1. ISSN 0302-9743, 2006, vol. 3971, Part 1, p. 72-79. [WOS]

--- XU, Z.B. - CAO, F.L. Simultaneous L-P-approximation order for neural networks. NEURAL NETWORKS. ISSN 0893-6080, SEP 2005, vol. 18, no. 7, p. 914-923. [WOS]

--- ANDRAS, P. Orthogonal RBF neural network approximation. NEURAL PROCESSING LETTERS. ISSN 1370-4621, APR 1999, vol. 9, no. 2, p. 141-151. [WOS]

--- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]

--- SIDLOFOVA, T. Bounds on rates of approximation by neural networks in L-p-spaces. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS, PROCEEDINGS. 2003, p. 23-27. [WOS]

--- HAMMER, B. - GERSMANN, K. A note on the universal approximation capability of support vector machines. NEURAL PROCESSING LETTERS. ISSN 1370-4621, 2003, vol. 17, no. 1, p. 43-53. [WOS]

--- BARRERA-CORTES, J. - BARUCH, I. - VALDEZ-CASTRO, L. - VAZQUEZ-CERVANTES, V. A recurrent neural network model of the b.t. fed-batch fermentation process. COMPUTER APPLICATIONS IN BIOTECHNOLOGY 2001 (CAB8). 2002, p. 385-390. [WOS]

--- ANDRAS, P. Spectrum-based design of sinusoidal RBF neural networks. PROCEEDING OF THE 2002 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-3. ISSN 1098-7576, 2002, p. 1421-1426. [WOS]

--- ANDRAS, P. Neural network design using spectral analysis. ICONIP'98: THE FIFTH INTERNATIONAL CONFERENCE ON NEURAL INFORMATION PROCESSING JOINTLY WITH JNNS'98: THE 1998 ANNUAL CONFERENCE OF THE JAPANESE NEURAL NETWORK SOCIETY - PROCEEDINGS, VOLS 1-3. 1998, p. 1228-1231. [WOS]

--- XU, Z.B. - CAO, F.L. The essential order of approximation for neural networks. SCIENCE IN CHINA SERIES F-INFORMATION SCIENCES. ISSN 1009-2757, FEB 2004, vol. 47, no. 1, p. 97-112. [WOS]

--- GARZON, M. - BOTELHO, F. Dynamical approximation by recurrent neural networks. NEUROCOMPUTING. ISSN 0925-2312, NOV 1999, vol. 29, no. 1-3, p. 25-46. [WOS]

--- CAO, F.L. - ZHANG, Y.Q. - XU, Z.B. Lower estimation of approximation rate for neural networks. SCIENCE IN CHINA SERIES F-INFORMATION SCIENCES. ISSN 1009-2757, AUG 2009, vol. 52, no. 8, p. 1321-1327. [WOS]

- GNECCO, G. - SANGUINETI, M. Estimates of Variation with Respect to a Set and Applications to Optimization Problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, APR 2010, vol. 145, no. 1, p. 53-75. [WOS]
- WANG, J.J. - XU, Z.B. New study on neural networks: The essential order of approximation. NEURAL NETWORKS. ISSN 0893-6080, JUN 2010, vol. 23, no. 5, p. 618-624. [WOS]
- GNECCO, G. - SANGUINETI, M. On a Variational Norm Tailored to Variable-Basis Approximation Schemes. IEEE TRANSACTIONS ON INFORMATION THEORY. ISSN 0018-9448, JAN 2011, vol. 57, no. 1, p. 549-558. [WOS]
- WANG, J.J. - CHEN, B.L. - YANG, C.Y. Approximation of algebraic and trigonometric polynomials by feedforward neural networks. NEURAL COMPUTING & APPLICATIONS. ISSN 0941-0643, FEB 2012, vol. 21, no. 1, p. 73-80. [WOS]
- GNECCO, G. - SANGUINETI, M. New insights into Witsenhausen's counterexample. OPTIMIZATION LETTERS. ISSN 1862-4472, OCT 2012, vol. 6, no. 7, SI, p. 1425-1446. [WOS]
- ADAM, S.P. - MAGOULAS, G.D. - VRAHATIS, M.N. Direct Zero-Norm Minimization for Neural Network Pruning and Training. ENGINEERING APPLICATIONS OF NEURAL NETWORKS. ISSN 1865-0929, 2012, vol. 311, p. 295-304. [WOS]
- SHEELA, K.G. - DEEPA, S.N. Review on Methods to Fix Number of Hidden Neurons in Neural Networks. MATHEMATICAL PROBLEMS IN ENGINEERING. ISSN 1024-123X, 2013. [WOS]
- LI, X.H. - XU, F. - ZHANG, J.H. - WANG, S.N. A Multilayer Feed Forward Small-World Neural Network Controller and Its Application on Electrohydraulic Actuation System. JOURNAL OF APPLIED MATHEMATICS. ISSN 1110-757X, 2013. [WOS]

#### Kůrková, Věra

Dimension-Independent Rates of Approximation by Neural Networks.

*Computer-Intensive Methods in Control and Signal Processing : The Curse of Dimensionality.* Boston : Birkhäuser, 1997 - (Warwick, K.; Kárný, M.), s. 261-270. ISBN 0-8176-3989-6.

[European IEEE Workshop on Computer-Intensive Methods in Control and Signal Processing: Can We Beat the Curse of Dimensionality? /2./. Prague (CR), 28.08.1996-30.08.1996]

 DOI: [10.1007/978-1-4612-1996-5\\_16](https://doi.org/10.1007/978-1-4612-1996-5_16)

Citováno: 18 x

- Hlaváčková K. Rates of Approximation in Feedforward Network Depend on the Type of the Computational Unit. Chapter 14. Dealing with Complexity: a Neural Network Approach. London : Springer, p. 205-219
- Kainen P. Recent Results and Mathematical Methods for Functional Approximation by Neural Networks. Chapter 15. Dealing with Complexity. London : Springer, p. 220-237
- Hlaváčková-Schindler K. On the Rates of Nonlinear and Linear Approximation. Preprints of the 3rd European IEEE Workshop CMP'98. Prague : Inst. Inf. Theory and Automat. AS CR, p. 211-216
- Hlaváčková K, Sanguineti M. Algorithm of Incremental Approximation Using Variation of a Function with Respect to a Subset. Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98. Zurich : ICSC, p. 878-884
- Hlaváčková K. Feedforward Networks with One Hidden Layer and Their Rates of Approximation. Control'98, Conference Publication No. 455. London : IEE, p. 727-732
- HLAVAKOVA-SCHINDLER, K. - SANGUINETI, M. Bounds on the complexity of neural-network models and comparison with linear methods. INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING. ISSN 0890-6327, MAR 2003, vol. 17, no. 2, p. 179-194. [WOS]
- BAGLIETTO, M. - SANGUINETI, M. - ZOPPOLI, R. The extended Ritz method for functional optimization: overview and applications to single-person and team optimal decision problems. OPTIMIZATION METHODS & SOFTWARE. ISSN 1055-6788, FEB 2009, vol. 24, no. 1, p. 15-43. [WOS]
- GNECCO, G. - SANGUINETI, M. Accuracy of suboptimal solutions to kernel principal component analysis. COMPUTATIONAL OPTIMIZATION AND APPLICATIONS. ISSN 0926-6003, MAR 2009, vol. 42, no. 2, p. 265-287. [WOS]
- GIULINI, S. - SANGUINETI, M. Approximation Schemes for Functional Optimization Problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, JAN 2009, vol. 140, no. 1, p. 33-54. [WOS]
- KAINEN, P.C. Convex geometry and nonlinear approximation. IJCNN 2000: PROCEEDINGS OF THE IEEE-

- INNS-ENNS INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOL I. ISSN 1098-7576, 2000, p. 299-302. [WOS]
- HLAVACKOVA-SCHINDLER, K. - FISCHER, M.M. An incremental algorithm for parallel training of the size and the weights in a feedforward neural network. NEURAL PROCESSING LETTERS. ISSN 1370-4621, APR 2000, vol. 11, no. 2, p. 131-138. [WOS]
- SANGUINETI, M. - HLAVACKOVA-SCHINDLER, K. Some comparisons between linear approximation and approximation by neural networks. ARTIFICIAL NEURAL NETS AND GENETIC ALGORITHMS. 1999, p. 172-177. [WOS]
- GNECCO, G. - SANGUINETI, M. Error bounds for suboptimal solutions to kernel principal component analysis. OPTIMIZATION LETTERS. ISSN 1862-4472, MAY 2010, vol. 4, no. 2, p. 197-210. [WOS]
- GNECCO, G. - SANGUINETI, M. Estimates of Variation with Respect to a Set and Applications to Optimization Problems. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, APR 2010, vol. 145, no. 1, p. 53-75. [WOS]
- GNECCO, G. - SANGUINETI, M. Regularization Techniques and Suboptimal Solutions to Optimization Problems in Learning from Data. NEURAL COMPUTATION. ISSN 0899-7667, MAR 2010, vol. 22, no. 3, p. 793-829. [WOS]
- GNECCO, G. - SANGUINETI, M. On a Variational Norm Tailored to Variable-Basis Approximation Schemes. IEEE TRANSACTIONS ON INFORMATION THEORY. ISSN 0018-9448, JAN 2011, vol. 57, no. 1, p. 549-558. [WOS]
- ALESSANDRI, A. - GNECCO, G. - SANGUINETI, M. COMPUTATIONALLY EFFICIENT APPROXIMATION SCHEMES FOR FUNCTIONAL OPTIMIZATION. COMPUTATIONAL OPTIMIZATION: NEW RESEARCH DEVELOPMENTS. 2010, p. 169-205. [WOS]
- GNECCO, G. - SANGUINETI, M. Regularization and Suboptimal Solutions in Learning from Data. INNOVATIONS IN NEURAL INFORMATION PARADIGMS AND APPLICATIONS. ISSN 1860-949X, 2009, vol. 247, p. 113-154. [WOS]

## 1996

### **Kůrková, Věra - Kainen, P.C.**

Singularities of Finite Scaling Functions.

*Applied Mathematics Letters*. Roč. 9, č. 2 (1996), s. 33-37. ISSN 0893-9659

Impakt faktor: 0.346, rok: 1996

 DOI: [10.1016/0893-9659\(96\)00008-0](https://doi.org/10.1016/0893-9659(96)00008-0)

Citováno: 2 x

--- PELLETIER, B. Approximation by ridge function fields over compact sets. JOURNAL OF APPROXIMATION THEORY. ISSN 0021-9045, AUG 2004, vol. 129, no. 2, p. 230-239. [WOS]

--- VOGT, A. Should activation functions be affinely recursive?. IJCNN 2000: PROCEEDINGS OF THE IEEE-INNS-ENNS INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOL I. ISSN 1098-7576, 2000, p. 289-292. [WOS]

### **Kůrková, Věra**

Trade-off Between the Size of Parameters and the Number of Units in One-Hidden-Layer Networks.

*Neural Network World*. Roč. 6, č. 2 (1996), s. 191-200. ISSN 1210-0552.

[Neurofuzzy'96. Prague, 16.04.1996-18.04.1996]

Citováno: 1 x

--- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. in : Acta Numerica., (1999), pp. 1-52

### **Hlaváčková, Kateřina - Kůrková, Věra**

Rates of Approximation of Real-Valued Boolean Functions by Neural Networks.

*ESANN'96. European Symposium on Artificial Neural Networks*. Brussels : D facta, 1996 - (Verleysen, M.), s. 167-172. ISBN 2-9600049-6-5.

[ESANN'96. Bruges (BE), 24.04.1996-26.04.1996]



Citováno: 1 x

--- VRETTAS, M.D. - CORNFORD, D. - OPPER, M. - SHEN, Y. A new variational radial basis function approximation for inference in multivariate diffusions. NEUROCOMPUTING. ISSN 0925-2312, MAR 2010, vol. 73, no. 7-9, Sp. Iss. SI, p. 1186-1198. [WOS]

### **Kůrková, Věra**

Trade-off Between the Size of Weights and the Number of Hidden Units in Feedforward Networks.

Prague : ICS AS CR, 1996. 17 s. - (Technical Report, V-695)

<http://hdl.handle.net/11104/0123270>

Citováno: 2 x

--- Kainen P. Recent Results and Mathematical Methods for Functional Approximation by Neural Networks. Chapter 15. in : Dealing with Complexity. London : Springer, (1998), pp. 220-237

--- Mhaskar H. Approximation of Smooth Functions by Neural Networks. Chapter 13. in : Dealing with Complexity. A Neural Networks Approach. London : Springer, (1998), pp. 189-204

## **1995**

### **Kůrková, Věra**

Kolmogorov's Theorem.

*The Handbook of Brain Theory and Neural Networks*. Cambridge : MIT Press, 1995 - (Arbib, M.), s. 501-502. ISBN 0-262-01148-4

Citováno: 12 x

--- Kainen P. Recent Results and Mathematical Methods for Functional Approximation by Neural Networks. Chapter 15. Dealing with Complexity. London : Springer, p. 220-237

--- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. Acta Numerica, 1999, p. 1-52

--- OPORTO-DIAZ, S. - HERNANDEZ-CISNEROS, R. - TERASHIMA-MARIN, H. Detection of micro calcification clusters in mammograms using a difference of optimized Gaussian filters. IMAGE ANALYSIS AND RECOGNITION. ISSN 0302-9743, 2005, vol. 3656, p. 998-1005. [WOS]

--- HERNANDEZ-CISNEROS, R.R. - TERASHIMA-MARIN, H. - CONANT-PABLOS, S.E. Comparison of class separability, forward sequential search and genetic algorithms for feature selection in the classification of individual and clustered micro calcifications in digital mammograms. IMAGE ANALYSIS AND RECOGNITION, PROCEEDINGS. ISSN 0302-9743, 2007, vol. 4633, p. 911-922. [WOS]

--- HERNANDEZ-CISNEROS, R.R. - TERASHIMA-MARIN, H. Evolutionary neural networks applied to the classification of microcalcification clusters in digital mammograms. 2006 IEEE CONGRESS ON EVOLUTIONARY COMPUTATION, VOLS 1-6. 2006, p. 2444-2451. [WOS]

--- MBI, R. - SW, L. Detection of the R wave peak of QRS complex using neural network. Proceedings of the World Engineers' Convention 2004, Vol B, Biological Engineering and Health Care. 2004, p. 110-117. [WOS]

--- KHOUKHI, L. - CHERKAOUI, S. An intelligent QoS model for service differentiation in mobile ad hoc networks. Proceedings of the Eighth IASTED International Conference on Artificial Intelligence and Soft Computing. 2004, p. 209-214. [WOS]

--- KHOUKHI, L. - CHERKAOUI, S. A quality of service approach based on neural networks for mobile ad hoc networks. 2005 International Conference on Wireless and Optical Communications Networks. 2005, p. 295-301. [WOS]

--- GILES, C.L. - LAWRENCE, S. - TSOI, A.C. Noisy time series prediction using recurrent neural networks and grammatical inference. MACHINE LEARNING. ISSN 0885-6125, 2001, vol. 44, no. 1-2, p. 161-183. [WOS]

--- BAEV, K.V. Highest level automatism in the nervous system: A theory of functional principles underlying the highest forms of brain function. PROGRESS IN NEUROBIOLOGY. ISSN 0301-0082, FEB 1997, vol. 51, no. 2, p. 129-166. [WOS]

--- MAIOROV, V. - PINKUS, A. Lower bounds for approximation by MLP neural networks. NEUROCOMPUTING. ISSN 0925-2312, APR 1999, vol. 25, no. 1-3, p. 81-91. [WOS]


--- FAVOROV, O.V. - KURSUN, O. Neocortical layer 4 as a pluripotent function linearizer. JOURNAL OF NEUROPHYSIOLOGY. ISSN 0022-3077, MAR 2011, vol. 105, no. 3, p. 1342-1360. [WOS]

**Kůrková, Věra**

Approximation of Functions by Perceptron Networks with Bounded Number of Hidden Units.

*Neural Networks*. Roč. 8, č. 5 (1995), s. 745-750. ISSN 0893-6080

Impakt faktor: 1.262, rok: 1995

 DOI: [10.1016/0893-6080\(95\)00027-W](https://doi.org/10.1016/0893-6080(95)00027-W)

Citováno: 28 x

- Hlaváčková K. Rates of Approximation in Feedforward Network Depend on the Type of the Computational Unit. Chapter 14. Dealing with Complexity: a Neural Network Approach. London : Springer, p. 205-219
- Kainen P. Recent Results and Mathematical Methods for Functional Approximation by Neural Networks. Chapter 15. Dealing with Complexity. London : Springer, p. 220-237
- Andonie R. The Psychological Limits of Neural Computational. Dealing with Complexity: a Neural Network Approach. London : Springer, p. 252-263
- Mhaskar H. Approximation of Smooth Functions by Neural Networks. Chapter 13. Dealing with Complexity. A Neural Networks Approach. London : Springer, p. 189-204
- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. Acta Numerica, 1999, p. 1-52
- BELIC, I. Neural networks and modelling in vacuum science. VACUUM. ISSN 0042-207X, AUG 3 2006, vol. 80, no. 10, p. 1107-1122. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - SANGUINETI, M. Functional optimal estimation problems and their solution by nonlinear approximation schemes. JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS. ISSN 0022-3239, SEP 2007, vol. 134, no. 3, p. 445-466. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - SANGUINETI, M. Design of asymptotic estimators: An approach based on neural networks and nonlinear programming. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 2007, vol. 18, no. 1, p. 86-96. [WOS]
- BASTERRETxea, K. - TARELA, J.M. - DEL C.a.m.p.o., J. - BOSQUE, G. An experimental study on nonlinear function computation for neural/fuzzy hardware design. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 2007, vol. 18, no. 1, p. 266-283. [WOS]
- ALESSANDRI, A. - BOLLA, R. - GAGGERO, M. - REPETTO, M. Modeling and Identification of Nonlinear Dynamics for Freeway Traffic by Using Information From a Mobile Cellular Network. IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY. ISSN 1063-6536, JUL 2009, vol. 17, no. 4, p. 952-959. [WOS]
- ALESSANDRI, A. - BOLLA, R. - GAGGERO, M. - REPETTO, M. Identification of freeway traffic dynamics using fluid and black-box nonlinear models. PROCEEDINGS OF THE 46TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-14. ISSN 0191-2216, 2007, p. 2711-2716. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - GRASSIA, A.F. - SANGUINETI, M. Design of observers for continuous-time nonlinear systems using neural networks. PROCEEDINGS OF THE 2004 AMERICAN CONTROL CONFERENCE, VOLS 1-6. ISSN 0743-1619, 2004, p. 2433-2438. [WOS]
- LI, Z.Q. A parallel learning algorithm for fuzzy neural networks based on fuzzy numbers operations. OPTICAL TECHNOLOGY AND IMAGE PROCESSING FOR FLUIDS AND SOLIDS DIAGNOSTICS 2002. ISSN 0277-786X, 2002, vol. 5058, p. 246-250. [WOS]
- TIKK, D. Notes on the approximation rate of fuzzy KH interpolators. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, SEP 1 2003, vol. 138, no. 2, p. 441-453. [WOS]
- TIKK, D. - KOCZY, L.T. - GEDEON, T.D. A survey on universal approximation and its limits in soft computing techniques. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING. ISSN 0888-613X, JUN 2003, vol. 33, no. 2, p. 185-202. [WOS]
- TIKK, D. Optimal order of convergence for alpha-cut based fuzzy interpolators. INTELLIGENT TECHNOLOGIES - THEORY AND APPLICATIONS - NEW TRENDS IN INTELLIGENT TECHNOLOGIES. ISSN 0922-6389, 2002, vol. 76, p. 105-110. [WOS]
- ALESSANDRI, A. - SANGUINETI, M. - MAGGIORE, M. Batch-mode identification of black-box models using feedforward neural networks. PROCEEDINGS OF THE 2002 AMERICAN CONTROL CONFERENCE, VOLS 1-6. ISSN 0743-1619, 2002, p. 406-411. [WOS]
- ALESSANDRI, A. - SANGUINETI, M. On the design of approximate state estimators for nonlinear systems. PROCEEDINGS OF THE 40TH IEEE CONFERENCE ON DECISION AND CONTROL, VOLS 1-5. ISSN 0191-2216, 2001, p. 3372-3377. [WOS]
- ALESSANDRI, A. - SANGUINETI, M. Stable approximate estimators for a class of nonlinear systems.



- SYSTEM STRUCTURE AND CONTROL 2001, VOLS 1 AND 2. ISSN 0962-9505, 2001, p. 507-512. [WOS]
- LI, Z.Q. - KECMAN, V. - ICHIKAWA, A. Fuzzified neural network based on fuzzy number operations. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, SEP 16 2002, vol. 130, no. 3, p. 291-304. [WOS]
- ALESSANDRI, A. - SANGUINETI, M. - MAGGIORE, M. Optimization-based learning with bounded error for feedforward neural networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAR 2002, vol. 13, no. 2, p. 261-273. [WOS]
- ANDREJKOVA, G. Incremental approximation by layer neural networks. STATE OF THE ART IN COMPUTATIONAL INTELLIGENCE. ISSN 1615-3871, 2000, p. 15-20. [WOS]
- CASTRO, J.L. - MANTES, C.J. - BENITEZ, J.M. Neural networks with a continuous squashing function in the output are universal approximators. NEURAL NETWORKS. ISSN 0893-6080, JUL 2000, vol. 13, no. 6, p. 561-563. [WOS]
- LONG, H.V. A note on the rates of uniform approximation of fuzzy systems. INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS. ISSN 1875-6883, JUN-AUG 2011, vol. 4, no. 4, p. 712-727. [WOS]
- ALESSANDRI, A. - CERVELLERA, C. - CUNEO, M. - GAGGERO, M. Nonlinear Predictive Control for the Management of Container Flows in Maritime Intermodal Terminals. 47TH IEEE CONFERENCE ON DECISION AND CONTROL, 2008 (CDC 2008). ISSN 0191-2216, 2008, p. 2800-2805. [WOS]
- TIKK, D. Optimal order of convergence for alpha-cut based fuzzy interpolators. INTELLIGENT TECHNOLOGIES - THEORY AND APPLICATIONS: NEW TRENDS IN INTELLIGENT TECHNOLOGIES. ISSN 0922-6389, 2002, vol. 76, p. 105-110. [WOS]
- KRUGLOV, I.A. - MISHULINA, O.A. Neural network modeling of vector multivariable functions in ill-posed approximation problems. JOURNAL OF COMPUTER AND SYSTEMS SCIENCES INTERNATIONAL. ISSN 1064-2307, JUL 2013, vol. 52, no. 4, p. 503-518. [WOS]
- KANNAN, S. - GIRAUD-AUDINE, C. - PATOOR, E. Application of Laguerre based adaptive predictive control to Shape Memory Alloy (SMA) Actuator. ISA TRANSACTIONS. ISSN 0019-0578, JUL 2013, vol. 52, no. 4, p. 469-479. [WOS]

**Kůrková, Věra - Beliczynski, B.**

An Incremental Learning Algorithm for Gaussian Radial-Basis-Function Approximation.

*Proceedings of the Second International Symposium on Methods and Models in Automation and Robotics.*

Warsaw, 1995 - (Banka, S.; Domek, S.; Emirsajlow, Z.), s. 675-680

[MMAR'95. Miedzyzdroje (PL), 30.08.1995-02.09.1995]

Citováno: 3 x

- BAHİ, J.M. - CONTASSOT-VIVIER, S. - SAUGET, M. An incremental learning algorithm for function approximation. ADVANCES IN ENGINEERING SOFTWARE. ISSN 0965-9978, AUG 2009, vol. 40, no. 8, p. 725-730. [WOS]
- BAHİ, J.M. - CONTASSOT-VIVIER, S. - SAUGET, M. - VASSEUR, A. A Parallel Incremental Learning Algorithm for Neural Networks with Fault Tolerance. HIGH PERFORMANCE COMPUTING FOR COMPUTATIONAL SCIENCE - VECPAR 2008. ISSN 0302-9743, 2008, vol. 5336, p. 174-187. [WOS]
- MOORE, M.S. - AMRINE, B. - LANGAN, J. Analog 2-D video processing and its application to wavelet filter banks. WAVELETS: APPLICATIONS IN SIGNAL AND IMAGE PROCESSING X, PTS 1 AND 2. ISSN 0277-786X, 2003, vol. 5207, Part 1&2, p. 751-762. [WOS]

**Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**

Dimension-Independent Rates of Approximation by Neural Networks and Variation with Respect to Half-Spaces.

*Proceedings of World Congress on Neural Networks 1995. Vol. 1.* Washington : INNS Press, 1995, s. 54-57. ISBN 0-8058-2125-2.

[WCNN'95. Washington (US), 17.07.1995-21.07.1995]

Citováno: 4 x

- Hlaváčková K. Dependence of the Rate of Approximation in a Feedforward Network on Its Activation Function. in : *Neural Network World.*, vol. 6, (1996), pp. 163-171
- Hlaváčková K. Rates of Approximation in Feedforward Network Depend on the Type of the Computational Unit. Chapter 14. in : *Dealing with Complexity: a Neural Network Approach.* London : Springer, (1998), pp. 205-219

- Hlaváčková K. Feedforward Networks with One Hidden Layer and Their Rates of Approximation. in : Control'98, Conference Publication No. 455. London : IEE, (1998), pp. 727-732
- HAYKIN, S. Neural networks expand SP's horizons. IEEE SIGNAL PROCESSING MAGAZINE. ISSN 1053-5888, MAR 1996, vol. 13, no. 2, p. 24-49. [WOS]

**Kůrková, Věra - Beliczynski, B.**

Incremental Approximation by One-Hidden-Layer Neural Networks.

ICANN'95. *International Conference on Artificial Neural Networks. NEURONIMES'95. Scientific Conference.*

Paris : EC2 & Cie, 1995 - (Fogelman-Soulié, F.; Gallinari, P.), s. 505-510. ISBN 2-910085-19-8.

[ICANN'95 /5./. Paris (FR), 09.10.1995-13.10.1995]

Citováno: 8 x

- Hlaváčková K, 1998, Sanguineti M. Algorithm of Incremental Approximation Using Variation of a Function with Respect to a Subset. Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98. Zurich : ICSC, p. 878-884
- ROMERO, E. - ALQUZAR, R. A sequential algorithm for feed-forward neural networks with optimal coefficients and interacting frequencies. NEUROCOMPUTING. ISSN 0925-2312, AUG 2006, vol. 69, no. 13-15, p. 1540-1552. [WOS]
- ROMERO, E. Selection of weights for sequential Feed-forward Neural Networks: An experimental study. COMPUTATIONAL INTELLIGENCE AND BIOINSPIRED SYSTEMS, PROCEEDINGS. ISSN 0302-9743, 2005, vol. 3512, p. 225-232. [WOS]
- ROMERO, E. - ALQUEZAR, R. Heuristics for the selection of weights in sequential feed-forward neural networks: An experimental study. NEUROCOMPUTING. ISSN 0925-2312, OCT 2007, vol. 70, no. 16-18, p. 2735-2743. [WOS]
- ROMERO, E. - ALQUEZAR, R. A new incremental method for function approximation using feed-forward neural networks. PROCEEDING OF THE 2002 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-3. ISSN 1098-7576, 2002, p. 1968-1973. [WOS]
- ANDREJKOVA, G. Incremental approximation by layer neural networks. STATE OF THE ART IN COMPUTATIONAL INTELLIGENCE. ISSN 1615-3871, 2000, p. 15-20. [WOS]
- KWOK, T.Y. - YEUNG, D.Y. Objective functions for training new hidden units in constructive neural networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, SEP 1997, vol. 8, no. 5, p. 1131-1148. [WOS]
- KWOK, T.Y. - YEUNG, D.Y. Constructive algorithms for structure learning in feedforward neural networks for regression problems. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAY 1997, vol. 8, no. 3, p. 630-645. [WOS]

## 1994

**Kůrková, Věra - Kainen, P.C.**

Functionally Equivalent Feedforward Neural Networks.

*Neural Computation*. Roč. 6, č. 3 (1994), s. 543-558. ISSN 0899-7667

Impakt faktor: 3.139, rok: 1994

 DOI: [10.1162/neco.1994.6.3.543](https://doi.org/10.1162/neco.1994.6.3.543)

Citováno: 31 x

- Neruda Roman. Functional Equivalence and Genetic Learning of RBF Networks. Artificial Neural Nets and Genetic Algorithms. Proceedings of the International Conference. Wien : Springer-Verlag, p. 53-56
- Bishop Ch. M. Neural Networks for Pattern Recognition. Oxford : Clarendon Press, p. 482
- Šíma J, 1996, Neruda R. Teoretické otázky neuronových sítí. Praha : Matfyzpress, p. 390
- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. Acta Numerica, 1999, p. 1-52
- Neruda R. Utilizing Unique Parametrization Property in Approximate Genetic Learning of Feed-Forward Networks. IJCNN'99 International Joint Conference on Neural Networks. Washington : INNS,
- Neruda R. Functional Equivalence Properties of Perceptron Networks. Technical Report, V-799. Prague : ICS AS CR, p. 6
- Fine T.L. Feedforward Neural Network Methodology. New York : Springer, p. 340

- AMARI, S. - PARK, H. - OZEKI, T. Singularities affect dynamics of learning in neuromanifolds. NEURAL COMPUTATION. ISSN 0899-7667, MAY 2006, vol. 18, no. 5, p. 1007-1065. [WOS]
- CURRY, B. - MORGAN, P.H. Model selection in neural networks: Some difficulties. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH. ISSN 0377-2217, APR 16 2006, vol. 170, no. 2, p. 567-577. [WOS]
- MEDEIROS, M.C. - VEIGA, A. A flexible coefficient smooth transition time series model. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 2005, vol. 16, no. 1, p. 97-113. [WOS]
- SUAREZ-FARINAS, M. - PEDREIRA, C.E. - MEDEIROS, M.C. Local global neural networks: A new approach for nonlinear time series modeling. JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION. ISSN 0162-1459, DEC 2004, vol. 99, no. 468, p. 1092-1107. [WOS]
- WEI, H.K. - ZHANG, J. - COUSSEAU, F. - OZEKI, T. - AMARI, S.I. Dynamics of learning near singularities in layered networks. NEURAL COMPUTATION. ISSN 0899-7667, MAR 2008, vol. 20, no. 3, p. 813-843. [WOS]
- DIMATTINA, C. - ZHANG, K.C. How to Modify a Neural Network Gradually Without Changing Its Input-Output Functionality. NEURAL COMPUTATION. ISSN 0899-7667, JAN 2010, vol. 22, no. 1, p. 1-47. [WOS]
- AMARI, S. - PARK, H. - OZEKI, T. Geometry of learning in multilayer perceptrons. COMPSTAT 2004: PROCEEDINGS IN COMPUTATIONAL STATISTICS. 2004, p. 49-60. [WOS]
- PELLETIER, B. Approximation by ridge function fields over compact sets. JOURNAL OF APPROXIMATION THEORY. ISSN 0021-9045, AUG 2004, vol. 129, no. 2, p. 230-239. [WOS]
- MEDEIROS, M.C. - TERASVIRTA, T. Statistical methods for modelling neural networks. ENGINEERING INTELLIGENT SYSTEMS FOR ELECTRICAL ENGINEERING AND COMMUNICATIONS. ISSN 0969-1170, DEC 2001, vol. 9, no. 4, p. 227-235. [WOS]
- MEDEIROS, M.C. - VEIGA, A. - PEDREIRA, C.E. Modeling exchange rates: Smooth transitions, neural networks, and linear models. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JUL 2001, vol. 12, no. 4, p. 755-764. [WOS]
- AMARI, S. - OZEKI, T. Differential and algebraic geometry of multilayer perceptrons. IEICE TRANSACTIONS ON FUNDAMENTALS OF ELECTRONICS COMMUNICATIONS AND COMPUTER SCIENCES. ISSN 0916-8508, JAN 2001, vol. E84A, no. 1, p. 31-38. [WOS]
- AMARI, S. - OZEKI, T. - PARK, H. Information geometry of adaptive systems. IEEE 2000 ADAPTIVE SYSTEMS FOR SIGNAL PROCESSING, COMMUNICATIONS, AND CONTROL SYMPOSIUM - PROCEEDINGS. 2000, p. 12-17. [WOS]
- NERUDA, R. Genetic algorithms and neural networks: Making use of parameter space symetries. IJCNN 2000: PROCEEDINGS OF THE IEEE-INNS-ENNS INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOL I. ISSN 1098-7576, 2000, p. 293-298. [WOS]
- TRAPLETTI, A. - LEISCH, F. - HORNIK, K. Stationary and integrated autoregressive neural network processes. NEURAL COMPUTATION. ISSN 0899-7667, OCT 2000, vol. 12, no. 10, p. 2427-2450. [WOS]
- FUKUMIZU, K. - AMARI, S. Local minima and plateaus in hierarchical structures of multilayer perceptrons. NEURAL NETWORKS. ISSN 0893-6080, APR 2000, vol. 13, no. 3, p. 317-327. [WOS]
- FISCHER, M.M. - HLAVACKOVA-SCHINDLER, K. - REISMANN, M. An evolutionary mutation-based algorithm for weight training in neural networks for telecommunication flow modelling. COMPUTATIONAL INTELLIGENCE FOR MODELLING, CONTROL & AUTOMATION - EVOLUTIONARY COMPUTATION & FUZZY LOGIC FOR INTELLIGENT CONTROL, KNOWLEDGE ACQUISITION & INFORMATION RETRIEVAL. ISSN 1383-7575, 1999, vol. 55, p. 54-59. [WOS]
- ELSKEN, T. Smaller nets may perform better: special transfer functions. NEURAL NETWORKS. ISSN 0893-6080, JUN 1999, vol. 12, no. 4-5, p. 627-645. [WOS]
- FINE, T.L. - MUKHERJEE, S. Parameter convergence and learning curves for neural networks. NEURAL COMPUTATION. ISSN 0899-7667, APR 1 1999, vol. 11, no. 3, p. 747-769. [WOS]
- REIMANN, S. Symmetry and network structure. NEURAL PROCESSING LETTERS. ISSN 1370-4621, AUG 1997, vol. 6, no. 1-2, p. 1-10. [WOS]
- ELSKEN, T. Even on finite test sets smaller nets may perform better. NEURAL NETWORKS. ISSN 0893-6080, MAR 1997, vol. 10, no. 2, p. 369-385. [WOS]
- SIMA, J. Back-propagation is not efficient. NEURAL NETWORKS. ISSN 0893-6080, AUG 1996, vol. 9, no. 6, p. 1017-1023. [WOS]
- FUKUMIZU, K. A regularity condition of the information matrix of a multilayer perceptron network. NEURAL NETWORKS. ISSN 0893-6080, JUL 1996, vol. 9, no. 5, p. 871-879. [WOS]
- BLATT, M. - DOMANY, E. - KANTER, I. ON THE EQUIVALENCE OF 2-LAYERED PERCEPTRONS WITH BINARY

NEURONS. INTERNATIONAL JOURNAL OF NEURAL SYSTEMS. ISSN 0129-0657, SEP 1995, vol. 6, no. 3, p. 225-231. [WOS]

--- MINNETT, R.C.J. - SMITH, A.T. - LENNON, W.C. - HECHT-NIELSEN, R. Neural network tomography: Network replication from output surface geometry. NEURAL NETWORKS. ISSN 0893-6080, JUN 2011, vol. 24, no. 5, p. 484-492. [WOS]

**Kainen, P.C. - Kůrková, Věra - Kreinovich, V. - Sirisaengtaksin, O.**

Uniqueness of Network Parametrization and Faster Learning.

*Neurall, Parallel & Scientific Computations*. Roč. 2, č. 4 (1994), s. 459-465. ISSN 1061-5369

Citováno: 1 x

--- Šíma J., Neruda R. in : Teoretické otázky neuronových sítí. Praha : Matfyzpress, (1996), pp. 390

**Kůrková, Věra - Hlaváčková, Kateřina**

Approximation of Continuous Functions by RBF and KBF Networks.

*ESANN'94. European Symposium on Artificial Neural Networks*. Brussels : D Facto, 1994 - (Verleysen, M.), s. 167-174 ISBN 2-9600049-1-4.

[ESANN'94. Brussels (BE), 20.04.1994-22.04.1994]

Citováno: 2 x

--- Andrejková G., Mikulová M. Kolmogorov's Theorem and Neural Networks. in : *Neural Network World.*, vol. 8, (1998), pp. 501-510

--- VRETTAS, M.D. - CORNFORD, D. - OPPER, M. - SHEN, Y. A new variational radial basis function approximation for inference in multivariate diffusions. NEUROCOMPUTING. ISSN 0925-2312, MAR 2010, vol. 73, no. 7-9, SI, p. 1186-1198. [WOS]

**Kůrková, Věra - Neruda, Roman**

Uniqueness of Functional Representations by Gaussian Basis Function Networks.

*ICANN' 94. Proceedings of the International Conference on Artificial Neural Networks*. London : Springer Verlag, 1994 - (Marinaro, M.; Morasso, P.), s. 471-474. ISBN 978-3-540-19887-1.

[ICANN' 94 /4./. Sorrento (IT), 26.05.1994-29.05.1994]

 DOI: [10.1007/978-1-4471-2097-1\\_111](https://doi.org/10.1007/978-1-4471-2097-1_111)

Citováno: 2 x

--- MULERO-MARTINEZ, J.I. Best approximation of Gaussian neural networks with nodes uniformly spaced. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, FEB 2008, vol. 19, no. 2, p. 284-298. [WOS]

--- GNECCO, G. - SANGUINETI, M. Regularization Techniques and Suboptimal Solutions to Optimization Problems in Learning from Data. NEURAL COMPUTATION. ISSN 0899-7667, MAR 2010, vol. 22, no. 3, p. 793-829. [WOS]

## 1993

**Kainen, P.C. - Kůrková, Věra**

Quasiorthogonal Dimension of Euclidean Spaces.

*Applied Mathematics Letters*. Roč. 6, č. 3 (1993), s. 7-10. ISSN 0893-9659

Impakt faktor: 0.304, rok: 1993

 DOI: [10.1016/0893-9659\(93\)90023-G](https://doi.org/10.1016/0893-9659(93)90023-G)

Citováno: 1 x

--- LOO, C.K. - PERUS, M. - BISCHOF, H. Associative memory based image and object recognition by quantum holography. OPEN SYSTEMS & INFORMATION DYNAMICS. ISSN 1230-1612, 2004, vol. 11, no. 3, p. 277-289. [WOS]

**Kůrková, Věra - Hlaváčková, Kateřina**

Uniform Approximation by KBF Networks.

*NEURONET'93. Proceedings of the International Scientific Conference on New Information Technology and Their Applications in Trade, Industry, Banking, Energetics, Ecology and Medicine*. Prague : ICS AS CR, 1993,

nestr.

[NEURONET'93. Prague (CZ), 20.09.1993-25.09.1993]

Citováno: 2 x

--- DUCH, W. - DIERCKSEN, G.H.F. FEATURE SPACE MAPPING AS A UNIVERSAL ADAPTIVE SYSTEM.

COMPUTER PHYSICS COMMUNICATIONS. ISSN 0010-4655, JUN 1995, vol. 87, no. 3, p. 341-371. [WOS]

--- DUCH, W. - DIERCKSEN, G.H.F. NEURAL NETWORKS AS TOOLS TO SOLVE PROBLEMS IN PHYSICS AND

CHEMISTRY. COMPUTER PHYSICS COMMUNICATIONS. ISSN 0010-4655, SEP 1994, vol. 82, no. 2-3, p. 91-103.

[WOS]

## 1992

### Kůrková, Věra

Kolmogorov's Theorem and Multilayer Neural Networks.

*Neural Networks*. Roč. 5, č. 3 (1992), s. 501-506. ISSN 0893-6080

Impakt faktor: 2.221, rok: 1992

 DOI: [10.1016/0893-6080\(92\)90012-8](https://doi.org/10.1016/0893-6080(92)90012-8)

Citováno: 232 x

--- Hornik K. Functional Approximation and Learning in Artificial Neural Networks. *Neural Network World*, 1991, vol. 1, p. 257-266

--- Nakamura M, Mines M, Kreinovich V. Guaranteed Intervals for Kolmogorov's Theorem (and their possible relation to neural networks). *Interval Computations, and their possible relation to neural networks*, vol. 3, (1993), p. 183-199

--- Řízek S, Frolov A. Differential Control by Neural Networks. *Neural Network World*, 1994, vol. 4, p. 493-508

--- Gupta, M.M, Rao, D.H. Functional Approximation Using Dynamic Neural Processor. *Neural Network World*, 1994, vol. 5, p. 573-592

--- Bitzan, P, Šmejkalová, J, Kučera, M. A Neural Network with Switching Units. *Neural Network World*, 1994, vol. 5, p. 515-526

--- Davies, P.C. Design Issues in Neural Network Development. *Neuro Vest Journal*, 1994, vol. 5, p. 21-25

--- Holeňa M. Wahl der Architektur eines neuronalen Netzes mittels der Theorie der Verbaende. *Fuzzy Logik. Theorie und Praxis*. Berlin : Springer-Verlag, p. 365-373

--- Bishop Ch. M. *Neural Networks for Pattern Recognition*. Oxford : Clarendon Press, p. 482

--- Ripley B.D. *Pattern Recognition and Neural Networks*. Cambridge : Cambridge Univ.Press,

--- Hassoun M.H. *Fundamentals of Artificial Neural Networks*. Cambridge : The MIT Press, p. 492

--- Šíma J, 1996, Neruda R. *Teoretické otázky neuronových sítí*. Praha : Matfyzpress, p. 390

--- Kainen P. *Recent Results and Mathematical Methods for Functional Approximation by Neural Networks*. Chapter 15. *Dealing with Complexity*. London : Springer, p. 220-237

--- Beiu, V. *Reduced Complexity Constructive Learning Algorithm*. *Neural Network World*, 1998, vol. 8, p. 1-38

--- Andrejková G, 1998, Mikulová M. *Kolmogorov's Theorem and Neural Networks*. *Neural Network World*. London : Springer, vol. 8, p. 501-510

--- Hlaváčková-Schindler K. *On the Rates of Nonlinear and Linear Approximation*. *Preprints of the 3rd European IEEE Workshop CMP'98*. Prague : Inst. Inf. Theory and Automat. AS CR, p. 211-216

--- Beiu V. *2D Neural Hardware Versus 3D Biological Ones*. *Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98*. Zurich : ICSC, p. 36-42

--- Andrejková G. *Neural Networks in Proposal of Fuzzy Logic Connectives*. *Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98*. Zurich : ICSC, p. 192-195

--- Ciuca I. *On the Approximation Capability of Layered Neural Networks Using Sigmoidal Heaviside Functions*. *Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98*. Zurich : ICSC, p. 878-884

--- Andrejková G, , Mikulová M. *Kolmogorov's Theorem and Neural Networks*. *SCANN'98*. 2nd Slovak Conference on Artificial Neural Networks. Trnava : VÚJE Trnava, p. 46-51

--- Pinkus A. *Approximation Theory of the MLP Model in Neural Networks*. *Acta Numerica*, 1999, p. 1-52

--- Fine T.L. *Feedforward Neural Network Methodology*. New York : Springer, p. 340



- Sundararajan N, 1999, Saratchandran P., Wei L.Y. Radial basis function networks with sequential learning. MRAN and its applications. : World Scientific,
- PADGETT M.L, KARPLUS W.J, DEISS S, et al. COMPUTATIONAL INTELLIGENCE STANDARDS - MOTIVATION, CURRENT ACTIVITIES AND PROGRESS. COMP STAND INTER, 1994, vol. 16, p. 185-203 [WOS]
- BELIC, I. Neural networks and modelling in vacuum science. VACUUM. ISSN 0042-207X, AUG 3 2006, vol. 80, no. 10, p. 1107-1122. [WOS]
- HUANG, G.B. - CHEN, Y.Q. - BABRI, H.A. Classification ability of single hidden layer feedforward neural networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAY 2000, vol. 11, no. 3, p. 799-801. [WOS]
- SMIEJA, F. The Pandemonium system of reflective agents. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 1996, vol. 7, no. 1, p. 97-106. [WOS]
- DAYHOFF, J.E. Computational properties of networks of synchronous groups of spiking neurons. NEURAL COMPUTATION. ISSN 0899-7667, SEP 2007, vol. 19, no. 9, p. 2433-2467. [WOS]
- HOLENA, M. McNaughton theorem of fuzzy logic from a data-mining point of view. NEURAL NETWORK WORLD. ISSN 1210-0552, 2007, vol. 17, no. 3, p. 189-212. [WOS]
- CURRY, B. Neural networks and seasonality: Some technical considerations. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH. ISSN 0377-2217, MAY 16 2007, vol. 179, no. 1, p. 267-274. [WOS]
- GOUGAM, L.A. - TRIBECHÉ, M. - MEKIDECHE-CHAFA, F. A systematic investigation of a neural network for function approximation. NEURAL NETWORKS. ISSN 0893-6080, NOV 2008, vol. 21, no. 9, p. 1311-1317. [WOS]
- DEGHANI, K. - SHAFIEI, A. - NAEIMI, H. Effect of Thermomechanical Processing on Forming Limit Diagrams Predicted by Neural Networks. MATERIALS AND MANUFACTURING PROCESSES. ISSN 1042-6914, 2008, vol. 23, no. 8, p. 829-833. [WOS]
- CACCIOLA, M. - CALCAGNO, S. - MORABITO, F.C. - VERSACI, M. Computational intelligence aspects for defect classification in aeronautic composites by using ultrasonic pulses. IEEE TRANSACTIONS ON ULTRASONICS FERROELECTRICS AND FREQUENCY CONTROL. ISSN 0885-3010, APR 2008, vol. 55, no. 4, p. 870-878. [WOS]
- KOUTSOYIANNIS, D. - YAO, H.M. - GEORGAKAKOS, A. Medium-range flow prediction for the Nile: a comparison of stochastic and deterministic methods. HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES. ISSN 0262-6667, FEB 2008, vol. 53, no. 1, p. 142-164. [WOS]
- MULERO-MARTINEZ, J.I. Best approximation of Gaussian neural networks with nodes uniformly spaced. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, FEB 2008, vol. 19, no. 2, p. 284-298. [WOS]
- MAHFOUF, M. - JAMEI, M. - LINKENS, D.A. - TENNER, J. Inverse modelling for optimal metal design using fuzzy specified multi-objective fitness functions. CONTROL ENGINEERING PRACTICE. ISSN 0967-0661, FEB 2008, vol. 16, no. 2, p. 179-191. [WOS]
- DEGHANI, K. - SHAFIEI, A. Predicting the bake hardenability of steels using neural network modeling. MATERIALS LETTERS. ISSN 0167-577X, JAN 31 2008, vol. 62, no. 2, p. 173-178. [WOS]
- NAFEY, A.S. Neural network based correlation for critical heat flux in steam-water flows in pipes. INTERNATIONAL JOURNAL OF THERMAL SCIENCES. ISSN 1290-0729, DEC 2009, vol. 48, no. 12, p. 2264-2270. [WOS]
- BRAUN, J. - GRIEBEL, M. On a Constructive Proof of Kolmogorov's Superposition Theorem. CONSTRUCTIVE APPROXIMATION. ISSN 0176-4276, DEC 2009, vol. 30, no. 3, p. 653-675. [WOS]
- TIRELLI, T. - PESSANI, D. USE OF DECISION TREE AND ARTIFICIAL NEURAL NETWORK APPROACHES TO MODEL PRESENCE/ABSENCE OF TELESTES MUTICELLUS IN PIEDMONT (NORTH-WESTERN ITALY). RIVER RESEARCH AND APPLICATIONS. ISSN 1535-1459, OCT 2009, vol. 25, no. 8, p. 1001-1012. [WOS]
- TIRELLI, T. - POZZI, L. - PESSANI, D. Use of different approaches to model presence/absence of *Salmo marmoratus* in Piedmont (Northwestern Italy). ECOLOGICAL INFORMATICS. ISSN 1574-9541, SEP 2009, vol. 4, no. 4, p. 234-242. [WOS]
- CACCIOLA, M. - FIASCHE, M. - MEGALI, G. - MORABITO, F.C. - VERSACI, M. A Neural Network Based Classification of Human Blood Cells in a Multiphysic Framework. ADVANCES IN NEURO-INFORMATION PROCESSING, PT II. ISSN 0302-9743, 2009, vol. 5507, p. 720-727. [WOS]
- BOLLENBECK, F. - PIELOT, R. - WEIER, D. - WESCHKE, W. - SEIFFERT, U. Inter-modality Registration of NMRI and Histological Section Images using Neural Networks Regression in Gabor Feature Space. 2009 IEEE SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE FOR IMAGE PROCESSING. 2009, p. 27-32. [WOS]

- BALABIN, R.M. - LOMAKINA, E.I. Neural network approach to quantum-chemistry data: Accurate prediction of density functional theory energies. JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, AUG 21 2009, vol. 131, no. 7. [WOS]
- LIU, D. - YUAN, Y.D. - LIAO, S.F. Artificial neural networks for optimization of gold-bearing slime smelting. EXPERT SYSTEMS WITH APPLICATIONS. ISSN 0957-4174, NOV 2009, vol. 36, no. 9, p. 11671-11674. [WOS]
- MANZHOS, S. - CARRINGTON, T. An improved neural network method for solving the Schrodinger equation(1). CANADIAN JOURNAL OF CHEMISTRY-REVUE CANADIENNE DE CHIMIE. ISSN 0008-4042, JUL 2009, vol. 87, no. 7, p. 864-871. [WOS]
- LIU, D. - YUAN, Y.D. - LIAO, S.F. Artificial neural network vs. nonlinear regression for gold content estimation in pyrometallurgy. EXPERT SYSTEMS WITH APPLICATIONS. ISSN 0957-4174, SEP 2009, vol. 36, no. 7, p. 10397-10400. [WOS]
- SHOKOUHMAND, H. - GHAZVINI, M. - SHABANIAN, J. Performance Analysis of Using Nanofluids in Microchannel Heat Sink in different Flow Regimes and its simulation using Artificial Neural Network. WORLD CONGRESS ON ENGINEERING 2008, VOL III. 2008, p. 1841-1846. [WOS]
- STATHAKIS, D. How many hidden layers and nodes?. INTERNATIONAL JOURNAL OF REMOTE SENSING. ISSN 0143-1161, 2009, vol. 30, no. 8, p. 2133-2147. [WOS]
- REZAEI, K. - GUEST, B. - FRIEDRICH, A. - FAYAZI, F. - NAKHAEI, M. - BEITOLLAHI, A. - AGHDA, S.M.F. Feed forward neural network and interpolation function models to predict the soil and subsurface sediments distribution in Bam, Iran. ACTA GEOPHYSICA. ISSN 1895-6572, JUN 2009, vol. 57, no. 2, p. 271-293. [WOS]
- CACCIOLA, M. - CALCAGNO, S. - MEGALI, G. - MORABITO, F.C. - PELLICANO, D. - VERSACI, M. FEA Design and Misfit Minimization for In-Depth Flaw Characterization in Metallic Plates With Eddy Current Nondestructive Testing. IEEE TRANSACTIONS ON MAGNETICS. ISSN 0018-9464, MAR 2009, vol. 45, no. 3, p. 1506-1509. [WOS]
- EL-BAKRY, H.M. - MASTORAKIS, N. A Novel Fast Kolmogorov's Spline Complex Network for Pattern Detection. SMO 08: PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON SIMULATION, MODELLING AND OPTIMIZATION. 2008, p. 261-279. [WOS]
- BIELECKI, A. - HAJTO, P. - SCHAEFER, R. Hybrid Neural Systems in Exchange Rate Prediction. NATURAL COMPUTING IN COMPUTATIONAL FINANCE. ISSN 1860-949X, 2008, vol. 100, p. 211-230. [WOS]
- GAS, B. - CHETOUANI, M. - ZARADER, J.L. Non linear and discriminant feature extraction applied to phonemes recognition. TRAITEMENT DU SIGNAL. ISSN 0765-0019, 2007, vol. 24, no. 1, p. 39-58. [WOS]
- TAR, J.K. - LORINC, K. - AGBEMASU, K. - NADAI, L. - KOVACS, R. Adaptive control of a semi-automatic convoy of unmodeled internal degrees of freedom. 2007 5TH INTERNATIONAL SYMPOSIUM ON INTELLIGENT SYSTEMS & INFORMATICS. 2007, p. 112-117. [WOS]
- TAR, J.K. Fixed point transformations as simple geometric alternatives in adaptive control. ICCS 2007: 5TH IEEE INTERNATIONAL CONFERENCE ON COMPUTATIONAL CYBERNETICS, PROCEEDINGS. 2007, p. 19-34. [WOS]
- DIMIROVSKI, G.M. - JING, Y.W. - ZHANG, Y.X. - VUKOBRATOVIC, M.K. Robust adaptive control for complex systems employing ANN emulation of nonlinear functions. NEUREL 2006: Eight Seminar on Neural Network Applications in Electrical Engineering, Proceedings. 2006, p. 87-92. [WOS]
- TAR, J.K. - RUDAS, I.J. Geometric approach to nonlinear adaptive control. SACI 2007: 4TH INTERNATIONAL SYMPOSIUM ON APPLIED COMPUTATIONAL INTELLIGENCE AND INFORMATICS, PROCEEDINGS. 2007, p. 9-23. [WOS]
- TAR, J.K. - LORINCZ, K. - KOVACS, R. Adaptive control of an automatic convoy of vehicles. INES 2007: 11TH INTERNATIONAL CONFERENCE ON INTELLIGENT ENGINEERING SYSTEMS, PROCEEDINGS. 2007, p. 21-26. [WOS]
- BEIU, V. - ZAWADZKI, A. On Kolmogorov's superpositions: Novel gates and circuits for nanoelectronics?. PROCEEDINGS OF THE INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS (IJCNN), VOLS 1-5. ISSN 1098-7576, 2005, p. 651-656. [WOS]
- HU, N. - DANNENBERG, R.B. Bootstrap learning for accurate onset detection. MACHINE LEARNING. ISSN 0885-6125, DEC 2006, vol. 65, no. 2-3, p. 457-471. [WOS]
- SCALABRIN, G. - MARCHI, P. - STRINGARI, P. - RICHON, D. An extended equation of state modeling method - II. Mixtures. INTERNATIONAL JOURNAL OF THERMOPHYSICS. ISSN 0195-928X, SEP 2006, vol. 27, no. 5, p. 1319-1353. [WOS]
- PIAZZA, L. - SCALABRIN, G. - MARCHI, P. - RICHON, D. Enhancement of the extended corresponding states



- techniques for thermodynamic modeling. I. Pure fluids. INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID. ISSN 0140-7007, NOV 2006, vol. 29, no. 7, p. 1182-1194. [WOS]
- HOLENA, M. Piecewise-linear neural networks and their relationship to rule extraction from data. NEURAL COMPUTATION. ISSN 0899-7667, NOV 2006, vol. 18, no. 11, p. 2813-2853. [WOS]
- MANZHOS, S. - CARRINGTON, T. A random-sampling high dimensional model representation neural network for building potential energy surfaces. JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, AUG 28 2006, vol. 125, no. 8. [WOS]
- HUANG, G.B. - CHEN, L. - SIEW, C.K. Universal approximation using incremental constructive feedforward networks with random hidden nodes. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JUL 2006, vol. 17, no. 4, p. 879-892. [WOS]
- WANG, W.J. - ZHAO, L.X. - ZHANG, C.L. Generalized neural network correlation for flow boiling heat transfer of R22 and its alternative refrigerants inside horizontal smooth tubes. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, JUL 2006, vol. 49, no. 15-16, p. 2458-2465. [WOS]
- SCALABRIN, G. - CONDOSTA, M. - MARCHI, P. Modeling flow boiling heat transfer of pure fluids through artificial neural networks. INTERNATIONAL JOURNAL OF THERMAL SCIENCES. ISSN 1290-0729, JUL 2006, vol. 45, no. 7, p. 643-663. [WOS]
- SCALABRIN, G. - CONDOSTA, M. - MARCHI, P. Mixtures flow boiling: modeling heat transfer through artificial neural networks. INTERNATIONAL JOURNAL OF THERMAL SCIENCES. ISSN 1290-0729, JUL 2006, vol. 45, no. 7, p. 664-680. [WOS]
- MANZHOS, S. - WANG, X.G. - DAWES, R. - CARRINGTON, T. A nested molecule-independent neural network approach for high-quality potential fits. JOURNAL OF PHYSICAL CHEMISTRY A. ISSN 1089-5639, APR 27 2006, vol. 110, no. 16, p. 5295-5304. [WOS]
- SCALABRIN, G. - MARCHI, P. - STRINGARI, P. - RICHON, D. Thermal conductivity equations for pure fluids in a heuristic extended corresponding states framework - II. Application to two fluids. FLUID PHASE EQUILIBRIA. ISSN 0378-3812, APR 5 2006, vol. 242, no. 1, p. 79-92. [WOS]
- XIAO, G. - XI, B. ANN based strategic decision analysis of corporation logistics supply structure. Proceedings of the 2005 International Conference on Management Science & Engineering (12th), Vols 1- 3. 2005, p. 700-703. [WOS]
- CURRY, B. - MORGAN, P.H. Model selection in neural networks: Some difficulties. EUROPEAN JOURNAL OF OPERATIONAL RESEARCH. ISSN 0377-2217, APR 16 2006, vol. 170, no. 2, p. 567-577. [WOS]
- BEIU, V.B. - ZAWADSKI, A. - ANDONIE, R. - AUNET, S. Using Kolmogorov inspired gates for low power nanoelectronics. COMPUTATIONAL INTELLIGENCE AND BIOINSPIRED SYSTEMS, PROCEEDINGS. ISSN 0302-9743, 2005, vol. 3512, p. 438-445. [WOS]
- SINGH, V. - GUPTA, I. - GUPTA, H.O. ANN based estimator for distillation-inferential control. CHEMICAL ENGINEERING AND PROCESSING. ISSN 0255-2701, JUL 2005, vol. 44, no. 7, p. 785-795. [WOS]
- ZHANG, Y.X. - DIMIROVSKI, G.M. - JING, Y.W. - ZHANG, S.Y. Neural-net based robust adaptive control of uncertain nonlinear composite systems. CCA 2003: PROCEEDINGS OF 2003 IEEE CONFERENCE ON CONTROL APPLICATIONS, VOLS 1 AND 2. 2003, p. 819-825. [WOS]
- BEIU, V. A novel highly reliable low-power nano architecture when von Neumann augments Kolmogorov. 15TH IEEE INTERNATIONAL CONFERENCE ON APPLICATION-SPECIFIC SYSTEMS, ARCHITECTURES AND PROCESSORS, PROCEEDINGS. ISSN 1063-6862, 2004, p. 167-177. [WOS]
- CHEN, L.H. - WANG, T.Y. Artificial neural networks to classify mean shifts from multivariate  $\chi^2$  chart signals. COMPUTERS & INDUSTRIAL ENGINEERING. ISSN 0360-8352, NOV 2004, vol. 47, no. 2-3, p. 195-205. [WOS]
- YANG, Y.Y. - LINKENS, D.A. - TALAMANTES-SILVA, J. Roll load prediction - data collection, analysis and neural network modelling. JOURNAL OF MATERIALS PROCESSING TECHNOLOGY. ISSN 0924-0136, OCT 30 2004, vol. 152, no. 3, p. 304-315. [WOS]
- JOY, M.K. - DEATH, R.G. Predictive modelling and spatial mapping of freshwater fish and decapod assemblages using GIS and neural networks. FRESHWATER BIOLOGY. ISSN 0046-5070, AUG 2004, vol. 49, no. 8, p. 1036-1052. [WOS]
- SZABO, T. - HORVATH, G. An efficient hardware implementation of feed-forward neural networks. APPLIED INTELLIGENCE. ISSN 0924-669X, SEP-OCT 2004, vol. 21, no. 2, p. 143-158. [WOS]
- RAO, N.S.V. A generic sensor fusion problem: Classification and function estimation. MULTIPLE CLASSIFIER SYSTEMS, PROCEEDINGS. ISSN 0302-9743, 2004, vol. 3077, p. 16-30. [WOS]

- BARANYI, P. TP model transformation as a way to LMI-based controller design. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. ISSN 0278-0046, APR 2004, vol. 51, no. 2, p. 387-400. [WOS]
- SOLAZZI, M. - UNCINI, A. Regularising neural networks using flexible multivariate activation function. NEURAL NETWORKS. ISSN 0893-6080, MAR 2004, vol. 17, no. 2, p. 247-260. [WOS]
- RAO, N.S.V. Overlay networks of in situ instruments for probabilistic guarantees on message delays in wide-area networks. IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS. ISSN 0733-8716, JAN 2004, vol. 22, no. 1, p. 79-90. [WOS]
- YANG, Y.Y. - LINKENS, D.A. - TALAMANTES-SILVA, J. - HOWARD, I.C. Roll force and torque prediction using neural network and finite element modelling. ISIJ INTERNATIONAL. ISSN 0915-1559, 2003, vol. 43, no. 12, p. 1957-1966. [WOS]
- DIMIROVSKI, G.M. - JING, Y.W. Towards hybrid soft computing approach to control of complex systems. 2002 FIRST INTERNATIONAL IEEE SYMPOSIUM INTELLIGENT SYSTEMS, VOL 1, PROCEEDINGS. 2002, p. 47-54. [WOS]
- DIMIROVSKI, G.M. - JING, Y.W. Kolmogorov networks and process characteristic input-output modes decomposition. 2002 FIRST INTERNATIONAL IEEE SYMPOSIUM INTELLIGENT SYSTEMS, VOL 1, PROCEEDINGS. 2002, p. 59-66. [WOS]
- HORVATH, G. Neural networks from the perspective of measurement systems. IMTC/O3: PROCEEDINGS OF THE 20TH IEEE INSTRUMENTATION AND MEASUREMENT TECHNOLOGY CONFERENCE, VOLS 1 AND 2. ISSN 1091-5281, 2003, p. 1102-1107. [WOS]
- IGELNIK, B. Use of the Kolmogorov's superposition theorem and cubic splines for efficient neural-network modeling. KNOWLEDGE-BASED INTELLIGENT INFORMATION AND ENGINEERING SYSTEMS, PT 1, PROCEEDINGS. ISSN 0302-9743, 2003, vol. 2773, p. 184-190. [WOS]
- VOJINOVIC, Z. - KECMAN, V. - BABOVIC, V. Hybrid approach for modeling wet weather response in wastewater systems. JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT-ASCE. ISSN 0733-9496, NOV-DEC 2003, vol. 129, no. 6, p. 511-521. [WOS]
- SCALABRIN, G. - PIAZZA, L. - CONDOSTA, M. Convective cooling of supercritical carbon dioxide inside tubes: heat transfer analysis through neural networks. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, NOV 2003, vol. 46, no. 23, p. 4413-4425. [WOS]
- ITO, Y. Activation functions defined on higher-dimensional spaces for approximation on compact sets with and without scaling. NEURAL COMPUTATION. ISSN 0899-7667, SEP 2003, vol. 15, no. 9, p. 2199-2226. [WOS]
- IGELNIK, B. - PARIKH, N. Kolmogorov's spline network. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JUL 2003, vol. 14, no. 4, p. 725-733. [WOS]
- TIKK, D. - KOCZY, L.T. - GEDEON, T.D. A survey on universal approximation and its limits in soft computing techniques. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING. ISSN 0888-613X, JUN 2003, vol. 33, no. 2, p. 185-202. [WOS]
- HOLENA, M. Extraction of logical rules from data by means of piecewise-linear neural networks. DISCOVERY SCIENCE, PROCEEDINGS. ISSN 0302-9743, 2002, vol. 2534, p. 192-205. [WOS]
- HUANG, G.B. Learning capability and storage capacity of two-hidden-layer feedforward networks. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, MAR 2003, vol. 14, no. 2, p. 274-281. [WOS]
- SCALABRIN, G. - PIAZZA, L. Analysis of forced convection heat transfer to supercritical carbon dioxide inside tubes using neural networks. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, MAR 2003, vol. 46, no. 7, p. 1139-1154. [WOS]
- SCALABRIN, G. - CRISTOFOLI, G. The viscosity surfaces of R152a in the form of multilayer feed forward neural networks. INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID. ISSN 0140-7007, MAY 2003, vol. 26, no. 3, p. 302-314. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Kolmogorov learning for feedforward networks. IJCNN'01: INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-4, PROCEEDINGS. ISSN 1098-7576, 2001, p. 77-81. [WOS]
- NGUYEN, H.T. - KREINOVICH, V. - GOODMAN, I.R. Why unary and binary operations in logic: General result motivated by interval-valued logics. JOINT 9TH IFSA WORLD CONGRESS AND 20TH NAFIPS INTERNATIONAL CONFERENCE, PROCEEDINGS, VOLS. 1-5. 2001, p. 1991-1996. [WOS]
- NERUDA, R. Efficient parallel implementation of Kolmogorov superpositions. PROCEEDING OF THE 2002 INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-3. ISSN 1098-7576, 2002, p. 1224-

1227. [WOS]

- RAO, N.S.V. Multisensor fusion under unknown distributions finite-sample performance guarantees. MULTISENSOR FUSION. 2002, vol. 70, p. 295-329. [WOS]
- SCALABRIN, G. - PIAZZA, L. Viscosity correlation for ethane in the form of multilayer feedforward neural networks. HIGH TEMPERATURES-HIGH PRESSURES. ISSN 0018-1544, 2002, vol. 34, no. 4, p. 457-471. [WOS]
- OLDEN, J.D. - JACKSON, D.A. A comparison of statistical approaches for modelling fish species distributions. FRESHWATER BIOLOGY. ISSN 0046-5070, OCT 2002, vol. 47, no. 10, p. 1976-1995. [WOS]
- CURRY, B. - MORGAN, P. - SILVER, M. Neural networks and non-linear statistical methods: an application to the modelling of price-quality relationships. COMPUTERS & OPERATIONS RESEARCH. ISSN 0305-0548, JUL 2002, vol. 29, no. 8, p. 951-969. [WOS]
- SCALABRIN, G. - PIAZZA, L. - CRISTOFOLI, G. Application of neural networks to a predictive extended corresponding states model for pure halocarbon thermodynamics. INTERNATIONAL JOURNAL OF THERMOPHYSICS. ISSN 0195-928X, JAN 2002, vol. 23, no. 1, p. 57-75. [WOS]
- SCALABRIN, G. - CORBETTI, C. - CRISTOFOLI, G. A viscosity equation of state for R123 in the form of a multilayer feedforward neural network. INTERNATIONAL JOURNAL OF THERMOPHYSICS. ISSN 0195-928X, SEP 2001, vol. 22, no. 5, p. 1383-1395. [WOS]
- YUAN, Q. - LU, Y.C. Research on weather forecast based on neural networks. PROCEEDINGS OF THE 3RD WORLD CONGRESS ON INTELLIGENT CONTROL AND AUTOMATION, VOLS 1-5. 2000, p. 1069-1072. [WOS]
- OLDEN, J.D. - JACKSON, D.A. Fish-habitat relationships in lakes: Gaining predictive and explanatory insight by using artificial neural networks. TRANSACTIONS OF THE AMERICAN FISHERIES SOCIETY. ISSN 0002-8487, SEP 2001, vol. 130, no. 5, p. 878-897. [WOS]
- HANSON, J. - LE BRAS, R. - DYSART, P. - BRUMBAUGH, D. - GAULT, A. - GUERN, J. Operational processing of hydroacoustics at the Prototype International Data Center. PURE AND APPLIED GEOPHYSICS. ISSN 0033-4553, FEB 2001, vol. 158, no. 3, p. 425-456. [WOS]
- FIORDALISO, A. Autostructuring of fuzzy systems by rules sensitivity analysis. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, MAR 1 2001, vol. 118, no. 2, p. 281-296. [WOS]
- OLDEN, J.D. An artificial neural network approach for studying phytoplankton succession. HYDROBIOLOGIA. ISSN 0018-8158, OCT 2000, vol. 436, no. 1-3, p. 131-143. [WOS]
- CIESIELSKI, K. - SACHA, J.P. - CIOS, K.J. Synthesis of feedforward networks in supremum error bound. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, NOV 2000, vol. 11, no. 6, p. 1213-1227. [WOS]
- CIUCA, I. - JITARU, E. On the three layer neural networks using sigmoidal functions. FOUNDATIONS AND TOOLS FOR NEURAL MODELING, PROCEEDINGS, VOL I. ISSN 0302-9743, 1999, vol. 1606, p. 321-329. [WOS]
- ANMALA, J. - ZHANG, B. - GOVINDARAJU, R.S. Comparison of ANNs and empirical approaches for predicting watershed runoff. JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT-ASCE. ISSN 0733-9496, MAY-JUN 2000, vol. 126, no. 3, p. 156-166. [WOS]
- KHAIKINE, M. - HOLTHAUSEN, K. A general probability estimation approach for neural computation. NEURAL COMPUTATION. ISSN 0899-7667, FEB 2000, vol. 12, no. 2, p. 433-450. [WOS]
- BEIU, V. - MOORE, K.R. On analog implementation of discrete neural networks. FUZZY LOGIC AND INTELLIGENT TECHNOLOGIES FOR NUCLEAR SCIENCE AND INDUSTRY. 1998, p. 258-265. [WOS]
- DOLMATOVA, L. - TCHISTIYAKOV, V. - RUCKEBUSCH, C. - DUPUY, N. - HUVENNE, J.P. - LEGRAND, P. Hierarchical neural network modeling for infrared spectra interpretation of modified starches. JOURNAL OF CHEMICAL INFORMATION AND COMPUTER SCIENCES. ISSN 0095-2338, NOV-DEC 1999, vol. 39, no. 6, p. 1027-1036. [WOS]
- HOLTHAUSEN, K. - KHAIKINE, M. - BREIDBACH, O. Neural computation with ideal approximation elements. THEORY IN BIOSCIENCES. ISSN 1431-7613, JUL 1999, vol. 118, no. 2, p. 113-124. [WOS]
- MORGAN, P. - CURRY, B. - BEYNON, M. Comparing neural network approximations for different functional forms. EXPERT SYSTEMS. ISSN 0266-4720, MAY 1999, vol. 16, no. 2, p. 60-71. [WOS]
- YAMAKAWA, T. - KREINOVICH, V. Why fundamental physical equations are of second order. INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS. ISSN 0020-7748, JUN 1999, vol. 38, no. 6, p. 1763-1769. [WOS]
- MAIOROV, V. - PINKUS, A. Lower bounds for approximation by MLP neural networks. NEUROCOMPUTING. ISSN 0925-2312, APR 1999, vol. 25, no. 1-3, p. 81-91. [WOS]
- RAO, N.S.V. Fusion methods in multiple sensor systems using feedforward sigmoid neural networks. INTELLIGENT AUTOMATION AND SOFT COMPUTING. ISSN 1079-8587, 1999, vol. 5, no. 1, p. 21-30. [WOS]

- CHOUËIKI, M.H. - MOUNT-CAMPBELL, C.A. Training data development with the D-optimality criterion. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 1999, vol. 10, no. 1, p. 56-63. [WOS]
- RAO, N.S.V. Multiple sensor fusion under unknown distributions. JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS. ISSN 0016-0032, MAR 1999, vol. 336, no. 2, p. 285-299. [WOS]
- VANDEERSTRAETEN, F. - WOJCIECHOWSKI, C. - DUPUY, N. - HUVENNE, J.P. Recognition of starch origin and modifications by chemometrics spectral data processing. ANALYSIS. ISSN 0365-4877, OCT 1998, vol. 26, no. 8, p. M57-M62. [WOS]
- AMIN, S.M. - RODIN, E.Y. - WU, A.Y. Neurocontrol of nonlinear systems via local memory neurons. MATHEMATICAL AND COMPUTER MODELLING. ISSN 0895-7177, FEB 1998, vol. 27, no. 3, p. 65-92. [WOS]
- RAO, N.S.V. Vector space methods for sensor fusion problems. OPTICAL ENGINEERING. ISSN 0091-3286, FEB 1998, vol. 37, no. 2, p. 499-504. [WOS]
- SCARSELLI, F. - TSOI, A.C. Universal approximation using feedforward neural networks: A survey of some existing methods, and some new results. NEURAL NETWORKS. ISSN 0893-6080, JAN 1998, vol. 11, no. 1, p. 15-37. [WOS]
- HUANG, G.B. - BABRI, H.A. Upper bounds on the number of hidden neurons in feedforward networks with arbitrary bounded nonlinear activation functions. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JAN 1998, vol. 9, no. 1, p. 224-229. [WOS]
- SVOZIL, D. - KVASNICKA, V. - POSPICAL, J. Introduction to multi-layer feed-forward neural networks. CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS. ISSN 0169-7439, NOV 1997, vol. 39, no. 1, p. 43-62. [WOS]
- NECHYBA, M.C. - XU, Y.S. Human control strategy: Abstraction, verification, and replication. IEEE CONTROL SYSTEMS MAGAZINE. ISSN 0272-1708, OCT 1997, vol. 17, no. 5, p. 48-61. [WOS]
- SWAIN, J. The statistical basis of neural network algorithms: Theory and applications. NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT. ISSN 0168-9002, APR 11 1997, vol. 389, no. 1-2, p. 271-273. [WOS]
- SPRECHER, D.A. A numerical implementation of kolmogorov's superpositions II. NEURAL NETWORKS. ISSN 0893-6080, APR 1997, vol. 10, no. 3, p. 447-457. [WOS]
- DOLMATOVA, L. - RUCKEBUSCH, C. - DUPUY, N. - HUVENNE, J.P. - LEGRAND, P. Quantitative analysis of paper coatings using artificial neural networks. CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS. ISSN 0169-7439, APR 1997, vol. 36, no. 2, p. 125-140. [WOS]
- MOUZOURIS, G.C. - MENDEL, J.M. Nonsingleton fuzzy logic systems: Theory and application. IEEE TRANSACTIONS ON FUZZY SYSTEMS. ISSN 1063-6706, FEB 1997, vol. 5, no. 1, p. 56-71. [WOS]
- NGUYEN, H.T. - KREINOVICH, V. - NESTEROV, V. - NAKAMURA, M. On hardware support for interval computations and for soft computing: Theorems. IEEE TRANSACTIONS ON FUZZY SYSTEMS. ISSN 1063-6706, FEB 1997, vol. 5, no. 1, p. 108-127. [WOS]
- KREINOVICH, V. - NGUYEN, H.T. - SPRECHER, D.A. Normal forms for fuzzy logic an application of Kolmogorov's theorem. INTERNATIONAL JOURNAL OF UNCERTAINTY FUZZINESS AND KNOWLEDGE-BASED SYSTEMS. ISSN 0218-4885, AUG 1996, vol. 4, no. 4, p. 331-349. [WOS]
- ZBIKOWSKI, R. - DZIELINSKI, A. Function approximation: Neurocontrol aspects. ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK. ISSN 0044-2267, 1996, vol. 76, p. 589-590. [WOS]
- KIM, K. - BARTLETT, E.B. Nuclear power plant fault diagnosis using neural networks with error estimation by series association. IEEE TRANSACTIONS ON NUCLEAR SCIENCE. ISSN 0018-9499, AUG 1996, vol. 43, no. 4, Part 2, p. 2373-2388. [WOS]
- SPRECHER, D.A. A numerical implementation of Kolmogorov's superpositions. NEURAL NETWORKS. ISSN 0893-6080, JUL 1996, vol. 9, no. 5, p. 765-772. [WOS]
- RAO, N.S.V. - PROTOPODESCU, V. - MANN, R.C. - OBLOW, E.M. - IYENGAR, S.S. Learning algorithms for feedforward networks based on finite samples. IEEE TRANSACTIONS ON NEURAL NETWORKS. ISSN 1045-9227, JUL 1996, vol. 7, no. 4, p. 926-940. [WOS]
- NEES, M. Chebyshev approximation by discrete superposition. Application to neural networks. ADVANCES IN COMPUTATIONAL MATHEMATICS. ISSN 1019-7168, 1996, vol. 5, no. 2-3, p. 137-151. [WOS]
- JAMBUNATHAN, K. - HARTLE, S.L. - ASHFORTHFROST, S. - FONTAMA, V.N. Evaluating convective heat transfer coefficients using neural networks. INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, JUL 1996, vol. 39, no. 11, p. 2329-2332. [WOS]
- DYSART, P.S. Bathymetric surface modeling: A machine learning approach. JOURNAL OF GEOPHYSICAL



- RESEARCH-SOLID EARTH. ISSN 0148-0227, APR 10 1996, vol. 101, no. B4, p. 8093-8105. [WOS]
- RIETMAN, E.A. A neural network model of a contact plasma etch process for VLSI production. IEEE TRANSACTIONS ON SEMICONDUCTOR MANUFACTURING. ISSN 0894-6507, FEB 1996, vol. 9, no. 1, p. 95-100. [WOS]
- KRUMBUGEL, M.A. - LADERA, C.L. - DELONG, K.W. - FITTINGHOFF, D.N. - SWEETSER, J.N. - TREBINO, R. Direct ultrashort-pulse intensity and phase retrieval by frequency-resolved optical gating and a computational neural network. OPTICS LETTERS. ISSN 0146-9592, JAN 15 1996, vol. 21, no. 2, p. 143-145. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. NEURAL NETS FOR FUZZY-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, MAY 12 1995, vol. 71, no. 3, p. 265-276. [WOS]
- KIM, K. - BARTLETT, E.B. ERROR ESTIMATION BY SERIES ASSOCIATION FOR NEURAL-NETWORK SYSTEMS. NEURAL COMPUTATION. ISSN 0899-7667, JUL 1995, vol. 7, no. 4, p. 799-808. [WOS]
- SUMPTER, B.G. - GETINO, C. - NOID, D.W. THEORY AND APPLICATIONS OF NEURAL COMPUTING IN CHEMICAL SCIENCE. ANNUAL REVIEW OF PHYSICAL CHEMISTRY. ISSN 0066-426X, 1994, vol. 45, p. 439-481. [WOS]
- ITO, Y. APPROXIMATION CAPABILITY OF LAYERED NEURAL NETWORKS WITH SIGMOID UNITS ON 2 LAYERS. NEURAL COMPUTATION. ISSN 0899-7667, NOV 1994, vol. 6, no. 6, p. 1233-1243. [WOS]
- PADGETT, M.L. - KARPLUS, W.J. - DEISS, S. - SHELTON, R. COMPUTATIONAL INTELLIGENCE STANDARDS - MOTIVATION, CURRENT ACTIVITIES AND PROGRESS. COMPUTER STANDARDS & INTERFACES. ISSN 0920-5489, JUL 1994, vol. 16, no. 3, p. 185-203. [WOS]
- RIPLEY, B.D. NEURAL NETWORKS AND RELATED METHODS FOR CLASSIFICATION. JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-METHODOLOGICAL. ISSN 0035-9246, 1994, vol. 56, no. 3, p. 409-437. [WOS]
- KATSUURA, H. - SPRECHER, D.A. COMPUTATIONAL ASPECTS OF KOLMOGOROV SUPERPOSITION THEOREM. NEURAL NETWORKS. ISSN 0893-6080, 1994, vol. 7, no. 3, p. 455-461. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. HYBRID NEURAL NETS CAN BE FUZZY CONTROLLERS AND FUZZY EXPERT-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, DEC 10 1993, vol. 60, no. 2, p. 135-142. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. CAN FUZZY NEURAL NETS APPROXIMATE CONTINUOUS FUZZY FUNCTIONS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, JAN 10 1994, vol. 61, no. 1, p. 43-51. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. NUMERICAL RELATIONSHIPS BETWEEN NEURAL NETWORKS, CONTINUOUS-FUNCTIONS, AND FUZZY-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, NOV 25 1993, vol. 60, no. 1, p. 1-8. [WOS]
- SPRECHER, D.A. A UNIVERSAL MAPPING FOR KOLMOGOROV SUPERPOSITION THEOREM. NEURAL NETWORKS. ISSN 0893-6080, 1993, vol. 6, no. 8, p. 1089-1094. [WOS]
- BULSARI, A. SOME ANALYTICAL SOLUTIONS TO THE GENERAL APPROXIMATION PROBLEM FOR FEEDFORWARD NEURAL NETWORKS. NEURAL NETWORKS. ISSN 0893-6080, 1993, vol. 6, no. 7, p. 991-996. [WOS]
- BARRON, A.R. UNIVERSAL APPROXIMATION BOUNDS FOR SUPERPOSITIONS OF A SIGMOIDAL FUNCTION. IEEE TRANSACTIONS ON INFORMATION THEORY. ISSN 0018-9448, MAY 1993, vol. 39, no. 3, p. 930-945. [WOS]
- WOELFEL, J. ARTIFICIAL NEURAL NETWORKS IN POLICY RESEARCH - A CURRENT ASSESSMENT. JOURNAL OF COMMUNICATION. ISSN 0021-9916, WIN 1993, vol. 43, no. 1, p. 63-80. [WOS]
- BROCKETT, P.L. - COOPER, W.W. - GOLDEN, L.L. - XIA, X. A case study in applying neural networks to predicting insolvency for property and casualty insurers. JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY. ISSN 0160-5682, DEC 1997, vol. 48, no. 12, p. 1153-1162. [WOS]
- JING, G.H. - LI, X.L. - ZHOU, Z.M. Quantitative Structure-activity Relationship (QSAR) Study of Toxicity of Substituted Aromatic Compounds to Photobacterium Phosphoreum. CHINESE JOURNAL OF STRUCTURAL CHEMISTRY. ISSN 0254-5861, 2010, vol. 29, no. 8, p. 1189-1196. [WOS]
- FIASCHE, M. - VERMA, A. - CUZZOLA, M. - IACOPINO, P. - KASABOV, N. - MORABITO, F.C. Discovering Diagnostic Gene Targets and Early Diagnosis of Acute GVHD Using Methods of Computational Intelligence over Gene Expression Data. ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT II. ISSN 0302-9743, 2009, vol. 5769, p. 10-19. [WOS]
- CACCIOLA, M. - CALCAGNO, S. - LAGANA, F. - MEGALI, G. - PELLICANO, D. - VERSACI, M. - MORABITO, F.C. Advanced Integration of Neural Networks for Characterizing Voids in Welded Strips. ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT II. ISSN 0302-9743, 2009, vol. 5769, p. 455-464. [WOS]

- BODYANSKIY, Y. - POPOV, S. - TITOV, M. Function Decomposition Network. ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT I. ISSN 0302-9743, 2009, vol. 5768, p. 718-727. [WOS]
- DING, Y.H. - DAI, X.Z. - ZHANG, T. Low-Cost Fiber-Optic Temperature Measurement System for High-Voltage Electrical Power Equipment. IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT. ISSN 0018-9456, APR 2010, vol. 59, no. 4, p. 923-933. [WOS]
- SCHMID, N.A. - NICOLO, F. A Method for Selecting and Ranking Quality Metrics for Optimization of Biometric Recognition Systems. 2009 IEEE COMPUTER SOCIETY CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION WORKSHOPS (CVPR WORKSHOPS 2009), VOLS 1 AND 2. ISSN 1063-6919, 2009, p. 743-750. [WOS]
- ZHOU, Z.M. - LI, X.L. - JING, G.H. Quantitative Models for the Structure and Photodegradation of Polycyclic Aromatic Hydrocarbons. CHINESE JOURNAL OF STRUCTURAL CHEMISTRY. ISSN 0254-5861, 2010, vol. 29, no. 2, p. 205-212. [WOS]
- LEHKY, D. - NOVAK, D. Neural Network Based Damage Detection of Dynamically Loaded Structures. ENGINEERING APPLICATIONS OF NEURAL NETWORKS, PROCEEDINGS. ISSN 1865-0929, 2009, vol. 43, p. 17-27. [WOS]
- FIASCHE, M. - CUZZOLA, M. - CACCIOLA, M. - MEGALI, G. - FEDELE, R. - IACOPINO, P. - MORABITO, F.C. A NEURAL NETWORK MODEL FOR EARLY DIAGNOSIS OF ACUTE GVHD BASED ON GENE EXPRESSION DATA. 2009 IEEE INTERNATIONAL WORKSHOP ON GENOMIC SIGNAL PROCESSING AND STATISTICS (GENSIPS 2009). 2009, p. 37-40. [WOS]
- STROFFEK, J. - KURISCAK, E. - MARSALEK, P. Highway Toll Enforcement Real-Time Classification of Motor Vehicles. IEEE VEHICULAR TECHNOLOGY MAGAZINE. ISSN 1556-6072, DEC 2010, vol. 5, no. 4, p. 56-65. [WOS]
- GRACZYK, K.M. - PLONSKI, P. - SULEJ, R. Neural network parameterizations of electromagnetic nucleon form-factors. JOURNAL OF HIGH ENERGY PHYSICS. ISSN 1126-6708, SEP 2010, no. 9. [WOS]
- BALABIN, R.M. - SAFIEVA, R.Z. Near-Infrared (NIR) Spectroscopy for Biodiesel Analysis: Fractional Composition, Iodine Value, and Cold Filter Plugging Point from One Vibrational Spectrum. ENERGY & FUELS. ISSN 0887-0624, MAY 2011, vol. 25, no. 5, p. 2373-2382. [WOS]
- BALABIN, R.M. - LOMAKINA, E.I. - SAFIEVA, R.Z. Neural network (ANN) approach to biodiesel analysis: Analysis of biodiesel density, kinematic viscosity, methanol and water contents using near infrared (NIR) spectroscopy. FUEL. ISSN 0016-2361, MAR 2011, vol. 90, no. 5, p. 2007-2015. [WOS]
- BITTENCOUT, F.R. - ZARATE, L.E. Hybrid structure based on previous knowledge and GA to search the ideal neurons quantity for the hidden layer of MLP-Application in the cold rolling process. APPLIED SOFT COMPUTING. ISSN 1568-4946, MAR 2011, vol. 11, no. 2, p. 2460-2471. [WOS]
- FENG, Z. - GARTSIDE, P. Spaces with a finite family of basic functions. BULLETIN OF THE LONDON MATHEMATICAL SOCIETY. ISSN 0024-6093, FEB 2011, vol. 43, Part 1, p. 26-32. [WOS]
- KARWA, V. - DONNELL, E.T. Predicting Pavement Marking Retroreflectivity Using Artificial Neural Networks: Exploratory Analysis. JOURNAL OF TRANSPORTATION ENGINEERING-ASCE. ISSN 0733-947X, FEB 2011, vol. 137, no. 2, p. 91-103. [WOS]
- CHANG, H.K. - LIOU, J.C. - LIU, S.J. - LIAW, S.R. Simulated wave-driven ANN model for typhoon waves. ADVANCES IN ENGINEERING SOFTWARE. ISSN 0965-9978, JAN-FEB 2011, vol. 42, no. 1-2, p. 25-34. [WOS]
- BALABIN, R.M. - LOMAKINA, E.I. Support vector machine regression (LS-SVM)-an alternative to artificial neural networks (ANNs) for the analysis of quantum chemistry data?. PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2011, vol. 13, no. 24, p. 11710-11718. [WOS]
- JING, G.H. - LI, X.L. - ZHOU, Z.M. Quantitative Structure-biodegradability Relationship Study about the Aerobic Biodegradation of Some Aromatic Compounds. CHINESE JOURNAL OF STRUCTURAL CHEMISTRY. ISSN 0254-5861, 2011, vol. 30, no. 3, p. 368-375. [WOS]
- LOVASSY, R. - KOCZY, L.T. - GAL, L. Function Approximation Performance of Fuzzy Neural Networks. ACTA POLYTECHNICA HUNGARICA. ISSN 1785-8860, 2010, vol. 7, no. 4, SI, p. 25-38. [WOS]
- GUTIERREZ-ANTONIO, C. - BRIONES-RAMIREZ, A. Speeding up a multiobjective genetic algorithm with constraints through artificial neuronal networks. 20TH EUROPEAN SYMPOSIUM ON COMPUTER AIDED PROCESS ENGINEERING. ISSN 1570-7946, 2010, vol. 28, p. 391-396. [WOS]
- GAL, L. - LOVASSY, R. - KOCZY, L.T. Function Approximation Performance of Fuzzy Neural Networks Based on Frequently Used Fuzzy Operations and a Pair of New Trigonometric Norms. 2010 IEEE INTERNATIONAL CONFERENCE ON FUZZY SYSTEMS (FUZZ-IEEE 2010). ISSN 1098-7584, 2010. [WOS]

- PEDNAULT, E. Transform Regression and the Kolmogorov Superposition Theorem. PROCEEDINGS OF THE SIXTH SIAM INTERNATIONAL CONFERENCE ON DATA MINING. 2006, p. 35-46. [WOS]
- JIN, Q.Y. - HUANG, Y.Z. - FAN, N. Learning images using compositional pattern-producing neural networks for source camera identification and digital demographic diagnosis. PATTERN RECOGNITION LETTERS. ISSN 0167-8655, MAR 2012, vol. 33, no. 4, SI, p. 381-396. [WOS]
- PAPADOPOULOS, V.D. - BELIGIANNIS, G.N. - HELA, D.G. Combining experimental design and artificial neural networks for the determination of chlorinated compounds in fish using matrix solid-phase dispersion. APPLIED SOFT COMPUTING. ISSN 1568-4946, DEC 2011, vol. 11, no. 8, p. 5155-5164. [WOS]
- TIRELLI, T. - FAVARO, L. - GAMBA, M. - PESSANI, D. Performance comparison among multivariate and data mining approaches to model presence/absence of Austropotamobius pallipes complex in Piedmont (North Western Italy). COMPTES RENDUS BIOLOGIES. ISSN 1631-0691, OCT 2011, vol. 334, no. 10, p. 695-704. [WOS]
- TIRELLI, T. - PESSANI, D. Importance of feature selection in decision-tree and artificial-neural-network ecological applications. Alburnus alburnus alborella: A practical example. ECOLOGICAL INFORMATICS. ISSN 1574-9541, SEP 2011, vol. 6, no. 5, p. 309-315. [WOS]
- LONG, H.V. A note on the rates of uniform approximation of fuzzy systems. INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS. ISSN 1875-6883, JUN-AUG 2011, vol. 4, no. 4, p. 712-727. [WOS]
- CAI, Z.M. - WEI, C.L. - YUAN, Y. An efficient method for electric meter readings automatic location and recognition. PEEA 2011. ISSN 1877-7058, 2011, vol. 23. [WOS]
- TZAVARAS, A. - WELLER, P.R. - PRINIANAKIS, G. - LAHANA, A. - AFENTOULIDIS, P. - SPYROPOULOS, B. Locating of the required Key-Variables to be employed in a Ventilation Management Decision Support System. 2011 ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC). 2011, p. 112-115. [WOS]
- FAN, N. Learning Nonlinear Distance Functions using Neural Network for Regression with Application to Robust Human Age Estimation. 2011 IEEE INTERNATIONAL CONFERENCE ON COMPUTER VISION (ICCV). 2011, p. 249-254. [WOS]
- CHAIREZ, I. - POZNYAK, A. - POZNYAK, T. High Order Sliding Mode Neurocontrol for Uncertain Nonlinear SISO Systems: Theory and Applications. MODERN SLIDING MODE CONTROL THEORY: NEW PERSPECTIVES AND APPLICATIONS. ISSN 0170-8643, 2008, vol. 375, p. 179-200. [WOS]
- SCALABRIN, G. - CRISTOFOLI, G. The viscosity surfaces of propane in the form of multilayer feed forward neural networks. INTERNATIONAL JOURNAL OF THERMOPHYSICS. ISSN 0195-928X, SEP 2003, vol. 24, no. 5, SI, p. 1241-1263. [WOS]
- EL FAKHRI, G. - MAKSUD, P. - KIJEWski, M.F. - ZIMMERMAN, R.E. - MOORE, S.C. Quantitative simultaneous (99m)Tc/(123)I SPECT: Design study and validation with Monte Carlo simulations and physical acquisitions. IEEE TRANSACTIONS ON NUCLEAR SCIENCE. ISSN 0018-9499, OCT 2002, vol. 49, no. 5, Part 1, p. 2315-2321. [WOS]
- SCALABRIN, G. - CRISTOFOLI, G. - RICHON, D. Viscosity equations of pure fluids in an innovative extended corresponding states framework II. Application to four fluids. FLUID PHASE EQUILIBRIA. ISSN 0378-3812, JUN 30 2002, vol. 199, no. 1-2, SI, p. 281-294. [WOS]
- CRISTOFOLI, G. - PIAZZA, L. - SCALABRIN, G. A viscosity equation of state for R134a through a multi-layer feedforward neural network technique. FLUID PHASE EQUILIBRIA. ISSN 0378-3812, JUN 30 2002, vol. 199, no. 1-2, SI, p. 223-236. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Implementation of Kolmogorov learning algorithm for feedforward neural networks. COMPUTATIONAL SCIENCE -- ICCS 200, PROCEEDINGS PT 2. ISSN 0302-9743, 2001, vol. 2074, p. 986-995. [WOS]
- AKBARZADEH-T, M.R. - MEGHDADI, A.H. Fuzzy modeling of human control strategy for over head crane. 10TH IEEE INTERNATIONAL CONFERENCE ON FUZZY SYSTEMS, VOLS 1-3: MEETING THE GRAND CHALLENGE: MACHINES THAT SERVE PEOPLE. 2001, p. 1076-1079. [WOS]
- CIUCA, I. - WARE, J.A. Layered neural networks as universal approximators. COMPUTATIONAL INTELLIGENCE: THEORY AND APPLICATIONS. ISSN 0302-9743, 1997, vol. 1226, p. 411-415. [WOS]
- HAYASHI, Y. - BUCKLEY, J.J. APPROXIMATIONS BETWEEN FUZZY EXPERT-SYSTEMS AND NEURAL NETWORKS. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING. ISSN 0888-613X, JAN 1994, vol. 10, no. 1, p. 63-73. [WOS]
- SANTOS, E.T. - ZARATE, L.E. - PEREIRA, E.M.D. Hybrid thermal model for swimming pools based on



- artificial neural networks for southeast region of Brazil. EXPERT SYSTEMS WITH APPLICATIONS. ISSN 0957-4174, JUN 15 2013, vol. 40, no. 8, p. 3106-3120. [WOS]
- CHAIREZ, I. Differential Neuro-Fuzzy Controller for Uncertain Nonlinear Systems. IEEE TRANSACTIONS ON FUZZY SYSTEMS. ISSN 1063-6706, APR 2013, vol. 21, no. 2, p. 369-384. [WOS]
- PENG, H.W. - LIU, F.R. - YANG, X.F. A hybrid strategy of short term wind power prediction. RENEWABLE ENERGY. ISSN 0960-1481, FEB 2013, vol. 50, p. 590-595. [WOS]
- TAO, L.L. - KONG, X.D. - ZHONG, W.M. - QIAN, F. Modified Self-adaptive Immune Genetic Algorithm for Optimization of Combustion Side Reaction of p-Xylene Oxidation. CHINESE JOURNAL OF CHEMICAL ENGINEERING. ISSN 1004-9541, DEC 2012, vol. 20, no. 6, p. 1047-1052. [WOS]
- OLAYA-MARIN, E.J. - MARTINEZ-CAPEL, F. - COSTA, R.M.S. - ALCARAZ-HERNANDEZ, J.D. Modelling native fish richness to evaluate the effects of hydromorphological changes and river restoration (Júcar River Basin, Spain). SCIENCE OF THE TOTAL ENVIRONMENT. ISSN 0048-9697, DEC 1 2012, vol. 440, SI, p. 95-105. [WOS]
- KAO, L.J. - CHIU, C.C. - CHIU, F.Y. A Bayesian latent variable model with classification and regression tree approach for behavior and credit scoring. KNOWLEDGE-BASED SYSTEMS. ISSN 0950-7051, DEC 2012, vol. 36, p. 245-252. [WOS]
- LEHKY, D. - NOVAK, D. Solving Inverse Structural Reliability Problem Using Artificial Neural Networks and Small-Sample Simulation. ADVANCES IN STRUCTURAL ENGINEERING. ISSN 1369-4332, NOV 2012, vol. 15, no. 11, p. 1911-1920. [WOS]
- MORA, M.C. - SANCHO-BRU, J.L. - PEREZ-GONZALEZ, A. Hand Posture Prediction using Neural Networks within a Biomechanical Model. INTERNATIONAL JOURNAL OF ADVANCED ROBOTIC SYSTEMS. ISSN 1729-8806, OCT 18 2012, vol. 9. [WOS]
- LUO, J.F. - LIN, W.T. - CAI, X.L. - LI, J.Y. Optimization of Fermentation Media for Enhancing Nitrite-oxidizing Activity by Artificial Neural Network Coupling Genetic Algorithm. CHINESE JOURNAL OF CHEMICAL ENGINEERING. ISSN 1004-9541, OCT 2012, vol. 20, no. 5, p. 950-957. [WOS]
- CACCIOLA, M. - MEGALI, G. - PELLICANO, D. - MORABITO, F.C. Elman neural networks for characterizing voids in welded strips: a study. NEURAL COMPUTING & APPLICATIONS. ISSN 0941-0643, JUL 2012, vol. 21, no. 5, p. 869-875. [WOS]
- BARGHI, F. - SAFAVI, A.A. AN INTELLIGENT CONTROL POLICY FOR FUEL INJECTION CONTROL OF CNG ENGINES. IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF ELECTRICAL ENGINEERING. ISSN 2228-6179, JUN 2012, vol. 36, no. E1, p. 83-94. [WOS]
- BLUME, C. - MATTHES, K. - HORENKO, I. Supervised Learning Approaches to Classify Sudden Stratospheric Warming Events. JOURNAL OF THE ATMOSPHERIC SCIENCES. ISSN 0022-4928, JUN 2012, vol. 69, no. 6, p. 1824-1840. [WOS]
- MIAO, Y.Q. - ROONEY, D.W. - GAN, Q. Artificial Neural Network for Compositional Ionic Liquid Viscosity Prediction. INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS. ISSN 1875-6883, JUN 2012, vol. 5, no. 3, p. 460-471. [WOS]
- THODE, A.M. - KIM, K.H. - BLACKWELL, S.B. - GREENE, C.R. - NATIONS, C.S. - MCDONALD, T.L. - MACRANDER, A.M. Automated detection and localization of bowhead whale sounds in the presence of seismic airgun surveys. JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA. ISSN 0001-4966, MAY 2012, vol. 131, no. 5, p. 3726-3747. [WOS]
- FATEMI, M.H. - MOGHADDAM, M.R. Quantitative structure-property prediction of ion-molecule rate constants for proton transfer reaction between H<sub>3</sub>O<sup>+</sup> and volatile organic compound. JOURNAL OF MASS SPECTROMETRY. ISSN 1076-5174, MAY 2012, vol. 47, no. 5, p. 574-580. [WOS]
- FIKSAK, B. - KRAWCZAK, M. Incidental Neural Networks as Nomograms Generators. ARTIFICIAL INTELLIGENCE AND SOFT COMPUTING, PT I. ISSN 0302-9743, 2012, vol. 7267, p. 63-71. [WOS]
- BLUME, C. - MATTHES, K. Understanding and forecasting polar stratospheric variability with statistical models. ATMOSPHERIC CHEMISTRY AND PHYSICS. ISSN 1680-7316, 2012, vol. 12, no. 13, p. 5691-5701. [WOS]
- MANZHOS, S. - YAMASHITA, K. - CARRINGTON, T. Using a neural network based method to solve the vibrational Schrodinger equation for H<sub>2</sub>O. CHEMICAL PHYSICS LETTERS. ISSN 0009-2614, MAY 25 2009, vol. 474, no. 1-3, p. 217-221. [WOS]
- SHOKOUHMAND, H. - GHAZVINI, M. - SHABANIAN, J. Analysis of Microchannel Heat Sink Performance Using Nanofluids in Turbulent and Laminar Flow Regimes and its simulation using Artificial Neural Network. 2008 UKSIM TENTH INTERNATIONAL CONFERENCE ON COMPUTER MODELING AND SIMULATION. 2008, p.

623-628. [WOS]

- CHAIREZ, I. - POZNYAK, A. - POZNYAK, T. Practical stability analysis for DNN observation. 47TH IEEE CONFERENCE ON DECISION AND CONTROL, 2008 (CDC 2008). ISSN 0191-2216, 2008, p. 2551-2556. [WOS]
- WELKE, K. - OZTOP, E. - UDE, A. - DILLMANN, R. - CHENG, G. Learning feature representations for an object recognition system. 2006 6TH IEEE-RAS INTERNATIONAL CONFERENCE ON HUMANOID ROBOTS, VOLS 1 AND 2. ISSN 2164-0572, 2006, p. 290-295. [WOS]
- KALANTZIS, G. - VASQUEZ-QUINO, L.A. - ZALMAN, T. - PRATX, G. - LEI, Y. Toward IMRT 2D dose modeling using artificial neural networks: A feasibility study. MEDICAL PHYSICS. ISSN 0094-2405, OCT 2011, vol. 38, no. 10, p. 5807-5817. [WOS]
- KALUZA, P. Computation with phase oscillators: An oscillatory perceptron model. NEUROCOMPUTING. ISSN 0925-2312, OCT 22 2013, vol. 118, p. 127-131. [WOS]
- PEREZ-RODRIGUEZ, P. - GIANOLA, D. - WEIGEL, K.A. - ROSA, G.J.M. - CROSSA, J. Technical Note: An R package for fitting Bayesian regularized neural networks with applications in animal breeding. JOURNAL OF ANIMAL SCIENCE. ISSN 0021-8812, AUG 2013, vol. 91, no. 8, p. 3522-3531. [WOS]
- SUN, X.D. - CHEN, L. - YANG, Z.B. - ZHU, H.Q. Speed-Sensorless Vector Control of a Bearingless Induction Motor With Artificial Neural Network Inverse Speed Observer. IEEE-ASME TRANSACTIONS ON MECHATRONICS. ISSN 1083-4435, AUG 2013, vol. 18, no. 4, p. 1357-1366. [WOS]
- TOUHAMI, S. - MEDLES, K. - DAHOU, O. - TILMATINE, A. - BENDAOU, A. - DASCALESCU, L. Modeling and Optimization of a Roll-Type Electrostatic Separation Process Using Artificial Neural Networks. IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS. ISSN 0093-9994, JUL-AUG 2013, vol. 49, no. 4, p. 1773-1780. [WOS]
- JANAKIRAMAN, V.M. - NGUYEN, X. - ASSANIS, D. Nonlinear identification of a gasoline HCCI engine using neural networks coupled with principal component analysis. APPLIED SOFT COMPUTING. ISSN 1568-4946, MAY 2013, vol. 13, no. 5, p. 2375-2389. [WOS]
- TRUCHETET, F. - LENI, P.E. - FOUGEROLLE, Y. New Representations for Multidimensional Functions Based on Kolmogorov Superposition Theorem. Applications on Image Processing. 3RD INTERNATIONAL TOPICAL MEETING ON OPTICAL SENSING AND ARTIFICIAL VISION (OSAV'2012). ISSN 0094-243X, 2013, vol. 1537, p. 8-18. [WOS]
- TAR, J.K. - RUDAS, I.J. - KOSI, K. - CSAPO, A. - BARANYI, P. Cognitive Control Initiative. 3RD IEEE INTERNATIONAL CONFERENCE ON COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM 2012). 2012, p. 579-584. [WOS]
- JIANG, Y. - CUI, M.H. - HU, J. Computer Generation of 3D Textile Draping Simulation. CONFERENCE ON MODELING, IDENTIFICATION AND CONTROL. ISSN 2212-6716, 2012, vol. 3, p. 661-666. [WOS]

### Kůrková, Věra


Universal Approximation Using Feedforward Neural Networks with Gaussian Bar Units.  
*Proceedings of ECAI 92*. Chichester : John Wiley & Sons, 1992 - (Neumann, B.), s. 193-197.  
 ISBN 978-0-471-93608-4.  
 [ECAI'92. Vienna (AT), 03.08.1992-07.08.1992]

Citováno: 4 x

- Sosík, P. RBF Networks with Quasi-Interpolating Functions. in : Proceedings of the 6. Microcomputer School: Neural Network Theory and Applications., (1994), pp. 151-154
- Gegout C., Girau B., Rossi F. in : NeuroCOLT Technical Report NC-TR-95-041. Egham, Surrey (GB), (1995)
- Dorffner G. Neural Networks for Time Series Processing. in : Neural Network World., vol. 6, (1996), pp. 447-468
- Šíma J., Neruda R. in : Teoretické otázky neuronových sítí. Praha : Matfyzpress, (1996), pp. 390

## 1991

### Kůrková, Věra

Kolmogorov's Theorem is Relevant.  
*Neural Computation*. Roč. 3, č. 4 (1991), s. 617-622. ISSN 0899-7667  
 DOI: [10.1162/neco.1991.3.4.617](https://doi.org/10.1162/neco.1991.3.4.617)

Citováno: 68 x

- Hornik K. Functional Approximation and Learning in Artificial Neural Networks. *Neural Network World*, 1991, vol. 1, p. 257-266
- Nakamura M, Mines R, Kreinovich V. Guaranteed Intervals for Kolmogorov's Theorem (and their possible relation to neural networks). *Interval Computations*, vol. 3, (1993), p. 183-199
- Kovačec, A, 1993, Ribiero, B. Kolmogorov's Theorem: From an Algebraic Equations and Nomography to Neural Networks. *Proceedings of the International Conference on Artificial Neural Networks and Genetic Algorithms*. Wien : Springer,
- Bishop Ch. M. *Neural Networks for Pattern Recognition*. Oxford : Clarendon Press, p. 482
- Ciuca I. On the Approximation Capability of Layered Neural Networks Using Sigmoidal Heaviside Functions. *Proc. of the Int. ICSC/IFAC Symposium on Neural Computation NC'98*. Zurich : ICSC, p. 878-884
- Andrejková G, Mikulová M. Kolmogorov's Theorem and Neural Networks. *Neural Network World*, 1998, vol. 8, p. 501-510
- Andrejková G, , Mikulová M. Kolmogorov's Theorem and Neural Networks. *SCANN'98. 2nd Slovak Conference on Artificial Neural Networks*. Trnava : VÚJE Trnava, p. 46-51
- Pinkus A. Approximation Theory of the MLP Model in Neural Networks. *Acta Numerica*, 1999, p. 1-52
- Ripley B.D. *Pattern recognition and neural networks*. : Cambridge University Press,
- FENG, C.X.J. - YU, Z.G. - KUSIAK, A. Selection and validation of predictive regression and neural network models based on designed experiments. *IIE TRANSACTIONS*. ISSN 0740-817X, JAN 2006, vol. 38, no. 1, p. 13-23. [WOS]
- BODYANSKIY, Y. - KOLODYAZHNIY, V. - OTTO, P. Neuro-Fuzzy Kolmogorov's Network for time series prediction and pattern classification. *KI2005: ADVANCES IN ARTIFICIAL INTELLIGENCE, PROCEEDINGS*. ISSN 0302-9743, 2005, vol. 3698, p. 191-202. [WOS]
- BODYANSKIY, Y. - GORSHKOV, Y. - KOLODYAZHNIY, V. - POYEDYNTSEVA, V. Neuro-fuzzy Kolmogorov's network. *ARTIFICIAL NEURAL NETWORKS: FORMAL MODELS AND THEIR APPLICATIONS - ICANN 2005, PT 2, PROCEEDINGS*. ISSN 0302-9743, 2005, vol. 3697, p. 1-6. [WOS]
- BEIU, V.B. - ZAWADSKI, A. - ANDONIE, R. - AUNET, S. Using Kolmogorov inspired gates for low power nanoelectronics. *COMPUTATIONAL INTELLIGENCE AND BIOINSPIRED SYSTEMS, PROCEEDINGS*. ISSN 0302-9743, 2005, vol. 3512, p. 438-445. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Implementation of Kolmogorov learning algorithm for feedforward neural networks. *COMPUTATIONAL SCIENCE -- ICCS 2001, PROCEEDINGS PT 2*. ISSN 0302-9743, 2001, vol. 2074, p. 986-995. [WOS]
- IGELNIK, B. Use of the Kolmogorov's superposition theorem and cubic splines for efficient neural-network modeling. *KNOWLEDGE-BASED INTELLIGENT INFORMATION AND ENGINEERING SYSTEMS, PT 1, PROCEEDINGS*. ISSN 0302-9743, 2003, vol. 2773, p. 184-190. [WOS]
- ALONSO-BETANZOS, A. - FONTENLA-ROMERO, O. - GUIJARRO-BERDINAS, B. - HERNANDEZ-PEREIRA, E. - ANDRADE, M.I.P. - JIMENEZ, E. - SOTO, J.L.L. - CARBALLAS, T. An intelligent system for forest fire risk prediction and fire fighting management in Galicia. *EXPERT SYSTEMS WITH APPLICATIONS*. ISSN 0957-4174, NOV 2003, vol. 25, no. 4, p. 545-554. [WOS]
- ITO, Y. Activation functions defined on higher-dimensional spaces for approximation on compact sets with and without scaling. *NEURAL COMPUTATION*. ISSN 0899-7667, SEP 2003, vol. 15, no. 9, p. 2199-2226. [WOS]
- IGELNIK, B. - PARIKH, N. Kolmogorov's spline network. *IEEE TRANSACTIONS ON NEURAL NETWORKS*. ISSN 1045-9227, JUL 2003, vol. 14, no. 4, p. 725-733. [WOS]
- MAZZATORTA, P. - BENFENATI, E. - NEAGU, C.D. - GINI, G. Tuning neural and fuzzy-neural networks for toxicity modeling. *JOURNAL OF CHEMICAL INFORMATION AND COMPUTER SCIENCES*. ISSN 0095-2338, MAR-APR 2003, vol. 43, no. 2, p. 513-518. [WOS]
- CIUCA, I. - WARE, J.A. Layered neural networks as universal approximators. *COMPUTATIONAL INTELLIGENCE*. ISSN 0302-9743, 1997, vol. 1226, p. 411-415. [WOS]
- MOUZOURIS, G.C. - MENDEL, J.M. Nonsingleton fuzzy logic systems: Theory and application. *IEEE TRANSACTIONS ON FUZZY SYSTEMS*. ISSN 1063-6706, FEB 1997, vol. 5, no. 1, p. 56-71. [WOS]
- NGUYEN, H.T. - KREINOVICH, V. - NESTEROV, V. - NAKAMURA, M. On hardware support for interval computations and for soft computing: Theorems. *IEEE TRANSACTIONS ON FUZZY SYSTEMS*. ISSN 1063-6706, FEB 1997, vol. 5, no. 1, p. 108-127. [WOS]

- KREINOVICH, V. - NGUYEN, H.T. - SPRECHER, D.A. Normal forms for fuzzy logic an application of Kolmogorov's theorem. INTERNATIONAL JOURNAL OF UNCERTAINTY FUZZINESS AND KNOWLEDGE-BASED SYSTEMS. ISSN 0218-4885, AUG 1996, vol. 4, no. 4, p. 331-349. [WOS]
- RIETMAN, E.A. A neural network model of a contact plasma etch process for VLSI production. IEEE TRANSACTIONS ON SEMICONDUCTOR MANUFACTURING. ISSN 0894-6507, FEB 1996, vol. 9, no. 1, p. 95-100. [WOS]
- BAHRAMI, M. ISSUES ON REPRESENTATIONAL CAPABILITIES OF ARTIFICIAL NEURAL NETWORKS AND THEIR IMPLEMENTATION. INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS. ISSN 0884-8173, JUN 1995, vol. 10, no. 6, p. 571-579. [WOS]
- HAYASHI, Y. - BUCKLEY, J.J. APPROXIMATIONS BETWEEN FUZZY EXPERT-SYSTEMS AND NEURAL NETWORKS. INTERNATIONAL JOURNAL OF APPROXIMATE REASONING. ISSN 0888-613X, JAN 1994, vol. 10, no. 1, p. 63-73. [WOS]
- JIANG, Z.Y. - ZHANG, Z. - FRIEDRICH, K. Prediction on wear properties of polymer composites with artificial neural networks. COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, FEB 2007, vol. 67, no. 2, p. 168-176. [WOS]
- KHAN, U. - TERCHI, A. Freeform surface inference from sketches via neural networks. NEUROCOMPUTING. ISSN 0925-2312, OCT 2008, vol. 71, no. 16-18, Sp. Iss. SI, p. 3282-3294. [WOS]
- JIANG, Z. - GYUROVA, L. - ZHANG, Z. - FRIEDRICH, K. - SCHLARB, A.K. Neural network based prediction on mechanical and wear properties of short fibers reinforced polyamide composites. MATERIALS & DESIGN. ISSN 0261-3069, 2008, vol. 29, no. 3, p. 628-637. [WOS]
- BRAUN, J. - GRIEBEL, M. On a Constructive Proof of Kolmogorov's Superposition Theorem. CONSTRUCTIVE APPROXIMATION. ISSN 0176-4276, DEC 2009, vol. 30, no. 3, p. 653-675. [WOS]
- EL-BAKRY, H.M. - MASTORAKIS, N. A Novel Fast Kolmogorov's Spline Complex Network for Pattern Detection. SMO 08: PROCEEDINGS OF THE 8TH WSEAS INTERNATIONAL CONFERENCE ON SIMULATION, MODELLING AND OPTIMIZATION. 2008, p. 261-279. [WOS]
- DIMIROVSKI, G.M. - JING, Y.W. - ZHANG, Y.X. - VUKOBRATOVIC, M.K. Robust adaptive control for complex systems employing ANN emulation of nonlinear functions. NEUREL 2006: Eight Seminar on Neural Network Applications in Electrical Engineering, Proceedings. 2006, p. 87-92. [WOS]
- FOUNDER-ZANUY, M. - CHETOUANI, M. Nonlinear predictive models: Overview and possibilities in speaker recognition. Progress in Nonlinear Speech Processing. ISSN 0302-9743, 2007, vol. 4391, p. 170-189. [WOS]
- BEIU, V. - ZAWADZKI, A. On Kolmogorov's superpositions: Novel gates and circuits for nanoelectronics?. PROCEEDINGS OF THE INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS (IJCNN), VOLS 1-5. ISSN 1098-7576, 2005, p. 651-656. [WOS]
- RESTREPO, J.A. - MILLAN, A.J. - HARLEY, R.G. - HABETLER, T.G. COT-ANN-PWM single-phase synchronous rectifiers without line-voltage sensors. PESC 04: 2004 IEEE 35TH ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE, VOLS 1-6, CONFERENCE PROCEEDINGS. ISSN 0275-9306, 2004, p. 3859-3864. [WOS]
- DIMIROVSKI, G.M. - JING, Y.W. Kolmogorov networks and process characteristic input-output modes decomposition. 2002 FIRST INTERNATIONAL IEEE SYMPOSIUM INTELLIGENT SYSTEMS, VOL 1, PROCEEDINGS. 2002, p. 59-66. [WOS]
- NEAGU, C.D.N. - APTULA, A.O. - GINI, G. Neural and neuro-fuzzy models of toxic action of phenols. 2002 FIRST INTERNATIONAL IEEE SYMPOSIUM INTELLIGENT SYSTEMS, VOL 1, PROCEEDINGS. 2002, p. 283-288. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Variants of learning algorithm based on Kolmogorov theorem. COMPUTATIONAL SCIENCE-ICCS 2002, PT III, PROCEEDINGS. ISSN 0302-9743, 2002, vol. 2331, p. 536-543. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Kolmogorov learning for feedforward networks. IJCNN'01: INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS, VOLS 1-4, PROCEEDINGS. ISSN 1098-7576, 2001, p. 77-81. [WOS]
- NGUYEN, H.T. - KREINOVICH, V. - GOODMAN, I.R. Why unary and binary operations in logic: General result motivated by interval-valued logics. JOINT 9TH IFSA WORLD CONGRESS AND 20TH NAFIPS INTERNATIONAL CONFERENCE, PROCEEDINGS, VOLS. 1-5. 2001, p. 1991-1996. [WOS]
- ALONSO-BETANZOS, A. - FONTENLA-ROMERO, O. - GUIJARRO-BERDINAS, B. - HERNANDEZ-PEREIRA, E. - CANDA, J. - JIMENEZ, E. - LEGIDO, J.L. - MUNIZ, S. - PAZ-ANDRADE, C. - PAZ-ANDRADE, M.I. A neural network



- approach for forestal fire risk estimation. ECAI 2002: 15TH EUROPEAN CONFERENCE ON ARTIFICIAL INTELLIGENCE, PROCEEDINGS. ISSN 0922-6389, 2002, vol. 77, p. 643-647. [WOS]
- MAZZATORTA, P. - BENFENATI, E. - NEAGU, D. - GINI, G. The importance of scaling in data mining for toxicity prediction. JOURNAL OF CHEMICAL INFORMATION AND COMPUTER SCIENCES. ISSN 0095-2338, SEP-OCT 2002, vol. 42, no. 5, p. 1250-1255. [WOS]
- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Towards feasible learning algorithm based on Kolmogorov theorem. IC-AI'2000: PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE, VOL 1-III. 2000, p. 915-920. [WOS]
- GILES, C.L. - LAWRENCE, S. - TSOI, A.C. Noisy time series prediction using recurrent neural networks and grammatical inference. MACHINE LEARNING. ISSN 0885-6125, 2001, vol. 44, no. 1-2, p. 161-183. [WOS]
- FIORDALISO, A. Autostructuration of fuzzy systems by rules sensitivity analysis. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, MAR 1 2001, vol. 118, no. 2, p. 281-296. [WOS]
- CIUCA, I. - JITARU, E. On the three layer neural networks using sigmoidal functions. FOUNDATIONS AND TOOLS FOR NEURAL MODELING, PROCEEDINGS, VOL I. ISSN 0302-9743, 1999, vol. 1606, p. 321-329. [WOS]
- GRINO, R. - CEMBRANO, G. - TORRAS, C. Nonlinear system identification using additive dynamic neural networks - Two on-line approaches. IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-FUNDAMENTAL THEORY AND APPLICATIONS. ISSN 1057-7122, FEB 2000, vol. 47, no. 2, p. 150-165. [WOS]
- BARAI, S.V. - REICH, Y. Ensemble modelling or selecting the best model: Many could be better than one. AI EDAM-ARTIFICIAL INTELLIGENCE FOR ENGINEERING DESIGN ANALYSIS AND MANUFACTURING. ISSN 0890-0604, NOV 1999, vol. 13, no. 5, p. 377-386. [WOS]
- YAMAKAWA, T. - KREINOVICH, V. Why fundamental physical equations are of second order. INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS. ISSN 0020-7748, JUN 1999, vol. 38, no. 6, p. 1763-1769. [WOS]
- MAIOROV, V. - PINKUS, A. Lower bounds for approximation by MLP neural networks. NEUROCOMPUTING. ISSN 0925-2312, APR 1999, vol. 25, no. 1-3, p. 81-91. [WOS]
- CIUCA, I. - WARE, J.A. Layered neural networks as universal approximators. COMPUTATIONAL INTELLIGENCE - THEORY AND APPLICATIONS. ISSN 0302-9743, 1997, vol. 1226, p. 411-415. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. NEURAL NETS FOR FUZZY-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, MAY 12 1995, vol. 71, no. 3, p. 265-276. [WOS]
- ITO, Y. APPROXIMATION CAPABILITY OF LAYERED NEURAL NETWORKS WITH SIGMOID UNITS ON 2 LAYERS. NEURAL COMPUTATION. ISSN 0899-7667, NOV 1994, vol. 6, no. 6, p. 1233-1243. [WOS]
- KATSUURA, H. - SPRECHER, D.A. COMPUTATIONAL ASPECTS OF KOLMOGOROV SUPERPOSITION THEOREM. NEURAL NETWORKS. ISSN 0893-6080, 1994, vol. 7, no. 3, p. 455-461. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. HYBRID NEURAL NETS CAN BE FUZZY CONTROLLERS AND FUZZY EXPERT-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, DEC 10 1993, vol. 60, no. 2, p. 135-142. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. CAN FUZZY NEURAL NETS APPROXIMATE CONTINUOUS FUZZY FUNCTIONS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, JAN 10 1994, vol. 61, no. 1, p. 43-51. [WOS]
- BUCKLEY, J.J. - HAYASHI, Y. NUMERICAL RELATIONSHIPS BETWEEN NEURAL NETWORKS, CONTINUOUS-FUNCTIONS, AND FUZZY-SYSTEMS. FUZZY SETS AND SYSTEMS. ISSN 0165-0114, NOV 25 1993, vol. 60, no. 1, p. 1-8. [WOS]
- BULSARI, A. SOME ANALYTICAL SOLUTIONS TO THE GENERAL APPROXIMATION PROBLEM FOR FEEDFORWARD NEURAL NETWORKS. NEURAL NETWORKS. ISSN 0893-6080, 1993, vol. 6, no. 7, p. 991-996. [WOS]
- LIN, J.N. - UNBEHAUEN, R. ON THE REALIZATION OF A KOLMOGOROV NETWORK. NEURAL COMPUTATION. ISSN 0899-7667, JAN 1993, vol. 5, no. 1, p. 18-20. [WOS]
- HUNT, K.J. - SBARBARO, D. - ZBIKOWSKI, R. - GAWTHROP, P.J. NEURAL NETWORKS FOR CONTROL-SYSTEMS - A SURVEY. AUTOMATICA. ISSN 0005-1098, NOV 1992, vol. 28, no. 6, p. 1083-1112. [WOS]
- FRANZ, M. - CAILLAUD, D. Fitting Artificial Neural Network Models to Animal Movement Data: Some Necessary Precautions, a Comment on Dalziel et al.. AMERICAN NATURALIST. ISSN 0003-0147, JUN 2010, vol. 175, no. 6, p. 759-761. [WOS]
- BODYANSKIY, Y. - POPOV, S. - TITOV, M. Function Decomposition Network. ARTIFICIAL NEURAL NETWORKS - ICANN 2009, PT I. ISSN 0302-9743, 2009, vol. 5768, p. 718-727. [WOS]
- TURNER, S.D. - DUDEK, S.M. - RITCHIE, M.D. Incorporating Domain Knowledge into Evolutionary Computing for Discovering Gene-Gene Interaction. PARALLEL PROBLEMS SOLVING FROM NATURE - PPSN XI,

- PT I. ISSN 0302-9743, 2010, vol. 6238, Part i, p. 394-403. [WOS]  
 --- KORDIK, P. - CERNY, J. Self-organization of Supervised Models. META-LEARNING IN COMPUTATIONAL INTELLIGENCE. ISSN 1860-949X, 2011, vol. 358, p. 179-223. [WOS]  
 --- NERUDA, R. - STEDRY, A. - DRKOSOVA, J. Implementation of Kolmogorov learning algorithm for feedforward neural networks. COMPUTATIONAL SCIENCE -- ICCS 200, PROCEEDINGS PT 2. ISSN 0302-9743, 2001, vol. 2074, p. 986-995. [WOS]  
 --- MICHALKIEWICZ, J. Modified Kolmogorov's Neural Network in the Identification of Hammerstein and Wiener Systems. IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS. ISSN 2162-237X, APR 2012, vol. 23, no. 4, p. 657-662. [WOS]  
 --- PEDNAULT, E. Transform Regression and the Kolmogorov Superposition Theorem. PROCEEDINGS OF THE SIXTH SIAM INTERNATIONAL CONFERENCE ON DATA MINING. 2006, p. 35-46. [WOS]  
 --- TRUCHETET, F. - LENI, P.E. - FOUGEROLLE, Y. New Representations for Multidimensional Functions Based on Kolmogorov Superposition Theorem. Applications on Image Processing. 3RD INTERNATIONAL TOPICAL MEETING ON OPTICAL SENSING AND ARTIFICIAL VISION (OSAV'2012). ISSN 0094-243X, 2013, vol. 1537, p. 8-18. [WOS]

### Kůrková, Věra

13th Hilbert's Problem and Neural Networks.

*Theoretical Aspects of Neurocomputing. Selected Papers from the Symposium on Neural Networks and Neurocomputing (NEURONET '90).* Singapore : World Scientific, 1991 - (Novák, M.; Pelikán, E.), s. 213-216. ISBN 981-02-0549-X.

[NEURONET'90. Prague (CS), 10.09.1990-14.09.1990]

Citováno: 2 x

- ZHANG, Y.X. - LI, S.M. Existence problem of optical correlation based pattern recognition. SCIENCE IN CHINA SERIES G-PHYSICS ASTRONOMY. ISSN 1672-1799, DEC 2003, vol. 46, no. 6, p. 589-601. [WOS]  
 --- BEIU, V. - ZAWADZKI, A. On Kolmogorov's superpositions: Novel gates and circuits for nanoelectronics?. PROCEEDINGS OF THE INTERNATIONAL JOINT CONFERENCE ON NEURAL NETWORKS (IJCNN), VOLS 1-5. ISSN 1098-7576, 2005, p. 651-656. [WOS]

## 1989

### Kůrková, Věra

Fraktální geometrie.

*Pokroky matematiky, fyziky a astronomie.* Roč. 34, č. 5 (1989), s. 267-277. ISSN 0032-2423

<http://dml.cz/handle/10338.dmlcz/138364>

<http://hdl.handle.net/11104/0121902>

Citováno: 1 x

- STRUNZ, P. - KULDA, J. - LUKAS, P. - MIKULA, P. - KRUMPOS, J. - SMETANA, Z. A SANS INVESTIGATION OF PRECIPITATES IN A HIGH-PRESSURE ROTOR OF A 55 MW TURBINE AFTER SERVICE. KOVOVE MATERIALY-METALLIC MATERIALS. ISSN 0023-432X, 1992, vol. 30, no. 2, p. 107-115. [WOS]

## 1974

### Kůrková-Pohlová, Věra - Koubek, V.

When a Generalized Algebraic Category is Monadic.

*Commentationes Mathematicae Universitatis Carolinae.* Roč. 15, č. 4 (1974), s. 577-587. ISSN 0010-2628

<http://dml.cz/handle/10338.dmlcz/105582>

<http://hdl.handle.net/11104/0123436>

Citováno: 1 x

- ADAMEK, J. - MERZENICH, W. FIXED-POINTS AS EQUATIONS AND SOLUTIONS. CANADIAN JOURNAL OF MATHEMATICS-JOURNAL CANADIEN DE MATHÉMATIQUES. ISSN 0008-414X, 1984, vol. 36, no. 3, p. 495-519. [WOS]

## 1973

### **Pohlová, Věra**

On Sums in Generalized Algebraic Categories.

*Czechoslovak Mathematical Journal*. Roč. 23, č. 2 (1973), s. 235-251. ISSN 0011-4642

<http://dml.cz/handle/10338.dmlcz/101163>

<http://hdl.handle.net/11104/0123435>

Citováno: 2 x

--- KOUBEK, V. FULL EMBEDDABILITY INTO CATEGORIES OF GENERALIZED ALGEBRAS. ALGEBRA UNIVERSALIS. ISSN 0002-5240, 1983, vol. 17, no. 1, p. 1-20. [WOS]

--- ADAMEK, J. LIMITS AND COLIMITS IN GENERALIZED ALGEBRAIC CATEGORIES. CZECHOSLOVAK MATHEMATICAL JOURNAL. ISSN 0011-4642, 1976, vol. 26, no. 1, p. 55-64. [WOS]



## Soupis nejvíce citovaných prací ve WOS (bez autocitací a citací spoluautorem)

### **Kůrková, Věra**

Kolmogorov's Theorem and Multilayer Neural Networks.  
*Neural Networks*. Roč. 5, č. 3 (1992), s. 501-506. ISSN 0893-6080  
 Impakt faktor: 2.221, rok: 1992  
[DOI: 10.1016/0893-6080\(92\)90012-8](https://doi.org/10.1016/0893-6080(92)90012-8)  
 Citováno: 210 x ve WOS

### **Kůrková, Věra**

Kolmogorov's Theorem is Relevant.  
*Neural Computation*. Roč. 3, č. 4 (1991), s. 617-622. ISSN 0899-7667  
[DOI: 10.1162/neco.1991.3.4.617](https://doi.org/10.1162/neco.1991.3.4.617)  
 Citováno: 59 x ve WOS

### **Kůrková, Věra - Kainen, P.C.**

Functionally Equivalent Feedforward Neural Networks.  
*Neural Computation*. Roč. 6, č. 3 (1994), s. 543-558. ISSN 0899-7667  
 Impakt faktor: 3.139, rok: 1994  
[DOI: 10.1162/neco.1994.6.3.543](https://doi.org/10.1162/neco.1994.6.3.543)  
 Citováno: 34 x ve WOS

### **Kůrková, Věra**

Approximation of Functions by Perceptron Networks with Bounded Number of Hidden Units.  
*Neural Networks*. Roč. 8, č. 5 (1995), s. 745-750. ISSN 0893-6080  
 Impakt faktor: 1.262, rok: 1995  
[DOI: 10.1016/0893-6080\(95\)00027-W](https://doi.org/10.1016/0893-6080(95)00027-W)  
 Citováno: 23 x ve WOS

### **Kůrková, Věra - Kainen, P.C. - Kreinovich, V.**

Estimates of the Number of Hidden Units and Variation with Respect to Half-Spaces.  
*Neural Networks*. Roč. 10, č. 6 (1997), s. 1061-1068. ISSN 0893-6080  
 Impakt faktor: 1.019, rok: 1997  
[DOI: 10.1016/S0893-6080\(97\)00028-2](https://doi.org/10.1016/S0893-6080(97)00028-2)  
 Citováno: 21 x ve WOS

### **Kůrková, Věra - Sanguineti, M.**

Comparison of Worst Case Errors in Linear and Neural Network Approximation.  
*IEEE Transactions on Information Theory*. Roč. 48, č. 1 (2002), s. 264-275. ISSN 0018-9448  
 Impakt faktor: 2.045, rok: 2002  
[DOI: 10.1109/18.971754](https://doi.org/10.1109/18.971754)  
 Citováno: 20 x ve WOS

### **Kůrková, Věra**

Dimension-Independent Rates of Approximation by Neural Networks.  
*Computer-Intensive Methods in Control and Signal Processing : The Curse of Dimensionality*. Boston : Birkhäuser, 1997 - (Warwick, K.; Kárný, M.), s. 261-270 ISBN 0-8176-3989-6.  
 [European IEEE Workshop on Computer-Intensive Methods in Control and Signal Processing: Can We Beat the Curse of Dimensionality? /2./. Prague (CR), 28.08.1996-30.08.1996]  
[DOI: 10.1007/978-1-4612-1996-5\\_16](https://doi.org/10.1007/978-1-4612-1996-5_16)  
 Citováno: 13 x ve WOS

### **Kůrková, Věra**

Learning from Data as an Inverse Problem.  
*Computational Statistics*. Heidelberg : Physica Verlag, 2004 - (Antoch, J.), s. 1377-1384 ISBN 3-7908-1554-3.  
 [COMPSTAT 2004. Symposium /16./. Prague (CZ), 23.08.2004-27.08.2004]  
 Citováno: 13 x ve WOS

### **Kůrková, Věra - Sanguineti, M.**

Error Estimates for Approximate Optimization by the Extended Ritz Method.  
*SIAM Journal on Optimization*. Roč. 15, č. 2 (2005), s. 461-487. ISSN 1052-6234  
 Impakt faktor: 1.238, rok: 2005  
[DOI: 10.1137/S1052623403426507](https://doi.org/10.1137/S1052623403426507)  
 Citováno: 11 x ve WOS

## Rejstřík spoluautorů

Adámek, J.	1
Beliczynski, B.	44, 49, 59
Gnecco, G.	158, 164, 165, 166, 179
Hecht-Nielsen, R.	22
Hlaváčková, K.	30, 37, 54, 66, 70
Kainen, P.C.	21, 26, 28, 29, 31, 32, 39, 40, 41, 42, 43, 45, 47, 56, 58, 61, 64, 73, 74, 80, 81, 82, 88, 90, 102, 103, 107, 119, 123, 124, 131, 133, 136, 143, 148, 150, 151, 161, 163, 167, 177, 185
Kárný, M.	62, 85
Koubek, V.	1, 4
Koutník, J.	138, 139, 157
Kreinovich, V.	28, 40, 42, 43, 45, 47, 61
Neruda, R.	35, 85, 138, 139, 157
Sanguineti, M.	72, 75, 78, 79, 83, 84, 86, 87, 89, 90, 91, 96, 98, 99, 100, 102, 115, 119, 121, 122, 123, 131, 132, 142, 145, 146, 148, 150, 158, 164, 165, 166, 177, 179, 184, 185
Savický, P.	66, 70
Sirisaengtaksin, O.	28, 40, 45
Steele, N.C.	85
Šmíd, J.	38
Vogt, A.	64, 73, 74, 80, 81, 82, 88, 103, 107, 124, 133, 161
Warwick, K.	62

## Seznam časopisů a počet prací, které v nich byly publikovány

časopis	ISSN	počet článků
Acta Universitatis Carolinae	0001-7140	1
Annals of Operations Research	0254-5330	1
Applied Mathematics and Computation	0096-3003	1
Applied Mathematics Letters	0893-9659	2
Commentationes Mathematicae Universitatis Carolinae	0010-2628	2
Czechoslovak Mathematical Journal	0011-4642	1
Discrete Applied Mathematics	0166-218X	1
IEEE Transactions on Information Theory	0018-9448	4
Journal of Approximation Theory	0021-9045	3
Journal of Complexity	0885-064X	2
Journal of Mathematical Modelling and Algorithms	1570-1166	1
Logic Journal of the IGPL	1367-0751	1
Mathematics of Operations Research	0364-765X	1
Mathematische Nachrichten	0025-584X	1
Neural Computation	0899-7667	4
Neural Network World	1210-0552	4
Neural Networks	0893-6080	8
Neurall Parallel & Scientific Computations	1061-5369	1
Neurocomputing	0925-2312	2
Pokroky matematiky fyziky & astronomie	0032-2423	3
Proceedings of AMS	0002-9939	1
Przegląd Elektrotechniczny	0033-2097	1
SIAM Journal on Optimization	1052-6234	2
Vesmír	0042-4544	1

## Bibliografie v číslech

<b>publikované práce</b>	<b>počet</b>
části monografie	11
články v časopisech	49
příspěvky ve sbornících z konferencí	77
editorství	5
výzkumné zprávy	26
samostatně publikovaná abstrakta	16
kvalifikační práce	2
<b>celkem</b>	<b>186</b>

<b>spoluautoři</b>	<b>počet</b>
články bez spoluautorů	99
s 1 spoluautorem	46
s 2 a více spoluautory	41

<b>dostupnost plného textu</b>	<b>počet</b>
v Repozitáři AV ČR	78
v DML-CZ	7
DOI	66
jiné	3

<b>citační ohlas</b>	<b>počet</b>
citované práce	64
evidované citace z WOS	526

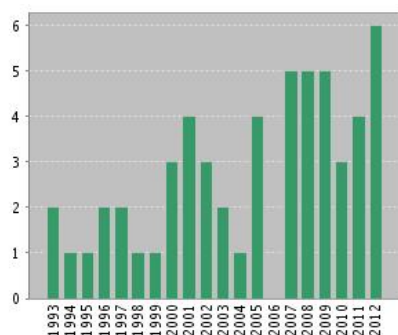
signal and time series processing  
 minimization of error functionals  
 rate of approximation linear and nonlinear approximation  
 uniformly convex space feedforward neural network  
 integral representation universal approximation property  
 variation with respect to half-spaces supervised learning  
 integral formula  
 Fredholm integral equations  
 perceptron networks  
 approximation of functions  
 contrairable set  
 Radon transform  
 artificial neural networks regularization learning  
 inverse problem  
 perceptron  
 network complexity kernel methods near best approximation  
 modulus of convexity integral transforms  
 Bochner integral  
 strictly convex space model complexity  
 tangent hypercone  
 neural networks continuous selection  
 learning from data generalization neural network  
 approximate optimization  
 bounded number of hidden units  
 Chebyshev set plane wave  
 rates of approximation best approximation  
 Heaviside function Chebyshev radius  
 inverse problems feedforward neural networks  
 curse of dimensionality evolutionary computing  
 Kolmogorov width  
 complexity of neural networks learning algorithms  
 reproducing kernel Hilbert spaces  
 dimension-independent approximation  
 high-dimensional optimization  
 minimization of empirical error  
 model complexity of neural networks  
 variable-basis approximation

## Co se dozvíme z WOS

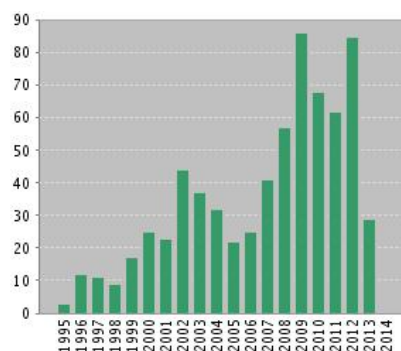
ResearcherID: J-8115-2012

počet článků / Results found	60
h-index	14
počet citací / Sum of the Times Cited	704
počet citací bez autocitací/ Sum of the Times Cited without self-citations	472
počet citujících článků / Citing Articles	392
počet citujících článků bez autocitací / Citing Articles Without self-citations	345
počet všech citací nalezených pomocí cited reference search (bez autocitací a citací spoluautorem)	526

### články podle roku zveřejnění



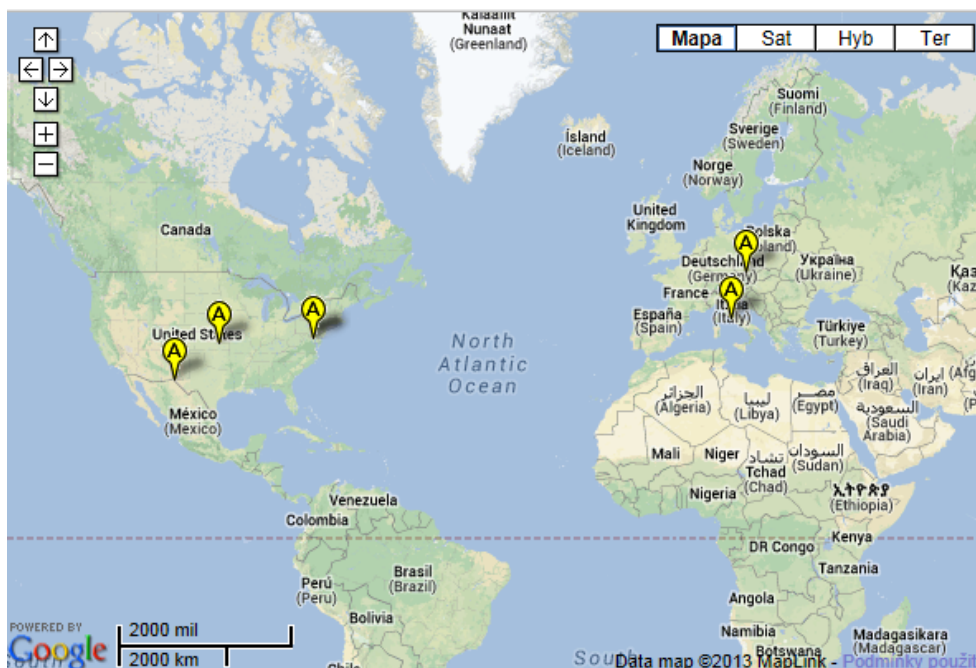
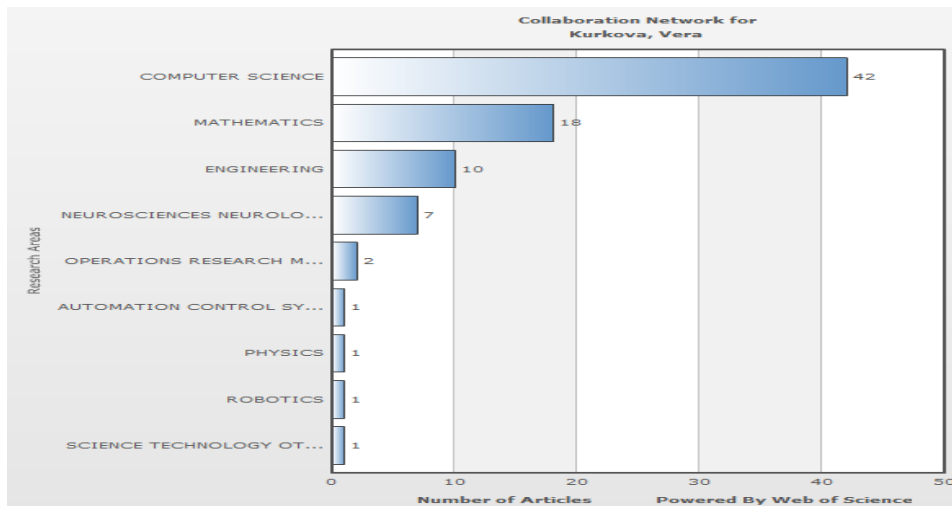
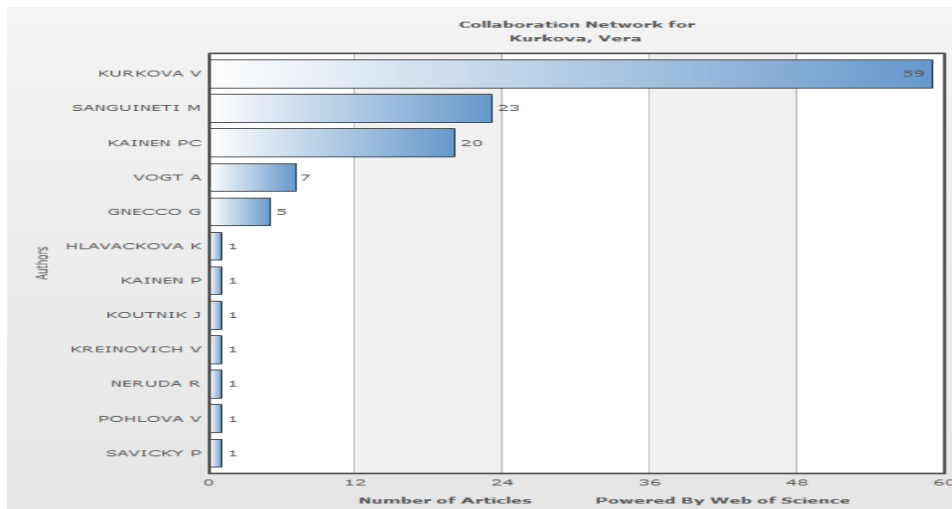
### citace podle roku citování





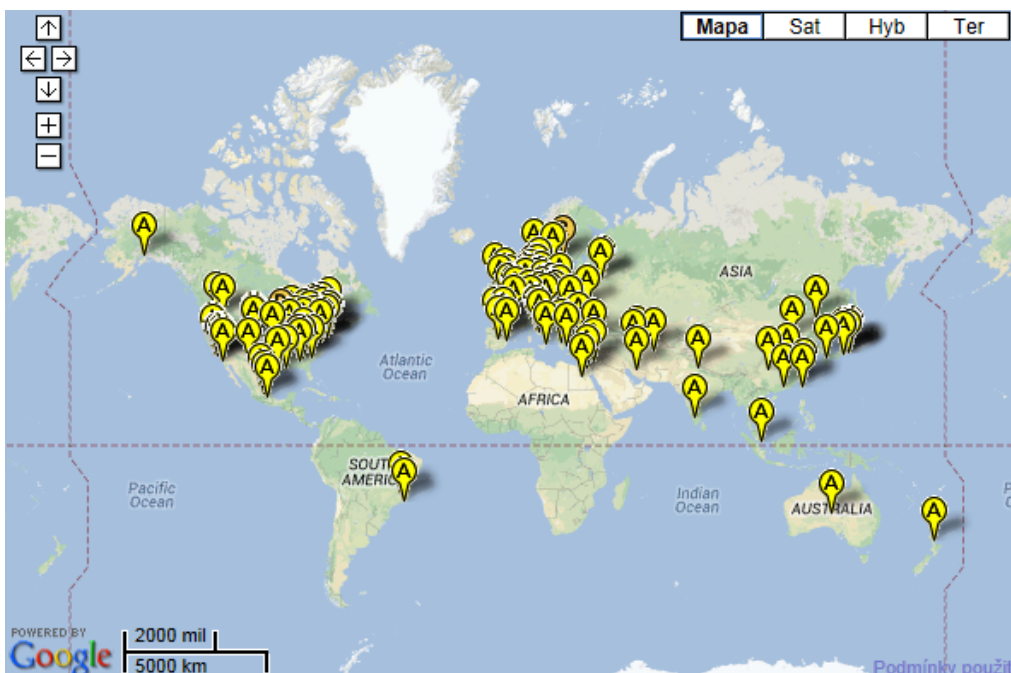
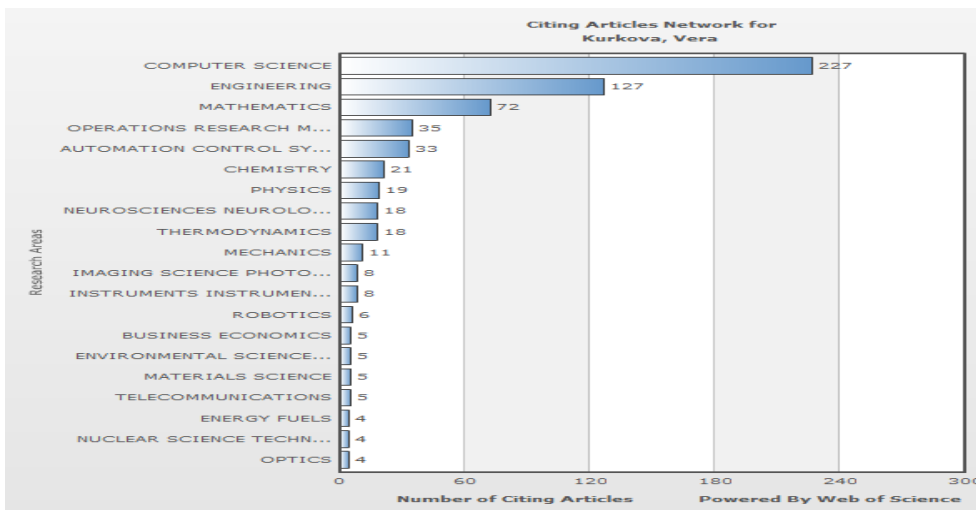
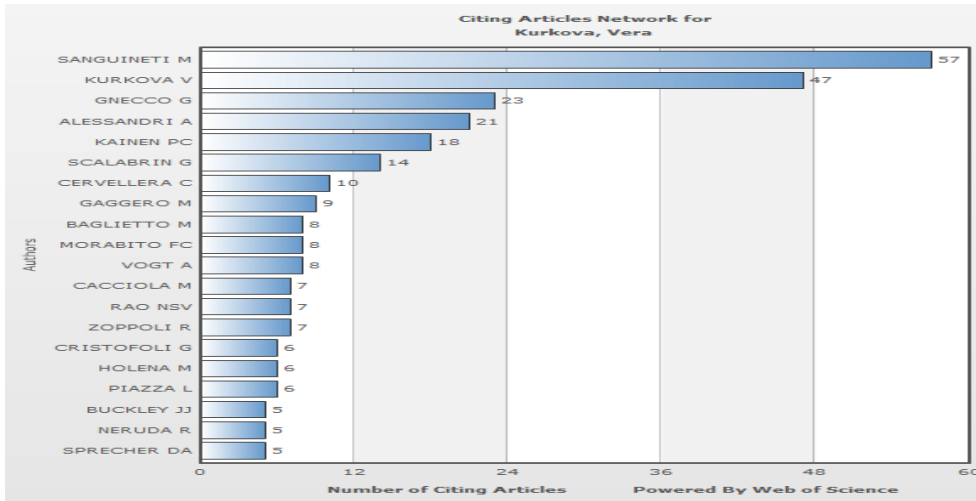
# Co se dozvíme z WOS - vizualizace

## Collaboration Network



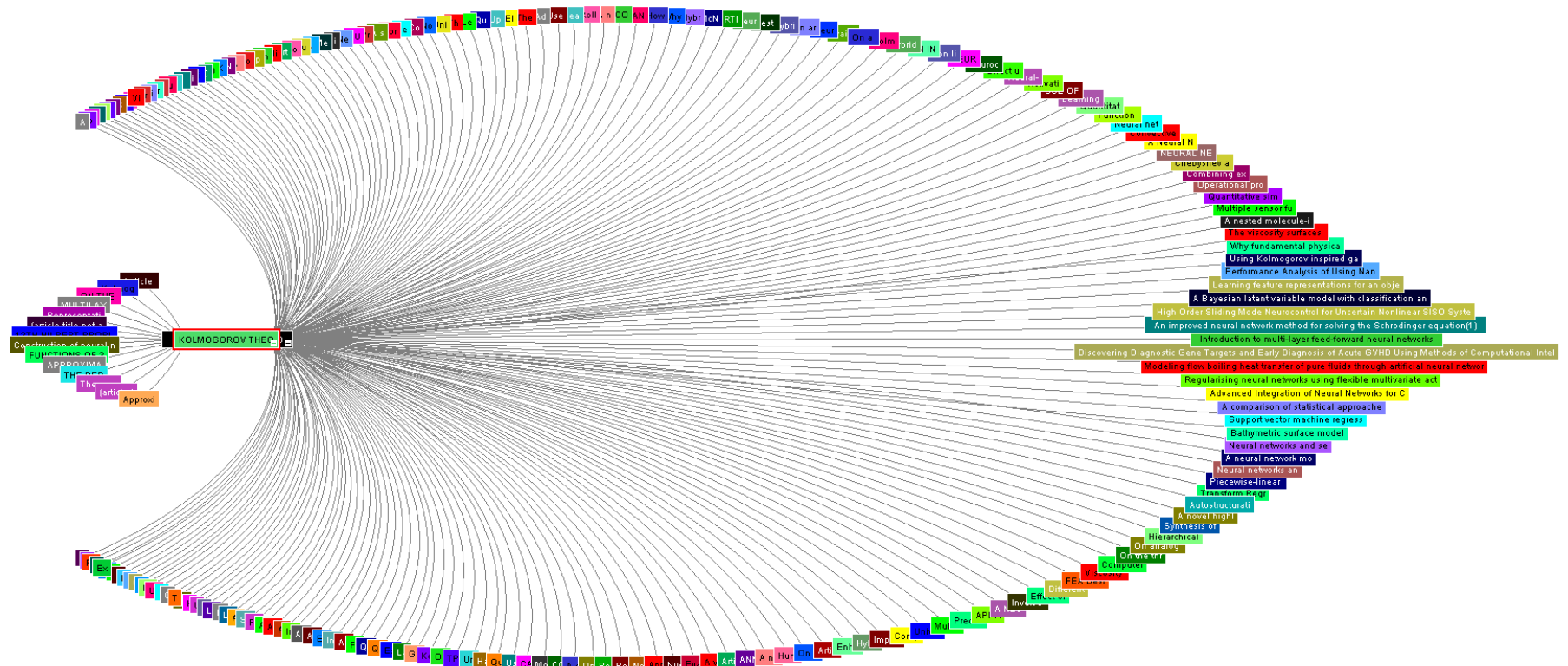
<http://www.researcherid.com/rid/J-8115-2012>

# Citing Articles Network



<http://www.researcherid.com/rid/J-8115-2012>

# WOS - citační mapa



Source: Web of Knowledge™ www.thomsonscientific.com

Kůrková, Věra  
 Kolmogorov's Theorem and Multilayer Neural Networks.  
*Neural Networks* 5, 3 (1992), 501-506. ISSN 0893-6080  
 DOI 10.1016/0893-6080(92)90012-8

## Co se dozvíme ze Scopus

počet publikací	58
h-index	14
počet citací od r. 1995 celkem	714
bez autocitací všemi spoluautory	364

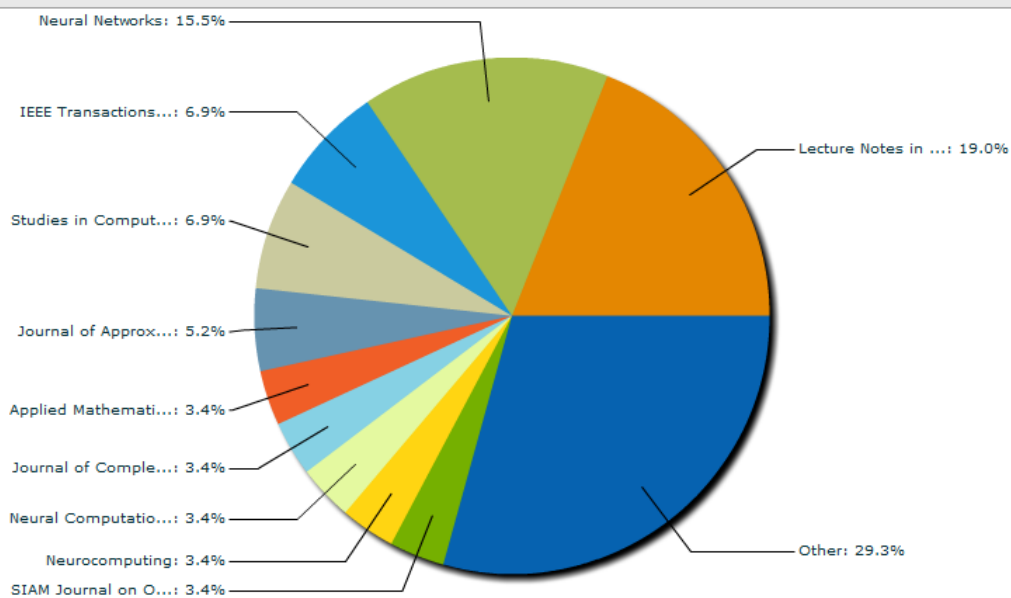
### 15 nejvíce citovaných publikací

	Document title	Author(s)	Date	Source title	Cited by
<input type="checkbox"/> 1	<b>Kolmogorov's theorem and multilayer neural networks</b>	Kůrková, V.	1992	<i>Neural Networks</i> 5 (3) , pp. 501-506	214
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 2	<b>Comparison of worst case errors in linear and neural network approximation</b>	Kůrková, V., Sanguineti, M.	2002	<i>IEEE Transactions on Information Theory</i> 48 (1) , pp. 264-275	64
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 3	<b>Error estimates for approximate optimization by the extended ritz method</b>	Kůrková, V., Sanguineti, M.	2005	<i>SIAM Journal on Optimization</i> 15 (2) , pp. 461-487	48
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 4	<b>Estimates of the number of hidden units and variation with respect to half-spaces</b>	Kůrková, V., Kainen, P.C., Kreinovich, V.	1997	<i>Neural Networks</i> 10 (6) , pp. 1061-1068	40
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 5	<b>Bounds on rates of variable-basis and neural-network approximation</b>	Kůrková, V., Sanguineti, M.	2001	<i>IEEE Transactions on Information Theory</i> 47 (6) , pp. 2659-2665	38
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 6	<b>Learning with generalization capability by kernel methods of bounded complexity</b>	Kůrková, V., Sanguineti, M.	2005	<i>Journal of Complexity</i> 21 (3) , pp. 350-367	31
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 7	<b>Representations and rates of approximation of real-valued Boolean functions by neural networks</b>	Kůrková, V., Savický, P., Hlaváčková, K.	1998	<i>Neural Networks</i> 11 (4) , pp. 651-659	28
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 8	<b>Complexity of Gaussian-radial-basis networks approximating smooth functions</b>	Kainen, P.C., Kůrková, V., Sanguineti, M.	2009	<i>Journal of Complexity</i> 25 (1) , pp. 63-74	27
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 9	<b>Approximation of functions by Perceptron networks with bounded number of hidden units</b>	Kurkova, V.	1995	<i>Neural Networks</i> 8 (5) , pp. 745-750	26
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 10	<b>Geometric upper bounds on rates of variable-basis approximation</b>	Kůrková, V., Sanguineti, M.	2008	<i>IEEE Transactions on Information Theory</i> 54 (12) , pp. 5681-5688	21
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 11	<b>Minimization of error functionals over variable-basis functions</b>	Kainen, P.C., Kůrková, V., Sanguineti, M.	2004	<i>SIAM Journal on Optimization</i> 14 (3) , pp. 732-742	15
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 12	<b>Approximate minimization of the regularized expected error over kernel models</b>	Kůrková, V., Sanguineti, M.	2008	<i>Mathematics of Operations Research</i> 33 (3) , pp. 747-756	14
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 13	<b>A Sobolev-type upper bound for rates of approximation by linear combinations of Heaviside plane waves</b>	Kainen, P.C., Kůrková, V., Vogt, A.	2007	<i>Journal of Approximation Theory</i> 147 (1) , pp. 1-10	14
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 14	<b>Approximation by neural networks is not continuous</b>	Kainen, P.C., Kůrková, V., Vogt, A.	1999	<i>Neurocomputing</i> 29 (1-3) , pp. 47-56	14
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>   <a href="#">Related documents</a>				
<input type="checkbox"/> 15	<b>An integral upper bound for neural network approximation.</b>	Kainen, P.C., Kůrková, V.	2009	<i>Neural computation</i> 21 (10) , pp. 2970-2989	12
	<a href="#">View at Publisher</a>   <a href="#">Show abstract</a>				

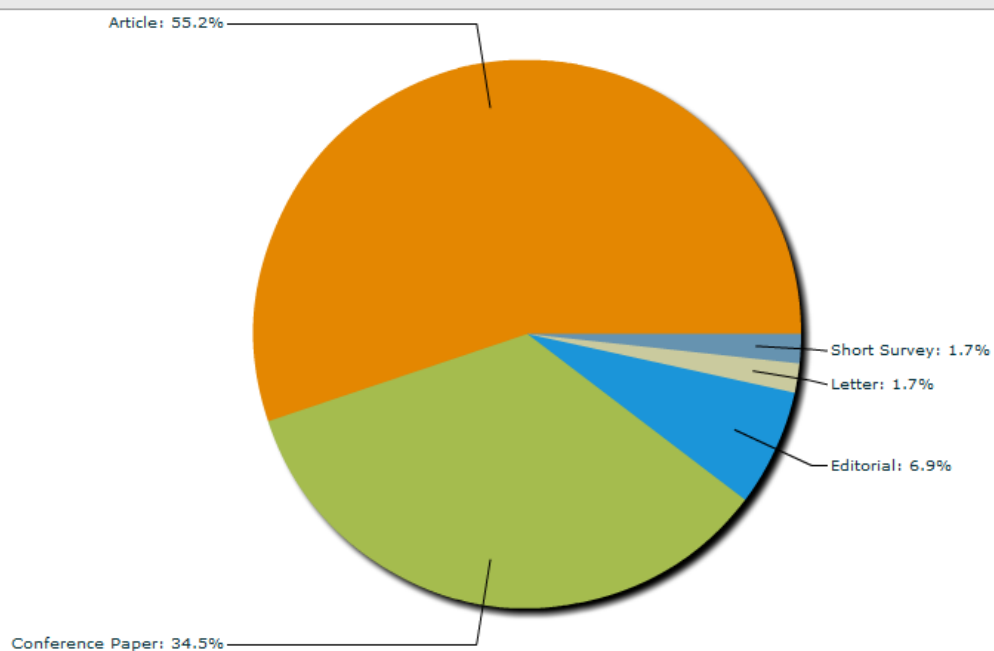
## Author evaluator

<http://www.scopus.com/authid/detail.url?authorId=35588592800>

**Sources** This chart shows a breakdown of the author's documents by Source.



**Document Types** This chart shows a breakdown of the author's documents by Document Type.



počet publikací	37
počet spoluautorů	8
počet citací	120
počet citujících autorů	38
Erdősovo číslo	2

spoluautor	počet článků
Kainen, Paul C.	14
Sanguineti, Marcello	12
Vogt, Andrew	5
Koubek, Václav	2
Kreinovich, Vladik Ya.	2
Sirisaengtaksin, Ongard	2
Adámek, Jiří	1
Gnecco, Giorgio	1

Search MSC Collaboration Distance Current Journals Current Publications

MR Erdos Number = 2

Věra Kůrková	coauthored with	Paul C. Kainen	MR1347278 (96c:51026)
Paul C. Kainen	coauthored with	Paul Erdős <sup>1</sup>	MR0523314 (80c:05109)

Change First Author Change Second Author New Search

## 10 nejvíce citovaných prací

Most Cited Publications	
Citations	Publication
25	<b>MR1872179 (2002i:62173)</b> Kůrková, Věra; Sanguineti, Marcello Comparison of worst case errors in linear and neural network approximation. <i>IEEE Trans. Inform. Theory</i> 48 (2002), no. 1, 264–275. 62M45 (68T05 92B20)
17	<b>MR1873958 (2002j:41014)</b> Kůrková, Věra; Sanguineti, Marcello Bounds on rates of variable-basis and neural-network approximation. <i>IEEE Trans. Inform. Theory</i> 47 (2001), no. 6, 2659–2665. 41A30 (62M45 82C32)
13	<b>MR2144176 (2006k:49086)</b> Kůrková, Věra; Sanguineti, Marcello Error estimates for approximate optimization by the extended Ritz method. <i>SIAM J. Optim.</i> 15 (2004/05), no. 2, 461–487 (electronic). (Reviewer: Arnd Rösch) 49M25 (41A25 68T05 90C30)
11	<b>MR2138445 (2006c:68153)</b> Kůrková, Věra; Sanguineti, Marcello Learning with generalization capability by kernel methods of bounded complexity. <i>J. Complexity</i> 21 (2005), no. 3, 350–367. (Reviewer: Claudio Gentile) 68T05 (62D05)
9	<b>MR2596808 (2010h:68150)</b> Kůrková, Věra; Sanguineti, Marcello Geometric upper bounds on rates of variable-basis approximation. <i>IEEE Trans. Inform. Theory</i> 54 (2008), no. 12, 5681–5688. 68T05 (94A12)
7	<b>MR2475308 (2009k:41019)</b> Kainen, Paul C.; Kůrková, Věra; Sanguineti, Marcello Complexity of Gaussian-radial-basis networks approximating smooth functions. <i>J. Complexity</i> 25 (2009), no. 1, 63–74. (Reviewer: Luoqing Li) 41A30 (68T05)
6	<b>MR2442651 (2009k:68211)</b> Kůrková, Věra; Sanguineti, Marcello Approximate minimization of the regularized expected error over kernel models. <i>Math. Oper. Res.</i> 33 (2008), no. 3, 747–756. 68T05 (41A25 90C48)
6	<b>MR2085939 (2005e:49052)</b> Kainen, Paul C.; Kůrková, Věra; Sanguineti, Marcello Minimization of error functionals over variable-basis functions. <i>SIAM J. Optim.</i> 14 (2003), no. 3, 732–742 (electronic). (Reviewer: Hans Benker) 49K40 (41A25)
4	<b>MR1775147 (2001f:46023)</b> Kainen, Paul C.; Kůrková, Věra; Vogt, Andrew Geometry and topology of continuous best and near best approximations. <i>J. Approx. Theory</i> 105 (2000), no. 2, 252–262. (Reviewer: S. Cobzaş) 46B20 (41A65)
3	<b>MR2567918 (2010k:41042)</b> Kainen, Paul C.; Kůrková, Věra An integral upper bound for neural network approximation. <i>Neural Comput.</i> 21 (2009), no. 10, 2970–2989. (Reviewer: Costică Mustăţa) 41A65 (41A25 68T05 92B20)



## Kůrková, Věra

**Author-ID:** kurkova.vera

**Published as:** Kůrková, Věra; Kurková, Vera; Kůrková, V.; Kůrková, Věra; Kůrková, Věra; Kurkova, Vera; Kurková, Věra; Kurková, V.

**Documents indexed:** 34 Publications, including 2 Books

### Co-Authors

all ▾

- 15 Sanguinetti, Marcello
- 12 Kainen, Paul C.
- 5 Vogt, Andrew
- 3 Gnecco, Giorgio
- 2 Kárný, Miroslav

### Journals

all ▾

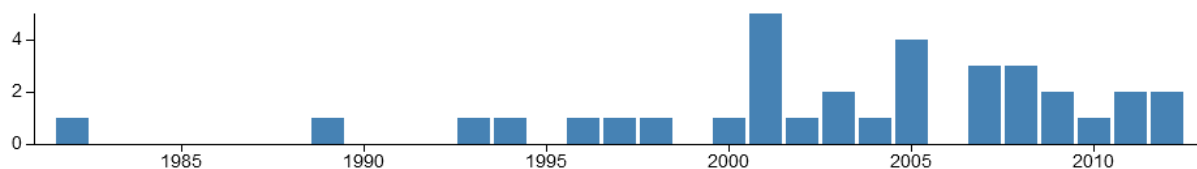
- 3 Journal of Approximation Theory
- 3 Neural Networks
- 2 IEEE Transactions on Information Theory
- 2 Journal of Complexity
- 2 Applied Mathematics Letters

### Classification

all ▾

- 18 Computer science (68-XX)
- 13 Approximation and expansions (41-XX)
- 9 Applications of mathematics to Biology and other natural sciences (92-XX)
- 6 Statistics (62-XX)
- 6 Numerical analysis (65-XX)

### Publication Years



## Kurkova-Pohlova, Vera

**Author-ID:** kurkova-pohlova.vera

**Published as:** Kurkova-Pohlova, Vera; Kurkova-Pohlova, V.

**Documents indexed:** 4 Publications

### Co-Authors

- 1 Koubek, Vaclav

### Journals

- 1 Commentationes Mathematicae Universitatis Carolinae

### Classification

- 3 Category theory, homological algebra (18-XX)
- 3 General topology (54-XX)
- 1 General algebraic systems (08-XX)

### Publication Years



<http://zbmath.org/authors/?q=ai:kurkova.vera>

<http://zbmath.org/authors/?q=ai:kurkova-pohlova.vera>

## Co se dozvíme z DBLP



<b>spoluautoři</b>	<b>počet společných publikací</b>
Marcello Sanguineti	23
Paul C. Kainen	18
Giorgio Gnecco	5
Andrew Vogt	5
Katerina Hlavácková-Schindler	3
Roman Neruda	3
Jan Koutník	3
Vladik Kreinovich	2
Petr Savický	1
Ongard Sirisaengtaksin	1

<b>výsledky podle typu</b>	<b>počet</b>
příspěvek v konferenčním sborníku	26
článek v časopise	30
editorství konferenčního sborníku	2

<http://dblp.uni-trier.de/pers/hd/k/Kurkov=acute=:Vera.html>

## Použité zdroje

DBLP <http://www.informatik.uni-trier.de/~ley/db/>

DML-CZ (Czech Digital Mathematics Library) <http://dml.cz/>

Katalogy českých a zahraničních knihoven <http://www.jib.cz/>

MathSciNet <http://www.ams.org/mathscinet>

Publikační báze ASEP Akademie věd ČR [http://library.sk/i2/i2.entry.cls?ictx=cav&src=cav\\_un\\_epca](http://library.sk/i2/i2.entry.cls?ictx=cav&src=cav_un_epca)

Scopus <http://www.scopus.com/>

Web of Knowledge <http://apps.isiknowledge.com>

Zentralblatt MATH <http://www.emis.de/ZMATH/>

WWW stránky autorky

WWW stránky časopisů, v nichž autorka publikovala

Internet