

СПИСЪК НА ТРУДОВЕ ЗА УЧАСТИЕ В КОНКУРСА

I. Статии, публикувани в реферирани чуждестранни издания и в списания с импакт-фактор (59)

1. **Mladenov V.**, Chobanov, V., Georgiev, A., Impact of Renewable Energy Sources on Power System Flexibility Requirements., *Energies* 2021, 14, 2813. <https://doi.org/10.3390/en14102813> ,2021.(Web of Science, Scopus) **IF 2.702**
2. Koltsaklis N E., Dagoumas A S., **Mladenov V.**, Electricity market clearing algorithms: A case study of the Bulgarian power system, *Energy sources part b-economics planning and policy*, Volume: 16, Issue: 1, Special Issue: SI, DOI: 0.1080/15567249.2020.1845252, pp. 91-117, 2021. (Web of Science, Scopus), **SJR 0.600, CiteScore 5.2, IF 1.758**
3. **Mladenov V.**, A New Simplified Model and Parameter Estimations for a HfO₂-Based Memristor, *Technologies* pp. 1-14, 2020, 8, 16. <https://doi.org/10.3390/technologies8010016> (Web of Science).
4. **Mladenov V.**, Analysis of Memory Matrices with HfO₂ Memristors in a PSpice Environment, *Electronics* 2019, 8, 383, pp. 1–15, <https://doi.org/10.3390/electronics8040383> (Web of Science, Scopus) **IF: 2.412, SJR 0.360, CiteScore 2.7**
5. **Mladenov V.**, Analysis and Simulations of Hybrid Memory Scheme Based on Memristors, *Electronics* 2018, 7, 289. <https://doi.org/10.3390/electronics7110289> (Scopus, Web of Science) **IF: 2.412, SJR 0.360, CiteScore 2.7**
6. Christodoulou C. A., Vita V., **Mladenov V.**, Ekonomou L., On the Computation of the Voltage Distribution along the Non-Linear Resistor of Gapless Metal Oxide Surge Arresters, *Energies* 2018, 11, 3046. <https://doi.org/10.3390/en11113046> (Scopus, Web of Science), **IF 2.822, SJR 0.598, CiteScore 4.7**

7. **Mladenov V.**, Kirilov S., Analysis of a Passive Memristor Crossbar, *Oriental Journal of Computer Science and Technology*, ISSN: 0974-6471, Vol. 11, No. (1) 2018, Pg. 04-11.
8. **Mladenov V.**, Kirilov S., Analysis of an anti-parallel memristor circuit, *Informatyka, Automatyka, Pomiar w Gospodarce i Ochronie Środowiska*, 2018, DOI: 10.5604/01.3001.0012.0696, IAPGOŚ 2/2018, pp. 9–14.
9. **Mladenov V.**, Kirilov S., Advanced memristor model with a modified Biolek window and a voltage-dependent variable exponent, *Informatyka, Automatyka, Pomiar w Gospodarce i Ochronie Środowiska*, 2018, DOI: 10.5604/01.3001.0012.0697, IAPGOŚ 2/2018, pp. 15 - 20.
10. **Mladenov V.**; Kirilov S., A Nonlinear Drift Memristor Model with a Modified Biolek Window Function and Activation Threshold, *Electronics* 2017, 6, 77. <https://doi.org/10.3390/electronics6040077> (Scopus, Web of Science, **IF 2.412**), **SJR 0.360**, **CiteScore 2.7**
11. Vetova S., Draganov I., Ivanov I., **Mladenov V.**, CBIR Efficiency Enhancement using Local Features Algorithm with Hausdorff Distance, *WSEAS Transactions on Computer Research*, 2017, E-ISSN: 2415-1521, Vol. 5, 2017, pp. 116 – 123.
12. Ekonomou L., Christodoulou C. A., **Mladenov V.**, An artificial neural network software tool for the assessment of the electric field around metal oxide surge arresters, *Neural Comput & Applic* 27, pp. 1143–1148, 2016. <https://doi.org/10.1007/s00521-015-1969-x>, (Scopus, Web of Science) **SJR 0.713**, **IF 4.774**, **CiteScore 7.3**.
13. **Mladenov V.**, Kirilov S., Synthesis and Analysis of a Memristor-Based Perceptron for Logical Function Emulation, *Przegląd Elektrotechniczny* 1, 2016, 24-27. (*Scopus*), **SJR 0.19**, **CiteScore 1.0**.
14. **V.M. Mladenov**, "Spatio-Temporal Phenomena in Two-dimensional Cellular Nonlinear Networks Based on Second Order Cells", *Functional Differential Equations*, ISSN 0793-1786, vol. 13, No. 1, 2006, pp. 99-106.

15. Dondon Ph., Cifuentes M., Tsenov G., **Mladenov V.**, Simple modelling and method for the design of a sigma delta class D power amplifier, *International Journal of Circuits, Systems and Signal Processing*, Issue 1, vol. 5, 2011, ISSN: 1998-4464, pp. 478-487, (Scopus) **SJR 0.156**
16. **Mladenov V.**, Application of Neural Networks for Control of Inverted Pendulum, *WSEAS Trans. on Circuits and Systems*, Issue 2, vol. 10, February 2011, ISSN: 1109-2734, pp. 49-58. (Scopus) **SJR 0.031**
17. **Mladenov V.**, Karampelas P., Tsenov G., Vita V., Approximation Formula for Easy Calculation of Signal-to-Noise Ratio of Sigma-Delta Modulators, *ISRN Signal Processing*, Vol. 2011, Article ID 731989, 7 pages, (Scopus) **SJR 0.188**.
18. Gevaer, W., Tsenov G., **Mladenov V.**, Neural networks used for speech recognition, *Journal of Automatic control*, 20(1), 2010, pp.1-7.
19. Dimov B., Ortlepp Th., **Mladenov V.**, Terzieva S., Uhlmann F. H., The asynchronous rapid single-flux quantum electronics – a promising alternative for the development of high-performance digital circuits, *Adv. Radio Sci.*, 6, , <https://doi.org/10.5194/ars-6-165-2008>, 2008, pp. 165–173, (Scopus) **SJR 0.211**, **CiteScore 1.5**.
20. Yordanova S., **Mladenov V.**, Online Real Time Sugeno Neuro-Fuzzy Predictive Control of Nonlinear Plant with Time Delay, *Int. Journal of Neural Networks and Applications*, vol. 1, No. 2, Int. Science Press, ISSN 0974-6048, 2008, pp. 47-53.
21. Dimov B., **Mladenov V.**, Ortlepp Th., Uhlmann, F. H., Designing of Ultra High-Speed Asynchronous Digital Electronics with Higher Complexity, *Przegląd Elektrotechniczny*, ISSN 0033-2097, R. 83 NR 11/ 2007, pp. 101-104. (Scopus, Web of science) **IF 0.244**, **SJR 0.029**, **CiteScore 1.0**.
22. **Mladenov V.**, Filipova K., Petrakieva S., Dimov B., Uhlmann F.H., Analysis of Signal Competition in Asynchronous Ultra High-Speed Digital Circuits, *Przegląd Elektrotechniczny*, ISSN 0033-2097, R. 83 NR 11/ 2007, pp. 197-200. (Scopus, Web of science) **IF 0.244**, **SJR 0.029**, **CiteScore 1.0**

23. Dimov B., **Mladenov V.**, Ortlepp T., Uhlmann, H., celluA constraint propagation algorithm for determining the stability margin of linear parameter circuits and systems, *Przegląd Elektrotechniczny*, 2007, pp. 101 – 104. (Scopus, Web of science) **IF 0.244, SJR 0.029, CiteScore 1.0.**
24. Radev N., Mastorakis N., Ivanov K., Stanchev K., **Mladenov V.**, Petrakieva S., "Right-LUD bandpass SC ladder filter with reduced sensitivity to finite amplifier gain and offset voltage", *WSEAS Trans. on Circuits and Systems*, Issue 6, vol. 6, June 2007, ISSN: 1109-2734, pp. 481-487. (Scopus) **SJR 0.029.**
25. Savov V., Georgiev Zh., Todorov T., Karagineva I., Mastorakis N., **Mladenov V.**, Using the Melnikov Function for a Synthesis of Generalized Van der Pol Systems, *WSEAS Trans. On Circuits and Systems*, Issue 11, Volume 5, Nov. 2006, ISSN: 1109-2734, pp 1602-1607. (Scopus) **SJR 0.032.**
26. Yordanova S., Petrova R., Mastorakis N., **Mladenov V.**, Sugeno Predictive Neuro-Fuzzy Controller for Control of Nonlinear Plant under Uncertainties, *WSEAS Trans. on Systems*, Issue 8, vol. 5, ISSN 1109-2777, 2006, pp. 1814-1821 (Scopus) **SJR 0.151.**
27. Tzeneva R., Slavtchev Y., **Mladenov V.**, Analysis of Bolted Busbar Connections with Slotted Bolt Holes, *WSEAS Trans. on Circuits and Systems*, Issue 7, vol. 5, July 2006, pp. 1021-1027, ISSN 1109-2734.
28. Dimov B., Todorov V., **Mladenov V.**, Khabipov M., Balashov D., Hagedorn D., Buchholz F.-Im., Niemeyer J., Uhlmann F. H., An improved technique for the design of Josephson transmission lines, *Superconductor Science and Technology*, vol.19, pp. S213-S216, 2006. (Scopus, Web of Science) **IF 3.067, SJR 1.033, CiteScore 5.7.**
29. Kolev L., Filipova-Petrakieva S., **Mladenov, V.**, Interval criterion for stability analysis of discrete-time nonlinear systems with partial state saturation nonlinearities, 2006 *Facta universitatis-series: Electronics and Energetics*, 19(2), pp.271-286.

30. Radev N., Mastorakis N., Ivanov K., **Mladenov V.**, Reduction of the gain errors in multi-input Nagaraj-89 very large time constant integrators, 2005 *WSEAS Transactions on Electronics*, 2(4), pp. 135-138, (Scopus) **SJR 0.107**.
31. Trushev I., Mastorakis N., Tabahnev I., **Mladenov V.**, Adaptive sliding mode control for dc/dc buck converters, *WSEAS Transactions on Electronics*, Issue 4, Vol. 2, October 2005, ISSN: 1109-9445, pp. 109-113 (Scopus) **SJR 0.107**.
32. **Mladenov V.**, A discrete-time recurrent neural network for solving general quadratic programming problems, *WSEAS Transactions on Systems*, pp. 996-1002, Issue 7, Vol. 4, 2005. (Scopus) **SJR 0.151**.
33. Zeghib A., Palis F., Tsenov G., Shoylev N., **Mladenov V.**, Performance of Surface EMG signals Identification Using Intelligent Computational Methods, *WSEAS Transactions on Systems*, pp. 1118-1125, Issue 7, Volume 4, 2005 (Scopus) **SJR 0.151**
34. Slavova A., Markova M., Tsenov G., Zeghib A., Palis F., Stoylev N., **Mladenov V.**, Kostova M., Djurov V., Prabhu S., Yordanova S., 2005. Receptor-based cellular neural network models, *Wseas Transactions On Mathematics*, 4(3), p.212.
35. Dimov B., Todorov V., **Mladenov V.**, Uhlmann H., RSFQ Technique for Generation of Ultra-Fast Pulse Chains Having Controlled and Variable Time-Domain Parameters, *WSEAS Trans. on Electronics*, Issue 4, Vol. 2, October 2004, ISSN: 1109 9445, pp. 208-212, (Scopus) **SJR 0.107**.
36. Yordanova S., Petrova R., **Mladenov V.**, Neuro-Fuzzy Control for Anaerobic Wastewater Treatment, *WSEAS Transactions on Systems*, Issue 2, vol. 3, 2004, ISSN 1109-2777, pp. 724-729 (Scopus) **SJR 0.151**.
37. Radev N., Mastorakis N., **Mladenov V.**, Reduction of the gain errors in finite gain insensitive switched-capacitor integrator pair, 2004, *WSEAS Transactions on Circuits and Systems* 3 (5), pp. 1135-1139. (Scopus) **SJR 0.11**
38. Radev N., Mastorakis N., **Mladenov V.**, Minimization of operational amplifiers finite gain effects in switched- capacitor biquads, 2004 *WSEAS Transactions on Circuits and Systems*, 3(5), pp.1130-1134. (Scopus) **SJR 0.11**

39. Dimov B., Todorov V., **Mladenov V**, Uhlmann H., Possible connections of the Josephson junctions within the RSFQ logic circuits, 2004 *WSEAS Transactions on Circuits and Systems*, 3(5), pp.1398-1402, (Scopus) **SJR 0.11**
40. Dimov B., Todorov V., **Mladenov V.**, Uhlmann H., Optimal signal propagation speed of a Josephson Transmission Line, *Superconductor Science and Technology*, vol. 17, No.6, 2004, pp. 819-822 (Scopus, Web of Science) **IF 3.067, SJR 1.033, CiteScore 5.7**
41. **Mladenov V.**, Hegt H., Roermund A., On the Stability Analysis of High Order Sigma-Delta Modulators, *An International Journal on Analog Integrated Circuits and Signal Processing, Kluwer Academic Publishers*, v.36, Issue 1-2, 2003, pp 47-55. (Scopus, Web of Science) **IF 0.925, SJR 0.240, CiteScore 2.1**
42. Tsakoumis A., Fessas P., **Mladenov V**, Mastorakis N., Application of chaotic time series for short-term load prediction". *WSEAS Trans. on Systems*, 2(3), 2003, pp.517-523. (Scopus) **SJR 0.031**
43. Tsakoumis C., Tashev T., **V.M. Mladenov**, Mastorakis N., Application of Neural Networks in Voice Recognition, *WSEAS Trans. on Systems*, ISSN: 1109-2777, vol. 2, Issue 3, 2003, pp. 543-546. (Scopus) **SJR 0.031**
44. Tsakoumis A., Fessas P., **Mladenov V.**, Mastorakis, N., Application of Neural Networks for Short Term Electric Load Prediction, 2003 *WSEAS Transactions on Systems*, 2(3), pp.513-517. (Scopus) **SJR 0.031**
45. Mastorakis N., **Mladenov V.**, On the general design problem of 2-dimensional recursive filters by using neural networks, 2002 *WSEAS Transactions on Circuits*, 1(1), pp.106-112.
46. Radev N., Ivanov K., **Mladenov V.**, Minimization of Pole Frequency Error and Pole Quality Factor Error in Switched-Capacitor Biquads, *WSEAS Trans. on Circuits*, vol. 1, Issue 1, ISSN: 1109-2734, 2002, pp. 7-12.
47. **Mladenov V.**, Maratos N., Tsakoumis A., Tashev T., Mastorakis N., On solving nonlinear programming problems via Neural Networks, 2001 *Neural Network World*, 11(3), pp. 293-304 (Scopus), **SJR 0.276, CiteScore 2.1**

48. Tsenov G., Zeghibib A., Palis F., Stoylev N., **Mladenov V.**, Online Classification of Hand and Finger Movements With Neural Networks, *Int. Journal of Neural Networks and Applications*, vol. 1, No. 2, Int. Science Press, ISSN 0974-6048, 2008, pp. 9-15.
49. **Mladenov V.**, Mastorakis N., Design of two-dimensional recursive filters by using neural networks, in *IEEE Transactions on Neural Networks*, vol. 12, no. 3, pp. 585-590, 2001, doi: 10.1109/72.925560. (Web of Science) **IF 2.952**
50. Ekonomou L., Fotis P., Vita V., **Mladenov V.**, Distributed Generation Islanding Effect on Distribution Networks and End User Loads Using the Master-Slave Islanding Method, *Journal of Power and Energy Engineering*, ISSN 2327-5901, 2016, p. 1- 24.
51. **Mladenov V.**, Leenaerts D., Estimation of the basin of attractions of stable equilibrium points in full range cellular neural networks, *Computational Intelligence and Applications*, 1999, pp. 119-122.
52. **Mladenov V.**, Mastorakis N., Design of 2-dimensional recursive filters by using neural networks, *Computational Intelligence and Applications*, 1999, pp. 12-20.
53. **Mladenov V.**, Leenaerts D., Uhlmann H., Estimation of the basin of attractions in CNN's, in *IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications*, vol. 45, no. 5, pp. 571-574, 1998, doi: 10.1109/81.668869. (Web of Science) **IF 3.201**.
54. Kolev L., **Mladenov V.**, Use of interval slopes in implementing an interval method for global non-linear DC circuit analysis, *International journal of circuit theory and applications*, 25(1), 1997, pp.37-42. (Web of Science) **IF 1.581**.
55. Leenaerts D., **Mladenov V.**, On the restrictions of the sensitivities in single-amplifier biquadratic active filters, *International Journal of Circuit Theory and Applications*, 23(3), 1995, pp. 247-252, <https://doi.org/10.1002/cta.4490230307>, (Scopus, Web of Science) **IF 1.581, SJR 0.364, CiteScore 3.5**.

56. Kolev L., **Mladenov V.**, An interval method for global non-linear dc circuit analysis, *International journal of circuit theory and applications*, 22(3), 1994, pp. 233-241. (Scopus, Web of Science) **IF 1.581, SJR 0.364, CiteScore 3.5.**
57. Kolev L., **Mladenov V.**, An interval method for finding all operating points of non-linear resistive circuits, *International Journal of Circuit Theory and Applications*, 18(3), 1990, pp. 257-267, <https://doi.org/10.1002/cta.4490180304> (Scopus, Web of Science) **IF 1.581, SJR 0.364, CiteScore 3.5.**
58. Benedetti A., **Mladenov V.**, et al., Finding Multiple Operating Points of Nonlinear Circuits by Interval Analysis: a Review and Recent Results, 1988.
59. Kolev L., **Mladenov V.**, Vladov S., Interval mathematics algorithms for tolerance analysis, in *IEEE Transactions on Circuits and Systems*, vol. 35, no. 8, pp. 967-975, Aug. 1988, doi: 10.1109/31.1843. (Scopus) **SJR 0.113**

II. Доклади в сборници на конференции, конгреси, и симпозиуми в чужбина (141)

60. **Mladenov V.**, Chobanov V., Popov Z., Technologies for energy exchange and provision of grid services, *12th Electrical Engineering Faculty Conference (BulEF)*, 2020, pp. 1-6, doi: 10.1109/BulEF51036.2020.9326050. (Scopus)
61. **Mladenov V.**, Chobanov V., Popov Z., Network flexibility and risk assessment as part of NordPool energy market, *12th Electrical Engineering Faculty Conference (BulEF)*, 2020, pp. 1-5, doi: 10.1109/BulEF51036.2020.9326075. (Scopus)
62. **Mladenov V.**, Chobanov V., Sarigiannidis P., Radoglou-Grammatikis P. I., Hristov A., Zlatev P., Defense against cyber-attacks on the Hydro Power Plant connected in parallel with Energy System, *12th Electrical Engineering Faculty Conference (BulEF)*, 2020, pp. 1-6, doi: 10.1109/BulEF51036.2020.9326016. (Scopus).
63. **Mladenov V.**, A Modified Tantalum Oxide Memristor Model for Neural Networks with Memristor-Based Synapses, *9th International Conference on Modern Circuits and*

- Systems Technologies (MOCAST)*, 2020, pp. 1-4, doi: 10.1109/MOCAST49295.2020.9200238. (Scopus)
64. **Mladenov V.**, Yordanov Y., Control of various robots through signals from the brain activity, *CompSysTech '20: Proceedings of the 21st International Conference on Computer Systems and Technologies* 2020, pp. 1–6, <https://doi.org/10.1145/3407982.3407983> (Scopus)
 65. Todorova V., **Mladenov V.**, Early detection of multiple sclerosis and the improvement of clinical trials recruitment process with ML methods, *International Scientific Conference Computer Science*, 2020.
 66. **Mladenov V.**, A New Simplified Model for HfO₂-Based Memristor, *8th International Conference on Modern Circuits and Systems Technologies (MOCAST)*, 2019, pp. 1-4, doi: 10.1109/MOCAST.2019.8741953. (Scopus)
 67. Yordanov Y., Nakov O., **Mladenov V.**, Baxter Industrial Robot Online Control, *11th annual International Conference on Education and New Learning Technologies (EDULEARN19)*, 2019, pp. 10443-10448, ISBN 978-84-09-12031-4. (Web of Science)
 68. **Mladenov V.**, Chobanov V., Zafeiropoulos E., Vita V., Flexibility Assessment Studies Worldwide-Bridging with the Adequacy Needs: *Note: Sub-titles are not captured in Xplore and should not be used, *11th Electrical Engineering Faculty Conference (BuleF)*, 2019, pp. 1-5, doi: 10.1109/BuleF48056.2019.9030794. (Scopus)
 69. **Mladenov V.**, Chobanov V., Zafeiropoulos E., Vita V., Characterisation and evaluation of flexibility of electrical power system, *10th Electrical Engineering Faculty Conference (BuleF)*, 2018, pp. 1-6, doi: 10.1109/BULEF.2018.8646924. (Scopus, Web of Science)
 70. Yordanov Y., Nakov O., **Mladenov V.**, System for monitoring and control of the Baxter robot, *MAURICON 2018: IEEE International Conference on Intelligent and Innovative Computing Applications*, pp. 1 - 4, DOI: 10.1109/ICONIC.2018.8601217, 2018 (Scopus, Web of Science)
 71. Trifonov R., Nakov O., **Mladenov V.**, Artificial Intelligence in Cyber Threats Intelligence, 2018 *International Conference on Intelligent and Innovative Computing*

Applications (ICONIC) , DOI: 10.1109/ICONIC.2018.8601235, pp. 1 - 4. (Scopus, Web of Science)

72. Nakov O., Mihaylova E., Lazarova M., **Mladenov V.**, Parallel Image Stitching Based on Multithreaded Processing on GPU, 2018 *International Conference on Intelligent and Innovative Computing Applications (ICONIC)*, DOI: 10.1109/ICONIC.2018.8601253 , pp. 1 – 5, (Scopus, Web of Science).
73. Tsenov G., **Mladenov V.**, EEG alphabet speller with Neural Network classifier for P300 signal detection, *14th IEEE Symposium on Neural Networks and Applications (NEUREL)* 2018, DOI: 10.1109/NEUREL.2018.8587033 , pp. 1 – 6, (Scopus, Web of Science).
74. Yordanov Y., **Mladenov V.**, Humanoid Robot Detecting Animals via Neural Network, *14th IEEE Symposium on Neural Networks and Applications (NEUREL)*, 2018, pp. 1-6, doi: 10.1109/NEUREL.2018.8587017. (Scopus, Web of Science).
75. Kirilov S., **Mladenov V.**, Integrator device with a memristor element, *7th IEEE International Conference on Modern Circuits and Systems Technologies (MOCAST)*, 2018, pp. 1-4, doi: 10.1109/MOCAST.2018.8376656.
76. **Mladenov V.**, Kirilov S., A Memristor Model with a Modified Window Function and Activation Thresholds, *IEEE International Symposium on Circuits and Systems (ISCAS)*, 2018, pp. 1-5, doi: 10.1109/ISCAS.2018.8351429. (Scopus)
77. **Mladenov V.**, Synthesis and Analysis of a Memristor-Based Artificial Neuron, *16th International Workshop on Cellular Nanoscale Networks and their Applications*, 2018, pp. 1-4. (Scopus)
78. **Mladenov V.**, Kirilov S., Learning of an Artificial Neuron with Resistor-Memristor Synapses, *IEEE ANNA '18; Advances in Neural Networks and Applications*, 2018, pp. 1-5. (Scopus).
79. Yordanov Y., Tsenov G., **Mladenov V.**, Humanoid robot control with EEG brainwaves, *9th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS)*, 2017, pp. 238-242, doi: 10.1109/IDAACS.2017.8095083.

80. Pelzers K., **Mladenov V.**, Animal call segregation using self organizing map with speeded up robust features, *13th IEEE Symposium on Neural Networks and Applications (NEUREL)*, 2016, pp. 1-5, doi: 10.1109/NEUREL.2016.7800139.
81. Stoimenov S., Tsenov G., **Mladenov V.**, Face recognition system in Android using neural networks, *13th IEEE Symposium on Neural Networks and Applications (NEUREL)*, 2016, pp. 1-4, doi: 10.1109/NEUREL.2016.7800138.
82. **Mladenov V.**, Kirilov S., A Nonlinear Memristor Model with Activation Thresholds and Variable Window Functions, *15th IEEE International Workshop on Cellular Nanoscale Networks and their Applications*, 2016, pp. 1-2.
83. **Mladenov V.**, Kirilov S.. Memristor Modeling in MATLAB & PSPICE, *ECMS (2015)*. DOI:10.7148/2015-0432.
84. Arbo M., Raijmakers P., **Mladenov V.**, Applications of neural networks for control of a double inverted pendulum, *12th IEEE Symposium on Neural Network Applications in Electrical Engineering (NEUREL)*, 2014, pp. 89-92, doi: 10.1109/NEUREL.2014.7011468.
85. Dondon P., Carvalho J., Gardere R., Lahalle P., Tsenov G., **Mladenov V.**, Implementation of a feed-forward Artificial Neural Network in VHDL on FPGA, *12th IEEE Symposium on Neural Network Applications in Electrical Engineering (NEUREL)*, 2014, pp. 37-40, doi: 10.1109/NEUREL.2014.7011454.
86. **Mladenov V.**, Kirilov S., Synthesis and Analysis of a Memristor Frequency Converter for Radio-receiver, *Advances in Robotics, Mechatronics and Circuits*, inase.org, ISBN: 978-1-61804-242-2, 2014, pp. 190 - 193.
87. Antonov S., Tsenov G., **Mladenov V.**, Speech processing strategy in a cochlear implant processing unit based on a combination of SNR and the number of frequency bands in amplitude and frequency modulation, *Mathematics and Computers in Science and Industry*, inase.org, 2014, pp. 66 - 69, ISBN: 978-1-61804-247-7.
88. **Mladenov V.**, Kirilov S., Syntheses of a PSPICE model of a titanium-dioxide memristor and Wien memristor generator, *IEEE European Conference on Circuit*

- Theory and Design (ECCTD)*, 2013, pp. 1-4, doi: 10.1109/ECCTD.2013.6662302. (Scopus)
89. **Mladenov V.**, Kirilov S., Analysis of the mutual inductive and capacitive connections and tolerances of memristors parameters of a memristor memory matrix, *IEEE European Conference on Circuit Theory and Design (ECCTD)*, 2013, pp. 1-4, doi: 10.1109/ECCTD.2013.6662269.
90. Kirilov S., Dichev S., Trushev I., **Mladenov V.**, Analysis of a LCM equivalent circuit of memristor and impulse voltage sources, 2012, *Summer School Advanced aspects of Theoretical Electrical Engineering Sozopol'12*, ISSN: 1313-9487, p.1-6
91. Stoikov K., Filipova-Petrakieva S., **Mladenov V.**, Temperature problems in the furnace transformer aggregates, consisting of the main and the voltage-adding transformer., In *Information technology and electrical engineering-devices and systems, materials and technologies for the future* (Vol. 54) 2012.
92. **Mladenov V.**, Kirilov S., Analysis of a serial circuit with two memristors and voltage source at sine and impulse regime, *13th IEEE International Workshop on Cellular Nanoscale Networks and their Applications*, 2012, pp. 1-6, doi: 10.1109/CNNA.2012.6331476. (Scopus).
93. La Maire B. F. J., **Mladenov V.**, Comparison of neural networks for solving the travelling salesman problem, *11th IEEE Symposium on Neural Network Applications in Electrical Engineering*, 2012, pp. 21-24, doi: 10.1109/NEUREL.2012.6419953. (Scopus).
94. Slavtchev Y., Mastorakis N., **Mladenov V.**, Thermal Field Distribution in Bolted Busbar Connections with Longitudinal Slots, *Proceedings of the 15th WSEAS International Conference on CIRCUITS-Recent Researches in Circuits, Systems and Signal Processing*, Corfu, Greece, July 14-16, 2011, pp. 154-159., ISBN: 978-1-61804-017-6 Scopus.
95. Dondon P., Cifuentes M., Tsenov G., **Mladenov V.**, A practical modelling for the design of a sigma delta class D power switching amplifier and its pedagogical application", *Recent Researches in Circuits, Systems and Signal Processing - Proc. of the*

- 15th WSEAS Int. Conf. on Circuits, Part of the 15th WSEAS CSCC Multiconference, 2011, pp. 93-99.
96. Sijakovic N., Kostic M., **Mladenov V.**, Transmission system contingency statistics analysis, *Proceedings of the 15th WSEAS International Conference on SYSTEMS - Recent Researches in System Science*", Corfu, Greece, July 14-16, 2011, pp. 386-389.
 97. Kostic M., Sijakovic N., **Mladenov V.**, Automation of the Day Ahead Congestion Forecast procedure, *Proceedings of the 15th WSEAS International Conference on SYSTEMS - Recent Researches in System Science*, Corfu, Greece, July 14-16, 2011, pp. 390-393.
 98. Petkova N., **Mladenov V.**, Tsolov A., Nakov P., Bozukov G., Study and Analysis of Systems for Monitoring in Power Substations, *Proceedings of the 15th WSEAS International Conference on SYSTEMS - Recent Researches in System Science*", Corfu, Greece, July 14-16, 2011, ISBN 978-1-61804-023-7, pp. 402-404.
 99. **Mladenov V.**, Karampelas P., Pavlatos C., Zirintsi, E Solving Sudoku puzzles by using Hopfield neural networks, *2011 International Conference on Applied and Computational Mathematics*, pp. 174-179 (Scopus).
 100. Tsenov G., **Mladenov V.**, Taralova I., Synchronization of Sigma Delta Modulators, *6th International Conference for Internet Technology and Secured Transactions*, United Arab Emirates, 2011, pp. 319-322. (Scopus).
 101. **Mladenov V.**, A method for validation the limit cycles of high order Sigma-Delta modulators, *Proceedings of the Joint INDS'11 & ISTET'11*, 2011, pp. 234-238, doi: 10.1109/INDS.2011.6024815.
 102. Tsenov G., **Mladenov V.**, Higher Order Sigma-Delta Modulator Loopfilter Paralel Form Representation in Z and S Domain, *Proceedings of the 3rd International Workshop on Nonlinear Dynamics and Synchjronization, INDS'11, 25 – 27 July, Klagenfurt, Austria*, 2011, pp. 257-261.
 103. Filipova-Petrakieva S., Stoykov K., **Mladenov V.**, Analysis and comparison of the analitical and experimental methods modeling the electrostatic field, *Proceedings of the Joint INDS'11 & ISTET'11*, 2011, pp. 1-6, doi: 10.1109/INDS.2011.6024810.

104. Tsenov G., **Mladenov V.**, Speech Recognition Using Neural Networks, *Proceedings of the 10th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010*, University of Belgrade, Serbia and Montenegro, 23-25 September, 2010, pp. 181-186.
105. Popov G., Mastorakis N., **Mladenov V.** Calculation of the acceleration of parallel programs as a function of the number of threads, *International Conference on Computers – Proceedings*, 2010, pp. 411-414.
106. Mastorakis N., **Mladenov V.**, Swamy M., Improved Neural Network for Checking the Stability of Multidimensional Systems, *Proceedings of the 10th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010*, University of Belgrade, Serbia and Montenegro, 23-25 September, 2010, pp. 143-148.
107. Liang N., Hegt J., **Mladenov V.**, Image Objects Detection Based on Boosting Neural Network, *Proceedings of the 10th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010*, University of Belgrade, Serbia and Montenegro, 23-25 September, 2010, pp. 207-211.
108. Tzeneva R., Slavtchev Y., Mastorakis N., **Mladenov V.**, Bolted Busbar Connections with Longitudinal Slots, *Proceedings of the 14th WSEAS International Conference on CIRCUITS*, Corfu, Greece, July 22-24, 2010, pp. 44-48.
109. Karampelas P., Vita V., Pavlatos C., **Mladenov V.**, Ekonomou L., Design of Artificial Neural Network Models for the Prediction of the Hellenic Energy Consumption, *Proceedings of the 10th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2010*, University of Belgrade, Serbia and Montenegro, 23-25 September, 2010, pp. 41-44.
110. Tsenov G., Nikolova A., **Mladenov V.**, Performance comparison of techniques for DNA sequence prediction using neural networks, *Proceedings of 4th IEEE INTERNATIONAL SYMPOSIUM ON COMMUNICATIONS CONTROL & Committees SIGNAL PROCESSING*", Limassol, Cyprus March 3-5, 2010, SS. 3.6.

111. **Mladenov V.**, A Method for Searching the Limit Cycles of High Order Sigma-Delta Modulators, *Proceedings of the 19th European Conference on Circuit Theory and Design ECCTD 2009*, Antalya, Turkey, August 23-27, 2009, pp. 543-546.
112. **Mladenov V.**, Prediction of Limit Cycles in nonlinear systems with ideal relay type nonlinearities by using Multiple-input Describing Functions, *Proceedings of the 13th WSEAS International Conference on SYSTEMS*, Rodos, Greece, July 22-24, 2009, pp. 39-47.
113. Tsenov G., **Mladenov V.**, Reiss J., A design procedure for finding optimal third order Delta-Sigma modulator loopfilters, *Proceedings of the 13th WSEAS International Conference on SYSTEMS*, Rodos, Greece, 2009, pp. 48-52.
114. Tzeneva R., Slavtchev Y., Mastorakis N., **Mladenov V.**, New Design of Aluminum Bolted Busbar Connections, *Proceedings of the 13th WSEAS International Conference on CIRCUITS*, Rodos, Greece, 2009, pp. 172-177.
115. **Mladenov V.**, Zirintsis E., Pavlatos C., Vita V., Ekonomou L., Application of Neural Networks for On-Line Calculations, *Proceedings of the 9th WSEAS International Conference on Applied Computer Science (ACS '09)*, University of Genova, Genova, Italy, 2009, pp. 272-280.
116. Petrakieva S., **Mladenov V.**, Signal Competition Based Synthesis of Asynchronous High-Speed Digital Circuits, *Proceedings of the 15th International Symposium on Theoretical Electrical Engineering*, ISTET'09, 22 – 24 June, Lübeck, Germany, 2009, pp. 182-185.
117. Stoyadinova T., Buzov I., Filipova K., **Mladenov V.**, Ortlepp T., Development of VHDL-models for transient simulation of complex asynchronous RSFQ circuits, *Proc. 54. Internationales Wissenschaftliches Kolloquium der TU Ilmenau*, 07-10 Sept. 2009, pp. 175-176.
118. Tzeneva R., Slavtchev Y., Mastorakis N., **Mladenov V.**, Experimental Investigation of Contact Resistance of Slotted and Perforated Bolted Busbar Connections, *Proceedings of the 12th WSEAS International Conference on CIRCUITS*, Heraklion, Greece, July 22-24, 2008, pp. 142-146.

119. Cristea P., **Mladenov V.**, Tuduce R., Tsenov G., Petrakieva S., Neural Networks for prediction of nucleotide sequences by using genomic signals, *9th WSEAS International Conference on NEURAL NETWORKS (NN'08)*, Sofia, Bulgaria, 2008, pp. 107-112.
120. **Mladenov V.**, Reiss, J., Tsenov, G., A comparison of theoretical, simulated, and experimental results concerning the stability of sigma delta modulators, 2008, In *Audio Engineering Society Convention 124*. Audio Engineering Society.
121. Cristea P., **Mladenov V.**, Tuduce R., Tsenov G., Petrakieva S., Prediction of nucleotide sequences by using genomic signals, 2008, In *NN'08–9th WSEAS International Conference on Neural Networks* (pp. 107-112).
122. Mastorakis N., **Mladenov V.**, Swamy M., Neural Networks for Checking the Stability of Multidimensional Systems, *Proceedings of the 9th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL*, University of Belgrade, Serbia and Montenegro, 25-27 September, 2008, pp. 89-94.
123. Cristea P., **Mladenov V.**, Tsenov G., Tuduce R., Petrakieva S., Application of Neural Networks, PCA and Feature Extraction for Prediction of Nucleotide Sequences by Using Genomic Signals, *Proceedings of the 9th IEEE Symposium on Neural Network Applications in Electrical Engineering, NEUREL 2008*, University of Belgrade, Serbia and Montenegro, 2008, pp. 83-88.
124. **Mladenov V.**, Georgiev Z., Brandisky K., Ivanov K., Terzieva S., Tabahnev I., Petrakieva S., Petkova N., Tzenov G., Educational and Technical Issues in Teaching Resonance Phenomena in the Theory of Electrical Engineering, *Proceedings of the 5th WSEAS / IASME International Conference on ENGINEERING EDUCATION (EE'08)*, Heraklion, Greece, 2008, pp. 469-475.
125. Petkova N., Nakov P., **Mladenov V.** Power transformer's state analysis at partial discharges availability, *Proceedings of the 4th International Scientific Symposium on Electric Power Engineering, ELEKTROENERGETIKA 2007*, Slovak Republic, ISBN: 978-1-63266-981-0, 2007, pp. 318-320.

126. Terzieva, S., Tsenov, G., Yakimov, P., **Mladenov, V.**, Design and implementation of First Order Sigma-Delta Modulator, *Proceedings of XLII Int. Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2007)*, 2007, Ohrid, pp. 751-754.
127. Yordanova S., Petrova R., Tabakova B., **Mladenov V.**, MATLAB Real-Time Two-Level Fuzzy Control of Nonlinear Plant, *Proc. of the 11th WSEAS International Conference on SYSTEMS*, Agios Nikolaos, Crete Island, Greece, 2007, pp. 183-188.
128. Zeghibib A., Palis F., Shoylev N., **Mladenov V.**, Mastorakis N., Sampling frequency and pass-band frequency effects on Neuromuscular signals (EMG) recognition, *Proceedings of the 6th WSEAS International Conference on Signal Processing, Robotics and Automation*, Corfu island, Greece, 2007, pp. 107-114.
129. **Mladenov V.**, RSFQ DC to SFQ Converter with Reduced Josephson Current Density, *Proceedings of 11th WSEAS Conference on CIRCUITS*, Agios Nikolaos, Crete, Greece, 2007, pp. 217-221.
130. Tzeneva R., Slavtchev Y., **Mladenov V.**, New Connection Design of High Power Bolted Busbar Connections, *Proceedings of the 11th WSEAS International Conference on CIRCUITS*, Agios Nikolaos, Crete, Greece, 2007, pp. 227-232.
131. Radev N., Ivanov K., Stanchev K., Petrakieva S., Mastorakis N., **Mladenov V.**, Left-LUD SC ladder filter with compensation for finite amplifier gain and offset voltage, *Proc. in the 11th WSEAS Int. Conf. on CIRCUITS*, Agios Nikolaos, Crete, Greece, 2007, pp. 156-160.
132. Dimov B., **Mladenov V.**, Ortlepp Th., Kuilekov M., Uhlmann H., Modeling of the Magnetic Coupling between Superconductive and Normal Conductive Microstructures by Varying Temperature, *Proceedings of the XIV International Symposium on Theoretical Electrical Engineering (ISTET'07)*, 2007, Szczecin, Poland, PS1/10(p.31).
133. Savov V., Georgiev Zh., Todorov T., Karagineva I., **Mladenov V.**, Synthesis of Generalized Van der Pol Oscillator Systems, *Proc. of the 5th WSEAS Int. Conference*

- on *Non-linear Analysis, Non-linear Systems and Chaos (NOLASC'06)*, Bucharest, Romania, 2006, pp. 149-152.
134. Tzeneva R., Slavtchev Y., **Mladenov V.**, Bolted Busbar Connections with Slotted Bolt Holes, *Proc. of 10th WSEAS International Conference on Circuits*, Vouliagmeni, Athens, Greece, 2006, pp. 91-95.
 135. Dimov B., **Mladenov V.**, Todorov V., Ortlepp Th., Uhlmann H., Design Aspects of Complex Asynchronous RSFQ Digital Circuits, *Proc. 51. Internationales Wissenschaftliches Kolloquium der TU Ilmenau*, 2006, pp. 147-148.
 136. **Mladenov V.**, Todorov V., Dimov B., Ortlepp Th., Uhlmann H., High-Level Design of Asynchronous RSFQ Digital Circuits, *Proc. 51. Internationales Wissenschaftliches Kolloquium der TU Ilmenau*, 2006, pp. 149-150.
 137. **Mladenov V.**, Todorov V., Dimov B., Ortlepp Th., Uhlmann H., Statistical Description and Optimization of the Time-Domain Parameters of Asynchronous RSFQ Digital Circuits, *Proc. 51. Internationales Wissenschaftliches Kolloquium der TU Ilmenau*, 2006, pp. 145-146.
 138. Yordanova S., Petrova R., **Mladenov V.**, Sugeno Predictive Neuro-Fuzzy Controller for Improving Dynamic Performance of Control Systems of Nonlinear Plants under Uncertainties, *Proc. of 10th WSEAS International Conference on Systems*, Vouliagmeni, Athens, Greece, 2006 pp. 190-197.
 139. **Mladenov V.**, Slavova A., On the Periodic Solutions in One Dimensional Cellular Nonlinear Networks Based on Josephson Junctions (JJ's), 2006, 10th *International Workshop on Cellular Neural Networks and Their Applications*, 2006, pp. 1-6, doi: 10.1109/CNNA.2006.341637.
 140. Rijlaarsdam D., and **Mladenov V.**, Synchronization of Chaotic Cellular Neural Networks based on Rössler Cells, *Proceedings of the 8th IEEE Seminar on Neural Network Applications in Electrical Engineering, NEUREL 2006*, University of Belgrade, Serbia and Montenegro, 2006, pp. 41-44.
 141. Tsenov G., Zeghibib A., Palis F., Shoylev N., **Mladenov V.**, Neural Networks for Online Classification of Hand and Finger Movements Using Surface EMG signals,

- 8th Seminar on Neural Network Applications in Electrical Engineering, 2006, pp. 167-171, doi: 10.1109/NEUREL.2006.341203.
142. Terzieva S., Vladov S., **Mladenov V.**, Course Project in Theoretical Foundations of Electrical Engineering - Clear and Easy with PSpice and MATLAB, *EUROCON 2005 - The International Conference on "Computer as a Tool"*, 2005, pp. 764-767, doi: 10.1109/EURCON.2005.1630044.
143. Dimov B., Todorov V., **Mladenov V.**, Uhlmann H., Improved Techniques for Long-Distance Signal Propagation within the Rapid Single-Flux Quantum Digital Circuits, *Proceedings of the 7th IEEE International Symposium on Signals, Circuits & Systems*, ISSCS'2005, 2005, Iasi, Romania, pp. 733-736.
144. **Mladenov V.**, Maratos N., Tsakoumis A., Tashev T., Mastorakis N., On Neural Networks for Solving Nonlinear Programming Problems, 2005, *Technical University of Sofia*.
145. Petrakieva S., Tsenov G., **Mladenov V.**, Recent advances of adoptability of EEG signals for application aimed at improving the life of disabled people, *International Journal of neural networks and advanced applications*, Volume 3, ISSN: 2313-0563, 2006, p.1-7
146. Zeghib A., Palis F., Tsenov G., Shoylev N., **Mladenov V.**, Fuzzy systems and neural networks methods to identify hand and finger movements using surface EMG signals, *Proc. of the 9th Int. Conference on Systems*, July 11-13, 2005, Vouliagmeni, Athens, ISBN:960-8457-29-7, art. No. 23.
147. **Mladenov V.**, Discrete neural network for solving general quadratic programming problems, In *Proceedings of the 9th WSEAS International Conference on Systems 2005*, pp. 1-5, ISBN:960-8457-29-7.
148. Popov G., Nakov O., **Mladenov V.**, Borovska P., Dokov I., Automated Information System for the Prevention of Crime and Terrorism on Local and Trans-border Level, *Proceedings of the 3rd International conference on Applied Informatics and Computing Theory (AICT 12), Latest Trends in Applied Informatics and Computing*, 2012, ISBN: 978-1-61804-130-2, 2012, p.259-263.

149. Radev N., Mastorakis N., Ivanov K., **Mladenov V.**, Reduction of the Gain Errors in Multi – Input Nagaraj – 89 Very Large Time Constant Integrators, *WSEAS Transactions on Electronics*, Issue 4, Volume 2, ISSN: 1109-9445, 2005, pp. 135-138.
150. Terzieva S., Vladov S., **Mladenov V.**, Course Project in Theoretical Foundations of Electrical Engineering – Clear and Easy with PSpice and MATLAB, *Proceedings of EUROCON 2005 – The International Conference on “Computer as a Tool”*, Belgrade, Serbia and Montenegro, 2005, pp 764-767.
151. Trushev I., Tabahnev I., Toshev G., **Mladenov V.**, On the adaptive sliding mode control for dc/dc buck converters, accepted for publishing in *Proceedings of the XIII International Symposium on Theoretical Electrical Engineering*, 2005, Lviv, Ukraine, pp. 401-404.
152. Ekonomou L., Christodoulou C.A., **Mladenov V.**, Short-term load forecasting method using artificial neural networks and wavelet analysis, *International Journal of Power Systems*, Volume 1, ISSN: 2367-8976, 2016, p. 64-68.
153. Dimov B., Todorov V., **Mladenov V.**, Khabipov M., Balashov D., Hagedorn D., Buchholz F.-Im., Niemeyer J., Uhlmann H., An Improved Technique for Design of Josephson Transmission Lines, *Proc. X. International Superconductive Electronics Conference ISEC'05*, Noordwijkerhout, The Netherlands, 2005, P-I.04.
154. Radev N., Mastorakis N., **Mladenov V.**, Minimization of operational amplifiers finite gain effects in switched-capacitor biquads, *Proceedings of 8th WSEAS International Multiconference on Circuits, Systems, Communications and Computers (CSCC2004)*, Athens, Greece, ISBN: 960-8052-99-8, paper 487-358; also in *WSEAS Trans. on Circuits and Systems*, Vol.3, Issue5, July 2004, ISSN: 1109-2734, 2004, pp. 1130-1134.
155. Dimov B., Todorov V., **Mladenov V.**, Uhlmann H., Possible Connections of the Josephson Junctions within the RSFQ Logic Circuits, *Proceedings of 8th WSEAS International Multiconference on Circuits, Systems, Communications and Computers*

- (CSCC2004), Athens, Greece, 2004, ISBN: 960-8052-99-8, paper 487-358; also in *WSEAS Trans. on Circuits and Systems*, Vol.3 Issue5, 2004, pp. 1398-1402.
156. **Mladenov V.**, On the recurrent neural networks for solving general quadratic programming problems, *IEEE Proceedings of the 7th Seminar on Neural Network Applications in Electrical Engineering, NEUREL 2004*, University of Belgrade, Serbia and Montenegro, 2004, pp. 5-9.
 157. Kolev L., Petrakieva S., **Mladenov V.**, Interval criterion for stability analysis of discrete-time neural networks with partial state saturation nonlinearities, 2004 *Seventh Seminar on Neural Network Applications in Electrical Engineering - Proceedings*, NEUREL 2004, pp. 11-16.
 158. **Mladenov V.**, Hegt, J, Roermund A., On Solitary and Periodic Waves in One-dimensional FitzHugh-Nagumo CNN's, In *8th IEEE International Workshop on Cellular Neural Networks and their Applications, CNNA 2004 Budapest, Hungary, 2004*, pp. 88-93.
 159. Dimov B., Todorov V., **Mladenov V.**, Uhlmann H.,. The Josephson transmission line as an impedance matching circuit. *WSEAS Transactions on Circuits and Systems*, 3(5), 2004, pp.1341-1346.
 160. Kolev L., Petrakieva S., **Mladenov V.**, Interval criterion for stability analysis of discrete-time neural networks with partial state saturation nonlinearities, *7th Seminar on Neural Network Applications in Electrical Engineering, 2004. NEUREL 2004*. 2004, pp. 11-16, doi: 10.1109/NEUREL.2004.1416520.
 161. Dimov B., **Mladenov V.**, Uhlmann H., Asynchronous RSFQ Gates with Flexible Delays, In *Proc. 48. Internat. Wiss. Kolloquium, TU Ilmenau, Germany, 2003*, pp. 387-388.
 162. **Mladenov V.**, Hegt J. Roermund A., On the stability analysis of sigma-delta modulators, In *Proceedings of the 16th European Conference on Circuits Theory and Design, ECCTD'03: 2003 Cracow, Poland* (pp. 97-100).
 163. Radev N., Ivanov K., **Mladenov V.**, A Comparison Study of Very Large Time Constant Switched-Capacitor Integrators, *Proceedings of 7th WSEAS International*

- Multiconference on Circuits, Systems, Communications and Computers (CSCC 2003), Corfu, Greece, also in the post-conference book Computational Methods in Circuits and Systems Applications, WSEAS Press, Series of Reference Books, ISBN: 960-8052-88-2, 2003, pp.237-243.*
164. Tsakoumis C., Tashev T., Tsakoumis A., **Mladenov V.**, Mastorakis N. A method for determination the influence of thermic deformation of the round pieces and lathe's knife about the size accuracy without temperature measurement, *Computational Methods in Circuits and Systems Applications, 2003*, pp. 42-44.
 165. Michanos S., Tsakoumis A., Fessas P., Vladov S., **Mladenov V.**, Short-Term Load Forecasting Using a Chaotic Time Series, *Proceedings of the IEEE International Symposium on Signals, Circuits & Systems, 2003*, Iasi, Romania, pp. 437-440.
 166. Galarniotis A., Tsakoumis A., Fessas P., Vladov S., **Mladenov V.**, Using Elman and FIR neural networks for short term electric load forecasting, 2003. SCS 2003. *International Symposium on Signals, Circuits and Systems, 2003*, pp. 433-436 vol. 2, doi: 10.1109/SCS.2003.1227082.
 167. **Mladenov V.**, Modeling and Simulation of DC/DC Converters, *Proceedings of the XII International Symposium on Theoretical Electrical Engineering, 2003*, Warsaw, Poland, pp. 57-60.
 168. Galarniotis A., Tsakoumis A., Fessas P., Vladov S., **Mladenov V.**, Using Elman and FIR Neural Networks for Electric Load Forecasting, *Proceedings of the IEEE International Symposium on Signals, Circuits & Systems, 2003*, Iasi, Romania, pp. 433-436.
 169. **Mladenov V.**, Uhlmann F.H., Recurrent Neural Networks for Solving General Quadratic Programming Problems, *Proceedings of the 48. Internationales Wissenschaftliches Kolloquium, 22.09-25.09, 2003*, TU-Ilmenau, Germany, pp. 377-378.
 170. Tsakoumis A., Vladov S., and **Mladenov V.**, Electric load forecasting with multilayer perceptron and Elman neural network, *6th Seminar on Neural Network*

Applications in Electrical Engineering, 2002, pp. 87-90, doi: 10.1109/NEUREL.2002.1057974.

171. Tsakoumis A., Vladov S., **Mladenov V.**, Daily Load Forecasting Based on Previous Day Load, *Proceedings of the 6th Seminar on Neural Network Applications in Electrical Engineering, NEUREL 2002, University of Belgrade, Yugoslavia*, 2002, pp. 83-86.
172. Doris K., **Mladenov V.**, Hegt H., Van Roermund A., Nonlinear dynamics and propagation in positive feedback comparators for A/D Converters, *Proceedings of the 2002 7th IEEE International Workshop on Cellular Neural Networks and Their Applications*, 2002, pp. 415-421, doi: 10.1109/CNNA.2002.1035078.
173. Doris K., **Mladenov V.**, Hegt J., Roermund, A. Leenaerts, D., On the nonlinear dynamics propagation in positive feedback comparators for A/D converters, *Proceedings of the IEEE International Workshop on Cellular Neural Networks and their Applications, CNNA 2002, Frankfurt.*, pp. 415-421.
174. **Mladenov V.**, Hegt H., van Roermund A., Stability Analysis of High Order Sigma-Delta Modulators, *Proceedings of the 15th European Conference on Circuit Theory and Design ECCTD 2001, Helsinki University of Technology, Finland*, 2001, pp. I-313 – I-316.
175. **Mladenov V.**, Hegt H., van Roermund A., Terminal dynamics approach to cellular neural networks, *Proceedings of IEEE International Symposium on Circuits and Systems 2001 (ISCAS 2001)*, 2001, pp. 97 –100.
176. **Mladenov V.**, Hegt J.A., Tolboom H., Feature Extraction Approach for Recognition of Handwritten Electrical Symbols, *Proceedings of the 5th International Multiconference on Circuits, Systems, Communications and Computers CSCC 2001, Rethymnon, CRETE, Greece*, pp. 7191-7195 also in the *Post-Conference Book Advances in Scientific Computing, Computational Intelligence and Applications from the WSES PRESS Series of Reference Books and Textbooks*, 2001, pp. 256-260.
177. **Mladenov V.**, Hegt H., van Roermund A., On the stability of high order Sigma-Delta modulators,. In *ICECS 2001. 8th IEEE International Conference on Electronics, Circuits and Systems (Cat. No. 01EX483) Vol. 3*, 2001, pp. 1383-1386.

178. **Mladenov V.**, Hegt H., On waves and recovering in one-dimensional autonomous CNNs, *Proceedings of the 6th IEEE International Workshop on Cellular Neural Networks and Their Applications*, 2000, CNNA 2000, Catania, Italy, 2000, pp. 21 -26.
179. **Mladenov V.**, Maratos N., Neural Networks for Solving Constrained Optimization Problems, *4th International Multiconference on Circuits, Systems, Computers and Communications CSCC 2000, Athens, Greece*, pp. 1351-1359, also in the post conference book *Prob On Waves and Recovering in One-dimensional Autonomous CNN lems in Modern Applied Mathematics*, from the *WSES PRESS Series of Reference Books and Textbooks*, Athens, Greece, 2000, pp. 244-252.
180. **Mladenov V.** Hegt J., Spatio-Temporal phenomena in two dimensional cellular neural networks based on first order cells,. In *Fourth International Multiconference on Ciruits, Systems, Computers and Communication E-MsM-20,2000*, (pp. 275-281).
181. **Mladenov V.**, Cellular neural networks based on terminal dynamics. In *Proceedings of the 5th Seminar on Neural Network Applications in Electrical Engineering. NEUREL 2000 (IEEE Cat. No. 00EX287)* p. 32.
182. Kolev L., **Mladenov V.**, Worst-Case Tolerance Analysis of Non-Linear Circuits Using an Interval Method, *Proceedings of X International Symposium on Theoretical Electrical Engineering*, Magdeburg, Germany, Sept. 6-9, 1999, pp. 621-623.
183. **Mladenov V.**, Leenaerts D., On the robustness of CNN s template parameters, 5th *Electronic Devices and Systems International Conference EDS'98*, Brno, Czech Republic, 1998, pp. 283-286.
184. **Mladenov V.M.**, Uhlmann F.H., Michelsson O., Neural Solution of the Non-destructive Testing Inverse Problem, 43. *Internationalen Wissenschaftlichen Kolloquium (IWK'98)*, TU-Ilmenau, Ilmenau, Germany, 1998, pp. 246-251.
185. Gadjeva E., **Mladenov V.**, Testability Analysis of Analog-Discrete Circuits Using General-Purpose Analysis Programs, 43. *Internationalen Wissenschaftlichen Kolloquium (IWK'98)*, TU-Ilmenau, Ilmenau, Germany, 1998, pp. 174-179.

186. **Mladenov V.M.**, Leenaerts D., On monotone behavior and basin of attraction in Cellular Neural Networks, accepted to be published on the 6'th Biennial Conference on Electronics BEC'98, Tallinn, Estonia, 1998.
187. Kolev L., **Mladenov V.**, A linear programming implementation of a interval method for global non-linear DC analysis, 1998 *IEEE International Conference on Electronics, Circuits and Systems*. Surfing the Waves of Science and Technology (Cat. No.98EX196), 1998, pp. 75-78 vol.1, doi: 10.1109/ICECS.1998.813274.
188. **Mladenov V.**, Leenaerts D., Estimation of the basin of attractions of stable equilibrium points in CNNs, In 1998 *Fifth IEEE International Workshop on Cellular Neural Networks and their Applications. Proceedings* (Cat. No. 98TH8359), 1998, pp. 62-67.
189. **Mladenov V.**, Domine M, Leenaerts, On the robustness of CNN's template parameters, conference; *Proc. EDS'98, Brno, Czech Republic*, 1998.
190. **Mladenov V.**, Proshkov P., Modelling and Simulation of Continuous Neural Networks for Constrained Optimization Problems, *2nd IMACS International Conference on: Circuits, Systems*, 1998, pp. 386 – 393.
191. Radev N., Ivanov K., **Mladenov V.**, Switched-capacitor filter with reduced sensitivity to operational amplifier DC gain, *Proceedings of the 5th Electronic Devices and Systems Conference*, 1998, pp. 223-226.
192. **Mladenov V.**, Leenaerts D., Uhlmann H., First Order Estimation of the Basin of Attraction of Stable Equilibrium Points in CNNs, *European Conference on Circuit Theory and Design (ECCTD'97)*, Budapest, Hungary, 1997, pp. 684-689.
193. **Mladenov V.**, Uhlmann H., Thiele H., Neural Network Approach in Eddy-Current Non-destructive Testing, 42. *Internationalen Wissenschaftlichen Kolloquium (IWK'97)*, TU-Ilmenau, Ilmenau, Germany, 1997, pp. 184-188.
194. **Mladenov V.**, Uhlmann H., Interval Approach in Determining the Robustness of the Equilibrium Points in Cellular Neural Networks (CNN's), *Electronic Circuits and Systems Conference (ECS'97)*, Bratislava, Slovakia, 1997, pp. 311-314.

195. **Mladenov V.**, Uhlmann H., Kirsanov S., Neural Network Approach in Eddy-Current Non-destructive Testing, *Electronic Circuits and Systems Conference (ECS'97)*, Bratislava, Slovakia, 1997, pp. 289-292.
196. **Mladenov V.**, Kolev L., Interval methods for solving cellular neural networks (CNNs) equations, 1996, October In *IEEE Proceedings of Third International Conference on Electronics, Circuits, and Systems*, Vol. 1, 1996, pp. 417-420.
197. Maratos N., **Mladenov V.**, Op Amp Noise in Dynamic Range Maximization of Integrated Active-RC Filters. *sat*, 1(2), p.2. also in the Post-Conference Book *Advances in Systems Science: Measurement, Circuits and Control from the WSES PRESS Series of Reference Books and Textbooks*, ISBN: 960-8052-39-4, 1996, pp. 466-473.
198. **Mladenov V.**, Vladov S., A Method for Solving Nonlinear Resistive Circuits, *8th International Symposium on Theoretical Electrical Engineering*, Aristotle University of Thessaloniki, Greece, 1995, pp. 242-245.
199. **Mladenov V.**, Some Properties of Nonlinear Resistive Circuits Solutions Curves, *Scientific Conference with International Participation, Theoretical Electroengineering and Electrical Measurement*, Kosice, Sept. 1994, pp. 205-208.
200. **Mladenov V.**, An improved interval method for solving nonlinear systems of monotone functions, *Mathematical Modelling and Scientific Computing*, SM Markov, ed., Sofia, 1993, pp.23-26.

III. Статии, публикувани в рецензирани български издания (12)

201. **Mladenov V.**, Memristor - The Fourth Fundamental Element, *Engineering Sciences*, 2020, issue 1, DOI 10.7546/EngSci.LVII.20.01.01, ISSN(e)2603-3542, <http://es.ims.bas.bg/indexx.htm>, <https://www.ijifactor.com/index.php>, pp. 5-23, (Indexed in Int. Journal Impact Factor) **IF 3.24**.
202. Tsenov G., Georgiev S., Andonov S., **Mladenov V.**, Electroencephalography for TV advertisement decomposition, "E+E", vol. 55, 3-4, 2020, ISSN 0861-4717, <https://epluse.ceec.bg>, pp. 41 – 48.

203. **Младенов В.**, Въведение в RSFQ веригите, *сп. Електротехника и Електроника (E&E)*, ISSN 0861-4717, том. 44, кн. 9-10, 2009, стр. 3-15.
204. **Mladenov V.**, Filipova-Petrakieva S., Filipova K., Signal Competition in Feedforward Asynchronous Ultra High-Speed Digital Electric Circuits, *Elektrotechnica & Elektronika (E&E)*, ISSN 0861-4717, vol. 43, book 9-10, 2008, pp. 55-62.
205. Kocev Cv, Zeghibib A, Tsenov G, Antonov L, **Mladenov V.**, Palis F, Shoylev N., Visualization of an on-line classification and recognition algorithm of EMG signals, *Journal of the University of Chemical Technology and Metallurgy*, 2008, pp. 154 – 158.
206. Наков П., Петкова Н., **Младенов В.**, Метод за откриване на частични разряди в силови трансформатори, *Енергетика*, № 3, 2007, Април-Май, ISSN 0324-1521, стр. 26-30.
207. Ташев Т., **Младенов В.**, Интерполиране на основната крива на намагнитване с използване на кубични сплайни“, *Стандартизация, метрология, сертификация*, кн. 1, София, 1998, стр. 21-25.
208. Иванов К., Божилов Г., **Младенов В.**, Представяне на несиметрична намотка на кафезен ротор посредством трифазен модел, *сп. Електротехника и електроника*, кн. 1-2, София, 1997, стр. 12-15.
209. **Младенов В.**, Енергийно оптимални режими на зареждане на кондензатор, *сп. Електротехника и електроника*, кн. 9-10, София, 1996, стр. 30-32.
210. **Младенов В.**, Владов С., Иванов К., Метод за анализ на нелинейни резисторни вериги, *сп. Електротехника и електроника*, кн. 1-2, София, 1996, стр. 19-22.
211. Колев Л., **Младенов В.**, Приблизителен метод за решаване на права и обратна допускова задача в линейни електрически вериги при синусоидални режими, *Известия на ВМЕИ "Ленин"*, София, т. 44, кн. 7, 1989, стр. 99-108.

- 212.Колев Л., Владов С., **Младенов В.**, Метод за приблизителен толерансен анализ и синтез на линейни електрически вериги при синусоидален режим, *Известия на ВМЕИ "Ленин"*, т.43, кн.7, София, 1988, стр. 57-66.

IV. Доклади в сборници на конференции, конгреси и симпозиуми у нас (14)

- 213.Kirilov S., Dichev S., Trushev I., **Mladenov V.**, Analysis of a LCM equivalent circuit of memristor and impulse voltage sources, 2012, *Summer School Advanced aspects of Theoretical Electrical Engineering Sozopol'12*, ISSN: 1313-9487, p.1-6.
- 214.Sijakovic N., Kostic M., Bogatinova I., **Mladenov V.**, Software tool for short term congestion forecasting in transmission network, *Proceedings of of 8th Summer school "Advanced aspects of theoretical electrical engineering"*, Sozopol, Bulgaria, 19-22 September 2010, Part II: Regular Papers, ISSN 1313-9487, pp. 84-89.
- 215.Stoyadinova T., Ortlepp T., Filipova K., **Mladenov V.**, Improved VHDL model of basic RSFQ cell – D Flip Flop, *Proceedings of the International PhD Seminar on Computational Electromagnetics and Optimization in Electrical Engineering, – CEMOEE 2010*, 10-13 September, Sofia, Bulgaria, pp. 158-161.
- 216.Petrakieva S., **Mladenov V.**, Signal competition approach for synthesis of asynchronous high-speed digital circuits, *Proceedings of of 8th Summer school "Advanced aspects of theoretical electrical engineering"*, Sozopol, Bulgaria, 19-22 September 2010, *Sozopol*, Bulgaria, Part II: Regular Papers, ISSN 1313-9487, pp. 9-16.
- 217.Panayotov I., Stoiadinova T., Filipova K., **Mladenov V.**, Ortlepp T., Creating VHDL Descriptions of Asynchronous Dual-rail RSFQ Logic, *Proceedings of the 18th International Scientific and Applied Science Conference ELECTRONICS ET2009*, Sept. 14-17, Sozopol, Bulgaria, *also in the ANNUAL JOURNAL OF ELECTRONICS*, 2009, ISSN 1313-1842, 2009, pp. 163-165.

- 218.Brandisky K., Ivanov K., **Mladenov V.**, Numerical and Experimental Investigation of Transients in Theoretical Electrical Engineering, *Proc. of the 7th Int. Conf. on Challenges in Higher Education & Research*, June 2-5, Sozopol, 2009, Heron Press, Sofia, vol. 7, 2009, pp. 95-106.
- 219.Cristea P., **Mladenov V.**, Tsenov G., Tuduce R., Prediction of Mycobacterium Tuberculosis (rpoB) Nucleotide Sequences by Using Neural Networks, *Proceedings of the 3rd Annual Meeting of the Bulgarian Section of SIAM (BGSIAM'08)*, Dec. 22-23, Sofia, pp. 23-27, 2008.
- 220.Tsenov G., Terzieva S., Yakimov P., **Mladenov V.**, Modeling and implementation of third order sigma-delta modulator, *Proc. of the 16th Int. Sci. And Applied Science Conference ELECTRONICS ET 2007*, ISBN 1313-1842, pp. 96-102, 2007, Sozopol, Bulgaria,
- 221.**Mladenov V.**, Neural Networks for Solving Sudocu Problems, *Proceedings of the 2nd Annual Meeting of the Bulgarian Section of SIAM (BGSIAM'07)*, Dec. 20-21, 2007, Sofia, pp. C41-C44.
- 222.Йорданова С., **Младенов В.**, Обучение по Размито управление и невронни мрежи, Сборник доклади на международна научна конференция "Автоматика и информатика'07", симпозиум "Компютърни методи за обучение по системи и управление", САИ, 3-6.10.2007г., т.ІІ, стр. IV-35-IV-40.
- 223.Tabahnev I., Petkova N., Terzieva Sn., Vladov S., **Mladenov V.**, Modeling, Simulations and Implementation of the Chua's Circuit, *Proceedings of the 4th International Conference on Challenges in Higher Education and Research in the 21 Century*, Sozopol, Heron Press, Sofia, vol. 4, 2006, pp. 277-279.
- 224.Trushev I., Tabahnev I., **Mladenov V.**, Pspice Models of Sliding Mode Controller of DC/DC Converters, *Proceedings of the XII International Scientific and Applied Science Conference ELECTRONICS 2003*, 2003, Sozopol, Bulgaria, book 3, pp 99-104.
- 225.Христов М., **Младенов В.**, Бакалски И., Интегрална реализация на клетъчна невронна мрежа чрез CADENCE, *Proceedings of the 7th International Conference*

ELECTRONICS'98, book 3, Sept. 23-25, Sozopol, Bulgaria, 1998, ISBN 954-438-245-3, pp. 9-14.7.

226. Колев Л., Младенов В., Приблизителен интервален метод за оптимален толерансен синтез на постояннотокови линейни електрически вериги, *XIV Национална младежка школа (НМШ) с международно участие "Приложение на математиката в техниката"*, Варна, 1988, стр. 150-153.

V. Глави от книги и монографии, издадени в чужбина (13)

227. Nakov O., **Mladenov V.**, Mihaylova E., Nakov P., Analysis and Evaluation of Distance Schooling and Learning with Respect to ICT Usage During COVID-19 Period in Bulgaria., In: Rocha Á., Adeli H., Dzemyda G., Moreira F., Ramalho Correia A.M. (eds) *Trends and Applications in Information Systems and Technologies. WorldCIST. Advances in Intelligent Systems and Computing*, 2021, vol. 1367. Springer, Cham. https://doi.org/10.1007/978-3-030-72660-7_19.
228. Vita V., Zafiropoulos E., Gonos I., **Mladenov V.**, Chobanov V. Power System Studies in the Clean Energy Era: From Capacity to Flexibility Adequacy Through Research and Innovation. In: Németh B., Ekonomou L. (eds) *Flexitranstore. ISH 2019. Lecture Notes in Electrical Engineering*, vol. 610. Springer, Cham. https://doi.org/10.1007/978-3-030-37818-9_7 (Scopus), **SJR 0.134, CiteScore 0.5**.
229. **Mladenov V.**, Tsenov G, Nonlinear Programming Approach for Design of High Performance Sigma-Delta Modulators, 2018, In: Kyamakya K., Mathis W., Stoop R., Chedjou J., Li Z. (eds) *Recent Advances in Nonlinear Dynamics and Synchronization. Studies in Systems, Decision and Control*, vol 109. Springer, Cham., DOI https://doi.org/10.1007/978-3-319-58996-1_12, Scopus pp 271-283.(Scopus) **SJR 0.102, CiteScore 1.1**
230. Tonchev K., Tsenov G., **Mladenov V.**, Manolova A., Poulkov V. (2018) Personalized and Intelligent Sleep Lifestyle Reasoner with Web Application for Improving Quality of Sleep Part of AAL Architecture, In: Oliver N., Serino S.,

- Matic A., Cipresso P., Filipovic N., Gavrilovska L. (eds) *Pervasive Computing Paradigms for Mental Health. FABULOUS 2016, MindCare 2016, IIOT 2015. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, vol 207. Springer, Cham. https://doi.org/10.1007/978-3-319-74935-8_15, (Scopus) **SJR 0.142, CiteScore 0.7**.
231. Pereira V., Tavares F., Mihaylova P., **Mladenov V.**, Georgieva P., "Factor Analysis for Finding Invariant Neural Descriptors of Human Emotions", *Complexity*, vol. 2018, Article ID 6740846, 8 pages, 2018. <https://doi.org/10.1155/2018/6740846> (Scopus, Web of Science), **IF 2.462, SJR 0.447, CiteScore 3.3**.
232. Petkova N., Nakov P., **Mladenov V.** (2016) Real Time Monitoring of Incipient Faults in Power Transformer. In: Karampelas P., Ekonomou L. (eds), *Electricity Distribution. Energy Systems*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-49434-9_9, (Scopus) **SJR 0.452, CiteScore 4.2**
233. Tsenov G., **Mladenov V.** A Design Procedure for Stable High Order, High Performance Sigma-Delta Modulator Loopfilters, In: **Mladenov V.**, Ivanov P. (eds) *Nonlinear Dynamics of Electronic Systems. NDES 2014. Communications in Computer and Information Science*, vol 438. Springer, Cham. https://doi.org/10.1007/978-3-319-08672-9_15, (Scopus) **SJR 0.160, CiteScore 0.8**.
234. Ekonomou L., Christodoulou C., **Mladenov V.** Estimation of the Electric Field across Medium Voltage Surge Arresters Using Artificial Neural Networks, In: **Mladenov V.**, Jayne C., Iliadis L. (eds) *Engineering Applications of Neural Networks. EANN 2014. Communications in Computer and Information Science*, vol. 459. Springer, Cham. https://doi.org/10.1007/978-3-319-11071-4_22, (Scopus) **SJR 0.160, CiteScore 0.8**
235. Tsekouras G., Kanellos F., Mastorakis N., **Mladenov V.**, Optimal Operation of Electric Power Production System without Transmission Losses Using Artificial Neural Networks Based on Augmented Lagrange Multiplier Method, In: **Mladenov V.**, Koprinkova-Hristova P., Palm G., Villa A.E.P., Appollini B., Kasabov N. (eds) *Artificial Neural Networks and Machine Learning. ICANN 2013*.

- Lecture Notes in Computer Science*, vol 8131. Springer, Berlin, Heidelberg.
https://doi.org/10.1007/978-3-642-40728-4_73, **IF 0.402, SJR 0.249, CiteScore 1.8**
236. **Mladenov V.** (2013) Stability Analysis and Limit Cycles of High Order Sigma-Delta Modulators. In: Kyamakya K., Halang W., Mathis W., Chedjou J., Li Z. (eds) *Selected Topics in Nonlinear Dynamics and Theoretical Electrical Engineering. Studies in Computational Intelligence*, vol 483. Springer, Berlin, Heidelberg.
https://doi.org/10.1007/978-3-642-37781-5_19, (Scopus) **SJR 0.185, CiteScore 1.5**
237. Popov G., **Mladenov V.** (2009) Modeling Diversity in Recovery Computer Systems. In: Mastorakis N., **Mladenov V.**, Kontargyri V. (eds), *Lecture Notes in Electrical Engineering*, vol 27. Springer, Boston, MA. https://doi.org/10.1007/978-0-387-84814-3_22, (Scopus) **SJR 0.134, CiteScore 0.5**
238. **Mladenov V.**, Introduction to Cellular Neural Networks, Chapter 1. In: Slavova, Angela., **Mladenov, V.**, Cellular Neural Networks: Theory & Applications, Nova Science Publishers, Inc. ISBN 9781594540400, Nov 2004.
239. **Mladenov V.**, Spatio-Temporal Phenomena in Two-dimensional Cellular Nonlinear Networks, Chapter 5, In: Slavova, Angela., **Mladenov, V.**, Cellular Neural Networks: Theory & Applications, Nova Science Publishers, Inc. ISBN 9781594540400, Nov 2004.

VI. Книги и монографии, издадени в чужбина (1)

240. **Mladenov V.**, Advanced Memristor Modeling - Memristor Circuits and Networks, MDPI Basel, Switzerland, ISBN 978-3-03897-104-7 (Hbk), pp. 172, 2019,
<https://doi.org/10.3390/books978-3-03897-103-0>.

VII. Книги и колективни монографии (10)

241. Reljin I., Obradović Z., Popović M., **Mladenov V.**, New Methods for Analyzing Complex Biomedical Systems and Signals, *Hindawi, Complexity*, 2018, Volume 2018, Article ID 6405121, 3 pages, Scopus, <https://doi.org/10.1155/2018/6405121>. (Scopus, Web of Science) **SJR 0.531, IF 2.474, CiteScore 3.3.**
242. **Mladenov V.**, Slavova A., Sgurev V., Hadjiski M., Boshnakov K. (Eds.), *Advances in Neural Networks and Applications - ANNA '18*, VDE VERLAG GMBH, ISBN 978-3-8007-4756-6 © 2018 Berlin, Offenbach, Bismarckstraße 33, 10625 Berlin, Germany www.vde-verlag.de.
243. Koprinkova-Hristova P., **Mladenov V.**, Kasabov N. (Eds.), *Artificial Neural Networks: Methods and Applications in Bio-/Neuroinformatics*, 2015, *Springer Series*, ISBN 978-3-319-09902-6.
244. **Mladenov V.**, Ivanov P. (eds) *Nonlinear Dynamics of Electronic Systems. NDES 2014. Communications in Computer and Information Science*, vol 438. Springer, Cham. https://doi.org/10.1007/978-3-319-08672-9_15, (Scopus) **SJR 0.160, CiteScore 0.8.**
245. **Mladenov V.**, Jayne C., Iliadis L. (eds) *Engineering Applications of Neural Networks. EANN 2014. Communications in Computer and Information Science*, vol. 459. Springer, Cham. DOI 10.1007/978-3-319-11071-4 (Scopus) **SJR 0.160, CiteScore 0.8**
246. Mastorakis N., **Mladenov V.**, *Computational Problems in Engineering (Lecture Notes in Electrical Engineering, Book 307)*, Jun 4, 2014., ISSN 1876-1100, ISBN 978-3-319-03966-4, DOI 10.1007/978-3-319-03967-1, Springer Cham Heidelberg New York Dordrecht London.
247. **Mladenov V.**, Koprinkova-Hristova P., Palm G., Villa A.E.P., Appollini B., Kasabov N. (eds) *Artificial Neural Networks and Machine Learning. ICANN 2013. Lecture Notes in Computer Science*, vol 8131. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-40728-4_73, (Web of Science Scopus) **IF 0.402, SJR 0.249, CiteScore 1.8**

- 248.Mastorakis N., **Mladenov V.**, Kontargyri V. (eds) *Lecture Notes in Electrical Engineering*, vol 27. Springer, Boston, MA, 2009. <https://doi.org/10.1007/978-0-387-85437-3>, (Scopus) **SJR 0.134, CiteScore 0.5**
- 249.Mastorakis N., **Mladenov V.**, Kontargyri V. (eds) *Lecture Notes in Electrical Engineering*, vol 28. Springer, Boston, MA, 2009. https://doi.org/10.1007/978-0-387-84814-3_22, (Scopus) **SJR 0.134, CiteScore 0.5**
- 250.Slavova, A., **Mladenov, V.**, Cellular Neural Networks: Theory & Applications, *Nova Science Publishers*, Nov 2004, Inc. ISBN 9781594540400.

VIII. Учебници и учебни пособия (20)

- 251.**Младенов В.**, Владов С., Теоретична електротехника, Второ допълнено и преработено издание, Второ допълнено и преработено издание, стр. 362, ISBN 978-954-9518-89-4, ИК КИНГ, 2021.
- 252.Брандиски К., Георгиев Ж., Иванов К., Кирилов С., **Младенов В.**, Петкова Н., Петракиева С., Табахнев И., Терзиева С., Трушев И., Ценов Г., Червенков А., Ячева И., Ръководство за лабораторни упражнения по теоретична електротехника – част втора, София, КИНГ, 2018, ISBN 978-954-598-94-8.
- 253.**Младенов В.**, Владов, С., Теоретична електротехника, София, КИНГ, ISBN 978-954-9518-89-4, 2017.
- 254.Брандиски К., Георгиев Ж., Иванов К., Кирилов С., **Младенов В.**, Петкова Н., Петракиева С., Табахнев И., Терзиева С., Трушев И., Ценов Г., Червенков А., Ячева И., Ръководство за лабораторни упражнения по теоретична електротехника – част първа, София, ISBN 978-954-9518-92-4, КИНГ, 2017.
- 255.**Mladenov V.**, Vladov S., Electrical engineering, Sofia, KING, 2014, ISBN 978-954-9518-78-8.
- 256.Petrakieva S., **Mladenov V**, Manual for Solving Problems of Theory of Electrical Engineering, Sofia, 2014, Avangard Prima Publishing House, ISBN 978-619-160-365-7.

257. **Mladenov V.**, Vladov S., Theory of electrical engineering, Sofia, 2013, KING, ISBN 978-954-9518-74-0.
258. Брандиски К., **Младенов В.**, Петракиева С., Ръководство за решаване на задачи по теоретична електротехника с PSpice (ORCAD 16.3), 2012, София, КИНГ, 2012, ISBN 978-954-9518-72-6.
259. Петракиева С., **Младенов В.**, Решени примери по дискретни структури, София, Авангард прима, 2011, ISBN 978-954-323-800-2.
260. Йорданова Сн., **Младенов В.**, Ценов Г., Цекова Р., Ръководство за лабораторни упражнения по размито управление и невронни мрежи, София, ТУ, 2008, ISBN 978-954-438-720-4.
261. Брандиски К., Георгиев Ж., **Младенов В.**, Станчева Р., Теоретична електротехника : Ч. II, София, 2008, КИНГ, ISBN 954-9518-29-9 - второ издание.
262. **Младенов В.**, Йорданова С., Размито управление и невронни мрежи, София, 2006, ТУ, ISBN 978-954-438-595-8.
263. Брандиски К., Георгиев Ж., **Младенов В.**, Станчева Р., Теоретична електротехника – част първа, София, 2004, КИНГ, ISBN 954-9518-28-0 – второ издание.
264. Брандиски К., Георгиев Ж., **Младенов В.**, Станчева Р., 2004, Теоретична електротехника – част втора, София, КИНГ, 2004, ISBN 954-9518-29-9.
265. Брандиски К., Георгиев Ж., **Младенов В.**, Владов С., Иванов К., Петракиева С., Радев Н., Станчев К., Станчева Р., Стойков К., Табахнев Ив., Терзиева Сн., Ръководство за лабораторни упражнения по теоретична електротехника., София, КИНГ, 2004., ISBN 954-9518-24-8.
266. Брандиски К., Владов С., Георгиев Ж., Иванов К., **Младенов В.**, Петракиева С., Радев Н., Станчев К., Станчева Р., Стойков К., Табахнев Ив., Терзиева Сн., Тошев Г., Ячева И., Бодурова М., Ръководство за семинарни упражнения по теоретична електротехника, - част първа, София, КИНГ, 2004, ISBN 954-9518-26-4.

- 267.Брандиски К., Владов С., Георгиев Ж., Иванов К., **Младенов В.**, Петракиева С., Радев Н., Станчев К., Станчева Р., Стойков К., Табахнев Ив., Терзиева Сн., Тошев Г., Ячева И., Бодурова М., Ръководство за семинарни упражнения по теоретична електротехника – част втора., София, КИНГ, 2004, ISBN 954-9518-27-2.
- 268.Брандиски К., Георгиев Ж., **Младенов В.**, Станчева Р., Учебник по теоретична електротехника - част първа, София, 2004, ИК КИНГ, ISBN 954-9518-28-0.
- 269.Брандиски К., **Младенов В.**, Станчев К., Ръководство за решаване на задачи по теоретична електротехника с ORCAD Pspice, София, КИНГ, 2002 , ISBN 954-649-520-4.
- 270.Брандиски К., **Младенов В.**, Вълчев Д., Решаване на задачи по електротехника с MATLAB., София, ТУ, 2000, ISBN 954-438-294-1.

IX. Дисертации (2)

271. **Младенов В.**, Усъвършенствано Моделиране на Мемристори, Дисертационен труд за присъждане на НС - Доктор на науките, 2019, ТУ-София.
272. **Младенов В.**, Върху някои проблеми на глобалния анализ на нелинейни вериги, Дисертационен труд за присъждане на НС – Кандидат на техническите науки, 1993, ТУ-София.