JiÅÃᴹ BÃ-la

List of Publications by Year
in descending order

		933447	610901
55 papers	**682** citations	**10** h-index	**24** g-index
56 all docs	**56** docs citations	**56** times ranked	**737** citing authors

#	Article	IF	Citations
1	Adaptive Analysis of Electrocardiogram Prediction Using a Dynamic Cubic Neural Unit. Lecture Notes in Networks and Systems, 2022, , 431-440.	0.7	0
2	Structural, electronic and optoelectronic properties of <scp> AB ₅ C ₈ </scp> (<scp>A = Cu/Ag; B = In and C = S, Se and Te</scp>) compounds. International Journal of Energy Research, 2021, 45, 4014-4025.	4.5	4
3	Optoelectronic and transport properties of Rb/ <scp> Cs ₂ TeI ₆ </scp> defective perovskites for green energy applications. International Journal of Energy Research, 2021, 45, 8448-8455.	4.5	16
4	First‐principles calculations of structural, electronic, optical, and thermoelectric properties of ternary <i>d</i> ‐metal sulfides <scp> Sc ₂ CdS ₄ </scp> and <scp> Y ₂ CdS ₄ </scp> compounds. International Journal of Energy Research, 2021, 45, 13657-13667.	4.5	9
5	Co2YZ (Y= Cr, Nb, Ta, V and Z= Al, Ga) Heusler alloys under the effect of pressure and strain. Journal of Molecular Graphics and Modelling, 2021, 104, 107841.	2.4	46
6	Internet of things-assisted architecture for QRS complex detection in real time. Internet of Things (Netherlands), 2021, 14, 100395.	7.7	7
7	Modeling Complex Systems by Structural Invariants Approach. Complexity, 2021, 2021, 1-17.	1.6	0
8	Modeling of complex ecosystems, extension of deserts and violation of the short water cycle. Ecological Modelling, 2021, 461, 109762.	2.5	0
9	Detection of the QRS Complexity in Real Time with Bluetooth Communication. Lecture Notes in Networks and Systems, 2021, , 429-439.	0.7	2
10	Pressure induced physical variations in the lead free fluoropervoskites XYF3 (X=K, Rb, Ag; Y=Zn, Sr,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.6	15
11	Cardiac Arrhythmia Prediction by Adaptive Analysis via Bluetooth. Mendel, 2020, 26, 29-38.	1.0	2
12	Phase Transition as an Emergent Phenomenon Analysed by Violation of Structural Invariant (M, BM). Mendel, 2020, 26, 45-50.	1.0	2
13	Noncentrosymmetric Sulfide Oxide MZnSO (M = Ca or Sr) with Strongly Polar Structure as Novel Nonlinear Crystals. Journal of Physical Chemistry C, 2019, 123, 27172-27180.	3.1	31
14	Phase transition in BaThO3 from Pbnm to Ibmm turn the fundamental energy band gap from indirect to direct. Journal of Alloys and Compounds, 2019, 771, 607-613.	5.5	10
15	Emergent Phenomena in Complex Systems. Advances in Intelligent Systems and Computing, 2019, , 262-270.	0.6	3
16	Modeling of Complex Systems by Means of Partial Algebras. Mendel, 2019, 25, 103-110.	1.0	3
17	Detection of Emergent Situations in Complex Systems by Structural Invariant (MB, M). Mendel, 2019, 23, 163-170.	1.0	5
18	Weight Adaptation Stability of Linear and Higher-Order Neural Units for Prediction Applications. Lecture Notes in Computer Science, 2019, , 503-511.	1.3	1

#	Article	IF	Citations
19	Prediction of Highly Non-stationary Time Series Using Higher-Order Neural Units. Lecture Notes on Data Engineering and Communications Technologies, 2018, , 787-795.	0.7	1
20	Adaptive Threshold, Wavelet and Hilbert Transform for QRS Detection in Electrocardiogram Signals. Lecture Notes on Data Engineering and Communications Technologies, 2018, , 777-786.	0.7	3
21	Capacity of Spaces of Properties Formulae, Approximations and Qualitative Shapes. Mendel, 2018, 24, 39-46.	1.0	0
22	Application of Fuzzy Logic for Monitoring of Appearance of Heat Waves in Large Towns. Mendel, 2018, 24, 165-172.	1.0	0
23	Monitoring of Cardiac Arrhythmia Patterns by Adaptive Analysis. Lecture Notes on Data Engineering and Communications Technologies, 2017, , 885-894.	0.7	2
24	The Detection and Interpretation of Emergent Situations in ECG Signals. Advances in Intelligent Systems and Computing, 2017, , 264-275.	0.6	0
25	Detection of emergent situations in complex systems represented by algebras of transformations. MATEC Web of Conferences, 2016, 76, 02035.	0.2	0
26	Exploration of the Electronic Structure of Monoclinic α-Eu$_2$(MoO$_4$)$_3$: DFT-Based Study and X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 10559-10568.	3.1	80
27	A Fast Neural Network Approach to Predict Lung Tumor Motion during Respiration for Radiation Therapy Applications. BioMed Research International, 2015, 2015, 1-13.	1.9	22
28	Interpretation of States Structures in the Control of Development of Ecosystems. International Journal of Engineering Research in Africa, 2015, 18, 85-94.	0.7	0
29	Interpretation of New ECG Signal Shapes for Diagnostics of Cardio-Vascular System. , 2015, , .		0
30	Arrhythmia disease classification using a higher-order neural unit. , 2015, , .		4
31	Fast fourier transform for feature extraction and neural network for classification of electrocardiogram signals. , 2015, , .		33
32	Smart Region as a complex system and some notes to its design. , 2015, , .		3
33	Feature Extraction of Electrocardiogram Signals by Applying Adaptive Threshold and Principal Component Analysis. Journal of Applied Research and Technology, 2015, 13, 261-269.	0.9	92
34	Characterization of multiferroic Bi0.8RE0.2FeO3 powders (RE=Nd3+, Eu3+) grown by the sol–gel method. Materials Letters, 2015, 139, 104-107.	2.6	4
35	Structural, elastic, thermal and electronic properties of M2X (M=Sr, Ba and X=Si, Ge, Sn) compounds in anti-fluorite structure: first principle calculations. Indian Journal of Physics, 2015, 89, 369-375.	1.8	10
36	Hilbert-Huang transform and neural networks for electrocardiogram modeling and prediction. , 2014, , .		8

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37	NaAuS chicken-wire-like semiconductor: Electronic structure and optical properties. Journal of Alloys and Compounds, 2014, 582, 6-11.	5.5	9
38	Adaptive Threshold and Principal Component Analysis for Features Extraction of Electrocardiogram Signals. , 2014, , .		5
39	Glass formation and the third harmonic generation of Cu2Se–GeSe2–As2Se3 glasses. Journal of Applied Physics, 2014, 116, 143102.	2.5	2
40	Emergent Phenomena in Natural Complex Systems. Emergence, Complexity and Computation, 2014, , 89-100.	0.3	6
41	Electronic and optical features of the mixed crystals Ag0.5Pb1.75Ge(S1–xSex)4. Journal of Materials Chemistry C, 2013, 1, 4667.	5.5	9
42	Linear, non-linear optical susceptibilities and the hyperpolarizability of the mixed crystals Ag0.5Pb1.75Ge(S1−xSex)4: experiment and theory. Physical Chemistry Chemical Physics, 2013, 15, 18979.	2.8	150
43	Hilbert transform and neural networks for identification and modeling of ECG complex. , 2013, , .		5
44	Genetic algorithm-based optimal fuzzy control system for the MT 25 microtron. Journal of Instrumentation, 2013, 8, T05003-T05003.	1.2	5
45	Modeling and interpretation of new solutions in problem solving. , 2011, , .		2
46	A mathematical model of the MT 25 microtron. Journal of Instrumentation, 2011, 6, T10005-T10005.	1.2	7
47	Qualitative modeling and monitoring of selected ecosystem functions. Ecological Modelling, 2011, 222, 3640-3650.	2.5	15
48	Microtron Modelling and Control. , 2010, , .		3
49	Quadratic neural unit and its network in validation of process data of steam turbine loop and energetic boiler. , 2010, , .		10
50	Adaptive Evaluation of Complex Dynamical Systems Using Low-Dimensional Neural Architectures. Studies in Computational Intelligence, 2010, , 33-57.	0.9	9
51	Adaptive evaluation of complex time series using nonconventional neural units. , 2008, , .		4
52	Foundations of Nonconventional Neural Units and their Classification. International Journal of Cognitive Informatics and Natural Intelligence, 2008, 2, 29-43.	0.4	8
53	Foundation of Notation and Classification of Nonconventional Static and Dynamic Neural Units. , 2007, , .		11
54	STABLE NEURAL ARCHITECTURE OF DYNAMIC NEURAL UNITS WITH ADAPTIVE TIME DELAYS. , 2006, , .		3

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55	Neural Network Processing of Observer Generated Residuals in Fault Diagnosis of Time Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 7760-7765.	0.4	1