Sergey A Shchanikov

List of Publications by Year
in descending order

30	394	1684188 5	1372567 10
papers	citations	h-index	g-index

30	30	30	211
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Silicon-Compatible Memristive Devices Tailored by Laser and Thermal Treatments. Journal of Low Power Electronics and Applications, 2022, 12, 14.	2.0	3
2	Designing a bidirectional, adaptive neural interface incorporating machine learning capabilities and memristor-enhanced hardware. Chaos, Solitons and Fractals, 2021, 142, 110504.	5.1	50
3	Fault Tolerance of Memristor-Based Perceptron Network for Neural Interface. BioNanoScience, 2021, 11, 84-90.	3.5	8
4	Noise-assisted persistence and recovery of memory state in a memristive spiking neuromorphic network. Chaos, Solitons and Fractals, 2021, 146, 110890.	5.1	76
5	Design and Hardware Implementation of Memristor-Based Multilayer Perceptron Network for a Bidirectional Adaptive Neural Interface. , 2021, , .		1
6	Memristive Concept of a High-Dimensional Neuron. , 2021, , .		2
7	Methodology for Hardware-in-the-Loop Simulation of Memristive Neuromorphic Systems. Nanobiotechnology Reports, 2021, 16, 782-789.	0.6	4
8	Neurohybrid Memristive CMOS-Integrated Systems for Biosensors and Neuroprosthetics. Frontiers in Neuroscience, 2020, 14, 358.	2.8	143
9	The Research of Fault Tolerance of Memristor-Based Artificial Neural Networks. , 2019, , .		1
10	Design of Multilayer Perceptron Network Based on Metal-Oxide Memristive Devices. , 2019, , .		3
11	The influence of algorithms for tuning the parameters of neuromorphic systems on their fault tolerance. Journal of Physics: Conference Series, 2019, 1333, 032077.	0.4	0
12	Using simulation to define the tolerances for the information and physical parameters of memristors-based artificial neural networks. Journal of Physics: Conference Series, 2019, 1333, 062026.	0.4	6
13	Quantitative determination of fault tolerance of memristor-based artificial neural networks. Journal of Physics: Conference Series, 2019, 1333, 062027.	0.4	1
14	Advanced Techniques of Artificial Networks Design for Radio Signal Detection. Journal of Physics: Conference Series, 2018, 1015, 032168.	0.4	2
15	Determining the Fault Tolerance of MemristorsBased Neural Network Using Simulation and Design of Experiments. , 2018, , .		8
16	Modelling nanoscale objects in order to conduct an empirical research into their properties as part of an engineering system designed. Journal of Physics: Conference Series, 2017, 803, 012091.	0.4	0
17	Algorithm for Determining Optimum Operation Tolerances of Memristor-Based Artificial Neural Networks. , 2017, , .		4
18	Neural network algorithms for determining the values of signal parameters in radio-electronic hardware. , 2017, , .		1

#	Article	IF	Citations
19	Monitoring the phase progression of linear chirp by applying artificial neural networks. , 2016, , .		1
20	The research of operation accuracy of a memristor-based artificial neural network with an input signal containing noise and pulse interference. , 2016, , .		1
21	Numerical Simulation of Neural Network Components of Controlling and Measuring Systems. Applied Mechanics and Materials, 2015, 756, 507-512.	0.2	1
22	Neural network control over operation accuracy of memristor-based hardware. , 2015, , .		10
23	The research of memristor-based neural network components operation accuracy in control and communication systems. , 2015, , .		18
24	The method of tolerance increasing to internal and external noises for neural network devices. , 2014, , .		4
25	Infocommunication systems parameter monitoring by means of artificial neural network devices. , 2014, , .		4
26	Numerical simulation of neural network components of controlling and measuring systems. , 2014, , .		6
27	The development of a neuronetwork component for technical systems of mechanical engineering. , 2014, , .		7
28	Design of Artificial Neural Networks with a Specified Quality of Functioning. , 2014, , .		11
29	Development of a Neuronetwork Component for Technical Systems of Mechanical Engineering. Applied Mechanics and Materials, 0, 756, 689-694.	0.2	0
30	Toward Reflective Spiking Neural Networks Exploiting Memristive Devices. Frontiers in Computational Neuroscience, 0, 16, .	2.1	18