

# Erika Covi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7410309/publications.pdf>

Version: 2024-02-01

33  
papers

776  
citations

623188

14  
h-index

887659

17  
g-index

33  
all docs

33  
docs citations

33  
times ranked

837  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ferroelectric-based synapses and neurons for neuromorphic computing. <i>Neuromorphic Computing and Engineering</i> , 2022, 2, 012002.	2.8	36
2	Challenges and Perspectives for Energy-efficient Brain-inspired Edge Computing Applications (Invited) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf</i>		3
3	Neuromorphic Motion Detection and Orientation Selectivity by Volatile Resistive Switching Memories. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000224.	3.3	45
4	Ferroelectric Tunneling Junctions for Edge Computing. , 2021, , .		8
5	Adaptive Extreme Edge Computing for Wearable Devices. <i>Frontiers in Neuroscience</i> , 2021, 15, 611300.	1.4	67
6	Switching Dynamics of Ag-Based Filamentary Volatile Resistive Switching Devicesâ€™Part I: Experimental Characterization. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 4335-4341.	1.6	28
7	Switching Dynamics of Ag-Based Filamentary Volatile Resistive Switching Devicesâ€™Part II: Mechanism and Modeling. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 4342-4349.	1.6	22
8	Combining Accuracy and Plasticity in Convolutional Neural Networks Based on Resistive Memory Arrays for Autonomous Learning. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2021, 7, 132-140.	1.1	1
9	A SiOx RRAM-Based Hardware with Spike Frequency Adaptation for Power-Saving Continual Learning in Convolutional Neural Networks. , 2020, , .		5
10	Volatile Resistive Switching Memory Based on Ag Ion Drift/Diffusion Part I: Numerical Modeling. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3795-3801.	1.6	45
11	Volatile Resistive Switching Memory Based on Ag Ion Drift/Diffusionâ€™Part II: Compact Modeling. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3802-3808.	1.6	34
12	Stimulated Ionic Telegraph Noise in Filamentary Memristive Devices. <i>Scientific Reports</i> , 2019, 9, 6310.	1.6	20
13	A Volatile RRAM Synapse for Neuromorphic Computing. , 2019, , .		10
14	Modeling of switching speed and retention time in volatile resistive switching memory by ionic drift and diffusion. , 2019, , .		6
15	Extended memory lifetime in spiking neural networks employing memristive synapses with nonlinear conductance dynamics. <i>Nanotechnology</i> , 2019, 30, 015102.	1.3	33
16	Physics-based modeling of volatile resistive switching memory (RRAM) for crosspoint selector and neuromorphic computing. , 2018, , .		16
17	Spike-driven threshold-based learning with memristive synapses and neuromorphic silicon neurons. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 344003.	1.3	23
18	Evidence of soft bound behaviour in analogue memristive devices for neuromorphic computing. <i>Scientific Reports</i> , 2018, 8, 7178.	1.6	54

#	ARTICLE	IF	CITATIONS
19	(Invited) Analog HfO <sub>2</sub> -RRAM Switches for Neural Networks. ECS Transactions, 2017, 75, 85-94.	0.3	15
20	Analog Memristive Synapse in Spiking Networks Implementing Unsupervised Learning. Frontiers in Neuroscience, 2016, 10, 482.	1.4	142
21	HfO <sub>2</sub> -based memristors for neuromorphic applications. , 2016, , .		32
22	Experimental study of gradual/abrupt dynamics of HfO <sub>2</sub> -based memristive devices. Applied Physics Letters, 2016, 109, .	1.5	49
23	A circuit for linearly decreasing temperature SET programming of PCM based on Ge-rich GST. , 2015, , .		0
24	Gradual set dynamics in HfO <sub>2</sub> -based memristor driven by sub-threshold voltage pulses. , 2015, , .		15
25	Synaptic potentiation and depression in Al:HfO <sub>2</sub> -based memristor. Microelectronic Engineering, 2015, 147, 41-44.	1.1	53
26	Compact model for phase change memory cells. , 2014, , .		3
27	Temperature study of high-drive capability buffer for phase change memories. , 2014, , .		1
28	On-Wafer Analog Pulse Generator for Fast Characterization and Parametric Test of Resistive Switching Memories. IEEE Transactions on Semiconductor Manufacturing, 2014, 27, 134-150.	1.4	3
29	Optimal programming with voltage-controlled temperature profile to reduce SET state distribution dispersion in PCM. , 2014, , .		3
30	Automatic trimming procedure to enhance the accuracy of on-chip analog pulse generators. , 2013, , .		1
31	On-wafer integrated system for fast characterization and parametric test of new-generation Non Volatile Memories. , 2013, , .		2
32	High-swing buffer for programmable resistive memories. , 2013, , .		1
33	High-drive capability buffer for highly variable resistive loads. , 2012, , .		0