Changjin Wan

List of Publications by Year in Descending Order

74 papers	3,787 citations	31 h-index	61 g-index
80 ext. papers	4,853 ext. citations	11.2 avg, IF	5.7 L-index

#	Paper	IF	Citations
74	Photoelectric Synapse Based on InGaZnO Nanofibers for High Precision Neuromorphic Computing. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	0
73	IGZO-based neuromorphic transistors with temperature-dependent synaptic plasticity and spiking logics. *Science China Information Sciences*, **2022**, 65, 1	3.4	2
72	A Photoelectric Spiking Neuron for Visual Depth Perception.. *Advanced Materials*, **2022**, e2201895	24	10
71	HfZrOx-based capacitive synapses with highly linear and symmetric multilevel characteristics for neuromorphic computing. *Applied Physics Letters*, **2022**, 120, 113504	3.4	1
70	Neuromorphic Perceptual Systems with Emerging Devices **2022**, 217-233		
69	Mechanically Durable Memristor Arrays Based on a Discrete Structure Design. *Advanced Materials*, **2021**, e2106212	24	5
68	Electrolyte-gated neuromorphic transistors for brain-like dynamic computing. *Journal of Applied Physics*, **2021**, 130, 190904	2.5	8
67	Highly Thermal-Wet Comfortable and Conformal Silk-Based Electrodes for On-Skin Sensors with Sweat Tolerance. *ACS Nano*, **2021**, 15, 9955-9966	16.7	21
66	Artificial Skin Perception. *Advanced Materials*, **2021**, 33, e2003014	24	78
65	Spontaneous Polarity Flipping in a 2D Heterobilayer Induced by Fluctuating Interfacial Carrier Flows. *Nano Letters*, **2021**, 21, 6773-6780	11.5	1
64	Indium-Gallium-Zinc-Oxide Based Photoelectric Neuromorphic Transistors for Modulable Photoexcited Corneal Nociceptor Emulation. *Advanced Electronic Materials*, **2021**, 7, 2100487	6.4	5
63	Freestanding multi-gate IZO-based neuromorphic transistors on composite electrolyte membranes. *Flexible and Printed Electronics*, **2021**, 6, 044008	3.1	1
62	A Smarter Pavlovian Dog with Optically Modulated Associative Learning in an Organic Ferroelectric Neuromem.. *Research*, **2021**, 2021, 9820502	7.8	4
61	High-Performance Amorphous InGaZnO Thin-Film Transistor Gated by HfAlOx Dielectric With Ultralow Subthreshold Swing. *IEEE Transactions on Electron Devices*, **2021**, 68, 6154-6158	2.9	3
60	An On-Skin Electrode with Anti-Epidermal-Surface-Lipid Function Based on a Zwitterionic Polymer Brush. *Advanced Materials*, **2020**, 32, e2001130	24	35
59	Locally coupled electromechanical interfaces based on cytoadhesion-inspired hybrids to identify muscular excitation-contraction signatures. *Nature Communications*, **2020**, 11, 2183	17.4	31
58	Bioinspired Ionic Sensory Systems: The Successor of Electronics. *Advanced Materials*, **2020**, 32, e2000218	24	35

57	Gesture recognition using a bioinspired learning architecture that integrates visual data with somatosensory data from stretchable sensors. *Nature Electronics*, **2020**, 3, 563-570	28.4	137
56	Adhesive Biocomposite Electrodes on Sweaty Skin for Long-Term Continuous Electrophysiological Monitoring **2020**, 2, 478-484		55
55	An Artificial Somatic Reflex Arc. *Advanced Materials*, **2020**, 32, e1905399	24	64
54	Emerging Devices for Biologically Accurate Neuron. *ACS Applied Electronic Materials*, **2020**, 2, 389-397	4	4
53	2D Material Chemistry: Graphdiyne-based Biochemical Sensing. *Chemical Research in Chinese Universities*, **2020**, 36, 622-630	2.2	60
52	Devising Materials Manufacturing Toward Lab-to-Fab Translation of Flexible Electronics. *Advanced Materials*, **2020**, 32, e2001903	24	23
51	An artificial sensory neuron with visual-haptic fusion. *Nature Communications*, **2020**, 11, 4602	17.4	55
50	Artificial Sensory Memory. *Advanced Materials*, **2020**, 32, e1902434	24	98
49	Water-Resistant Conformal Hybrid Electrodes for Aquatic Endurable Electrocardiographic Monitoring. *Advanced Materials*, **2020**, 32, e2001496	24	66
48	Differential Homeostasis of Sessile and Pendant Epithelium Reconstituted in a 3D-Printed "GeminiChip". *Advanced Materials*, **2019**, 31, e1900514	24	11
47	Mechanocombinatorially Screening Sensitivity of Stretchable Strain Sensors. *Advanced Materials*, **2019**, 31, e1903130	24	47
46	High-Transconductance Stretchable Transistors Achieved by Controlled Gold Microcrack Morphology. *Advanced Electronic Materials*, **2019**, 5, 1900347	6.4	33
45	The Rise of Bioinspired Ionotronics. *Advanced Intelligent Systems*, **2019**, 1, 1900073	6	25
44	Conclusion and Perspective. *Springer Theses*, **2019**, 99-101	0.1	
43	Electric-Double-Layer Coupled Oxide-Based Neuromorphic Transistors Studies. *Springer Theses*, **2019**,	0.1	1
42	Oxide Based EDL Transistors for Mimicking Synapse Functions. *Springer Theses*, **2019**, 55-75	0.1	
41	Oxide-Based EDL Transistors for Neuromorphic Computing Applications. *Springer Theses*, **2019**, 77-97	0.1	
40	Fabrications and Characterizations of Oxide Based EDL Transistors. *Springer Theses*, **2019**, 33-53	0.1	

39	Highly Stretchable, Elastic, and Ionic Conductive Hydrogel for Artificial Soft Electronics. *Advanced Functional Materials*, **2019**, 29, 1806220	15.6	342
38	Plasticizing Silk Protein for On-Skin Stretchable Electrodes. *Advanced Materials*, **2018**, 30, e1800129	24	160
37	Auxetic Mechanical Metamaterials to Enhance Sensitivity of Stretchable Strain Sensors. *Advanced Materials*, **2018**, 30, e1706589	24	213
36	HodgkinHuxley Artificial Synaptic Membrane Based on Protonic/Electronic Hybrid Neuromorphic Transistors. *Advanced Biology*, **2018**, 2, 1700198	3.5	30
35	Mediating Short-Term Plasticity in an Artificial Memristive Synapse by the Orientation of Silica Mesopores. *Advanced Materials*, **2018**, 30, e1706395	24	69
34	Electrolyte Gated Oxide Pseudodiode for Inhibitory Synapse Applications. *Advanced Electronic Materials*, **2018**, 4, 1800371	6.4	8
33	An Artificial Sensory Neuron with Tactile Perceptual Learning. *Advanced Materials*, **2018**, 30, e1801291	24	216
32	Enhancing the Matrix Addressing of Flexible Sensory Arrays by a Highly Nonlinear Threshold Switch. *Advanced Materials*, **2018**, 30, e1802516	24	47
31	Multifunctional Logic Demonstrated in a Flexible Multigate Oxide-Based Electric-Double-Layer Transistor on Paper Substrate. *Advanced Electronic Materials*, **2017**, 3, 1600509	6.4	30
30	3D Graphene Oxide Micropatterns Achieved by Roller-Assisted Microcontact Printing Induced Interface Integral Peel and Transfer. *Advanced Materials Interfaces*, **2017**, 4, 1600867	4.6	5
29	3D Printed Photoresponsive Devices Based on Shape Memory Composites. *Advanced Materials*, **2017**, 29, 1701627	24	257
28	Ultrafast Formation of Free-Standing 2D Carbon Nanotube Thin Films through Capillary Force Driving Compression on an Air/Water Interface. *Chemistry of Materials*, **2016**, 28, 7125-7133	9.6	47
27	Proton Conducting Graphene Oxide/Chitosan Composite Electrolytes as Gate Dielectrics for New-Concept Devices. *Scientific Reports*, **2016**, 6, 34065	4.9	26
26	Short-Term Synaptic Plasticity Regulation in Solution-Gated Indium-Gallium-Zinc-Oxide Electric-Double-Layer Transistors. *ACS Applied Materials & Interfaces*, **2016**, 8, 9762-8	9.5	63
25	. *IEEE Electron Device Letters*, **2016**, 37, 591-594	4.4	7
24	Proton-Conducting Graphene Oxide-Coupled Neuron Transistors for Brain-Inspired Cognitive Systems. *Advanced Materials*, **2016**, 28, 3557-63	24	181
23	Flexible Metal Oxide/Graphene Oxide Hybrid Neuromorphic Transistors on Flexible Conducting Graphene Substrates. *Advanced Materials*, **2016**, 28, 5878-85	24	123
22	Excitatory Post-Synaptic Potential Mimicked in Indium-Zinc-Oxide Synaptic Transistors Gated by Methyl Cellulose Solid Electrolyte. *Scientific Reports*, **2016**, 6, 38578	4.9	7

21	Organic/inorganic hybrid synaptic transistors gated by proton conducting methylcellulose films. *Applied Physics Letters*, **2016**, 108, 043508	3.4	33
20	Indium-Zinc-Oxide Neuron Thin Film Transistors Laterally Coupled by Sodium Alginate Electrolytes. *IEEE Transactions on Electron Devices*, **2016**, 63, 3958-3963	2.9	12
19	Flexible Proton-Gated Oxide Synaptic Transistors on Si Membrane. *ACS Applied Materials & Interfaces*, **2016**, 8, 21770-5	9.5	41
18	2D Janus Hybrid Materials of Polymer-Grafted Carbon Nanotube/Graphene Oxide Thin Film as Flexible, Miniature Electric Carpet. *Advanced Functional Materials*, **2015**, 25, 2428-2435	15.6	38
17	Transient characteristics for proton gating in laterally coupled indium-zinc-oxide transistors. *ACS Applied Materials & Interfaces*, **2015**, 7, 6205-10	9.5	21
16	Hexamethylene diisocyanate as an electrolyte additive for high-energy density lithium ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 8246-8249	13	17
15	Flexible Sensory Platform Based on Oxide-based Neuromorphic Transistors. *Scientific Reports*, **2015** , 5, 18082	4.9	60
14	Multi-gate synergic modulation in laterally coupled synaptic transistors. *Applied Physics Letters*, **2015**, 107, 143502	3.4	25
13	Thin Films: 2D Janus Hybrid Materials of Polymer-Grafted Carbon Nanotube/Graphene Oxide Thin Film as Flexible, Miniature Electric Carpet (Adv. Funct. Mater. 16/2015). *Advanced Functional Materials*, **2015**, 25, 2479-2479	15.6	
12	Low-voltage protonic/electronic hybrid indium zinc oxide synaptic transistors on paper substrates. *Nanotechnology*, **2014**, 25, 094001	3.4	10
11	Artificial synapse network on inorganic proton conductor for neuromorphic systems. *Nature Communications*, **2014**, 5, 3158	17.4	495
10	Classical Conditioning Mimicked in Junctionless IZO Electric-Double-Layer Thin-Film Transistors. *IEEE Electron Device Letters*, **2014**, 35, 414-416	4.4	22
9	Laterally Coupled Synaptic Transistors Gated by Proton Conducting Sodium Alginate Films. *IEEE Electron Device Letters*, **2014**, 35, 672-674	4.4	9
8	Inorganic proton conducting electrolyte coupled oxide-based dendritic transistors for synaptic electronics. *Nanoscale*, **2014**, 6, 4491-7	7.7	48
7	Memory and learning behaviors mimicked in nanogranular SiO2-based proton conductor gated oxide-based synaptic transistors. *Nanoscale*, **2013**, 5, 10194-9	7.7	59
6	Tungsten oxide proton conducting films for low-voltage transparent oxide-based thin-film transistors. *Applied Physics Letters*, **2013**, 102, 052905	3.4	23
5	Proton induced multilevel storage capability in self-assembled indium-zinc-oxide thin-film transistors. *Applied Physics Letters*, **2013**, 103, 113503	3.4	7
4	Short-Term Memory to Long-Term Memory Transition Mimicked in IZO Homojunction Synaptic Transistors. *IEEE Electron Device Letters*, **2013**, 34, 1581-1583	4.4	30

3	Synaptic Behaviors Mimicked in Flexible Oxide-Based Transistors on Plastic Substrates. *IEEE Electron Device Letters*, **2013**, 34, 1433-1435	4.4	64
2	A Spiking Stochastic Neuron Based on Stacked InGaZnO Memristors. *Advanced Electronic Materials*,2100518	6.4	5
1	Recent advances in emerging neuromorphic computing and perception devices. *Journal Physics D: Applied Physics*,	3	5