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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

107 papers	2,307 citations	26 h-index	42 g-index
112 ext. papers	2,896 ext. citations	5 avg, IF	5.48 L-index

#	Paper	IF	Citations
107	2D MoS Neuromorphic Devices for Brain-Like Computational Systems. <i>Small</i> , 2017 , 13, 1700933	11	200
106	2D electric-double-layer phototransistor for photoelectronic and spatiotemporal hybrid neuromorphic integration. <i>Nanoscale</i> , 2019 , 11, 1360-1369	7.7	132
105	Ultralow-voltage transparent electric-double-layer thin-film transistors processed at room-temperature. <i>Applied Physics Letters</i> , 2009 , 95, 152114	3.4	76
104	Coplanar Multigate MoS Electric-Double-Layer Transistors for Neuromorphic Visual Recognition. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 25943-25948	9.5	74
103	A Sub-10 nm Vertical Organic/Inorganic Hybrid Transistor for Pain-Perceptual and Sensitization-Regulated Nociceptor Emulation. <i>Advanced Materials</i> , 2020 , 32, e1906171	24	74
102	Transient security transistors self-supported on biodegradable natural-polymer membranes for brain-inspired neuromorphic applications. <i>Nanoscale</i> , 2018 , 10, 14893-14901	7.7	69
101	PbS Nanoparticles for Ultrashort Pulse Generation in Optical Communication Region. <i>Particle and Particle Systems Characterization</i> , 2018 , 35, 1800341	3.1	62
100	Bidirectionally-triggered 2D MoS ₂ synapse through coplanar-gate electric-double-layer polymer coupling for neuromorphic complementary spatiotemporal learning. <i>Organic Electronics</i> , 2018 , 63, 120-128	3.5	53
99	Low-voltage electric-double-layer paper transistors gated by microporous SiO ₂ processed at room temperature. <i>Applied Physics Letters</i> , 2009 , 95, 222108	3.4	50
98	Indium-tin-oxide thin film transistor biosensors for label-free detection of avian influenza virus H5N1. <i>Analytica Chimica Acta</i> , 2013 , 773, 83-88	6.6	49
97	Microporous SiO ₂ with huge electric-double-layer capacitance for low-voltage indium tin oxide thin-film transistors. <i>Applied Physics Letters</i> , 2009 , 95, 222905	3.4	48
96	One-Shadow-Mask Self-Assembled Ultralow-Voltage Coplanar Homo Junction Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2010 , 31, 1137-1139	4.4	47
95	Thermal oxidation of Ni films for p-type thin-film transistors. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 6875-8	3.6	46
94	Vertical 0D-Perovskite/2D-MoS van der Waals Heterojunction Phototransistor for Emulating Photoelectric-Synergistically Classical Pavlovian Conditioning and Neural Coding Dynamics. <i>Small</i> , 2020 , 16, e2005217	11	46
93	Proton-electron-coupled MoS ₂ synaptic transistors with a natural renewable biopolymer neurotransmitter for brain-inspired neuromorphic learning. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 682-691	7.1	43
92	Low-voltage transparent electric-double-layer ZnO-based thin-film transistors for portable transparent electronics. <i>Applied Physics Letters</i> , 2010 , 96, 043114	3.4	42
91	Flexible protonic/electronic coupled neuron transistors self-assembled on paper substrates for logic applications. <i>Applied Physics Letters</i> , 2013 , 102, 093509	3.4	35

90	Lightweight flexible indium-free oxide TFTs with AND logic function employing chitosan biopolymer as self-supporting layer. <i>Solid-State Electronics</i> , 2019 , 153, 16-22	1.7	34
89	Chitosan-gated low-voltage transparent indium-free aluminum-doped zinc oxide thin-film transistors. <i>Organic Electronics</i> , 2016 , 33, 311-315	3.5	33
88	Vertical organic-inorganic hybrid transparent oxide TFTs gated by biodegradable electric-double-layer biopolymer. <i>Organic Electronics</i> , 2017 , 44, 1-5	3.5	31
87	Photoelectric Visual Adaptation Based on 0D-CsPbBr ₃ -Quantum-Dots/2D-MoS ₂ Mixed-Dimensional Heterojunction Transistor. <i>Advanced Functional Materials</i> , 2021 , 31, 2010655	15.6	31
86	Low-voltage transparent SnO ₂ nanowire transistors gated by microporous SiO ₂ solid-electrolyte with improved polarization response. <i>Journal of Materials Chemistry</i> , 2010 , 20, 8010		30
85	Solution-processed natural gelatin was used as a gate dielectric for the fabrication of oxide field-effect transistors. <i>Organic Electronics</i> , 2016 , 38, 357-361	3.5	30
84	Junctionless Flexible Oxide-Based Thin-Film Transistors on Paper Substrates. <i>IEEE Electron Device Letters</i> , 2012 , 33, 65-67	4.4	28
83	In-plane-gate indium-tin-oxide thin-film transistors self-assembled on paper substrates. <i>Applied Physics Letters</i> , 2011 , 98, 113507	3.4	27
82	Hardware implementation of photoelectrically modulated dendritic arithmetic and spike-timing-dependent plasticity enabled by an ion-coupling gate-tunable vertical 0D-perovskite/2D-MoS hybrid-dimensional van der Waals heterostructure. <i>Nanoscale</i> , 2020 , 12, 21798-21811	7.7	27
81	A homogeneous p-n junction diode by selective doping of few layer MoSe using ultraviolet ozone for high-performance photovoltaic devices. <i>Nanoscale</i> , 2019 , 11, 13469-13476	7.7	26
80	Ion Migration Accelerated Reaction between Oxygen and Metal Halide Perovskites in Light and Its Suppression by Cesium Incorporation. <i>Advanced Energy Materials</i> , 2021 , 11, 2002552	21.8	26
79	Low-Voltage Organic/Inorganic Hybrid Transparent Thin-Film Transistors Gated by Chitosan-Based Proton Conductors. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1549-1551	4.4	25
78	Flexible Vertical Photogating Transistor Network with an Ultrashort Channel for In-Sensor Visual Nociceptor. <i>Advanced Functional Materials</i> , 2021 , 31, 2104327	15.6	25
77	The correlations of the electronic structure and film growth of 2,7-dioctyl[1]benzothieno[3,2-b]benzothiophene (C8-BTBT) on SiO. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 1669-1676	3.6	24
76	Low-voltage electric-double-layer MoS ₂ transistor gated via water solution. <i>Solid-State Electronics</i> , 2018 , 150, 8-15	1.7	24
75	Enhanced performance of multilayer MoS ₂ transistor employing a polymer capping layer. <i>Organic Electronics</i> , 2017 , 40, 75-78	3.5	23
74	Emerging uniform Cu ₂ O nanocubes for 251st harmonic ultrashort pulse generation. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 14386-14392	7.1	22
73	Interfacial electronic structures of MoOx/mixed perovskite photodetector. <i>Organic Electronics</i> , 2019 , 65, 162-169	3.5	22

72	Flexible Dual-Gate Oxide TFTs Gated by Chitosan Film on Paper Substrates. <i>IEEE Electron Device Letters</i> , 2013 , 34, 259-261	4.4	21
71	Chitosan solid electrolyte as electric double layer in multilayer MoS ₂ transistor for low-voltage operation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 2219-2225	1.6	21
70	Tuning the hysteresis voltage in 2D multilayer MoS ₂ FETs. <i>Physica B: Condensed Matter</i> , 2016 , 498, 76-81	2.8	21
69	Poly(vinyl alcohol)-gated junctionless Al-Zn-O phototransistor for photonic and electric hybrid neuromorphic computation. <i>Solid-State Electronics</i> , 2020 , 165, 107767	1.7	20
68	One-Volt Oxide Thin-Film Transistors on Paper Substrates Gated by SiO_2 -Based Solid Electrolyte With Controllable Operation Modes. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 2258-2263	2.9	20
67	Observation of abnormal mobility enhancement in multilayer MoS ₂ transistor by synergy of ultraviolet illumination and ozone plasma treatment. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017 , 87, 150-154	3	18
66	Polymer-Decorated 2D MoS ₂ Synaptic Transistors for Biological Bipolar Metaplasticities Emulation. <i>Chinese Physics Letters</i> , 2020 , 37, 088501	1.8	18
65	Transparent Junctionless Electric-Double-Layer Transistors Gated by a Reinforced Chitosan-Based Biopolymer Electrolyte. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 1951-1957	2.9	18
64	. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 547-552	2.9	18
63	Junctionless in-plane-gate transparent thin-film transistors. <i>Applied Physics Letters</i> , 2011 , 99, 193502	3.4	18
62	Tuning the threshold voltage from depletion to enhancement mode in a multilayer MoS ₂ transistor via oxygen adsorption and desorption. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 685-9	3.6	17
61	PbI-MoS Heterojunction: van der Waals Epitaxial Growth and Energy Band Alignment. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 4203-4208	6.4	16
60	Flexible Low-Voltage Electric-Double-Layer TFTs Self-Assembled on Paper Substrates. <i>IEEE Electron Device Letters</i> , 2011 , 32, 518-520	4.4	16
59	Self-Assembled In-Plane Gate Oxide-Based Homojunction Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2011 , 32, 500-502	4.4	16
58	Bio-inspired coplanar-gate-coupled ITO-free oxide-based transistors employing natural nontoxic bio-polymer electrolyte. <i>Organic Electronics</i> , 2016 , 37, 474-478	3.5	16
57	In situ surface modification of TiO ₂ by CaTiO ₃ to improve the UV stability and power conversion efficiency of perovskite solar cells. <i>Applied Physics Letters</i> , 2019 , 115, 213501	3.4	16
56	Initial photochemical stability in perovskite solar cells based on the Cu electrode and the appropriate charge transport layers. <i>Synthetic Metals</i> , 2018 , 246, 101-107	3.6	16
55	FeO nanoparticles as a saturable absorber for giant chirped pulse generation. <i>Beilstein Journal of Nanotechnology</i> , 2019 , 10, 1065-1072	3	15

54	Research progress on hybrid organic/inorganic perovskites for photo-applications. <i>Chinese Chemical Letters</i> , 2020 , 31, 3055-3064	8.1	15
53	From MoO ₂ @MoS ₂ Core/Shell Nanorods to MoS ₂ Nanobelts. <i>Physica Status Solidi (B): Basic Research</i> , 2018 , 255, 1800254	1.3	15
52	Famatinite Cu ₃ SbS ₄ nanocrystals as hole transporting material for efficient perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 7989-7993	7.1	14
51	Dual in-plane-gate oxide-based thin-film transistors with tunable threshold voltage. <i>Applied Physics Letters</i> , 2011 , 99, 113504	3.4	14
50	Fullerene (C ₆₀) interlayer modification on the electronic structure and the film growth of 2,7-dioctyl[1]benzothieno-[3,2-b]benzothiophene on SiO ₂ . <i>Synthetic Metals</i> , 2017 , 229, 1-6	3.6	13
49	Tailoring micro/nanostructured porous polytetrafluoroethylene surfaces for dual-reversible transition of wettability and transmittance. <i>Chemical Engineering Journal</i> , 2022 , 434, 134756	14.7	13
48	High-Sensitivity Terahertz Refractive Index Sensor in a Multilayered Structure with Graphene. <i>Nanomaterials</i> , 2020 , 10,	5.4	12
47	Vertical low-voltage oxide transistors gated by microporous SiO ₂ /LiCl composite solid electrolyte with enhanced electric-double-layer capacitance. <i>Applied Physics Letters</i> , 2010 , 97, 052104	3.4	12
46	Femtosecond Laser Thermal Accumulation-Triggered Micro-/Nanostructures with Patternable and Controllable Wettability Towards Liquid Manipulating.. <i>Nano-Micro Letters</i> , 2022 , 14, 97	19.5	12
45	Solution-processed ultra-flexible C8-BTBT organic thin-film transistors with the corrected mobility over 18 cm ² /(V s). <i>Science Bulletin</i> , 2020 , 65, 791-795	10.6	11
44	Energy Level Evolution and Oxygen Exposure of Fullerene/Black Phosphorus Interface. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5254-5261	6.4	11
43	Low-Voltage Oxide-Based Electric-Double-Layer TFTs Gated by Stacked SiO ₂ /Electrolyte/Chitosan Hybrid Dielectrics. <i>IEEE Electron Device Letters</i> , 2012 , 33, 848-850	4.4	11
42	A biopolymer-gated ionotronic junctionless oxide transistor array for spatiotemporal pain-perception emulation in nociceptor network.. <i>Nanoscale</i> , 2022 ,	7.7	11
41	Recent Progress on Neuromorphic Synapse Electronics: From Emerging Materials, Devices, to Neural Networks. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 8003-8015	1.3	11
40	Interface Energy-Level Alignment between Black Phosphorus and F16CuPc Molecular Films. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 10443-10450	3.8	10
39	Low-power logic computing realized in a single electric-double-layer MoS ₂ transistor gated with polymer electrolyte. <i>Solid-State Electronics</i> , 2018 , 144, 1-6	1.7	10
38	Low-Voltage Transparent Indium/Zinc Oxide Coplanar Homo Junction TFTs Self-Assembled on Inorganic Proton Conductors. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 764-768	2.9	9
37	Ultralow-Voltage Transparent In ₂ O ₃ Nanowire Electric-Double-Layer Transistors. <i>IEEE Electron Device Letters</i> , 2011 , 32, 315-317	4.4	9

36	Type-II Interface Band Alignment in the vdW Pbl-MoSe Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32099-32105	9.5	8
35	Dual-Gate MoS2 FET With a Coplanar-Gate Engineering. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 573-577	2.9	8
34	Modeling of low-voltage oxide-based electric-double-layer thin-film transistors fabricated at room temperature. <i>Applied Physics Letters</i> , 2011 , 98, 093506	3.4	8
33	Recent progress on two-dimensional neuromorphic devices and artificial neural network. <i>Current Applied Physics</i> , 2021 , 31, 182-198	2.6	8
32	Electrostatic modification of oxide semiconductors by electric double layers of microporous SiO2-based solid electrolyte. <i>Journal of Applied Physics</i> , 2011 , 109, 054501	2.5	7
31	Graphene-based low-threshold and tunable optical bistability in one-dimensional photonic crystal Fano resonance heterostructure at optical communication band. <i>Optics Express</i> , 2020 , 28, 34948-34959	3.3	7
30	Polarization-perceptual anisotropic two-dimensional ReS neuro-transistor with reconfigurable neuromorphic vision.. <i>Materials Horizons</i> , 2022 ,	14.4	7
29	Low-Voltage Electric-Double-Layer TFTs on SiO_2 -Covered Paper Substrates. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1543-1545	4.4	6
28	Photoemission studies of C8-BTBT/La0.67Sr0.33MnO3 interface. <i>Synthetic Metals</i> , 2020 , 260, 116261	3.6	6
27	Effective passivation of black phosphorus against atmosphere by quasi-monolayer of F4TCNQ molecules. <i>Applied Physics Letters</i> , 2020 , 117, 061602	3.4	6
26	Interface Electronic Structure between Au and Black Phosphorus. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 18405-18411	3.8	5
25	Low-Voltage Oxide Homojunction Electric-Double-Layer Transistors Gated by Ion-Incorporated Inorganic Solid Electrolytes. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 110201	1.4	5
24	Anomalous Threshold Voltage Shift and Surface Passivation of Transparent IndiumZincOxide Electric-Double-Layer TFTs. <i>IEEE Electron Device Letters</i> , 2011 , 32, 910-912	4.4	5
23	Lead sulfide nanoparticles for dual-wavelength ultrashort pulse generation. <i>Nanotechnology</i> , 2019 , 31, 085202	3.4	5
22	Modification of C60 nano-interlayers on organic field-effect transistors based on 2,7-diocetyl[1]benzothieno-[3,2-b]benzothiophene (C8-BTBT)/SiO2. <i>Results in Physics</i> , 2020 , 19, 103590	3.7	4
21	Automated elicitation of inclusion dependencies from the source code for database transactions. <i>Journal of Software: Evolution and Process</i> , 2003 , 15, 379-392		4
20	Software cost estimation through conceptual requirement 2003 ,		4
19	Recent Progress in Anisotropic 2D Semiconductors: From Material Properties to Photoelectric Detection. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021 , 218, 2100204	1.6	4

18	The effect of air exposure on device performance of flexible C8-BTBT organic thin-film transistors with hygroscopic insulators. <i>Science China Materials</i> , 2020 , 63, 2551-2559	7.1	3
17	Modification of an ultrathin C interlayer on the electronic structure and molecular packing of C8-BTBT on HOPG. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 25264-25271	3.6	3
16	High-sensitivity detection of Concanavalin A using MoS ₂ -based field effect transistor biosensor. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 245401	3	3
15	2D transition metal dichalcogenides for neuromorphic vision system. <i>Journal of Semiconductors</i> , 2021 , 42, 090203	2.3	3
14	Electronic Structures and Nanofilm Growth of 2,7-Dioctyl[1]Benzothieno[3,2-b]Benzothiophene on Black Phosphorus. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 4332-4336	1.3	2
13	Low-Voltage Oxide-Based TFTs Self-Assembled on Paper Substrates With Tunable Threshold Voltage. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 380-384	2.9	2
12	Microporous SiO ₂ -based solid electrolyte with improved polarization response for 0.8 V transparent thin-film transistors. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 295103	3	2
11	. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1710-1712	4.4	2
10	Low threshold optical bistability in graphene/waveguide hybrid structure at terahertz frequencies. <i>Optics Communications</i> , 2021 , 499, 127282	2	2
9	. <i>IEEE Electron Device Letters</i> , 2010 ,	4.4	1
8	Density-of-State and Trap Modeling of Low-Voltage Electric-Double-Layer TFTs. <i>IEEE Electron Device Letters</i> , 2011 , 32, 512-514	4.4	1
7	Anisotropic 2D materials for post-Moore photoelectric devices. <i>Journal of Semiconductors</i> , 2022 , 43, 010201	2.1	1
6	Enhanced and tunable terahertz spin hall effect of reflected light due to tamm plasmons with topological insulators. <i>Results in Physics</i> , 2020 , 19, 103392	3.7	1
5	Neuromorphic Photoelectric Devices: Vertical 0D-Perovskite/2D-MoS ₂ van der Waals Heterojunction Phototransistor for Emulating Photoelectric-Synergistically Classical Pavlovian Conditioning and Neural Coding Dynamics (Small 45/2020). <i>Small</i> , 2020 , 16, 2070244	11	1
4	Water-induced dual ultrahigh mobilities over 400 cm ² V ⁻¹ s ⁻¹ in 2D MoS ₂ transistors for ultralow-voltage operation and photoelectric synapse perception. <i>Journal of Materials Chemistry C</i> , 2022 , 10, 5249-5256	7.1	1
3	Modification of FA _{0.85} MA _{0.15} Pb(I _{0.85} Br _{0.15}) ₃ Films by NH ₂ -POSS. <i>Crystals</i> , 2021 , 11, 1544	2.3	1
2	From Pain to Fear Recognition via Pavlovian Learning in an Organic-Inorganic Hybrid Neuromorphic Transistor. <i>Advanced Electronic Materials</i> , 2021 , 1, 2101174	6.4	0
1	MoS ₂ -based Multiterminal Ionic Transistor with Orientation-dependent STDP Learning Rules. <i>Solid-State Electronics</i> , 2022 , 108386	1.7	0

