Huipeng Chen

List of Publications by Citations

Source: https://exaly.com/author-pdf/7997748/huipeng-chen-publications-by-citations.pdf
Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112 papers	1,920 citations	26 h-index	37 g-index
118 ext. papers	2,501 ext. citations	8.3 avg, IF	5.32 L-index

#	Paper	IF	Citations
112	High Performance Flexible Nonvolatile Memory Based on Vertical Organic Thin Film Transistor. *Advanced Functional Materials*, **2017**, 27, 1703541	15.6	82
111	Self-powered artificial synapses actuated by triboelectric nanogenerator. *Nano Energy*, **2019**, 60, 377-384	17.1	73
110	The miscibility and depth profile of PCBM in P3HT: thermodynamic information to improve organic photovoltaics. *Physical Chemistry Chemical Physics*, **2012**, 14, 5635-41	3.6	68
109	Precise Structural Development and its Correlation to Function in Conjugated Polymer: Fullerene Thin Films by Controlled Solvent Annealing. *Advanced Functional Materials*, **2013**, 23, 1701-1710	15.6	64
108	Boost up the electrical performance of InGaZnO thin film transistors by inserting an ultrathin InGaZnO:H layer. *Applied Physics Letters*, **2016**, 108, 213501	3.4	51
107	Synaptic Transistor Capable of Accelerated Learning Induced by Temperature-Facilitated Modulation of Synaptic Plasticity. *ACS Applied Materials & Interfaces*, **2019**, 11, 46008-46016	9.5	50
106	The Role of Fullerene Mixing Behavior in the Performance of Organic Photovoltaics: PCBM in Low-Bandgap Polymers. *Advanced Functional Materials*, **2014**, 24, 140-150	15.6	50
105	High Performance Flexible Organic Phototransistors with Ultrashort Channel Length. *ACS Photonics* , **2018**, 5, 3712-3722	6.3	47
104	Inkjet-Printed Vertical Organic Field-Effect Transistor Arrays and Their Image Sensors. *ACS Applied Materials & Interfaces*, **2018**, 10, 30587-30595	9.5	47
103	A multi-input light-stimulated synaptic transistor for complex neuromorphic computing. *Journal of Materials Chemistry C*, **2019**, 7, 12523-12531	7.1	46
102	Flexible ultra-short channel organic ferroelectric non-volatile memory transistors. *Journal of Materials Chemistry C*, **2019**, 7, 998-1005	7.1	43
101	Effects of Nitrogen and Hydrogen Codoping on the Electrical Performance and Reliability of InGaZnO Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2017**, 9, 10798-10804	9.5	41
100	Electret-Based Organic Synaptic Transistor for Neuromorphic Computing. *ACS Applied Materials & Interfaces*, **2020**, 12, 15446-15455	9.5	41
99	Tuning the Morphology and Performance of Low Bandgap Polymer:Fullerene Heterojunctions via Solvent Annealing in Selective Solvents. *Advanced Functional Materials*, **2014**, 24, 5129-5136	15.6	41
98	Stretchable synaptic transistors with tunable synaptic behavior. *Nano Energy*, **2020**, 75, 104952	17.1	40
97	Self-powered high-sensitivity sensory memory actuated by triboelectric sensory receptor for real-time neuromorphic computing. *Nano Energy*, **2020**, 75, 104930	17.1	38
96	High performance flexible multilevel optical memory based on a vertical organic field effect transistor with ultrashort channel length. *Journal of Materials Chemistry C*, **2019**, 7, 9229-9240	7.1	34

95	Self-powered artificial auditory pathway for intelligent neuromorphic computing and sound detection. *Nano Energy*, **2020**, 78, 105403	17.1	34
94	Artificial multisensory integration nervous system with haptic and iconic perception behaviors. *Nano Energy*, **2021**, 85, 106000	17.1	31
93	Correlation of polymeric compatibilizer structure to its impact on the morphology and function of P3HT:PCBM bulk heterojunctions. *Journal of Materials Chemistry A*, **2013**, 1, 5309	13	30
92	Control of morphology and function of low band gap polymer–bis-fullerene mixed heterojunctions in organic photovoltaics with selective solvent vapor annealing. *Journal of Materials Chemistry A*, **2014**, 2, 9883	13	28
91	Solution-processed metal oxide arrays using femtosecond laser ablation and annealing for thin-film transistors. *Journal of Materials Chemistry C*, **2017**, 5, 9273-9280	7.1	28
90	Defect Self-Compensation for High-Mobility Bilayer InGaZnO/In2O3 Thin-Film Transistor. *Advanced Electronic Materials*, **2019**, 5, 1900125	6.4	27
89	High-Performance Low-Voltage Flexible Photodetector Arrays Based on All-Solid-State Organic Electrochemical Transistors for Photosensing and Imaging. *ACS Applied Materials & Interfaces*, **2019**, 11, 20214-20224	9.5	26
88	Enhanced Reliability of InGaZnO Thin-Film Transistors Through Design of Dual Passivation Layers. *IEEE Transactions on Electron Devices*, **2018**, 65, 2844-2849	2.9	26
87	Nanoscale channel organic ferroelectric synaptic transistor array for high recognition accuracy neuromorphic computing. *Nano Energy*, **2021**, 85, 106010	17.1	26
86	Gelatin-hydrogel based organic synaptic transistor. *Organic Electronics*, **2019**, 75, 105409	3.5	24
85	Morphology of a Ternary Blend Solar Cell Based on Small Molecule:Conjugated Polymer:Fullerene Fabricated by Blade Coating. *Advanced Functional Materials*, **2017**, 27, 1703268	15.6	24
84	High-Performance All-Solution-Processed Flexible Photodetector Arrays Based on Ultrashort Channel Amorphous Oxide Semiconductor Transistors. *ACS Applied Materials & Interfaces*, **2018**, 10, 40631-40640	9.5	24
83	Improving Charge Mobility of Polymer Transistors by Judicious Choice of the Molecular Weight of Insulating Polymer Additive. *Journal of Physical Chemistry C*, **2016**, 120, 17282-17289	3.8	23
82	The Impact of Fullerene Structure on Its Miscibility with P3HT and Its Correlation of Performance in Organic Photovoltaics. *Chemistry of Materials*, **2014**, 26, 3993-4003	9.6	23
81	A one-structure-layer PDMS/Mxenes based stretchable triboelectric nanogenerator for simultaneously harvesting mechanical and light energy. *Nano Energy*, **2021**, 86, 106118	17.1	23
80	Solution-Processed Organic Thin-Film Transistor Arrays with the Assistance of Laser Ablation. *ACS Applied Materials & Interfaces*, **2017**, 9, 3849-3856	9.5	22
79	Improving device performance of n-type organic field-effect transistors via doping with a p-type organic semiconductor. *Journal of Materials Chemistry C*, **2019**, 7, 4543-4550	7.1	22
78	High performance inkjet-printed metal oxide thin film transistors via addition of insulating polymer with proper molecular weight. *Applied Physics Letters*, **2018**, 112, 012102	3.4	21

77	High-Performance All-Inorganic Perovskite-Quantum-Dot-Based Flexible Organic Phototransistor Memory with Architecture Design. *Advanced Electronic Materials*, **2019**, 5, 1900864	6.4	21
76	High-Performance Nonvolatile Organic Transistor Memory Using Quantum Dots-Based Floating Gate. *IEEE Transactions on Electron Devices*, **2017**, 64, 3816-3821	2.9	21
75	A multilevel vertical photonic memory transistor based on organic semiconductor/inorganic perovskite quantum dot blends. *Journal of Materials Chemistry C*, **2020**, 8, 2861-2869	7.1	21
74	High-Performance Quantum-Dot Light-Emitting Transistors Based on Vertical Organic Thin-Film Transistors. *ACS Applied Materials & Interfaces*, **2019**, 11, 35888-35895	9.5	19
73	High-performance Nonvolatile Organic Photoelectronic Transistor Memory Based on Bulk Heterojunction Structure. *ACS Applied Materials & Interfaces*, **2020**, 12, 31716-31724	9.5	19
72	Design of Highly Stable Tungsten-Doped IZO Thin-Film Transistors With Enhanced Performance. *IEEE Transactions on Electron Devices*, **2018**, 65, 1018-1022	2.9	19
71	Distinguishing the Importance of Fullerene Phase Separation from Polymer Ordering in the Performance of Low Band Gap Polymer:Bis-Fullerene Heterojunctions. *Advanced Functional Materials*, **2014**, 24, 7284-7290	15.6	19
70	Flexible metal oxide synaptic transistors using biomass-based hydrogel as gate dielectric. *Journal Physics D: Applied Physics*, **2019**, 52, 484002	3	18
69	High-Performance Organic Electrochemical Transistors with Nanoscale Channel Length and Their Application to Artificial Synapse. *ACS Applied Materials & Interfaces*, **2020**, 12, 49915-49925	9.5	18
68	Importance of domain purity in semi-conducting polymer/insulating polymer blends transistors. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 1760-1766	2.6	17
67	Importance of Solvent Removal Rate on the Morphology and Device Performance of Organic Photovoltaics with Solvent Annealing. *ACS Applied Materials & Interfaces*, **2017**, 9, 20679-20685	9.5	15
66	Band-tailored van der Waals heterostructure for multilevel memory and artificial synapse. *Informa□□Materi□y*, **2021**, 3, 917-928	23.1	15
65	A novel post-processed surface modified double-network polymer layer for a triboelectric nanogenerator. *Journal of Materials Chemistry A*, **2020**, 8, 6328-6336	13	14
64	Impact of Fullerene Structure on Nanoscale Morphology and Miscibility and Correlation of Performance on Small Molecules: Fullerene Solar Cell. *Journal of Physical Chemistry C*, **2016**, 120, 21317-21324	3.8	14
63	Tuning the synaptic behaviors of biocompatible synaptic transistor through ion-doping. *Organic Electronics*, **2021**, 89, 106019	3.5	14
62	High-Performance Organic Phototransistors With Vertical Structure Design. *IEEE Transactions on Electron Devices*, **2019**, 66, 1815-1818	2.9	13
61	Nonvolatile Multilevel Photomemory Based on Lead-Free Double Perovskite CsAgBiBr Nanocrystals Wrapped Within SiO as a Charge Trapping Layer. *ACS Applied Materials & Interfaces*, **2020**, 12, 43967-43975	9.5	13
60	Regioregular and Regioirregular Poly(selenophene-perylene diimide) Acceptors for Polymer-Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 32397-32403	9.5	13

59	A Postalignment Method for High-Mobility Organic Thin-Film Transistors. *IEEE Transactions on Electron Devices*, **2018**, 65, 1101-1106	2.9	12
58	Controlling Native Oxidation of HfS for 2D Materials Based Flash Memory and Artificial Synapse. *ACS Applied Materials & Interfaces*, **2021**, 13, 10639-10649	9.5	12
57	Bioinspired kinesthetic system for human-machine interaction. *Nano Energy*, **2021**, 88, 106283	17.1	12
56	High performance n-type vertical organic phototransistors. *Organic Electronics*, **2019**, 67, 200-207	3.5	11
55	Low-temperature solution-processed flexible metal oxide thin-film transistors via laser annealing. *Journal Physics D: Applied Physics*, **2019**, 52, 385105	3	11
54	Heterostructured Vertical Organic Transistor for High-Performance Optoelectronic Memory and Artificial Synapse. *ACS Photonics*, **2021**, 8, 3094-3103	6.3	11
53	An optoelectronic synaptic transistor with efficient dual modulation by light illumination. *Journal of Materials Chemistry C*, **2021**, 9, 3412-3420	7.1	11
52	High-Performance Organic Synaptic Transistors with an Ultrathin Active Layer for Neuromorphic Computing. *ACS Applied Materials & Interfaces*, **2021**, 13, 8672-8681	9.5	11
51	Low-Frequency Noise in High-Mobility a-InGaZnO/InSnO Nanowire Composite Thin-Film Transistors. *IEEE Electron Device Letters*, **2017**, 38, 1540-1542	4.4	10
50	High-resolution organic field-effect transistors manufactured by electrohydrodynamic inkjet printing of doped electrodes. *Journal of Materials Chemistry C*, **2020**, 8, 15219-15223	7.1	9
49	All-metal oxide synaptic transistor with modulatable plasticity. *Nanotechnology*, **2020**, 31, 065201	3.4	9
48	Improved stability and performance of all inorganic perovskite quantum dots synthesized directly with N-alkylmonoamine ligands for light-erasable transistor memory. *Organic Electronics*, **2020**, 86, 105869	3.5	8
47	Solution-Processed Oxide Complementary Inverter via Laser Annealing and Inkjet Printing. *IEEE Transactions on Electron Devices*, **2019**, 66, 4888-4893	2.9	8
46	Vertical Channel Inorganic/Organic Hybrid Electrochemical Phototransistors with Ultrahigh Responsivity and Fast Response Speed. *ACS Applied Materials & Interfaces*, **2021**, 13, 7498-7509	9.5	8
45	Interface engineering with double-network dielectric structure for flexible organic thin film transistors. *Organic Electronics*, **2018**, 52, 213-221	3.5	8
44	Ultra-high stability of cesium lead halide nanocrystals synthesized by a simple one-pot method. *Materials and Design*, **2019**, 181, 108100	8.1	7
43	A universal strategy to improve the mechanical stability of flexible organic thin film transistors. *Journal of Materials Chemistry C*, **2019**, 7, 6323-6331	7.1	6
42	An intrinsically healing artificial neuromorphic device. *Journal of Materials Chemistry C*, **2020**, 8, 6869-6876	7.1	6

41	Influence of strain rate and temperature on necking transition in a polydomain smectic main chain elastomer. *Journal of Polymer Science, Part B: Polymer Physics*, **2011**, 49, 591-598	2.6	6
40	Gate-tunable all-inorganic QLED with enhanced charge injection balance. *Journal of Materials Chemistry C*, **2020**, 8, 1280-1285	7.1	6
39	Stretchable vertical organic transistors and their applications in neurologically systems. *Nano Energy*, **2021**, 90, 106497	17.1	6
38	Modulation of the plasticity of an all-metal oxide synaptic transistor via laser irradiation. *Nanotechnology*, **2020**, 31, 215202	3.4	5
37	Impact of new skeletal isomerization in polymer semiconductors. *Journal of Materials Chemistry C*, **2019**, 7, 10860-10867	7.1	5
36	Surface infusion micropatterning of elastomeric substrates. *Microfluidics and Nanofluidics*, **2012**, 12, 451-464	2.8	5
35	Multifunctional MoTe 2 Fe-FET Enabled by Ferroelectric Polarization-Assisted Charge Trapping. *Advanced Functional Materials*,2110415	15.6	5
34	Bi-mode electrolyte-gated synaptic transistor additional ion doping and its application to artificial nociceptors. *Materials Horizons*, **2021**, 8, 2797-2807	14.4	5
33	Modulation of bulk heterojunction morphology through small □bridge changes for polymer solar cells with enhanced performance. *Journal of Materials Chemistry C*, **2018**, 6, 5999-6007	7.1	5
32	Recent advances in stretchable field-effect transistors. *Journal of Materials Chemistry C*,	7.1	5
31	Negative Phototransistors with Ultrahigh Sensitivity and Weak-Light Detection Based on 1D/2D Molecular Crystal p-n Heterojunctions and their Application in Light Encoders.. *Advanced Materials*, **2022**, e2201364	24	5
30	Surface Infused Interpenetrating Network as Gate Dielectric for High Performance Thin Film Transistors. *Macromolecular Materials and Engineering*, **2017**, 302, 1600562	3.9	4
29	Artificial Indium-Tin-Oxide Synaptic Transistor by Inkjet Printing Using Solution-Processed ZrOx Gate Dielectric. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 2000314	1.6	4
28	A full transparent high-performance flexible phototransistor with an ultra-short channel length. *Journal of Materials Chemistry C*, **2021**, 9, 1604-1613	7.1	4
27	Improvement of Device Performance of Organic Photovoltaics via Laser Irradiation. *Journal of Physical Chemistry C*, **2019**, 123, 22058-22065	3.8	3
26	Solution templating of Au and Ag nanoparticles by linear poly[2-(diethylamino)ethyl methacrylate]. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	3
25	Neuromorphic display system for intelligent display. *Nano Energy*, **2022**, 94, 106931	17.1	3
24	Photonic Synaptic Transistor Based on P-Type Organic Semiconductor Blending With N-Type Organic Semiconductor. *IEEE Electron Device Letters*, **2021**, 42, 1180-1183	4.4	3

23	Direct Fabrication of Stretchable Electronics on a Programmable Stiffness Substrate With 100% Strain Isolation. *IEEE Electron Device Letters*, **2021**, 42, 1484-1487	4.4	3
22	An organic synaptic transistor with integration of memory and neuromorphic computing. *Journal of Materials Chemistry C*, **2021**, 9, 9972-9981	7.1	3
21	Modification of polymer gate dielectrics for organic thin-film transistor from inkjet printing. *Applied Physics A: Materials Science and Processing*, **2018**, 124, 1	2.6	2
20	High-Performance Vertical Organic Phototransistors Enhanced by Ferroelectrics. *ACS Applied Materials & Interfaces*, **2021**, 13, 1035-1042	9.5	2
19	High-Density Reconfigurable Synaptic Transistors Targeting a Minimalist Neural Network. *ACS Applied Materials & Interfaces*, **2021**, 13, 28564-28573	9.5	2
18	Complementary of Ferroelectric and Floating Gate Structure for High Performance Organic Nonvolatile Memory. *Advanced Electronic Materials*, **2021**, 7, 2100599	6.4	2
17	High Performance Organic Phototransistor Doped With MXene. *IEEE Electron Device Letters*, **2021**, 42, 1358-1361	4.4	2
16	Noise Detection System Based on Noise Triboelectric Nanogenerator and Synaptic Transistors. *IEEE Electron Device Letters*, **2021**, 42, 1334-1337	4.4	2
15	Polymer bulk-heterojunction synaptic field-effect transistors with tunable decay constant. *Journal of Materials Chemistry C*, **2021**, 9, 4854-4861	7.1	2
14	Multifunctional Memory-Synaptic Hybrid Optoelectronic Transistors for Neuromorphic Computing. *IEEE Transactions on Electron Devices*, **2022**, 1-5	2.9	2
13	Oxygen-Assisted Anisotropic Chemical Etching of MoSe2 for Enhanced Phototransistors. *Chemistry of Materials*, **2022**, 34, 4212-4223	9.6	2
12	Low-voltage solution-processed artificial optoelectronic hybrid-integrated neuron based on 2D MXene for multi-task spiking neural network. *Nano Energy*, **2022**, 99, 107418	17.1	2
11	The effect of light environment during the film formation process on the morphology and function of organic photovoltaics. *Journal of Materials Chemistry C*, **2019**, 7, 10581-10588	7.1	1
10	Influence of thermal history on mesoscale ordering in polydomain smectic networks. *Journal of Polymer Science, Part B: Polymer Physics*, **2013**, 51, 225-230	2.6	1
9	Printed Organic Synaptic Transistor Array for One-to-many Neural Response. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	1
8	Floating-gate based PN blending optoelectronic synaptic transistor for neural machine translation. *Science China Materials*,1	7.1	1
7	Quantitative characterization of interface stress using a nanoindentation technique for high performance flexible electronics. *Journal of Materials Chemistry C*, **2020**, 8, 12155-12163	7.1	1
6	Synaptic transistor with tunable synaptic behavior based on a thermo-denatured polar polymer material. *Journal of Materials Chemistry C*, **2022**, 10, 5534-5541	7.1	1

5	A light-emitting electrochemical artificial synapse with dual output of photoelectric signals. *Science China Materials*,1	7.1	1
4	Flexible multi-level quasi-volatile memory based on organic vertical transistor. *Nano Research*, **2022** , 15, 386	10	0
3	Micron-scale Resolution Image Sensor Based on Flexible Organic Thin Film Transistor Arrays via Femtosecond Laser Processing. *IEEE Electron Device Letters*, **2021**, 1-1	4.4	
2	Transparent Organic Nonvolatile Memory and Volatile Synaptic Transistors based on Floating Gate Structure. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	
1	Neuron Based Driving Circuit for Flat Panel Display. *IEEE Electron Device Letters*, **2022**, 1-1	4.4	