Yuanyuan Hu

List of Publications by Year
in descending order

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42 papers	1,625 citations	331642 21 h-index	289230 40 g-index
42 all docs	42 docs citations	42 times ranked	1946 citing authors

#	Article	IF	Citations
1	Ultrathin Film Organic Transistors: Precise Control of Semiconductor Thickness via Spinâ€Coating. Advanced Materials, 2013, 25, 1401-1407.	21.0	222
2	Remarkable enhancement of charge carrier mobility of conjugated polymer field-effect transistors upon incorporating an ionic additive. Science Advances, 2016, 2, e1600076.	10.3	139
3	Bottom-up growth of n-type monolayer molecular crystals on polymeric substrate for optoelectronic device applications. Nature Communications, 2018, 9, 2933.	12.8	118
4	Artificial multisensory integration nervous system with haptic and iconic perception behaviors. Nano Energy, 2021, 85, 106000.	16.0	83
5	Self-powered artificial auditory pathway for intelligent neuromorphic computing and sound detection. Nano Energy, 2020, 78, 105403.	16.0	75
6	Nanoscale channel organic ferroelectric synaptic transistor array for high recognition accuracy neuromorphic computing. Nano Energy, 2021, 85, 106010.	16.0	75
7	Investigation of Electrode Electrochemical Reactions in CH₃NH₃PbBr₃ Perovskite Singleâ€Crystal Fieldâ€Effect Transistors. Advanced Materials, 2019, 31, e1902618.	21.0	74
8	Self-powered high-sensitivity sensory memory actuated by triboelectric sensory receptor for real-time neuromorphic computing. Nano Energy, 2020, 75, 104930.	16.0	64
9	Relieving the Photosensitivity of Organic Fieldâ€Effect Transistors. Advanced Materials, 2020, 32, e1906122.	21.0	61
10	2D Ruddlesdenâ€“Popper Perovskite Single Crystal Fieldâ€Effect Transistors. Advanced Functional Materials, 2021, 31, .	14.9	56
11	MXene based saturation organic vertical photoelectric transistors with low subthreshold swing. Nature Communications, 2022, 13, .	12.8	56
12	Doping Polymer Semiconductors by Organic Salts: Toward High-Performance Solution-Processed Organic Field-Effect Transistors. ACS Nano, 2018, 12, 3938-3946.	14.6	52
13	Sub-5 nm single crystalline organic pâ€“n heterojunctions. Nature Communications, 2021, 12, 2774.	12.8	39
14	Controllable growth of C₈-BTBT single crystalline microribbon arrays by a limited solvent vapor-assisted crystallization (LSVC) method. Journal of Materials Chemistry C, 2018, 6, 2419-2423.	5.5	37
15	Scanning Kelvin Probe Microscopy Investigation of the Role of Minority Carriers on the Switching Characteristics of Organic Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 4713-4719.	21.0	34
16	Recent developments in fabrication and performance of metal halide perovskite field-effect transistors. Journal of Materials Chemistry C, 2020, 8, 16691-16715.	5.5	34
17	Influence of different dielectrics on the first layer grain sizes and its effect on the mobility of pentacene-based thin-film transistors. Applied Physics Letters, 2010, 96, .	3.3	33
18	Realizing low-voltage operating crystalline monolayer organic field-effect transistors with a low contact resistance. Journal of Materials Chemistry C, 2019, 7, 3436-3442.	5.5	30

#	Article	IF	Citations
19	Doping Highâ€Mobility Donorâ€“Acceptor Copolymer Semiconductors with an Organic Salt for Highâ€Performance Thermoelectric Materials. Advanced Electronic Materials, 2020, 6, 1900945.	5.1	30
20	Fabrication of ultra-flexible, ultra-thin organic field-effect transistors and circuits by a peeling-off method. Journal of Materials Chemistry C, 2014, 2, 1260-1263.	5.5	27
21	Flexible Monolayer Molecular Crystalâ€Field Effect Transistors for Ultrasensitive and Selective Detection of Dimethoate. Advanced Electronic Materials, 2020, 6, 2000579.	5.1	22
22	Effect of Backbone Fluorine and Chlorine Substitution on Chargeâ€Transport Properties of Naphthalenediimideâ€Based Polymer Semiconductors. Advanced Electronic Materials, 2020, 6, 1901241.	5.1	21
23	Comparing the Gate Dependence of Contact Resistance and Channel Resistance in Organic Field-Effect Transistors for Understanding the Mobility Overestimation Issue. IEEE Electron Device Letters, 2018, 39, 421-423.	3.9	19
24	Effect of Alkylâ€Chain Length on Charge Transport Properties of Organic Semiconductors and Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1800175.	5.1	19
25	Lowâ€Cost Nucleophilic Organic Bases as nâ€Dopants for Organic Fieldâ€Effect Transistors and Thermoelectric Devices. Advanced Functional Materials, 2021, 31, 2102768.	14.9	19
26	Effect of contact resistance in organic fieldâ€effect transistors. Nano Select, 2021, 2, 1661-1681.	3.7	18
27	Microfluidic solution-processed organic and perovskite nanowires fabricated for field-effect transistors and photodetectors. Journal of Materials Chemistry C, 2020, 8, 2353-2362.	5.5	17
28	Charge Transport Model Based on Single-Layered Grains and Grain Boundaries for Polycrystalline Pentacene Thin-Film Transistors. Journal of Physical Chemistry C, 2011, 115, 23568-23573.	3.1	16
29	Effect of Molecular Asymmetry on the Charge Transport Physics of High Mobility n-Type Molecular Semiconductors Investigated by Scanning Kelvin Probe Microscopy. ACS Nano, 2014, 8, 6778-6787.	14.6	16
30	Bi-mode electrolyte-gated synaptic transistorviaadditional ion doping and its application to artificial nociceptors. Materials Horizons, 2021, 8, 2797-2807.	12.2	16
31	Doping of Sn-based two-dimensional perovskite semiconductor for high-performance field-effect transistors and thermoelectric devices. IScience, 2022, 25, 104109.	4.1	15
32	Pursuing Highâ€Performance Organic Fieldâ€Effect Transistors through Organic Salt Doping. Advanced Functional Materials, 2022, 32, .	14.9	14
33	Low-voltage solution-processed artificial optoelectronic hybrid-integrated neuron based on 2D MXene for multi-task spiking neural network. Nano Energy, 2022, 99, 107418.	16.0	13
34	Understanding the Device Physics in Polymerâ€Based Ionicâ€“Organic Ratchets. Advanced Materials, 2017, 29, 1606464.	21.0	12
35	Tuning the Electrical Performance of 2D Perovskite Fieldâ€Effect Transistors by Forming Organic Semiconductor/Perovskite van der Waals Heterojunctions. Advanced Electronic Materials, 2022, 8, .	5.1	10
36	Selective doping of a single ambipolar organic semiconductor to obtain P- and N-type semiconductors. Matter, 2022, 5, 2882-2897.	10.0	10

#	Article	IF	Citations
37	Doped Vertical Organic Fieldâ€Effect Transistors Demonstrating Superior Biasâ€Stress Stability. Small, 2021, 17, e2101325.	10.0	9
38	An organic synaptic transistor with integration of memory and neuromorphic computing. Journal of Materials Chemistry C, 2021, 9, 9972-9981.	5.5	7
39	Correlation of Molecular Structure and Charge Transport Properties: A Case Study in Naphthalenediimideâ€“Based Copolymer Semiconductors. Advanced Electronic Materials, 2018, 4, 1800203.	5.1	6
40	Revealing Charge Transport and Device Operations of Organic Ambipolar Transistors and Inverters by Fourâ€Probe Measurement. Advanced Electronic Materials, 2021, 7, 2001134.	5.1	4
41	Band-like transport in non-fullerene acceptor semiconductor Y6. Frontiers of Optoelectronics, 2022, 15, .	3.7	3
42	36.2: Invited Paper: Doing Organic Semiconductors for Highâ€Performance Organic Fieldâ€Effect Transistors. Digest of Technical Papers SID International Symposium, 2019, 50, 401-401.	0.3	0