

Takeo Minari

List of Publications by Year in descending order

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87
papers

4,164
citations

101543

36
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114465

63
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91
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docs citations

91
times ranked

4855
citing authors

#	ARTICLE	IF	CITATIONS
1	Solution-Processable Organic Single Crystals with Bandlike Transport in Field-Effect Transistors. <i>Advanced Materials</i> , 2011, 23, 523-526.	21.0	348
2	Simple and Scalable Gel-Based Separation of Metallic and Semiconducting Carbon Nanotubes. <i>Nano Letters</i> , 2009, 9, 1497-1500.	9.1	307
3	Device Physics of Contact Issues for the Overestimation and Underestimation of Carrier Mobility in Field-Effect Transistors. <i>Physical Review Applied</i> , 2017, 8, .	3.8	183
4	Direct evaluation of low-field mobility and access resistance in pentacene field-effect transistors. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	181
5	Improvement of subthreshold current transport by contact interface modification in p-type organic field-effect transistors. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	164
6	Ambipolar-transporting coaxial nanotubes with a tailored molecular graphene-fullerene heterojunction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21051-21056.	7.1	161
7	A unified understanding of charge transport in organic semiconductors: the importance of attenuated delocalization for the carriers. <i>Materials Horizons</i> , 2017, 4, 608-618.	12.2	146
8	Charge injection process in organic field-effect transistors. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	140
9	Functional biomaterials towards flexible electronics and sensors. <i>Biosensors and Bioelectronics</i> , 2018, 119, 237-251.	10.1	139
10	Highly enhanced charge injection in thienoacene-based organic field-effect transistors with chemically doped contact. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	130
11	Room-Temperature Printing of Organic Thin-Film Transistors with Γ -Junction Gold Nanoparticles. <i>Advanced Functional Materials</i> , 2014, 24, 4886-4892.	14.9	118
12	Controlled Self-Assembly of Organic Semiconductors for Solution-Based Fabrication of Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2012, 24, 299-306.	21.0	104
13	Critical Impact of Gate Dielectric Interfaces on the Contact Resistance of High-Performance Organic Field-Effect Transistors. <i>Journal of Physical Chemistry C</i> , 2013, 117, 12337-12345.	3.1	98
14	Surface selective deposition of molecular semiconductors for solution-based integration of organic field-effect transistors. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	96
15	Wafer-scale and deterministic patterned growth of monolayer MoS ₂ via vapor-liquid-solid method. <i>Nanoscale</i> , 2019, 11, 16122-16129.	5.6	76
16	The rise of conductive copper inks: challenges and perspectives. <i>Applied Materials Today</i> , 2020, 18, 100451.	4.3	75
17	Selective organization of solution-processed organic field-effect transistors. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	74
18	Solution-processed electronics for artificial synapses. <i>Materials Horizons</i> , 2021, 8, 447-470.	12.2	74

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19	Large plate-like organic crystals from direct spin-coating for solution-processed field-effect transistor arrays with high uniformity. <i>Organic Electronics</i> , 2012, 13, 264-272.	2.6	69
20	Fabrication and characterization of single-grain organic field-effect transistor of pentacene. <i>Journal of Applied Physics</i> , 2004, 96, 769-772.	2.5	68
21	Solution-processed organic crystals for field-effect transistor arrays with smooth semiconductor/dielectric interface on paper substrates. <i>Organic Electronics</i> , 2012, 13, 815-819.	2.6	65
22	Microchannel Wetting for Controllable Patterning and Alignment of Silver Nanowire with High Resolution. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21433-21441.	8.0	60
23	Spontaneous Patterning of High-Resolution Electronics via Parallel Vacuum Ultraviolet. <i>Advanced Materials</i> , 2016, 28, 6568-6573.	21.0	60
24	Optimal Structure for High-Performance and Low-Contact-Resistance Organic Field-Effect Transistors Using Contact-Doped Coplanar and Pseudo-Staggered Device Architectures. <i>Advanced Functional Materials</i> , 2012, 22, 4577-4583.	14.9	57
25	Direct formation of organic semiconducting single crystals by solvent vapor annealing on a polymer base film. <i>Journal of Materials Chemistry</i> , 2012, 22, 8462.	6.7	55
26	Essential Effects on the Mobility Extraction Reliability for Organic Transistors. <i>Advanced Functional Materials</i> , 2018, 28, 1803907.	14.9	54
27	Origin of low-frequency noise in pentacene field-effect transistors. <i>Solid-State Electronics</i> , 2011, 61, 106-110.	1.4	45
28	Molecular-packing-enhanced charge transport in organic field-effect transistors based on semiconducting porphyrin crystals. <i>Applied Physics Letters</i> , 2007, 91, 123501.	3.3	43
29	Carrier mobility in organic field-effect transistors. <i>Journal of Applied Physics</i> , 2011, 110, 104513.	2.5	43
30	Direct and quantitative understanding of the non-Ohmic contact resistance in organic and oxide thin-film transistors. <i>Organic Electronics</i> , 2015, 27, 253-258.	2.6	43
31	Polymer-based dielectrics with high permittivity and low dielectric loss for flexible electronics. <i>Journal of Materials Chemistry C</i> , 2022, 10, 6196-6221.	5.5	41
32	Analysis of Ultrahigh Apparent Mobility in Oxide Field-Effect Transistors. <i>Advanced Science</i> , 2019, 6, 1801189.	11.2	40
33	Forming semiconductor/dielectric double layers by one-step spin-coating for enhancing the performance of organic field-effect transistors. <i>Organic Electronics</i> , 2012, 13, 1146-1151.	2.6	39
34	Recyclable Oil-Absorption Foams via Secondary Phase Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13834-13843.	6.7	39
35	All-Solution-Processed Selective Assembly of Flexible Organic Field-Effect Transistor Arrays. <i>Applied Physics Express</i> , 2010, 3, 051601.	2.4	37
36	Reduction of charge injection barrier by 1-nm contact oxide interlayer in organic field effect transistors. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	37

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37	High-performance organic field-effect transistors based on dihexyl-substituted dibenzo[d, <i>d'</i>]thieno[3,2- <i>b</i> ;4,5- <i>b'</i>]dithiophene. <i>Journal of Materials Chemistry</i> , 2012, 22, 7715.	6.7	37
38	Optical microresonator arrays of fluorescence-switchable diarylethenes with unreplicable spectral fingerprints. <i>Materials Horizons</i> , 2020, 7, 1801-1808.	12.2	36
39	Homogeneous dewetting on large-scale microdroplet arrays for solution-processed electronics. <i>NPG Asia Materials</i> , 2017, 9, e409-e409.	7.9	31
40	Synthesis of fluorinated anti-fluorenone and the structural, electronic, and field-effect properties. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 2592.	2.8	30
41	Strain-Tunable Superconducting Field-Effect Transistor with an Organic Strongly-Correlated Electron System. <i>Advanced Materials</i> , 2014, 26, 3490-3495.	21.0	29
42	Significant roles of low-temperature post-metallization annealing in solution-processed oxide thin-film transistors. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	24
43	Fabrication of Two-Dimensional Crystalline Organic Films by Tilted Spin Coating for High-Performance Organic Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7226-7234.	8.0	24
44	Universal diffusion-limited injection and the hook effect in organic thin-film transistors. <i>Scientific Reports</i> , 2016, 6, 29811.	3.3	23
45	A General Approach to Probe Dynamic Operation and Carrier Mobility in Field-Effect Transistors with Nonuniform Accumulation. <i>Advanced Functional Materials</i> , 2019, 29, 1901700.	14.9	22
46	Evaluating injection and transport properties of organic field-effect transistors by the convergence point in transfer-length method. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	20
47	Thin-Film Phase of Pentacene Film Formed on KCl by Vacuum Deposition. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 401-404.	1.5	19
48	Tunable contact resistance in double-gate organic field-effect transistors. <i>Organic Electronics</i> , 2012, 13, 1583-1588.	2.6	18
49	Charge Transport Properties of Hexabenzocoronene Nanotubes by Field Effect: Influence of the Oligoether Side Chains on the Mobility. <i>Chemistry Letters</i> , 2009, 38, 888-889.	1.3	17
50	Controlling the crystal formation in solution-process for organic field-effect transistors with high-performance. <i>Organic Electronics</i> , 2012, 13, 2975-2984.	2.6	17
51	Operational Stability Enhancement of Polymeric Organic Field-Effect Transistors by Amorphous Perfluoropolymers Chemically Anchored to Gate Dielectric Surfaces. <i>Advanced Electronic Materials</i> , 2020, 6, 2000161.	5.1	17
52	Direct fabrication of high-resolution and high-performance flexible electronics via surface-activation-localized electroless plating. <i>Chemical Engineering Journal</i> , 2021, 416, 127644.	12.7	17
53	Power transfer-length method for full biasing contact resistance evaluation of organic field-effect transistors. <i>Organic Electronics</i> , 2011, 12, 2019-2024.	2.6	16
54	Improving solution-processed n-type organic field-effect transistors by transfer-printed metal/semiconductor and semiconductor/semiconductor heterojunctions. <i>Organic Electronics</i> , 2014, 15, 1884-1889.	2.6	16

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55	DNA as Functional Material in Organic-Based Electronics. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 90.	2.5	16
56	Polymer-Based Organic Field-Effect Transistors with Active Layers Aligned by Highly Hydrophobic Nanogrooved Surfaces. <i>Advanced Functional Materials</i> , 2019, 29, 1905365.	14.9	16
57	Solution-Processable Multifused Thiophene Small Molecules and Conjugated Polymer Semiconducting Blend for Organic Field Effect Transistor Application. <i>Advanced Materials Technologies</i> , 2021, 6, 2001028.	5.8	14
58	Large [6,6]-phenyl C61 butyric acid methyl (PCBM) hexagonal crystals grown by solvent-vapor annealing. <i>Materials Chemistry and Physics</i> , 2014, 145, 327-333.	4.0	13
59	Spatially Uniform Thin-Film Formation of Polymeric Organic Semiconductors on Lyophobic Gate Insulator Surfaces by Self-Assisted Flow-Coating. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6237-6245.	8.0	13
60	Ultra-high-resolution printing of flexible organic thin-film transistors. <i>Journal of Information Display</i> , 2017, 18, 93-99.	4.0	13
61	Quinoidal thioalkyl-substituted bithiophene small molecule semiconductors for n-type organic field effect transistors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15450-15458.	5.5	12
62	Wafer-scale single crystals: crystal growth mechanisms, fabrication methods, and functional applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 7829-7851.	5.5	11
63	Temperature dependence of frequency response characteristics in organic field-effect transistors. <i>Applied Physics Letters</i> , 2012, 100, 183308.	3.3	10
64	Layer-by-layer printing non-volatile organic thin-film transistor memory with a planarly-oriented DNA-complex dielectric. <i>Organic Electronics</i> , 2018, 55, 75-81.	2.6	10
65	Dual Surface Architectonics for Directed Self-Assembly of Ultrahigh-Resolution Electronics. <i>Small</i> , 2021, 17, e2101754.	10.0	10
66	Generating one-dimensional micro- or nano-structures with in-plane alignment by vapor-driven wetting kinetics. <i>Materials Horizons</i> , 2017, 4, 259-267.	12.2	9
67	Organic thin-film transistors with over 10^4 cm ² /Vs mobility through low-temperature solution coating. <i>Journal of Information Display</i> , 2018, 19, 71-80.	4.0	9
68	Self-Organizing, Environmentally Stable, and Low-Cost Copper-Nickel Complex Inks for Printed Flexible Electronics. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8146-8156.	8.0	9
69	Resistance-switchable conjugated polyrotaxane for flexible high-performance RRAMs. <i>Materials Horizons</i> , 2022, 9, 1526-1535.	12.2	9
70	Bottom-Contact Pentacene Thin-Film Transistors on Silicon Nitride. <i>IEEE Electron Device Letters</i> , 2011, 32, 1305-1307.	3.9	8
71	Self-assembling diacetylene molecules on atomically flat insulators. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 31600-31605.	2.8	8
72	Layer-by-Layer Printing Strategy for High-Performance Flexible Electronic Devices with Low-Temperature Catalyzed Solution-Processed SiO ₂ . <i>Small Methods</i> , 2021, 5, 2100263.	8.6	8

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73	Solution-processable liquid crystalline chrysenes with wide band gap: Self-organization and carrier transport properties. <i>Organic Electronics</i> , 2018, 63, 184-193.	2.6	7
74	Rapid Laser Annealing of Silver Electrodes for Printing Organic Thin-Film Transistors on Plastic Substrates. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 2729-2734.	3.0	7
75	3D cross-linking N-doped graphene framework for high sulfur nanocrystal storage. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 295502.	2.8	6
76	Hydrogen Doping Oxide Transistors: Analysis of Ultrahigh Apparent Mobility in Oxide Field-Effect Transistors (Adv. Sci. 7/2019). <i>Advanced Science</i> , 2019, 6, 1970040.	11.2	6
77	High-Resolution Electronics: Spontaneous Patterning of High-Resolution Electronics via Parallel Vacuum Ultraviolet (Adv. Mater. 31/2016). <i>Advanced Materials</i> , 2016, 28, 6768-6768.	21.0	5
78	Surface Selectively Deposited Organic Single-crystal Transistor Arrays with High Device Performance. <i>Molecular Crystals and Liquid Crystals</i> , 2012, 566, 13-17.	0.9	4
79	A multidimensional scheme of characterization for performance deterioration behavior of flexible devices under bending deformation. <i>Thin Solid Films</i> , 2020, 694, 137613.	1.8	3
80	Air-stable Cu complex inks for printed electronics with high conductivity and high reliability. , 2019, , .		2
81	Microflow Manipulation by Velocity Field Gradient: Spontaneous Patterning of Silver Nanowires for Tailored Flexible Transparent Conductors. <i>Advanced Materials Technologies</i> , 0, , 2101687.	5.8	2
82	Homogeneous Dewetting on Large-Scale Microdroplet Arrays for Solution-Processing Electronics. , 2019, , .		0
83	Room-temperature printing of CNTs-based flexible TFTs with high performance. , 2019, , .		0
84	Evaluation of Leakage Current and Leakage Path of Gate-Insulating Layer Used in Organic Thin-Film Transistors under Mechanical Loading. <i>Journal of Japan Institute of Electronics Packaging</i> , 2021, 24, 586-594.	0.1	0
85	Spontaneous Patterning of Electronic Circuits by Surface Selective Deposition. <i>Hyomen Kagaku</i> , 2017, 38, 222-227.	0.0	0
86	Performance deterioration behavior of printed organic semiconductor flexible micro transistor under repeated bending deformation. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2019, 2019, J22315.	0.0	0
87	Rupture of bar-coated liquid films on wettability-patterned surfaces. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2021, 2021, J222-04.	0.0	0