

Alberto Salleo

List of Publications by Year in descending order

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207
papers

23,301
citations

13865

67
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212
docs citations

212
times ranked

20925
citing authors

#	ARTICLE	IF	CITATIONS
1	A general relationship between disorder, aggregation and charge transport in conjugated polymers. <i>Nature Materials</i> , 2013, 12, 1038-1044.	27.5	1,742
2	Materials and Applications for Large Area Electronics: Solution-Based Approaches. <i>Chemical Reviews</i> , 2010, 110, 3-24.	47.7	1,646
3	A non-volatile organic electrochemical device as a low-voltage artificial synapse for neuromorphic computing. <i>Nature Materials</i> , 2017, 16, 414-418.	27.5	1,234
4	Organic electrochemical transistors. <i>Nature Reviews Materials</i> , 2018, 3, .	48.7	1,143
5	High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor. <i>Nature Communications</i> , 2016, 7, 11585.	12.8	1,053
6	Reducing the efficiency–stability–cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. <i>Nature Materials</i> , 2017, 16, 363-369.	27.5	921
7	Multi-phase microstructures drive exciton dissociation in neat semicrystalline polymeric semiconductors. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10715-10722.	5.5	689
8	Organic electronics for neuromorphic computing. <i>Nature Electronics</i> , 2018, 1, 386-397.	26.0	672
9	Efficient charge generation by relaxed charge-transfer states at organic interfaces. <i>Nature Materials</i> , 2014, 13, 63-68.	27.5	667
10	Semi-transparent perovskite solar cells for tandems with silicon and CIGS. <i>Energy and Environmental Science</i> , 2015, 8, 956-963.	30.8	630
11	Charge transport in high-mobility conjugated polymers and molecular semiconductors. <i>Nature Materials</i> , 2020, 19, 491-502.	27.5	485
12	Parallel programming of an ionic floating-gate memory array for scalable neuromorphic computing. <i>Science</i> , 2019, 364, 570-574.	12.6	484
13	Semiconducting Thienothiophene Copolymers: Design, Synthesis, Morphology, and Performance in Thin-Film Organic Transistors. <i>Advanced Materials</i> , 2009, 21, 1091-1109.	21.0	412
14	Molecularly selective nanoporous membrane-based wearable organic electrochemical device for noninvasive cortisol sensing. <i>Science Advances</i> , 2018, 4, eaar2904.	10.3	395
15	The role of the third component in ternary organic solar cells. <i>Nature Reviews Materials</i> , 2019, 4, 229-242.	48.7	370
16	Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. <i>Macromolecules</i> , 2011, 44, 5246-5255.	4.8	278
17	The impact of molecular weight on microstructure and charge transport in semicrystalline polymer semiconductors—poly(3-hexylthiophene), a model study. <i>Progress in Polymer Science</i> , 2013, 38, 1978-1989.	24.7	274
18	Quantitative analysis of lattice disorder and crystallite size in organic semiconductor thin films. <i>Physical Review B</i> , 2011, 84, .	3.2	262

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19	The chemical and structural origin of efficient p-type doping in P3HT. <i>Organic Electronics</i> , 2013, 14, 1330-1336.	2.6	256
20	Plasmon-Enhanced Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 4020-4031.	4.6	248
21	2022 roadmap on neuromorphic computing and engineering. <i>Neuromorphic Computing and Engineering</i> , 2022, 2, 022501.	5.9	217
22	A biohybrid synapse with neurotransmitter-mediated plasticity. <i>Nature Materials</i> , 2020, 19, 969-973.	27.5	215
23	Avoid the kinks when measuring mobility. <i>Science</i> , 2016, 352, 1521-1522.	12.6	213
24	Recombination in Polymer:Fullerene Solar Cells with Open-Circuit Voltages Approaching and Exceeding 1.0 V. <i>Advanced Energy Materials</i> , 2013, 3, 220-230.	19.5	212
25	Redefining near-unity luminescence in quantum dots with photothermal threshold quantum yield. <i>Science</i> , 2019, 363, 1199-1202.	12.6	190
26	Morphology-Dependent Trap Formation in High Performance Polymer Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 954-962.	19.5	183
27	Side Chain Redistribution as a Strategy to Boost Organic Electrochemical Transistor Performance and Stability. <i>Advanced Materials</i> , 2020, 32, e2002748.	21.0	181
28	Structural origin of gap states in semicrystalline polymers and the implications for charge transport. <i>Physical Review B</i> , 2011, 83, .	3.2	180
29	Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10599-10604.	7.1	175
30	Electrolyte-gated transistors for enhanced performance bioelectronics. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	21.2	172
31	Optically switchable transistors by simple incorporation of photochromic systems into small-molecule semiconducting matrices. <i>Nature Communications</i> , 2015, 6, 6330.	12.8	162
32	Revealing the Cell-Material Interface with Nanometer Resolution by Focused Ion Beam/Scanning Electron Microscopy. <i>ACS Nano</i> , 2017, 11, 8320-8328.	14.6	152
33	Influence of Water on the Performance of Organic Electrochemical Transistors. <i>Chemistry of Materials</i> , 2019, 31, 927-937.	6.7	140
34	Enhanced Photovoltaic Performance of Indacenodithiophene-Quinoxaline Copolymers by Side-Chain Modulation. <i>Advanced Energy Materials</i> , 2014, 4, 1400680.	19.5	134
35	Fused electron deficient semiconducting polymers for air stable electron transport. <i>Nature Communications</i> , 2018, 9, 416.	12.8	133
36	Temperature-resilient solid-state organic artificial synapses for neuromorphic computing. <i>Science Advances</i> , 2020, 6, .	10.3	131

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37	Balancing Ionic and Electronic Conduction for High-Performance Organic Electrochemical Transistors. <i>Advanced Functional Materials</i> , 2020, 30, 1907657.	14.9	131
38	Energetic Control of Redox-Active Polymers toward Safe Organic Bioelectronic Materials. <i>Advanced Materials</i> , 2020, 32, e1908047.	21.0	124
39	Role of the Anion on the Transport and Structure of Organic Mixed Conductors. <i>Advanced Functional Materials</i> , 2019, 29, 1807034.	14.9	116
40	Wearable Organic Electrochemical Transistor Patch for Multiplexed Sensing of Calcium and Ammonium Ions from Human Perspiration. <i>Advanced Healthcare Materials</i> , 2019, 8, e1901321.	7.6	115
41	Solution-Processable Zirconium Oxide Gate Dielectrics for Flexible Organic Field Effect Transistors Operated at Low Voltages. <i>Chemistry of Materials</i> , 2013, 25, 2571-2579.	6.7	110
42	Enhancement of Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular De-Doping. <i>Advanced Materials</i> , 2020, 32, e2000270.	21.0	109
43	Structure-property relationships of oligothiophene-indigo polymers for efficient bulk-heterojunction solar cells. <i>Energy and Environmental Science</i> , 2014, 7, 361-369.	30.8	108
44	Optical measurement of doping efficiency in poly(3-hexylthiophene) solutions and thin films. <i>Physical Review B</i> , 2015, 91, .	3.2	108
45	Organic Electronics for Point-of-Care Metabolite Monitoring. <i>Trends in Biotechnology</i> , 2018, 36, 45-59.	9.3	104
46	Roadmap on emerging hardware and technology for machine learning. <i>Nanotechnology</i> , 2021, 32, 012002.	2.6	104
47	Role of Molecular Weight Distribution on Charge Transport in Semiconducting Polymers. <i>Macromolecules</i> , 2014, 47, 7151-7157.	4.8	102
48	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2020, 142, 652-664.	13.7	101
49	Role of confinement and aggregation in charge transport in semicrystalline polythiophene thin films. <i>Physical Review B</i> , 2012, 86, .	3.2	100
50	Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties. <i>Macromolecules</i> , 2011, 44, 6653-6658.	4.8	99
51	Spray Deposition of Silver Nanowire Electrodes for Semitransparent Solid-State Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2013, 3, 1657-1663.	19.5	99
52	Role of Polymer Structure on the Conductivity of N-Doped Polymers. <i>Advanced Electronic Materials</i> , 2016, 2, 1600004.	5.1	99
53	Diffraction imaging of nanocrystalline structures in organic semiconductor molecular thin films. <i>Nature Materials</i> , 2019, 18, 860-865.	27.5	99
54	Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. <i>Advanced Energy Materials</i> , 2018, 8, 1801001.	19.5	95

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55	Polymorphism controls the degree of charge transfer in a molecularly doped semiconducting polymer. <i>Materials Horizons</i> , 2018, 5, 655-660.	12.2	92
56	High-mobility, trap-free charge transport in conjugated polymer diodes. <i>Nature Communications</i> , 2019, 10, 2122.	12.8	92
57	Uncovering the Effects of Metal Contacts on Monolayer MoS ₂ . <i>ACS Nano</i> , 2020, 14, 14798-14808.	14.6	89
58	Vertical confinement and interface effects on the microstructure and charge transport of P3HT thin films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 611-620.	2.1	87
59	Laser-driven formation of a high-pressure phase in amorphous silica. <i>Nature Materials</i> , 2003, 2, 796-800.	27.5	86
60	Conformational Disorder Enhances Solubility and Photovoltaic Performance of a Thiophene-Quinoxaline Copolymer. <i>Advanced Energy Materials</i> , 2013, 3, 806-814.	19.5	86
61	Symmetry-Breaking Charge Transfer in a Zinc Chlorodipyrin Acceptor for High Open Circuit Voltage Organic Photovoltaics. <i>Journal of the American Chemical Society</i> , 2015, 137, 5397-5405.	13.7	82
62	Engineering semiconducting polymers for efficient charge transport. <i>MRS Communications</i> , 2015, 5, 383-395.	1.8	78
63	Correlating the microstructure of thin films of poly[5,5-bis(3-dodecyl-2-thienyl)-2,2-bithiophene] with charge transport: Effect of dielectric surface energy and thermal annealing. <i>Physical Review B</i> , 2008, 78, .	3.2	74
64	Strain effects on the work function of an organic semiconductor. <i>Nature Communications</i> , 2016, 7, 10270.	12.8	74
65	One-Step Macroscopic Alignment of Conjugated Polymer Systems by Epitaxial Crystallization during Spin-Coating. <i>Advanced Functional Materials</i> , 2013, 23, 2368-2377.	14.9	73
66	Enhancing Quantum Yield via Local Symmetry Distortion in Lanthanide-Based Upconverting Nanoparticles. <i>ACS Photonics</i> , 2016, 3, 1523-1530.	6.6	72
67	Sequential Doping Reveals the Importance of Amorphous Chain Rigidity in Charge Transport of Semi-Crystalline Polymers. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4974-4980.	4.6	72
68	Structural Effects of Gating Poly(3-hexylthiophene) through an Ionic Liquid. <i>Advanced Functional Materials</i> , 2017, 27, 1701791.	14.9	70
69	Spectral Signatures and Spatial Coherence of Bound and Unbound Polarons in P3HT Films: Theory Versus Experiment. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18048-18060.	3.1	70
70	Improving Quantum Yield of Upconverting Nanoparticles in Aqueous Media via Emission Sensitization. <i>Nano Letters</i> , 2018, 18, 2689-2695.	9.1	69
71	Microstructural and Electronic Origins of Open-Circuit Voltage Tuning in Organic Solar Cells Based on Ternary Blends. <i>Advanced Energy Materials</i> , 2015, 5, 1501335.	19.5	68
72	Mechanism of Crystallization and Implications for Charge Transport in Poly(3-ethylhexylthiophene) Thin Films. <i>Advanced Functional Materials</i> , 2014, 24, 4515-4521.	14.9	66

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73	Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors. <i>Scientific Reports</i> , 2015, 5, 17849.	3.3	66
74	Mechanisms for Enhanced State Retention and Stability in Redox-Gated Organic Neuromorphic Devices. <i>Advanced Electronic Materials</i> , 2019, 5, 1800686.	5.1	66
75	Role of Side-Chain Branching on Thin-Film Structure and Electronic Properties of Polythiophenes. <i>Advanced Functional Materials</i> , 2015, 25, 2616-2624.	14.9	65
76	Charge Transport Orthogonality in All-Polymer Blend Transistors, Diodes, and Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1301409.	19.5	64
77	Solution Based Self-Assembly of an Array of Polymeric Thin-Film Transistors. <i>Advanced Materials</i> , 2007, 19, 3540-3543.	21.0	63
78	Naphthalenediimide Polymers with Finely Tuned In-Chain π -Conjugation: Electronic Structure, Film Microstructure, and Charge Transport Properties. <i>Advanced Materials</i> , 2016, 28, 9169-9174.	21.0	63
79	On the transient response of organic electrochemical transistors. <i>Organic Electronics</i> , 2017, 45, 215-221.	2.6	62
80	Organic neuromorphic devices: Past, present, and future challenges. <i>MRS Bulletin</i> , 2020, 45, 619-630.	3.5	59
81	Bandgap Restructuring of the Layered Semiconductor Gallium Telluride in Air. <i>Advanced Materials</i> , 2016, 28, 6465-6470.	21.0	58
82	Tuning the bandgap of Cs ₂ AgBiBr ₆ through dilute tin alloying. <i>Chemical Science</i> , 2019, 10, 10620-10628.	7.4	58
83	Optically switchable transistors comprising a hybrid photochromic molecule/n-type organic active layer. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4156-4161.	5.5	56
84	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400922.	19.5	54
85	Organic neuromorphic electronics for sensorimotor integration and learning in robotics. <i>Science Advances</i> , 2021, 7, eabl5068.	10.3	54
86	Optimized pulsed write schemes improve linearity and write speed for low-power organic neuromorphic devices. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 224002.	2.8	53
87	Optical and Electronic Ion Channel Monitoring from Native Human Membranes. <i>ACS Nano</i> , 2020, 14, 12538-12545.	14.6	51
88	The Effect of Processing Additives on Energetic Disorder in Highly Efficient Organic Photovoltaics: A Case Study on PBDTTT-C ₆₀ -PC ₇₁ BM. <i>Advanced Materials</i> , 2015, 27, 3868-3873.	21.0	46
89	High-Gain Chemically Gated Organic Electrochemical Transistor. <i>Advanced Functional Materials</i> , 2021, 31, 2010868.	14.9	46
90	Direct Correlation of Charge Transfer Absorption with Molecular Donor:Acceptor Interfacial Area via Photothermal Deflection Spectroscopy. <i>Journal of the American Chemical Society</i> , 2015, 137, 5256-5259.	13.7	45

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91	Trade-off between Trap Filling, Trap Creation, and Charge Recombination Results in Performance Increase at Ultralow Doping Levels in Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1601149.	19.5	45
92	The Roles of Structural Order and Intermolecular Interactions in Determining Ionization Energies and Charge-transfer State Energies in Organic Semiconductors. <i>Advanced Energy Materials</i> , 2016, 6, 1601211.	19.5	45
93	The Effect of Ring Expansion in Thienobenzobenzimidacenodithiophene Polymers for Organic Field-Effect Transistors. <i>Journal of the American Chemical Society</i> , 2019, 141, 18806-18813.	13.7	45
94	Signatures of Intracrystallite and Intercrystallite Limitations of Charge Transport in Polythiophenes. <i>Macromolecules</i> , 2016, 49, 7359-7369.	4.8	43
95	A Universal Platform for Fabricating Organic Electrochemical Devices. <i>Advanced Electronic Materials</i> , 2018, 4, 1800090.	5.1	43
96	Biomimetic Electronic Devices for Measuring Bacterial Membrane Disruption. <i>Advanced Materials</i> , 2018, 30, e1803130.	21.0	43
97	Toward bulk heterojunction polymer solar cells with thermally stable active layer morphology. <i>Journal of Photonics for Energy</i> , 2014, 4, 040997.	1.3	42
98	Anisotropic Polaron Delocalization in Conjugated Homopolymers and Donor-acceptor Copolymers. <i>Chemistry of Materials</i> , 2019, 31, 7033-7045.	6.7	39
99	Approaching Perfect Light Incoupling in Perovskite and Silicon Thin Film Solar Cells by Moth Eye Surface Textures. <i>Advanced Theory and Simulations</i> , 2018, 1, 1800030.	2.8	38
100	Organic electrochemical transistors as impedance biosensors. <i>MRS Communications</i> , 2014, 4, 189-194.	1.8	37
101	The Mechanism of Dedoping PEDOT:PSS by Aliphatic Polyamines. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24328-24337.	3.1	37
102	Engineering Optically Switchable Transistors with Improved Performance by Controlling Interactions of Diarylethenes in Polymer Matrices. <i>Journal of the American Chemical Society</i> , 2020, 142, 11050-11059.	13.7	37
103	Reversible Electrochemical Phase Change in Monolayer to Bulk-like MoTe ₂ by Ionic Liquid Gating. <i>ACS Nano</i> , 2020, 14, 2894-2903.	14.6	37
104	Dual-gate organic thin film transistors as chemical sensors. <i>Applied Physics Letters</i> , 2009, 95, 133307.	3.3	36
105	Probing the electrical properties of highly-doped Al:ZnO nanowire ensembles. <i>Journal of Applied Physics</i> , 2010, 107, 074312.	2.5	36
106	Self-Assembly of Mammalian-Cell Membranes on Bioelectronic Devices with Functional Transmembrane Proteins. <i>Langmuir</i> , 2020, 36, 7325-7331.	3.5	36
107	Open-circuit Voltage in Organic Solar Cells: The Impacts of Donor Semicrystallinity and Coexistence of Multiple Interfacial Charge-transfer Bands. <i>Advanced Energy Materials</i> , 2017, 7, 1601995.	19.5	35
108	Controlling Electrochemically Induced Volume Changes in Conjugated Polymers by Chemical Design: from Theory to Devices. <i>Advanced Functional Materials</i> , 2021, 31, 2100723.	14.9	35

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109	Ion Pair Uptake in Ion Gel Devices Based on Organic Mixed Ionic-Electronic Conductors. <i>Advanced Functional Materials</i> , 2021, 31, 2104301.	14.9	35
110	Intrinsic and Doped Zinc Oxide Nanowires for Transparent Electrode Fabrication via Low-Temperature Solution Synthesis. <i>Journal of Electronic Materials</i> , 2009, 38, 586-595.	2.2	34
111	Unraveling the Effect of Conformational and Electronic Disorder in the Charge Transport Processes of Semiconducting Polymers. <i>Advanced Functional Materials</i> , 2018, 28, 1804142.	14.9	34
112	Anomalous Charge Transport in Conjugated Polymers Reveals Underlying Mechanisms of Trapping and Percolation. <i>ACS Central Science</i> , 2016, 2, 910-915.	11.3	33
113	Materials Strategies for Organic Neuromorphic Devices. <i>Annual Review of Materials Research</i> , 2021, 51, 47-71.	9.3	33
114	High-Speed Ionic Synaptic Memory Based on 2D Titanium Carbide MXene. <i>Advanced Functional Materials</i> , 2022, 32, 2109970.	14.9	33
115	Toward Conductive Mesocrystalline Assemblies: PbS Nanocrystals Cross-Linked with Tetrathiafulvalene Dicarboxylate. <i>Chemistry of Materials</i> , 2015, 27, 8105-8115.	6.7	32
116	Negative Isotope Effect on Field-Effect Hole Transport in Fully Substituted ¹³ C-Rubrene. <i>Advanced Electronic Materials</i> , 2017, 3, 1700018.	5.1	32
117	Optics of Perovskite Solar Cell Front Contacts. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14693-14701.	8.0	32
118	How is flexible electronics advancing neuroscience research?. <i>Biomaterials</i> , 2021, 268, 120559.	11.4	32
119	Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 24349-24357.	10.3	31
120	Core/Shell Approach to Dopant Incorporation and Shape Control in Colloidal Zinc Oxide Nanorods. <i>Chemistry of Materials</i> , 2016, 28, 3454-3461.	6.7	31
121	Influence of Perovskite Interface Morphology on the Photon Management in Perovskite/Silicon Tandem Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 15080-15086.	8.0	30
122	Surfactant-Mediated Growth and Patterning of Atomically Thin Transition Metal Dichalcogenides. <i>ACS Nano</i> , 2020, 14, 6570-6581.	14.6	30
123	Bias Stress Effects in Organic Thin Film Transistors. , 2007, , .		29
124	Perovskite Color Detectors: Approaching the Efficiency Limit. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 47831-47839.	8.0	29
125	Mixed Ionic-Electronic Conduction, a Multifunctional Property in Organic Conductors. <i>Advanced Materials</i> , 2022, 34, e2110406.	21.0	29
126	Redox transistors for neuromorphic computing. <i>IBM Journal of Research and Development</i> , 2019, 63, 9:1-9:9.	3.1	28

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127	Vertically Stacked Perovskite Detectors for Color Sensing and Color Vision. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000459.	3.7	28
128	Multifunctional, Room-Temperature Processable, Heterogeneous Organic Passivation Layer for Oxide Semiconductor Thin-Film Transistors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2615-2624.	8.0	27
129	Phototuning Selectively Hole and Electron Transport in Optically Switchable Ambipolar Transistors. <i>Advanced Functional Materials</i> , 2020, 30, 1908944.	14.9	27
130	Nanoscale Electrolyte-Gated Vertical Organic Transistors with Low Operation Voltage and Five Orders of Magnitude Switching Range for Neuromorphic Systems. <i>Nano Letters</i> , 2022, 22, 973-978.	9.1	27
131	Efficient Electronic Tunneling Governs Transport in Conducting Polymer-Insulator Blends. <i>Journal of the American Chemical Society</i> , 2022, 144, 10368-10376.	13.7	26
132	Contact Doping with Sub-Å Monolayers of Strong Polyelectrolytes for Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2014, 4, 1400439.	19.5	25
133	In situ Parallel Training of Analog Neural Network Using Electrochemical Random-Access Memory. <i>Frontiers in Neuroscience</i> , 2021, 15, 636127.	2.8	24
134	Time- and Temperature-Independent Local Carrier Mobility and Effects of Regioregularity in Polymer-Fullerene Organic Semiconductors. <i>Advanced Electronic Materials</i> , 2016, 2, 1500351.	5.1	23
135	Enhanced Cell-Chip Coupling by Rapid Femtosecond Laser Patterning of Soft PEDOT:PSS Biointerfaces. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39116-39121.	8.0	23
136	Dual-Characteristic Transistors Based on Semiconducting Polymer Blends. <i>Advanced Electronic Materials</i> , 2016, 2, 1600267.	5.1	20
137	Characterizing the Polymer:Fullerene Intermolecular Interactions. <i>Chemistry of Materials</i> , 2016, 28, 1446-1452.	6.7	20
138	The Role of Morphology in Optically Switchable Transistors Based on a Photochromic Molecule/p-type Polymer Semiconductor Blend. <i>Advanced Functional Materials</i> , 2020, 30, 1907507.	14.9	20
139	Nonequilibrium Thermodynamics of Colloidal Gold Nanocrystals Monitored by Ultrafast Electron Diffraction and Optical Scattering Microscopy. <i>ACS Nano</i> , 2020, 14, 4792-4804.	14.6	20
140	Altered heparan sulfate metabolism during development triggers dopamine-dependent autistic-behaviours in models of lysosomal storage disorders. <i>Nature Communications</i> , 2021, 12, 3495.	12.8	20
141	Unraveling the Unconventional Order of a High-Mobility Indacenodithiophene-Benzothiadiazole Copolymer. <i>ACS Macro Letters</i> , 2021, 10, 1306-1314.	4.8	20
142	Understanding electrochemical properties of supported lipid bilayers interfaced with organic electronic devices. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8050-8060.	5.5	20
143	Something out of nothing. <i>Nature Materials</i> , 2015, 14, 1077-1078.	27.5	19
144	Chemically Responsive Elastomers Exhibiting Unity-Order Refractive Index Modulation. <i>Advanced Materials</i> , 2018, 30, 1703912.	21.0	19

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145	Increased charge carrier mobility and molecular packing of a solution sheared diketopyrrolopyrrole-based donor-acceptor copolymer by alkyl side chain modification. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3665-3674.	5.5	19
146	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. <i>Nature Communications</i> , 2021, 12, 1860.	12.8	19
147	Functional Infectious Nanoparticle Detector: Finding Viruses by Detecting Their Host Entry Functions Using Organic Bioelectronic Devices. <i>ACS Nano</i> , 2021, 15, 18142-18152.	14.6	19
148	Tuning the plasmonic absorption of metal reflectors by zinc oxide nano particles: Application in thin film solar cells. <i>Nano Energy</i> , 2014, 6, 167-172.	16.0	18
149	Copper interstitial recombination centers in Cu_2S . <i>Physical Review B</i> , 2018, 97, .	3.3	18
150	Redox-Active Polymers Designed for the Circular Economy of Energy Storage Devices. <i>ACS Energy Letters</i> , 2021, 6, 3450-3457.	17.4	18
151	Title: Using Alignment and 2D Network Simulations to Study Charge Transport Through Doped ZnO Nanowire Thin Film Electrodes. <i>Advanced Functional Materials</i> , 2011, 21, 4691-4697.	14.9	17
152	Organic Transistors Incorporating Lipid Monolayers for Drug Interaction Studies. <i>Advanced Materials Technologies</i> , 2020, 5, 1900680.	5.8	17
153	Operation mechanism of organic electrochemical transistors as redox chemical transducers. <i>Journal of Materials Chemistry C</i> , 2021, 9, 12148-12158.	5.5	17
154	High-Performance Humidity Sensing in π -Conjugated Molecular Assemblies through the Engineering of Electron/Proton Transport and Device Interfaces. <i>Journal of the American Chemical Society</i> , 2022, 144, 2546-2555.	13.7	17
155	Confined organization of fullerene units along high polymer chains. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5747.	5.5	16
156	Solid Solutions of Rare Earth Cations in Mesoporous Anatase Beads and Their Performances in Dye-Sensitized Solar Cells. <i>Scientific Reports</i> , 2015, 5, 16785.	3.3	16
157	Spectroscopic studies of dopant-induced conformational changes in poly (3-hexylthiophene) thin films. <i>MRS Communications</i> , 2017, 7, 728-734.	1.8	15
158	Ion conductivity through TEMPO-mediated oxidated and periodate oxidated cellulose membranes. <i>Carbohydrate Polymers</i> , 2020, 233, 115829.	10.2	15
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