Alberto Salleo

List of Publications by Year
in descending order

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207 papers	23,301 citations	13865 67 h-index	8167 148 g-index
212 all docs	212 docs citations	212 times ranked	20925 citing authors

#	Article	IF	Citations
1	A Stacked Hybrid Organic/Inorganic Electrochemical Randomâ€Access Memory for Scalable Implementation. Advanced Electronic Materials, 2022, 8, 2100426.	5.1	7
2	Highâ€Speed Ionic Synaptic Memory Based on 2D Titanium Carbide MXene. Advanced Functional Materials, 2022, 32, 2109970.	14.9	33
3	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	5.9	217
4	Nanoscopic Electrolyte-Gated Vertical Organic Transistors with Low Operation Voltage and Five Orders of Magnitude Switching Range for Neuromorphic Systems. Nano Letters, 2022, 22, 973-978.	9.1	27
5	Conjugated polymers with controllable interfacial order and energetics enable tunable heterojunctions in organic and colloidal quantum dot photovoltaics. Journal of Materials Chemistry A, 2022, 10, 1788-1801.	10.3	6
6	Impedance sensing of antibiotic interactions with a pathogenic E. coli outer membrane supported bilayer. Biosensors and Bioelectronics, 2022, 204, 114045.	10.1	6
7	High-Performance Humidity Sensing in Ï€-Conjugated Molecular Assemblies through the Engineering of Electron/Proton Transport and Device Interfaces. Journal of the American Chemical Society, 2022, 144, 2546-2555.	13.7	17
8	Beyond Tristimulus Color Vision with Perovskite-Based Multispectral Sensors. ACS Applied Materials & Interfaces, 2022, 14, 11645-11653.	8.0	7
9	Quantifying Polaron Mole Fractions and Interpreting Spectral Changes in Molecularly Doped Conjugated Polymers. Advanced Electronic Materials, 2022, 8, .	5.1	7
10	Mixed Ionicâ€“Electronic Conduction, a Multifunctional Property in Organic Conductors. Advanced Materials, 2022, 34, e2110406.	21.0	29
11	Understanding electrochemical properties of supported lipid bilayers interfaced with organic electronic devices. Journal of Materials Chemistry C, 2022, 10, 8050-8060.	5.5	20
12	Tuning Organic Electrochemical Transistor Threshold Voltage using Chemically Doped Polymer Gates. Advanced Materials, 2022, 34, .	21.0	14
13	Efficient Electronic Tunneling Governs Transport in Conducting Polymer-Insulator Blends. Journal of the American Chemical Society, 2022, 144, 10368-10376.	13.7	26
14	Wafer-scale microfabrication of flexible organic electrochemical transistors. Flexible and Printed Electronics, 2022, 7, 034001.	2.7	6
15	Conjugated Polymers for Microwave Applications: Untethered Sensing Platforms and Multifunctional Devices. Advanced Materials, 2022, 34, .	21.0	11
16	Roadmap on emerging hardware and technology for machine learning. Nanotechnology, 2021, 32, 012002.	2.6	104
17	How is flexible electronics advancing neuroscience research?. Biomaterials, 2021, 268, 120559.	11.4	32
18	Operation mechanism of organic electrochemical transistors as redox chemical transducers. Journal of Materials Chemistry C, 2021, 9, 12148-12158.	5.5	17

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19	Highâ€Gain Chemically Gated Organic Electrochemical Transistor. Advanced Functional Materials, 2021, 31, 2010868.	14.9	46
20	Dynamic lattice distortions driven by surface trapping in semiconductor nanocrystals. Nature Communications, 2021, 12, 1860.	12.8	19
21	In situ Parallel Training of Analog Neural Network Using Electrochemical Random-Access Memory. Frontiers in Neuroscience, 2021, 15, 636127.	2.8	24
22	Controlling Electrochemically Induced Volume Changes in Conjugated Polymers by Chemical Design: from Theory to Devices. Advanced Functional Materials, 2021, 31, 2100723.	14.9	35
23	Altered heparan sulfate metabolism during development triggers dopamine-dependent autistic-behaviours in models of lysosomal storage disorders. Nature Communications, 2021, 12, 3495.	12.8	20
24	Electronic Doping and Enhancement of nâ€Channel Polycrystalline OFET Performance through Gate Oxide Modifications with Aminosilanes. Advanced Materials Interfaces, 2021, 8, 2100320.	3.7	9
25	Materials Strategies for Organic Neuromorphic Devices. Annual Review of Materials Research, 2021, 51, 47-71.	9.3	33
26	Band-Gap-Engineered Transparent Perovskite Solar Modules to Combine Photovoltaics with Photosynthesis. ACS Applied Materials & Interfaces, 2021, 13, 39230-39238.	8.0	8
27	Ion Pair Uptake in Ion Gel Devices Based on Organic Mixed Ionicâ€“Electronic Conductors. Advanced Functional Materials, 2021, 31, 2104301.	14.9	35
28	Growth-Controlled Broad Emission in Phase-Pure Two-Dimensional Hybrid Perovskite Films. Chemistry of Materials, 2021, 33, 7290-7300.	6.7	13
29	Redox-Active Polymers Designed for the Circular Economy of Energy Storage Devices. ACS Energy Letters, 2021, 6, 3450-3457.	17.4	18
30	Improving molecular alignment and charge percolation in semiconducting polymer films with highly localized electronic states through tailored thermal annealing. Journal of Materials Chemistry C, 2021, 9, 15848-15857.	5.5	8
31	Functional Infectious Nanoparticle Detector: Finding Viruses by Detecting Their Host Entry Functions Using Organic Bioelectronic Devices. ACS Nano, 2021, 15, 18142-18152.	14.6	19
32	Electrolyte-gated transistors for enhanced performance bioelectronics. Nature Reviews Methods Primers, 2021, 1, .	21.2	172
33	Detection of Ganglioside-Specific Toxin Binding with Biomembrane-Based Bioelectronic Sensors. ACS Applied Bio Materials, 2021, 4, 7942-7950.	4.6	7
34	Unraveling the Unconventional Order of a High-Mobility Indacenodithiopheneâ€“Benzothiadiazole Copolymer. ACS Macro Letters, 2021, 10, 1306-1314.	4.8	20
35	Organic neuromorphic electronics for sensorimotor integration and learning in robotics. Science Advances, 2021, 7, eabl5068.	10.3	54
36	Organic Transistors Incorporating Lipid Monolayers for Drug Interaction Studies. Advanced Materials Technologies, 2020, 5, 1900680.	5.8	17

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37	Ion conductivity through TEMPO-mediated oxidated and periodate oxidated cellulose membranes. Carbohydrate Polymers, 2020, 233, 115829.	10.2	15
38	Multifunctional, Room-Temperature Processable, Heterogeneous Organic Passivation Layer for Oxide Semiconductor Thin-Film Transistors. ACS Applied Materials & Interfaces, 2020, 12, 2615-2624.	8.0	27
39	The Role of Morphology in Optically Switchable Transistors Based on a Photochromic Molecule/pâ€Type Polymer Semiconductor Blend. Advanced Functional Materials, 2020, 30, 1907507.	14.9	20
40	Modification of Indacenodithiophene-Based Polymers and Its Impact on Charge Carrier Mobility in Organic Thin-Film Transistors. Journal of the American Chemical Society, 2020, 142, 652-664.	13.7	101
41	Phototuning Selectively Hole and Electron Transport in Optically Switchable Ambipolar Transistors. Advanced Functional Materials, 2020, 30, 1908944.	14.9	27
42	Towards biomimetic electronics that emulate cells. MRS Communications, 2020, 10, 398-412.	1.8	13
43	Side Chain Redistribution as a Strategy to Boost Organic Electrochemical Transistor Performance and Stability. Advanced Materials, 2020, 32, e2002748.	21.0	181
44	Organic neuromorphic devices: Past, present, and future challenges. MRS Bulletin, 2020, 45, 619-630.	3.5	59
45	Combining Photosynthesis and Photovoltaics: A Hybrid Energy-Harvesting System Using Optical Antennas. ACS Applied Materials & Interfaces, 2020, 12, 40261-40268.	8.0	8
46	Perovskite Color Detectors: Approaching the Efficiency Limit. ACS Applied Materials & Interfaces, 2020, 12, 47831-47839.	8.0	29
47	Brush-Painted Solar Cells from Pre-Crystallized Components in a Nonhalogenated Solvent System Prepared by a Simple Stirring Technique. Macromolecules, 2020, 53, 8276-8285.	4.8	1
48	Reversible Doping and Photo Patterning of Polymer Nanowires. Advanced Electronic Materials, 2020, 6, 2000469.	5.1	4
49	Uncovering the Effects of Metal Contacts on Monolayer MoS₂. ACS Nano, 2020, 14, 14798-14808.	14.6	89
50	Self-Assembly of Mammalian-Cell Membranes on Bioelectronic Devices with Functional Transmembrane Proteins. Langmuir, 2020, 36, 7325-7331.	3.5	36
51	Electrochemical Transistors: Enhancementâ€Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular Deâ€Doping (Adv. Mater. 19/2020). Advanced Materials, 2020, 32, 2070148.	21.0	2
52	On the growth, structure and dynamics of P3EHT crystals. Journal of Materials Chemistry C, 2020, 8, 8155-8170.	5.5	7
53	Engineering Optically Switchable Transistors with Improved Performance by Controlling Interactions of Diarylethenes in Polymer Matrices. Journal of the American Chemical Society, 2020, 142, 11050-11059.	13.7	37
54	Optical and Electronic Ion Channel Monitoring from Native Human Membranes. ACS Nano, 2020, 14, 12538-12545.	14.6	51

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55	A biohybrid synapse with neurotransmitter-mediated plasticity. Nature Materials, 2020, 19, 969-973.	27.5	215
56	Vertically Stacked Perovskite Detectors for Color Sensing and Color Vision. Advanced Materials Interfaces, 2020, 7, 2000459.	3.7	28
57	Enhancementâ€Mode PEDOT:PSS Organic Electrochemical Transistors Using Molecular Deâ€Doping. Advanced Materials, 2020, 32, e2000270.	21.0	109
58	Nonequilibrium Thermodynamics of Colloidal Gold Nanocrystals Monitored by Ultrafast Electron Diffraction and Optical Scattering Microscopy. ACS Nano, 2020, 14, 4792-4804.	14.6	20
59	Influence of Perovskite Interface Morphology on the Photon Management in Perovskite/Silicon Tandem Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 15080-15086.	8.0	30
60	Temperature-resilient solid-state organic artificial synapses for neuromorphic computing. Science Advances, 2020, 6, .	10.3	131
61	Energetic Control of Redoxâ€Active Polymers toward Safe Organic Bioelectronic Materials. Advanced Materials, 2020, 32, e1908047.	21.0	124
62	Reversible Electrochemical Phase Change in Monolayer to Bulk-like MoTe₂ by Ionic Liquid Gating. ACS Nano, 2020, 14, 2894-2903.	14.6	37
63	Wearable biosensors and sample handling strategies. , 2020, , 65-88.		10
64	Balancing Ionic and Electronic Conduction for Highâ€Performance Organic Electrochemical Transistors. Advanced Functional Materials, 2020, 30, 1907657.	14.9	131
65	Surfactant-Mediated Growth and Patterning of Atomically Thin Transition Metal Dichalcogenides. ACS Nano, 2020, 14, 6570-6581.	14.6	30
66	Charge transport in high-mobility conjugated polymers and molecular semiconductors. Nature Materials, 2020, 19, 491-502.	27.5	485
67	Enhancing the energy conversion efficiency of low mobility solar cells by a 3D device architecture. Journal of Materials Chemistry C, 2019, 7, 10289-10296.	5.5	10
68	Anisotropic Polaron Delocalization in Conjugated Homopolymers and Donorâ€“Acceptor Copolymers. Chemistry of Materials, 2019, 31, 7033-7045.	6.7	39
69	Color Sensing by Optical Antennas: Approaching the Quantum Efficiency Limit. ACS Photonics, 2019, 6, 2041-2048.	6.6	12
70	The Effect of Ring Expansion in Thienobenzo[b]indacenodithiophene Polymers for Organic Field-Effect Transistors. Journal of the American Chemical Society, 2019, 141, 18806-18813.	13.7	45
71	Wearable Organic Electrochemical Transistor Patch for Multiplexed Sensing of Calcium and Ammonium Ions from Human Perspiration. Advanced Healthcare Materials, 2019, 8, e1901321.	7.6	115
72	The Mechanism of Dedoping PEDOT:PSS by Aliphatic Polyamines. Journal of Physical Chemistry C, 2019, 123, 24328-24337.	3.1	37

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73	Additive solution deposition of multi-layered semiconducting polymer films for design of sophisticated device architectures. Journal of Materials Chemistry C, 2019, 7, 953-960.	5.5	10
74	Diffraction imaging of nanocrystalline structures in organic semiconductor molecular thin films. Nature Materials, 2019, 18, 860-865.	27.5	99
75	High-mobility, trap-free charge transport in conjugated polymer diodes. Nature Communications, 2019, 10, 2122.	12.8	92
76	Parallel programming of an ionic floating-gate memory array for scalable neuromorphic computing. Science, 2019, 364, 570-574.	12.6	484
77	Optics of Perovskite Solar Cell Front Contacts. ACS Applied Materials & Interfaces, 2019, 11, 14693-14701.	8.0	32
78	The role of the third component in ternary organic solar cells. Nature Reviews Materials, 2019, 4, 229-242.	48.7	370
79	Increased charge carrier mobility and molecular packing of a solution sheared diketopyrrolopyrrole-based donorâ€“acceptor copolymer by alkyl side chain modification. Journal of Materials Chemistry C, 2019, 7, 3665-3674.	5.5	19
80	Redefining near-unity luminescence in quantum dots with photothermal threshold quantum yield. Science, 2019, 363, 1199-1202.	12.6	190
81	Realizing high aspect ratio silver micro and nanostructures by microcontact printing of alkyl thiol self-assembled monolayers. MRS Advances, 2019, 4, 2441-2451.	0.9	1
82	Redox transistors for neuromorphic computing. IBM Journal of Research and Development, 2019, 63, 9:1-9:9.	3.1	28
83	Tuning the bandgap of Cs₂AgBiBr₆ through dilute tin alloying. Chemical Science, 2019, 10, 10620-10628.	7.4	58
84	Role of the Anion on the Transport and Structure of Organic Mixed Conductors. Advanced Functional Materials, 2019, 29, 1807034.	14.9	116
85	Mechanisms for Enhanced State Retention and Stability in Redoxâ€Gated Organic Neuromorphic Devices. Advanced Electronic Materials, 2019, 5, 1800686.	5.1	66
86	Influence of Water on the Performance of Organic Electrochemical Transistors. Chemistry of Materials, 2019, 31, 927-937.	6.7	140
87	Optimized pulsed write schemes improve linearity and write speed for low-power organic neuromorphic devices. Journal Physics D: Applied Physics, 2018, 51, 224002.	2.8	53
88	Fused electron deficient semiconducting polymers for air stable electron transport. Nature Communications, 2018, 9, 416.	12.8	133
89	Organic electrochemical transistors. Nature Reviews Materials, 2018, 3, .	48.7	1,143
90	Chemically Responsive Elastomers Exhibiting Unityâ€Order Refractive Index Modulation. Advanced Materials, 2018, 30, 1703912.	21.0	19

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91	Polymorphism controls the degree of charge transfer in a molecularly doped semiconducting polymer. Materials Horizons, 2018, 5, 655-660.	12.2	92
92	Improving Quantum Yield of Upconverting Nanoparticles in Aqueous Media via Emission Sensitization. Nano Letters, 2018, 18, 2689-2695.	9.1	69
93	Organic Electronics for Point-of-Care Metabolite Monitoring. Trends in Biotechnology, 2018, 36, 45-59.	9.3	104
94	High-Throughput Open-Air Plasma Activation of Metal-Oxide Thin Films with Low Thermal Budget. ACS Applied Materials & Interfaces, 2018, 10, 37223-37232.	8.0	13
95	A Universal Platform for Fabricating Organic Electrochemical Devices. Advanced Electronic Materials, 2018, 4, 1800090.	5.1	43
96	Progress in Poly (3â€Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. Advanced Energy Materials, 2018, 8, 1801001.	19.5	95
97	Approaching Perfect Light Incoupling in Perovskite and Silicon Thin Film Solar Cells by Moth Eye Surface Textures. Advanced Theory and Simulations, 2018, 1, 1800030.	2.8	38
98	Spectral Signatures and Spatial Coherence of Bound and Unbound Polarons in P3HT Films: Theory Versus Experiment. Journal of Physical Chemistry C, 2018, 122, 18048-18060.	3.1	70
99	Organic electronics for neuromorphic computing. Nature Electronics, 2018, 1, 386-397.	26.0	672
100	Molecularly selective nanoporous membrane-based wearable organic electrochemical device for noninvasive cortisol sensing. Science Advances, 2018, 4, eaar2904.	10.3	395
101	Unraveling the Effect of Conformational and Electronic Disorder in the Charge Transport Processes of Semiconducting Polymers. Advanced Functional Materials, 2018, 28, 1804142.	14.9	34
102	Biomimetic Electronic Devices for Measuring Bacterial Membrane Disruption. Advanced Materials, 2018, 30, e1803130.	21.0	43
103	Copper interstitial recombination centers in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">N</mml:mi></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.2	18
104	Openâ€Circuit Voltage in Organic Solar Cells: The Impacts of Donor Semicrystallinity and Coexistence of Multiple Interfacial Chargeâ€Transfer Bands. Advanced Energy Materials, 2017, 7, 1601995.	19.5	35
105	A non-volatile organic electrochemical device as a low-voltage artificial synapse for neuromorphic computing. Nature Materials, 2017, 16, 414-418.	27.5	1,234
106	Longâ€Term Structural Evolution of an Intercalated Layered Semiconductor. Advanced Functional Materials, 2017, 27, 1605038.	14.9	8
107	Improving the electrical performance of solution processed oligothiophene thin-film transistors via structural similarity blending. Journal of Materials Chemistry C, 2017, 5, 5048-5054.	5.5	1
108	Effect of oxygen vacancies and strain on the phonon spectrum of HfO2 thin films. Journal of Applied Physics, 2017, 121, .	2.5	10

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109	Negative Isotope Effect on Fieldâ€Effect Hole Transport in Fully Substituted ¹³Câ€Rubrene. Advanced Electronic Materials, 2017, 3, 1700018.	5.1	32
110	On the transient response of organic electrochemical transistors. Organic Electronics, 2017, 45, 215-221.	2.6	62
111	Enhanced Cellâ€“Chip Coupling by Rapid Femtosecond Laser Patterning of Soft PEDOT:PSS Biointerfaces. ACS Applied Materials & Interfaces, 2017, 9, 39116-39121.	8.0	23
112	Sequential Doping Reveals the Importance of Amorphous Chain Rigidity in Charge Transport of Semi-Crystalline Polymers. Journal of Physical Chemistry Letters, 2017, 8, 4974-4980.	4.6	72
113	Spectroscopic studies of dopant-induced conformational changes in poly (3-hexylthiophene) thin films. MRS Communications, 2017, 7, 728-734.	1.8	15
114	Structural Effects of Gating Poly(3â€hexylthiophene) through an Ionic Liquid. Advanced Functional Materials, 2017, 27, 1701791.	14.9	70
115	Point defects in Cu 2 ZnSnSe 4 (CZTSe): Resonant Xâ€ray diffraction study of the lowâ€temperature order/disorder transition. Physica Status Solidi (B): Basic Research, 2017, 254, 1700156.	1.5	14
116	Revealing the Cellâ€“Material Interface with Nanometer Resolution by Focused Ion Beam/Scanning Electron Microscopy. ACS Nano, 2017, 11, 8320-8328.	14.6	152
117	Reducing the efficiencyâ€“stabilityâ€“cost gap of organic photovoltaics with highly efficient and stable small molecule acceptor ternary solar cells. Nature Materials, 2017, 16, 363-369.	27.5	921
118	Timeâ€•and Temperatureâ€Independent Local Carrier Mobility and Effects of Regioregularity in Polymerâ€Fullerene Organic Semiconductors. Advanced Electronic Materials, 2016, 2, 1500351.	5.1	23
119	Role of Polymer Structure on the Conductivity of Nâ€Doped Polymers. Advanced Electronic Materials, 2016, 2, 1600004.	5.1	99
120	Core/Shell Approach to Dopant Incorporation and Shape Control in Colloidal Zinc Oxide Nanorods. Chemistry of Materials, 2016, 28, 3454-3461.	6.7	31
121	Signatures of Intracrystallite and Intercrystallite Limitations of Charge Transport in Polythiophenes. Macromolecules, 2016, 49, 7359-7369.	4.8	43
122	Impact of Organic Semiconductor Microstructure on Transport: Basic Concepts. Materials and Energy, 2016, , 293-323.	0.1	2
123	Dualâ€Characteristic Transistors Based on Semiconducting Polymer Blends. Advanced Electronic Materials, 2016, 2, 1600267.	5.1	20
124	Enhancing Quantum Yield via Local Symmetry Distortion in Lanthanide-Based Upconverting Nanoparticles. ACS Photonics, 2016, 3, 1523-1530.	6.6	72
125	Naphthalenediimide Polymers with Finely Tuned Inâ€Chain Ïâ€Conjugation: Electronic Structure, Film Microstructure, and Charge Transport Properties. Advanced Materials, 2016, 28, 9169-9174.	21.0	63
126	Tradeâ€Off between Trap Filling, Trap Creation, and Charge Recombination Results in Performance Increase at Ultralow Doping Levels in Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2016, 6, 1601149.	19.5	45

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127	The Roles of Structural Order and Intermolecular Interactions in Determining Ionization Energies and Chargeâ€Transfer State Energies in Organic Semiconductors. Advanced Energy Materials, 2016, 6, 1601211.	19.5	45
128	Anomalous Charge Transport in Conjugated Polymers Reveals Underlying Mechanisms of Trapping and Percolation. ACS Central Science, 2016, 2, 910-915.	11.3	33
129	High-efficiency and air-stable P3HT-based polymer solar cells with a new non-fullerene acceptor. Nature Communications, 2016, 7, 11585.	12.8	1,053
130	Bandgap Restructuring of the Layered Semiconductor Gallium Telluride in Air. Advanced Materials, 2016, 28, 6465-6470.	21.0	58
131	Avoid the kinks when measuring mobility. Science, 2016, 352, 1521-1522.	12.6	213
132	Characterizing the Polymer:Fullerene Intermolecular Interactions. Chemistry of Materials, 2016, 28, 1446-1452.	6.7	20
133	Strain effects on the work function of an organic semiconductor. Nature Communications, 2016, 7, 10270.	12.8	74
134	Engineering semiconducting polymers for efficient charge transport. MRS Communications, 2015, 5, 383-395.	1.8	78
135	Significance of the double-layer capacitor effect in polar rubbery dielectrics and exceptionally stable low-voltage high transconductance organic transistors. Scientific Reports, 2015, 5, 17849.	3.3	66
136	Solid Solutions of Rare Earth Cations in Mesoporous Anatase Beads and Their Performances in Dye-Sensitized Solar Cells. Scientific Reports, 2015, 5, 16785.	3.3	16
137	Microstructural and Electronic Origins of Openâ€Circuit Voltage Tuning in Organic Solar Cells Based on Ternary Blends. Advanced Energy Materials, 2015, 5, 1501335.	19.5	68
138	The Effect of Processing Additives on Energetic Disorder in Highly Efficient Organic Photovoltaics: A Case Study on PBDTTTâ€Câ€T:PC₇₁BM. Advanced Materials, 2015, 27, 3868-3873.	21.0	46
139	Efficiency Enhancement of Gallium Arsenide Photovoltaics Using Solution-Processed Zinc Oxide Nanoparticle Light Scattering Layers. Journal of Nanomaterials, 2015, 2015, 1-6.	2.7	2
140	Optically switchable transistors by simple incorporation of photochromic systems into small-molecule semiconducting matrices. Nature Communications, 2015, 6, 6330.	12.8	162
141	Modular synthetic design enables precise control of shape and doping in colloidal zinc oxide nanorods. Journal of Materials Chemistry C, 2015, 3, 7172-7179.	5.5	14
142	Miscibility and Acid Strength Govern Contact Doping of Organic Photovoltaics with Strong Polyelectrolytes. Macromolecules, 2015, 48, 5162-5171.	4.8	13
143	Direct Correlation of Charge Transfer Absorption with Molecular Donor:Acceptor Interfacial Area via Photothermal Deflection Spectroscopy. Journal of the American Chemical Society, 2015, 137, 5256-5259.	13.7	45
144	Optical measurement of doping efficiency in poly(3-hexylthiophene) solutions and thin films. Physical Review B, 2015, 91, .	3.2	108

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145	Role of Sideâ€Chain Branching on Thinâ€Film Structure and Electronic Properties of Polythiophenes. Advanced Functional Materials, 2015, 25, 2616-2624.	14.9	65
146	Symmetry-Breaking Charge Transfer in a Zinc Chlorodipyrrin Acceptor for High Open Circuit Voltage Organic Photovoltaics. Journal of the American Chemical Society, 2015, 137, 5397-5405.	13.7	82
147	Optically switchable transistors comprising a hybrid photochromic molecule/n-type organic active layer. Journal of Materials Chemistry C, 2015, 3, 4156-4161.	5.5	56
148	Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells. Journal of Materials Chemistry A, 2015, 3, 24349-24357.	10.3	31
149	Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10599-10604.	7.1	175
150	Branched and linear A2â€“Dâ€“A1â€“Dâ€“A2isoindigo-based solution-processable small molecules for organic field-effect transistors and solar cells. RSC Advances, 2015, 5, 85460-85469.	3.6	8
151	Multi-phase microstructures drive exciton dissociation in neat semicrystalline polymeric semiconductors. Journal of Materials Chemistry C, 2015, 3, 10715-10722.	5.5	689
152	Something out of nothing. Nature Materials, 2015, 14, 1077-1078.	27.5	19
153	Toward Conductive Mesocrystalline Assemblies: PbS Nanocrystals Cross-Linked with Tetrathiafulvalene Dicarboxylate. Chemistry of Materials, 2015, 27, 8105-8115.	6.7	32
154	Semi-transparent perovskite solar cells for tandems with silicon and CIGS. Energy and Environmental Science, 2015, 8, 956-963.	30.8	630
155	Organic electrochemical transistors as impedance biosensors. MRS Communications, 2014, 4, 189-194.	1.8	37
156	Modeling of the effect of intentionally introduced traps on hole transport in single-crystal rubrene. Physical Review B, 2014, 89, .	3.2	5
157	Toward bulk heterojunction polymer solar cells with thermally stable active layer morphology. Journal of Photonics for Energy, 2014, 4, 040997.	1.3	42
158	High-resolution x-ray analysis of graphene grown on 4Hâ€“SiC (000) at low pressures. Journal of Materials Research, 2014, 29, 439-446.	2.6	1
159	Tuning the plasmonic absorption of metal reflectors by zinc oxide nano particles: Application in thin film solar cells. Nano Energy, 2014, 6, 167-172.	16.0	18
160	Mechanism of Crystallization and Implications for Charge Transport in Poly(3â€ethylhexylthiophene) Thin Films. Advanced Functional Materials, 2014, 24, 4515-4521.	14.9	66
161	Organic Solar Cells: On the Efficiency of Charge Transfer State Splitting in Polymer:Fullerene Solar Cells (Adv. Mater. 16/2014). Advanced Materials, 2014, 26, 2607-2607.	21.0	0
162	Contact Doping with Subâ€Monolayers of Strong Polyelectrolytes for Organic Photovoltaics. Advanced Energy Materials, 2014, 4, 1400439.	19.5	25

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163	Structureâ€“property relationships of oligothiopheneâ€“isoindigo polymers for efficient bulk-heterojunction solar cells. Energy and Environmental Science, 2014, 7, 361-369.	30.8	108
164	Efficient charge generation by relaxed charge-transfer states at organic interfaces. Nature Materials, 2014, 13, 63-68.	27.5	667
165	Plasmon-Enhanced Upconversion. Journal of Physical Chemistry Letters, 2014, 5, 4020-4031.	4.6	248
166	Role of Molecular Weight Distribution on Charge Transport in Semiconducting Polymers. Macromolecules, 2014, 47, 7151-7157.	4.8	102
167	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2014, 4, 1400922.	19.5	54
168	Charge Transport Orthogonality in Allâ€Polymer Blend Transistors, Diodes, and Solar Cells. Advanced Energy Materials, 2014, 4, 1301409.	19.5	64
169	Enhanced Photovoltaic Performance of Indacenodithiopheneâ€Quinoxaline Copolymers by Sideâ€Chain Modulation. Advanced Energy Materials, 2014, 4, 1400680.	19.5	134
170	Enhancing Fullereneâ€Based Solar Cell Lifetimes by Addition of a Fullerene Dumbbell. Angewandte Chemie, 2014, 126, 13084-13089.	2.0	8
171	Spray Deposition of Silver Nanowire Electrodes for Semitransparent Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2013, 3, 1657-1663.	19.5	99
172	A general relationship between disorder, aggregation and charge transport in conjugated polymers. Nature Materials, 2013, 12, 1038-1044.	27.5	1,742
173	Vertical confinement and interface effects on the microstructure and charge transport of P3HT thin films. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 611-620.	2.1	87
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