

# Stephen R Forrest

## List of Publications by Year in descending order

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193  
papers

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195  
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195  
docs citations

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times ranked

22384  
citing authors

#	ARTICLE	IF	CITATIONS
1	The path to ubiquitous and low-cost organic electronic appliances on plastic. <i>Nature</i> , 2004, 428, 911-918.	13.7	4,755
2	Nearly 100% internal phosphorescence efficiency in an organic light-emitting device. <i>Journal of Applied Physics</i> , 2001, 90, 5048-5051.	1.1	3,189
3	Highly Phosphorescent Bis-Cyclometalated Iridium Complexes: Synthesis, Photophysical Characterization, and Use in Organic Light Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2001, 123, 4304-4312.	6.6	2,639
4	Small molecular weight organic thin-film photodetectors and solar cells. <i>Journal of Applied Physics</i> , 2003, 93, 3693-3723.	1.1	2,504
5	Ultrathin Organic Films Grown by Organic Molecular Beam Deposition and Related Techniques. <i>Chemical Reviews</i> , 1997, 97, 1793-1896.	23.0	1,765
6	Endothermic energy transfer: A mechanism for generating very efficient high-energy phosphorescent emission in organic materials. <i>Applied Physics Letters</i> , 2001, 79, 2082-2084.	1.5	1,029
7	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , 2020, 5, 35-49.	19.8	797
8	Deep blue phosphorescent organic light-emitting diodes with very high brightness and efficiency. <i>Nature Materials</i> , 2016, 15, 92-98.	13.3	696
9	Effects of film morphology and gate dielectric surface preparation on the electrical characteristics of organic-vapor-phase-deposited pentacene thin-film transistors. <i>Applied Physics Letters</i> , 2002, 81, 268-270.	1.5	653
10	Three-Color, Tunable, Organic Light-Emitting Devices. <i>Science</i> , 1997, 276, 2009-2011.	6.0	571
11	4.2% efficient organic photovoltaic cells with low series resistances. <i>Applied Physics Letters</i> , 2004, 84, 3013-3015.	1.5	535
12	Enhanced light out-coupling of organic light-emitting devices using embedded low-index grids. <i>Nature Photonics</i> , 2008, 2, 483-487.	15.6	525
13	Controlled growth of a molecular bulk heterojunction photovoltaic cell. <i>Nature Materials</i> , 2004, 4, 37-41.	13.3	519
14	High efficiency single dopant white electrophosphorescent light emitting diodes Electronic supplementary information (ESI) available: emission spectra as a function of doping concentration for 3 in CBP, as well as the absorption and emission spectra of Irppz, CBP and mCP. See <a href="http://www.rsc.org/suppdata/nj/b2/b204301g/">http://www.rsc.org/suppdata/nj/b2/b204301g/</a> . <i>New Journal of Chemistry</i> , 2002, 26, 1171-1178.	1.4	486
15	Ultrahigh Energy Gap Hosts in Deep Blue Organic Electrophosphorescent Devices. <i>Chemistry of Materials</i> , 2004, 16, 4743-4747.	3.2	473
16	Electroluminescence mechanisms in organic light emitting devices employing a europium chelate doped in a wide energy gap bipolar conducting host. <i>Journal of Applied Physics</i> , 2000, 87, 8049-8055.	1.1	408
17	Exciton diffusion lengths of organic semiconductor thin films measured by spectrally resolved photoluminescence quenching. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	401
18	High Efficiency Near-Infrared and Semitransparent Non-Fullerene Acceptor Organic Photovoltaic Cells. <i>Journal of the American Chemical Society</i> , 2017, 139, 17114-17119.	6.6	384

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19	Energy transfer in polymer electrophosphorescent light emitting devices with single and multiple doped luminescent layers. <i>Journal of Applied Physics</i> , 2002, 92, 87-93.	1.1	371
20	Tenfold increase in the lifetime of blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , 2014, 5, 5008.	5.8	367
21	Suppressing molecular motions for enhanced room-temperature phosphorescence of metal-free organic materials. <i>Nature Communications</i> , 2015, 6, 8947.	5.8	344
22	Dynamic kirigami structures for integrated solar tracking. <i>Nature Communications</i> , 2015, 6, 8092.	5.8	297
23	Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices. <i>Advanced Materials</i> , 1998, 10, 1108-1112.	11.1	262
24	Solvent-Annealed Crystalline Squaraine: PC <sub>70</sub> BM (1:6) Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 184-187.	10.2	254
25	Organic small molecule solar cells with a homogeneously mixed copper phthalocyanine: C60 active layer. <i>Applied Physics Letters</i> , 2004, 84, 4218-4220.	1.5	252
26	Micropatterning of Organic Electronic Devices by Cold-Welding. <i>Science</i> , 2000, 288, 831-833.	6.0	239
27	Hot excited state management for long-lived blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , 2017, 8, 15566.	5.8	209
28	Effects of Systematic Methyl Substitution of Metal (III) Tris(n-Methyl-8-Quinolinolato) Chelates on Material Properties for Optimum Electroluminescence Device Performance. <i>Journal of the American Chemical Society</i> , 2001, 123, 6300-6307.	6.6	207
29	High-efficiency yellow double-doped organic light-emitting devices based on phosphor-sensitized fluorescence. <i>Applied Physics Letters</i> , 2001, 79, 1045-1047.	1.5	199
30	Open circuit voltage enhancement due to reduced dark current in small molecule photovoltaic cells. <i>Applied Physics Letters</i> , 2009, 94, 023307.	1.5	198
31	Intrinsically stable organic solar cells under high-intensity illumination. <i>Nature</i> , 2019, 573, 394-397.	13.7	194
32	Thermodynamic efficiency limit of excitonic solar cells. <i>Physical Review B</i> , 2011, 83, .	1.1	150
33	Organic Vapor Phase Deposition. <i>Advanced Materials</i> , 1998, 10, 1505-1514.	11.1	134
34	Nanolithography based on patterned metal transfer and its application to organic electronic devices. <i>Applied Physics Letters</i> , 2002, 80, 4051-4053.	1.5	129
35	Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. <i>Nature Communications</i> , 2021, 12, 5419.	5.8	128
36	Near-perfect photon utilization in an air-bridge thermophotovoltaic cell. <i>Nature</i> , 2020, 586, 237-241.	13.7	118

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37	Material transport regimes and mechanisms for growth of molecular organic thin films using low-pressure organic vapor phase deposition. <i>Journal of Applied Physics</i> , 2001, 89, 1470-1476.	1.1	112
38	Color-neutral, semitransparent organic photovoltaics for power window applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21147-21154.	3.3	109
39	Enhanced Light Utilization in Semitransparent Organic Photovoltaics Using an Optical Outcoupling Architecture. <i>Advanced Materials</i> , 2019, 31, e1903173.	11.1	105
40	High Efficiency, Vacuum Deposited, Small Molecule Organic Tandem and Triple Junction Photovoltaic Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400568.	10.2	103
41	High efficiency organic photovoltaic cells based on a vapor deposited squaraine donor. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	101
42	Van der Waals heterostructure polaritons with moiré-induced nonlinearity. <i>Nature</i> , 2021, 591, 61-65.	13.7	100
43	Existence of continuous-wave threshold for organic semiconductor lasers. <i>Physical Review B</i> , 2011, 84, .	1.1	98
44	A hybrid planar-mixed tetraphenyldibenzoperiflanthene/C70 photovoltaic cell. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	98
45	Enhanced light extraction from organic light-emitting devices using a sub-anode grid. <i>Nature Photonics</i> , 2015, 9, 758-763.	15.6	87
46	Twist-angle dependence of moiré excitons in WS <sub>2</sub> /MoSe <sub>2</sub> heterobilayers. <i>Nature Communications</i> , 2020, 11, 5888.	5.8	87
47	Efficient, Nonintrusive Outcoupling in Organic Light Emitting Devices Using Embedded Microlens Arrays. <i>ACS Photonics</i> , 2018, 5, 2453-2458.	3.2	80
48	Transforming the cost of solar-to-electrical energy conversion: Integrating thin-film GaAs solar cells with non-tracking mini-concentrators. <i>Light: Science and Applications</i> , 2015, 4, e288-e288.	7.7	78
49	Nearly 100% Horizontal Dipole Orientation and Upconversion Efficiency in Blue Thermally Activated Delayed Fluorescent Emitters. <i>Advanced Optical Materials</i> , 2018, 6, 1701340.	3.6	78
50	Effects of exciton and charge confinement on the performance of white organic phosphorescent emissive excimer devices. <i>Journal of Applied Physics</i> , 2003, 94, 3101-3109.	1.1	75
51	Micropatterning of small molecular weight organic semiconductor thin films using organic vapor phase deposition. <i>Journal of Applied Physics</i> , 2003, 93, 4005-4016.	1.1	74
52	Organic photovoltaics incorporating electron conducting exciton blocking layers. <i>Applied Physics Letters</i> , 2011, 98, 243307.	1.5	70
53	Energy Loss in Organic Photovoltaics: Nonfullerene Versus Fullerene Acceptors. <i>Physical Review Applied</i> , 2019, 11, .	1.5	68
54	Growth and characterization of small band gap ( $\sim 0.6$ eV) InGaAsN layers on InP. <i>Applied Physics Letters</i> , 1999, 74, 1287-1289.	1.5	67

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55	Near-field thermophotovoltaics for efficient heat to electricity conversion at high power density. <i>Nature Communications</i> , 2021, 12, 4364.	5.8	67
56	Analysis of metal-oxide-based charge generation layers used in stacked organic light-emitting diodes. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	65
57	Reuse of GaAs substrates for epitaxial lift-off by employing protection layers. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	65
58	Photochemical origins of burn-in degradation in small molecular weight organic photovoltaic cells. <i>Energy and Environmental Science</i> , 2015, 8, 1005-1010.	15.6	65
59	Near-Infrared Ternary Tandem Solar Cells. <i>Advanced Materials</i> , 2018, 30, e1804416.	11.1	65
60	Centimetre-scale electron diffusion in photoactive organic heterostructures. <i>Nature</i> , 2018, 554, 77-80.	13.7	64
61	A low switching voltage organic-on-inorganic heterojunction memory element utilizing a conductive polymer fuse on a doped silicon substrate. <i>Applied Physics Letters</i> , 2004, 84, 5019-5021.	1.5	63
62	Stacked white organic light emitting devices consisting of separate red, green, and blue elements. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	62
63	Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , 2014, 24, 4284-4291.	7.8	61
64	Tandem organic photovoltaics using both solution and vacuum deposited small molecules. <i>Applied Physics Letters</i> , 2012, 101, 063303.	1.5	60
65	Carrier transport in multilayer organic photodetectors: II. Effects of anode preparation. <i>Journal of Applied Physics</i> , 2004, 95, 1869-1877.	1.1	59
66	Ultralong-Range Energy Transport in a Disordered Organic Semiconductor at Room Temperature Via Coherent Exciton-Polariton Propagation. <i>Advanced Materials</i> , 2020, 32, e2002127.	11.1	58
67	Room Temperature Frenkel-Wannier-Mott Hybridization of Degenerate Excitons in a Strongly Coupled Microcavity. <i>Physical Review Letters</i> , 2014, 112, 076401.	2.9	56
68	Small-Molecule Planar-Mixed Heterojunction Photovoltaic Cells with Fullerene-Based Electron Filtering Buffers. <i>Advanced Energy Materials</i> , 2014, 4, 1301557.	10.2	54
69	Optical nonlinearities in crystalline organic multiple quantum wells. <i>Physical Review Letters</i> , 1991, 66, 1614-1617.	2.9	53
70	Organic thin-film transistors based on bis(1,2,5-thiadiazolo)-p-quinobis (1,3-dithiole). <i>Applied Physics Letters</i> , 2001, 79, 3714-3716.	1.5	52
71	Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	51
72	Organic Photovoltaics Using Tetraphenylbenzoporphyrin Complexes as Donor Layers. <i>Advanced Materials</i> , 2009, 21, 1517-1520.	11.1	51

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73	Blue Emissive <i>fac</i> / <i>mer</i> - <i>mer</i> Iridium (III) NHC Carbene Complexes and their Application in OLEDs. <i>Advanced Optical Materials</i> , 2021, 9, 2001994.	3.6	51
74	Carrier transport in multilayer organic photodetectors: I. Effects of layer structure on dark current and photoresponse. <i>Journal of Applied Physics</i> , 2004, 95, 1859-1868.	1.1	47
75	Charge transport and exciton dissociation in organic solar cells consisting of dipolar donors mixed with $C_{70}$ . <i>Physical Review B</i> , 2015, 92, .	1.1	47
76	Thin-Film Architectures with High Spectral Selectivity for Thermophotovoltaic Cells. <i>ACS Photonics</i> , 2018, 5, 2748-2754.	3.2	47
77	Evolution of quasi-epitaxial growth of a crystalline organic semiconductor on graphite. <i>Applied Physics Letters</i> , 1992, 60, 3223-3225.	1.5	46
78	Charge Transfer States in Dilute Donor-Acceptor Blend Organic Heterojunctions. <i>ACS Nano</i> , 2016, 10, 7619-7626.	7.3	46
79	Isomeric Effects of Solution Processed Ladder-Type Non-Fullerene Electron Acceptors. <i>Solar Rrl</i> , 2017, 1, 1700107.	3.1	44
80	Multiple growths of epitaxial lift-off solar cells from a single InP substrate. <i>Applied Physics Letters</i> , 2010, 97, 101107.	1.5	42
81	Cost estimates of production scale semitransparent organic photovoltaic modules for building integrated photovoltaics. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5765-5772.	2.5	42
82	Elimination of Plasmon Losses and Enhanced Light Extraction of Top-Emitting Organic Light-Emitting Devices Using a Reflective Subelectrode Grid. <i>ACS Photonics</i> , 2017, 4, 363-368.	3.2	41
83	Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. I. Theory. <i>Physical Review B</i> , 2014, 90, .	1.1	40
84	Organic optical bistable switch. <i>Applied Physics Letters</i> , 2003, 82, 136-138.	1.5	38
85	Flexible Thin-Film InGaAs Photodiode Focal Plane Array. <i>ACS Photonics</i> , 2016, 3, 670-676.	3.2	38
86	Excitons and the lifetime of organic semiconductor devices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140320.	1.6	37
87	Phenanthro[9,10- <i>d</i> ]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. <i>Materials Horizons</i> , 2019, 6, 1179-1186.	6.4	36
88	Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. <i>Advanced Materials</i> , 2019, 31, e1900921.	11.1	35
89	Direct mask-free patterning of molecular organic semiconductors using organic vapor jet printing. <i>Journal of Applied Physics</i> , 2004, 96, 4500-4507.	1.1	34
90	Ultrathin film, high specific power InP solar cells on flexible plastic substrates. <i>Applied Physics Letters</i> , 2009, 95, 223503.	1.5	34

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91	Organic vapor phase deposition for the growth of large area organic electronic devices. Applied Physics Letters, 2009, 95, .	1.5	34
92	Enhanced efficiency in high-brightness fluorescent organic light emitting diodes through triplet management. Applied Physics Letters, 2011, 99, 223303.	1.5	33
93	Donor–Acceptor–Acceptor's Molecules for Vacuum-Deposited Organic Photovoltaics with Efficiency Exceeding 9%. Advanced Energy Materials, 2018, 8, 1703603.	10.2	33
94	Measurement of exciton diffusion lengths in optically thin organic films. Applied Physics Letters, 2011, 99, 243303.	1.5	31
95	Organic photodetector arrays with indium tin oxide electrodes patterned using directly transferred metal masks. Applied Physics Letters, 2009, 94, .	1.5	30
96	Direct vapor jet printing of three color segment organic light emitting devices for white light illumination. Applied Physics Letters, 2008, 92, 053301.	1.5	29
97	Snow cleaning of substrates increases yield of large-area organic photovoltaics. Applied Physics Letters, 2012, 101, 133901.	1.5	29
98	Full-wave simulation of enhanced outcoupling of organic light-emitting devices with an embedded low-index grid. Applied Physics Letters, 2009, 94, .	1.5	28
99	Reliability of Small Molecule Organic Photovoltaics with Electron-Filtering Compound Buffer Layers. Advanced Energy Materials, 2016, 6, 1601094.	10.2	28
100	Ordered organic-organic multilayer growth. Physical Review B, 2011, 83, .	1.1	26
101	Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. II. Experiment. Physical Review B, 2014, 90, .	1.1	26
102	Charge Transfer and Collection in Dilute Organic Donor–Acceptor Heterojunction Blends. Nano Letters, 2018, 18, 3180-3184.	4.5	26
103	Optical detectors: Three contenders: Depending on the application, the photoconductor, p-i-n diode, or avalanche photodiode may prove the best choice. IEEE Spectrum, 1986, 23, 76-85.	0.5	25
104	Stable and efficient electrophosphorescent organic light-emitting devices grown by organic vapor phase deposition. Applied Physics Letters, 2005, 86, 021107.	1.5	25
105	Vertical orientation of copper phthalocyanine in organic solar cells using a small molecular weight organic templating layer. Applied Physics Letters, 2011, 99, 043308.	1.5	25
106	Temperature dependence of polariton lasing in a crystalline anthracene microcavity. Physical Review B, 2012, 86, .	1.1	25
107	Thermal analysis of high intensity organic light-emitting diodes based on a transmission matrix approach. Journal of Applied Physics, 2011, 110, 124516.	1.1	23
108	An electrophosphorescent organic light emitting concentrator. Light: Science and Applications, 2014, 3, e181-e181.	7.7	23

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109	Optically powered arrays for optoelectronic interconnection networks. <i>Applied Optics</i> , 1991, 30, 1335.	2.1	22
110	Continuous roll-to-roll fabrication of organic photovoltaic cells via interconnected high-vacuum and low-pressure organic vapor phase deposition systems. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	22
111	From 2D to 3D: Strain- and elongation-free topological transformations of optoelectronic circuits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 3968-3973.	3.3	22
112	Understanding tandem organic photovoltaic cell performance. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	21
113	Charge Balance and Exciton Confinement in Phosphorescent Organic Light Emitting Diodes. <i>Advanced Optical Materials</i> , 2016, 4, 889-895.	3.6	21
114	Engineering Temperature-Dependent Carrier Concentration in Bulk Composite Materials via Temperature-Dependent Fermi Level Offset. <i>Advanced Energy Materials</i> , 2018, 8, 1701623.	10.2	21
115	Molecular Alignment of Homoleptic Iridium Phosphors in Organic Light-Emitting Diodes. <i>Advanced Materials</i> , 2021, 33, e2102882.	11.1	21
116	Novel organic- $\text{InP}$ field-effect transistor. <i>Applied Physics Letters</i> , 1985, 47, 1217-1219.	1.5	20
117	Efficient Outcoupling of Organic Light-Emitting Devices Using a Light-Scattering Dielectric Layer. <i>ACS Photonics</i> , 2018, 5, 3315-3321.	3.2	20
118	Effects of Charge Balance and Exciton Confinement on the Operational Lifetime of Blue Phosphorescent Organic Light-Emitting Diodes. <i>Physical Review Applied</i> , 2017, 7, .	1.5	19
119	Efficient Charge Generation via Hole Transfer in Dilute Organic Donor-Fullerene Blends. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2203-2210.	2.1	19
120	Origami Solar-Tracking Concentrator Array for Planar Photovoltaics. <i>ACS Photonics</i> , 2016, 3, 2134-2140.	3.2	18
121	Bilayer Interdiffused Heterojunction Organic Photodiodes Fabricated by Double Transfer Stamping. <i>Advanced Optical Materials</i> , 2017, 5, 1600784.	3.6	18
122	Lasing from a molecular sieve. <i>Nature</i> , 1999, 397, 294-295.	13.7	17
123	Inverted small molecule organic photovoltaic cells on reflective substrates. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	16
124	Theory of the perfect lens. <i>Physical Review B</i> , 2011, 84, .	1.1	16
125	Free and trapped hybrid charge transfer excitons at a ZnO/small-molecule heterojunction. <i>Physical Review B</i> , 2016, 94, .	1.1	16
126	Tuning the Photophysical and Electrochemical Properties of Aza-Boron-Dipyridylmethenes for Fluorescent Blue OLEDs. <i>Advanced Functional Materials</i> , 2021, 31, 2101175.	7.8	15



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127	Growth of abrupt InGaAs(P)/In(GaAs)P heterointerfaces by gas source molecular beam epitaxy. Journal of Applied Physics, 1995, 77, 201-209.	1.1	14
128	Symmetric "Double Spiro" Wide Energy Gap Hosts for Blue Phosphorescent OLED Devices. Advanced Optical Materials, 2022, 10, 2101530.	3.6	14
129	Waiting for Act 2: what lies beyond organic light-emitting diode (OLED) displays for organic electronics?. Nanophotonics, 2020, 10, 31-40.	2.9	13
130	Air-Bridge Si Thermophotovoltaic Cell with High Photon Utilization. ACS Energy Letters, 2022, 7, 2388-2392.	8.8	13
131	Low-threshold 1.3-µm wavelength, InGaAsP strained-layer multiple quantum well lasers grown by gas source molecular beam epitaxy. Applied Physics Letters, 1994, 65, 892-894.	1.5	11
132	Epitaxial lift-off of GaAs thin-film solar cells followed by substrate reuse. , 2012, , .		11
133	Ultrastrong coupling of vibrationally dressed organic Frenkel excitons with Bloch surface waves in a one-sided all-dielectric structure. Physical Review B, 2019, 100, .	1.1	11
134	Kirigami-Based Compliant Mechanism for Multiaxis Optical Tracking and Energy Harvesting Applications. Advanced Engineering Materials, 2021, 23, 2001079.	1.6	11
135	Mechanistic Study of Charge Separation in a Nonfullerene Organic Donor-Acceptor Blend Using Multispectral Multidimensional Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 3410-3416.	2.1	11
136	27.4: Modeling and Fabrication of Organic Vapor Phase Deposition (OVPD) Equipment for OLED Display Manufacturing. Digest of Technical Papers SID International Symposium, 2002, 33, 894.	0.1	10
137	Characterizing and Improving the Thermal Stability of Organic Photovoltaics Based on Halogen-Rich Non-Fullerene Acceptors. ACS Applied Materials & Interfaces, 2022, 14, 5692-5698.	4.0	10
138	Nonideal Diode Behavior and Bandgap Renormalization in Carbon Nanotube p-n Junctions. IEEE Nanotechnology Magazine, 2014, 13, 41-45.	1.1	9
139	Quantum Confinement of Hybrid Charge Transfer Excitons in GaN/InGaN/Organic Semiconductor Quantum Wells. Nano Letters, 2017, 17, 7853-7858.	4.5	9
140	Modifying the Spectral Weights of Vibronic Transitions via Strong Coupling to Surface Plasmons. ACS Photonics, 2020, 7, 43-48.	3.2	9
141	Using Fourier-Plane Imaging Microscopy for Determining Transition-Dipole-Moment Orientations in Organic Light-Emitting Devices. Physical Review Applied, 2020, 14, .	1.5	9
142	Photogeneration and the bulk quantum efficiency of organic photovoltaics. Energy and Environmental Science, 2021, 14, 1584-1593.	15.6	9
143	Surface passivation of InP/In <sub>0.53</sub> Ga <sub>0.47</sub> As heterojunction bipolar transistors for opto-electronic integration. Journal of Electronic Materials, 1996, 25, 537-540.	1.0	8
144	Response to "Comment on "Thermodynamic limits of quantum photovoltaic cell efficiency" [Appl. Phys. Lett. 92, 066101 (2008)]. Applied Physics Letters, 2008, 92, 066102.	1.5	8

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145	Reciprocal carrier collection in organic photovoltaics. <i>Physical Review B</i> , 2011, 84, .	1.1	8
146	Mass Transport through the Carrier Gas Boundary Layer in Organic Vapor Phase Deposition. <i>Physical Review Applied</i> , 2014, 1, .	1.5	8
147	Surprisingly High Conductivity and Efficient Exciton Blocking in Fullerene/Wide-Energy-Gap Small Molecule Mixtures. <i>Nano Letters</i> , 2015, 15, 3994-3999.	4.5	8
148	Reducing Energy Losses at the Organicâ€‘anode-buffer Interface of Organic Photovoltaics. <i>Physical Review Applied</i> , 2020, 13, .	1.5	8
149	Neutralizing Defect States in MoS <sub>2</sub> Monolayers. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 44686-44692.	4.0	8
150	Integratable High Linearity Compact Waveguide Coupled Tapered InGaAsP Photodetectors. <i>IEEE Journal of Quantum Electronics</i> , 2007, 43, 597-606.	1.0	7
151	Reliability of Mixedâ€‘heterojunction Organic Photovoltaics Grown via Organic Vapor Phase Deposition. <i>Advanced Energy Materials</i> , 2015, 5, 1401952.	10.2	7
152	Fast Organic Vapor Phase Deposition of Thin Films in Light-Emitting Diodes. <i>ACS Nano</i> , 2020, 14, 14157-14163.	7.3	7
153	A high throughput, linear molecular beam epitaxy system for reduced cost manufacturing of GaAs photovoltaic cells: will GaAs ever be inexpensive enough?. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2035-2042.	2.5	7
154	Temperature-Dependence of an Amorphous Organic Thin Film Polariton Laser. <i>ACS Photonics</i> , 2020, 7, 867-872.	3.2	7
155	22.1: Invited Paper: Color Tuning Dopants for Electrophosphorescent Devices: Toward Efficient Blue Phosphorescence from Metal Complexes. <i>Digest of Technical Papers SID International Symposium</i> , 2005, 36, 1058.	0.1	6
156	47.4: Blue Phosphorescent Organic Light Emitting Device Stability Analysis. <i>Digest of Technical Papers SID International Symposium</i> , 2008, 39, 712.	0.1	6
157	Efficient bulk heterojunction photovoltaic cells using small-molecular-weight organic thin films. , 2010, , 94-98.		6
158	Temperature dependence of the exciton dynamics inDCM2:Alq3. <i>Physical Review B</i> , 2014, 90, .	1.1	6
159	Singlets lead to photogeneration in<math>C_{60}</math>-based organic heterojunctions. <i>Physical Review B</i> , 2015, 92, .	1.1	6
160	Transient capacitance analysis of IIIâ€‘V semiconductors with organicâ€‘inorganic semiconductor contact barrier diodes. <i>Applied Physics Letters</i> , 1985, 46, 506-508.	1.5	5
161	Novel methods to analyze and fabricate electrically small antennas. , 2011, , .		5
162	Preserving voltage and long wavelength photoresponse in GaSb/GaAs quantum dot solar cells. , 2013, , .		5

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163	Large-Area Organic-Transition Metal Dichalcogenide Hybrid Light-Emitting Device. ACS Photonics, 2021, 8, 1152-1158.	3.2	5
164	A subwavelength near-infrared negative index material. Applied Physics Letters, 2009, 94, 131107.	1.5	4
165	Polymer photovoltaic cells with a graded active region achieved using double stamp transfer printing. Applied Physics Letters, 2013, 103, .	1.5	4
166	Organic Charge-Coupled Device. ACS Photonics, 2019, 6, 2090-2095.	3.2	4
167	New D <sup>+</sup> -Configured Small Molecule Donors Employing Conjugation to Redshift the Absorption for Photovoltaics. Chemistry - an Asian Journal, 2020, 15, 2520-2531.	1.7	4
168	Theory of Stark shifts in quantum wells consisting of highly anisotropic molecular-crystalline layers. Physical Review B, 1993, 48, 17584-17587.	1.1	3
169	Organic Photodetector Focal Plane Arrays Fabricated on Hemispherical Substrates by Three-Dimensional Stamping. , 2007, , .		3
170	Nanoscale Control of Morphology in Fullerene-Based Electron-Conducting Buffers via Organic Vapor Phase Deposition. Nano Letters, 2016, 16, 3905-3910.	4.5	3
171	High Efficiency Semi-Transparent Organic Photovoltaics. , 2019, , .		3
172	27.2: Single Dopant p-i-n White Organic Light Emitting Devices. Digest of Technical Papers SID International Symposium, 2003, 34, 967.	0.1	2
173	25.1:Invited Paper: Achieving Efficient Solid State Lighting Using Organic Light Emitting Devices. Digest of Technical Papers SID International Symposium, 2007, 38, 1109-1109.	0.1	2
174	Conformal, structurally integrated antenna with a thin-film solar cell array for flapping-wing robots. , 2013, , .		2
175	Highly efficient (11.1%) small molecule multi-junction organic photovoltaic cells. , 2014, , .		2
176	Nanoscale Mapping of Morphology of Organic Thin Films. Nano Letters, 2020, 20, 8290-8297.	4.5	2
177	Printable Organic Electronic Materials for Precisely Positioned Cell Attachment. Langmuir, 2021, 37, 1874-1881.	1.6	2
178	Understanding and Control of Compressively Buckled Semiconductor Thin Films. Physical Review Applied, 2021, 16, .	1.5	2
179	Helium ion-implanted InGaAsP tunnel junction current blocking layers. Applied Physics Letters, 2002, 81, 984-986.	1.5	1
180	A 10&#x00D7;10 all-organic passive pixel sensor array. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
181	Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices. , 1998, 10, 1108.		1
182	Organic Vapor Phase Deposition. Advanced Materials, 1998, 10, 1505-1514.	11.1	1
183	Small molecular weight organic thin-film photodetectors and solar cells. , 0, .		1
184	Light-induced ionic displacement in CdZnTe:V crystals giving rise to crystalline symmetry breaking and giant nonlinearities. , 2006, , .		0
185	Hybridization of Frenkel and Wannier-Mott excitons in an optical microcavity. , 2006, , .		0
186	Cascaded Emission from a Dual-Wavelength Quantum Cascade Laser. , 2007, , .		0
187	Nanofabrication and Characterization of Subwavelength Metamaterials for Negative-index Propagation at Near-infrared Wavelengths. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
188	Electronics on plastic: A solution to the energy challenge, or just a pipe dream?. , 2007, , .		0
189	Giant Davydov splitting of the lower polariton branch in a polycrystalline tetracene microcavity. , 2007, , .		0
190	Hemispherical focal plane detector arrays. , 2008, , .		0
191	A printed spherical helix antenna. , 2010, , .		0
192	Squaraine donors for high efficiency small molecule solar cells. , 2011, , .		0
193	Patterning: Direct Transfer Patterning of Electrically Small Antennas onto Three-Dimensionally Contoured Substrates (Adv. Mater. 9/2012). Advanced Materials, 2012, 24, 1138-1138.	11.1	0