# Stephen R Forrest

#### List of Publications by Citations

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180 26,943 164 54 h-index g-index citations papers 10.8 28,924 195 7.5 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
180	The path to ubiquitous and low-cost organic electronic appliances on plastic. <i>Nature</i> , <b>2004</b> , 428, 911-8	50.4	4347
179	Nearly 100% internal phosphorescence efficiency in an organic light-emitting device. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 5048-5051	2.5	2883
178	Highly phosphorescent bis-cyclometalated iridium complexes: synthesis, photophysical characterization, and use in organic light emitting diodes. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 4304-12	16.4	2408
177	Small molecular weight organic thin-film photodetectors and solar cells. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 3693-3723	2.5	2307
176	Ultrathin Organic Films Grown by Organic Molecular Beam Deposition and Related Techniques. <i>Chemical Reviews</i> , <b>1997</b> , 97, 1793-1896	68.1	1666
175	Endothermic energy transfer: A mechanism for generating very efficient high-energy phosphorescent emission in organic materials. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2082-2084	3.4	953
174	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> , <b>2002</b> , 81, 268	3- <del>27</del> 0	602
173	Deep blue phosphorescent organic light-emitting diodes with very high brightness and efficiency. <i>Nature Materials</i> , <b>2016</b> , 15, 92-8	27	539
172	Three-Color, Tunable, Organic Light-Emitting Devices. <i>Science</i> , <b>1997</b> , 276, 2009-2011	33.3	522
171	4.2% efficient organic photovoltaic cells with low series resistances. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3013-3015	3.4	498
170	Controlled growth of a molecular bulk heterojunction photovoltaic cell. <i>Nature Materials</i> , <b>2004</b> , 4, 37-4	<b>1</b> 27	489
169	Enhanced light out-coupling of organic light-emitting devices using embedded low-index grids. <i>Nature Photonics</i> , <b>2008</b> , 2, 483-487	33.9	471
168	Ultrahigh Energy Gap Hosts in Deep Blue Organic Electrophosphorescent Devices. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 4743-4747	9.6	450
167	High efficiency single dopant white electrophosphorescent light emitting diodes. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 1171-1178	3.6	450
166	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> , <b>2000</b> , 87, 8049-8055	2.5	372
165	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , <b>2020</b> , 5, 35-49	62.3	369
164	Exciton diffusion lengths of organic semiconductor thin films measured by spectrally resolved photoluminescence quenching. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 053711	2.5	369

## (2001-2002)

163	Energy transfer in polymer electrophosphorescent light emitting devices with single and multiple doped luminescent layers. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 87-93	2.5	347	
162	High Efficiency Near-Infrared and Semitransparent Non-Fullerene Acceptor Organic Photovoltaic Cells. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 17114-17119	16.4	312	
161	Tenfold increase in the lifetime of blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , <b>2014</b> , 5, 5008	17.4	310	
160	Suppressing molecular motions for enhanced room-temperature phosphorescence of metal-free organic materials. <i>Nature Communications</i> , <b>2015</b> , 6, 8947	17.4	269	
159	Solvent-Annealed Crystalline Squaraine: PC70BM (1:6) Solar Cells. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 184-187	21.8	242	
158	Dynamic kirigami structures for integrated solar tracking. <i>Nature Communications</i> , <b>2015</b> , 6, 8092	17.4	240	
157	Organic small molecule solar cells with a homogeneously mixed copper phthalocyanine: C60 active layer. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 4218-4220	3.4	235	
156	Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices. <i>Advanced Materials</i> , <b>1998</b> , 10, 1108-1112	24	234	
155	Micropatterning of organic electronic devices by cold-welding. <i>Science</i> , <b>2000</b> , 288, 831-3	33.3	216	
154	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> , <b>2001</b> , 123, 6300-7	16.4	192	
153	Open circuit voltage enhancement due to reduced dark current in small molecule photovoltaic cells. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 023307	3.4	186	
152	High-efficiency yellow double-doped organic light-emitting devices based on phosphor-sensitized fluorescence. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 1045-1047	3.4	181	
151	Hot excited state management for long-lived blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , <b>2017</b> , 8, 15566	17.4	153	
150	Thermodynamic efficiency limit of excitonic solar cells. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	138	
149	Organic Vapor Phase Deposition. Advanced Materials, 1998, 10, 1505-1514	24	122	
148	Nanolithography based on patterned metal transfer and its application to organic electronic devices. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 4051-4053	3.4	105	
147	Intrinsically stable organic solar cells under high-intensity illumination. <i>Nature</i> , <b>2019</b> , 573, 394-397	50.4	104	
146	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> , <b>2001</b> , 89, 1470-1476	2.5	102	

145	High-Efficiency, Vacuum-Deposited, Small-Molecule Organic Tandem and Triple-Junction Photovoltaic Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400568	21.8	100
144	High efficiency organic photovoltaic cells based on a vapor deposited squaraine donor. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 233304	3.4	94
143	A hybrid planar-mixed tetraphenyldibenzoperiflanthene/C70 photovoltaic cell. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 073302	3.4	90
142	Existence of continuous-wave threshold for organic semiconductor lasers. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	79
141	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> , <b>2015</b> , 4, e288-e288	16.7	69
140	Micropatterning of small molecular weight organic semiconductor thin films using organic vapor phase deposition. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 4005-4016	2.5	69
139	Enhanced light extraction from organic light-emitting devices using a sub-anode grid. <i>Nature Photonics</i> , <b>2015</b> , 9, 758-763	33.9	68
138	Organic photovoltaics incorporating electron conducting exciton blocking layers. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 243307	3.4	68
137	Effects of exciton and charge confinement on the performance of white organic place electrophosphorescent emissive excimer devices. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 3101-3109	2.5	68
136	Enhanced Light Utilization in Semitransparent Organic Photovoltaics Using an Optical Outcoupling Architecture. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903173	24	64
135	Analysis of metal-oxide-based charge generation layers used in stacked organic light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 014514	2.5	62
134	Nearly 100% Horizontal Dipole Orientation and Upconversion Efficiency in Blue Thermally Activated Delayed Fluorescent Emitters. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1701340	8.1	62
133	Photochemical origins of burn-in degradation in small molecular weight organic photovoltaic cells. Energy and Environmental Science, <b>2015</b> , 8, 1005-1010	35.4	59
132	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> , <b>2004</b> , 84, 5019-5021	3.4	59
131	Growth and characterization of small band gap (~0.6 eV) InGaAsN layers on InP. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 1287-1289	3.4	57
130	Centimetre-scale electron diffusion in photoactive organic heterostructures. <i>Nature</i> , <b>2018</b> , 554, 77-80	50.4	55
129	Stacked white organic light emitting devices consisting of separate red, green, and blue elements. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 193306	3.4	55
128	Efficient, Nonintrusive Outcoupling in Organic Light Emitting Devices Using Embedded Microlens Arrays. <i>ACS Photonics</i> , <b>2018</b> , 5, 2453-2458	6.3	54

## (2015-2012)

127	Tandem organic photovoltaics using both solution and vacuum deposited small molecules. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 063303	3.4	54
126	Carrier transport in multilayer organic photodetectors: II. Effects of anode preparation. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 1869-1877	2.5	54
125	Small-Molecule Planar-Mixed Heterojunction Photovoltaic Cells with Fullerene-Based Electron Filtering Buffers. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1301557	21.8	52
124	Energy Loss in Organic Photovoltaics: Nonfullerene Versus Fullerene Acceptors. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	51
123	Optical nonlinearities in crystalline organic multiple quantum wells. <i>Physical Review Letters</i> , <b>1991</b> , 66, 1614-1617	7.4	50
122	Near-Infrared Ternary Tandem Solar Cells. <i>Advanced Materials</i> , <b>2018</b> , 30, e1804416	24	50
121	Organic thin-film transistors based on bis(1,2,5-thiadiazolo)-p-quinobis (1,3-dithiole). <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3714-3716	3.4	49
120	Organic Photovoltaics Using Tetraphenylbenzoporphyrin Complexes as Donor Layers. <i>Advanced Materials</i> , <b>2009</b> , 21, 1517-1520	24	48
119	Reuse of GaAs substrates for epitaxial lift-off by employing protection layers. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 033527	2.5	48
118	Near-perfect photon utilization in an air-bridge thermophotovoltaic cell. <i>Nature</i> , <b>2020</b> , 586, 237-241	50.4	48
118	Near-perfect photon utilization in an air-bridge thermophotovoltaic cell. <i>Nature</i> , <b>2020</b> , 586, 237-241  Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401	50.4 7.4	48
	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly		46
117	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401  Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced</i>	7.4	46
117	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401  Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4284-4291  Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics</i>	7·4 15.6	46 46
117 116 115	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401  Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4284-4291  Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 053310  Color-neutral, semitransparent organic photovoltaics for power window applications. <i>Proceedings</i>	7·4 15.6 3·4	46 46 46
117 116 115	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401  Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4284-4291  Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 053310  Color-neutral, semitransparent organic photovoltaics for power window applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 21147-21154  Carrier transport in multilayer organic photodetectors: I. Effects of layer structure on dark current	7·4 15.6 3·4	46 46 46 44
117 116 115 114	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401  Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4284-4291  Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 053310  Color-neutral, semitransparent organic photovoltaics for power window applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 21147-21154  Carrier transport in multilayer organic photodetectors: I. Effects of layer structure on dark current and photoresponse. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 1859-1868  Isomeric Effects of Solution Processed Ladder-Type Non-Fullerene Electron Acceptors. <i>Solar Rrl</i> ,	7·4 15.6 3·4 11.5	46 46 46 44 42

109	Evolution of quasi-epitaxial growth of a crystalline organic semiconductor on graphite. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 3223-3225	3.4	38
108	Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. I. Theory. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	37
107	Multiple growths of epitaxial lift-off solar cells from a single InP substrate. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 101107	3.4	37
106	Organic optical bistable switch. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 136-138	3.4	34
105	Thin-Film Architectures with High Spectral Selectivity for Thermophotovoltaic Cells. <i>ACS Photonics</i> , <b>2018</b> , 5, 2748-2754	6.3	33
104	Direct mask-free patterning of molecular organic semiconductors using organic vapor jet printing. Journal of Applied Physics, <b>2004</b> , 96, 4500-4507	2.5	32
103	Excitons and the lifetime of organic semiconductor devices. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2015</b> , 373,	3	31
102	Twist-angle dependence of moir[excitons in WS/MoSe heterobilayers. <i>Nature Communications</i> , <b>2020</b> , 11, 5888	17.4	31
101	Elimination of Plasmon Losses and Enhanced Light Extraction of Top-Emitting Organic Light-Emitting Devices Using a Reflective Subelectrode Grid. <i>ACS Photonics</i> , <b>2017</b> , 4, 363-368	6.3	30
100	Ultrathin film, high specific power InP solar cells on flexible plastic substrates. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 223503	3.4	30
99	Organic photodetector arrays with indium tin oxide electrodes patterned using directly transferred metal masks. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 043313	3.4	30
98	Enhanced efficiency in high-brightness fluorescent organic light emitting diodes through triplet management. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 223303	3.4	29
97	Measurement of exciton diffusion lengths in optically thin organic films. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 243303	3.4	28
96	Snow cleaning of substrates increases yield of large-area organic photovoltaics. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 133901	3.4	28
95	Direct vapor jet printing of three color segment organic light emitting devices for white light illumination. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 053301	3.4	28
94	Van der Waals heterostructure polaritons with moirEnduced nonlinearity. <i>Nature</i> , <b>2021</b> , 591, 61-65	50.4	28
93	Flexible Thin-Film InGaAs Photodiode Focal Plane Array. ACS Photonics, 2016, 3, 670-676	6.3	28
92	DonorAcceptorAcceptor's Molecules for Vacuum-Deposited Organic Photovoltaics with Efficiency Exceeding 9%. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1703603	21.8	27

#### (2016-2014)

Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. II. Experiment. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	26	
Ordered organic-organic multilayer growth. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	26	
Full-wave simulation of enhanced outcoupling of organic light-emitting devices with an embedded low-index grid. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 163302	3.4	26	
Vertical orientation of copper phthalocyanine in organic solar cells using a small molecular weight organic templating layer. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 043308	3.4	25	
Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. <i>Nature Communications</i> , <b>2021</b> , 12, 5419	17.4	25	
Phenanthro[9,10-d]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. <i>Materials Horizons</i> , <b>2019</b> , 6, 1179-1186	14.4	24	
Organic vapor phase deposition for the growth of large area organic electronic devices. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 233305	3.4	23	
Stable and efficient electrophosphorescent organic light-emitting devices grown by organic vapor phase deposition. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 021107	3.4	23	
Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900921	24	22	
An electrophosphorescent organic light emitting concentrator. <i>Light: Science and Applications</i> , <b>2014</b> , 3, e181-e181	16.7	22	
Temperature dependence of polariton lasing in a crystalline anthracene microcavity. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	21	
Thermal analysis of high intensity organic light-emitting diodes based on a transmission matrix approach. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 124516	2.5	21	
Optical detectors: Three contenders: Depending on the application, the photoeonductor, p-i-n diode, or avalanche photodiode may prove the best choice. <i>IEEE Spectrum</i> , <b>1986</b> , 23, 76-85	1.7	21	
Charge Transfer and Collection in Dilute Organic Donor-Acceptor Heterojunction Blends. <i>Nano Letters</i> , <b>2018</b> , 18, 3180-3184	11.5	20	
Cost estimates of production scale semitransparent organic photovoltaic modules for building integrated photovoltaics. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 5765-5772	5.8	20	
Novel organic-on-InP field-effect transistor. <i>Applied Physics Letters</i> , <b>1985</b> , 47, 1217-1219	3.4	19	
Reliability of Small Molecule Organic Photovoltaics with Electron-Filtering Compound Buffer Layers. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1601094	21.8	19	
Charge Balance and Exciton Confinement in Phosphorescent Organic Light Emitting Diodes.  Advanced Optical Materials, 2016, 4, 889-895	8.1	18	
	Ordered organic-organic multilayer growth. <i>Physical Review B</i> , <b>2011</b> , 83,  Full-wave simulation of enhanced outcoupling of organic light-emitting devices with an embedded low-index grid. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 163302  Vertical orientation of copper phthalocyanine in organic solar cells using a small molecular weight organic templating layer. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 043308  Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. <i>Nature Communications</i> , <b>2021</b> , 12, 5419  Phenanthro[9,10-d]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. <i>Materials Horizons</i> , <b>2019</b> , 6, 1179-1186  Organic vapor phase deposition for the growth of large area organic electronic devices. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 233305  Stable and efficient electrophosphorescent organic light-emitting devices grown by organic vapor phase deposition. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 021107  Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900921  An electrophosphorescent organic light emitting concentrator. <i>Light: Science and Applications</i> , <b>2014</b> , 3, e181-e181  Temperature dependence of polariton lasing in a crystalline anthracene microcavity. <i>Physical Review B</i> , <b>2012</b> , 86,  Thermal analysis of high intensity organic light-emitting diodes based on a transmission matrix approach. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 124516  Optical detectors: Three contenders: Depending on the application, the photoeonductor, p-in diode, or avalanche photodiode may prove the best choice. <i>IEEE Spectrum</i> , <b>1986</b> , 23, 76-85  Charge Transfer and Collection in Dilute Organic Donor-Acceptor Heterojunction Blends. <i>Nano Letters</i> , <b>2018</b> , 18, 3180-3184  Cost estimates of production scale semitransparent organic photovoltaic modules for building integrated photovoltaics. <i>Sustainable Ene</i>	Ordered organic-organic multilayer growth. <i>Physical Review B</i> , 2011, 83,  Full-wave simulation of enhanced outcoupling of organic light-emitting devices with an embedded low-index grid. <i>Applied Physics Letters</i> , 2009, 94, 163302  Vertical orientation of copper phthalocyanine in organic solar cells using a small molecular weight organic templating layer. <i>Applied Physics Letters</i> , 2011, 99, 043308  Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. <i>Nature Communications</i> , 2021, 12, 5419  Phenanthro[9,10-d]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. <i>Materials Harizons</i> , 2019, 6, 1179-1186  Organic vapor phase deposition for the growth of large area organic electronic devices. <i>Applied Physics Letters</i> , 2009, 95, 233305  Stable and efficient electrophosphorescent organic light-emitting devices grown by organic vapor phase deposition. <i>Applied Physics Letters</i> , 2005, 86, 021107  Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. <i>Advanced Materials</i> , 2019, 31, e1900921  An electrophosphorescent organic light emitting concentrator. <i>Light: Science and Applications</i> , 2014  An electrophosphorescent organic light emitting concentrator. <i>Light: Science and Applications</i> , 2014  Temperature dependence of polariton lasing in a crystalline anthracene microcavity. <i>Physical Review B</i> , 2012, 86,  Thermal analysis of high intensity organic light-emitting diodes based on a transmission matrix approach. <i>Journal of Applied Physics</i> , 2011, 110, 124516  Optical detectors: Three contenders: Depending on the application, the photoeonductor, p-i-n diode, or avalanche photodiode may prove the best choice. <i>IEEE Spectrum</i> , 1986, 23, 76-85  Charge Transfer and Collection in Dilute Organic Donor-Acceptor Heterojunction Blends. <i>Nano Letters</i> , 2018, 18, 3180-3184  Reliability of Small Molecule Organic Photovoltaics with Electron-Filte	Ordered organic-organic multilayer growth. Physical Review B, 2011, 83, 26  Full-wave simulation of enhanced outcoupling of organic light-emitting devices with an embedded low-index grid. Applied Physics Letters, 2009, 94, 163302  Vertical orientation of copper phthalocyanine in organic solar cells using a small molecular weight organic templating layer. Applied Physics Letters, 2011, 99, 043308  Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. Nature Communications, 2021, 12, 5419  Phenanthro [9,10-d]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. Materials Horizons, 2019, 6, 1179-1186  Organic vapor phase deposition for the growth of large area organic electronic devices. Applied Physics Letters, 2009, 95, 233305  Stable and efficient electrophosphorescent organic light-emitting devices grown by organic vapor phase deposition. Applied Physics Letters, 2005, 86, 021107  Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. Advanced Materials, 2019, 31, e1900921  An electrophosphorescent organic light emitting concentrator. Light: Science and Applications, 2014, 3, e181-e181  Temperature dependence of polariton lasing in a crystalline anthracene microcavity. Physical Review B, 2012, 86.  Thermal analysis of high intensity organic light-emitting diodes based on a transmission matrix approach. Journal of Applied Physics, 2011, 110, 124516  Optical detectors: Three contenders: Depending on the application, the photoconductor, p-indiode, or avalanche photodiode may prove the best choice. IEEE Spectrum, 1986, 23, 76-85  Charge Transfer and Collection in Dilute Organic Donor-Acceptor Heterojunction Blends. Nano Letters, 2018, 18, 3180-3184  Cost estimates of production scale semitransparent organic photovoltaic modules for building integrated photovoltaics. Sustainable Energy and Fuels, 2020, 4, 5765-5772  Novel organic-o

73	Understanding tandem organic photovoltaic cell performance. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 214505	2.5	18	
72	Bilayer Interdiffused Heterojunction Organic Photodiodes Fabricated by Double Transfer Stamping. <i>Advanced Optical Materials</i> , <b>2017</b> , 5, 1600784	8.1	16	
71	Origami Solar-Tracking Concentrator Array for Planar Photovoltaics. ACS Photonics, 2016, 3, 2134-2140	6.3	16	
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68	Efficient Charge Generation via Hole Transfer in Dilute Organic Donor-Fullerene Blends. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 2203-2210	6.4	15	
67	Engineering Temperature-Dependent Carrier Concentration in Bulk Composite Materials via Temperature-Dependent Fermi Level Offset. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1701623	21.8	15	
66	Free and trapped hybrid charge transfer excitons at a ZnO/small-molecule heterojunction. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	15	
65	Inverted small molecule organic photovoltaic cells on reflective substrates. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 173304	3.4	15	
64	Blue Emissive fac/mer-Iridium (III) NHC Carbene Complexes and their Application in OLEDs. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2001994	8.1	15	
63	Near-field thermophotovoltaics for efficient heat to electricity conversion at high power density. <i>Nature Communications</i> , <b>2021</b> , 12, 4364	17.4	15	
62	Ultralong-Range Energy Transport in a Disordered Organic Semiconductor at Room Temperature Via Coherent Exciton-Polariton Propagation. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002127	24	14	
61	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> , <b>2018</b> , 113, 053302	3.4	14	
60	Effects of Charge Balance and Exciton Confinement on the Operational Lifetime of Blue Phosphorescent Organic Light-Emitting Diodes. <i>Physical Review Applied</i> , <b>2017</b> , 7,	4.3	14	
59	Growth of abrupt InGaAs(P)/In(GaAs)P heterointerfaces by gas source molecular beam epitaxy. Journal of Applied Physics, <b>1995</b> , 77, 201-209	2.5	12	
58	Efficient Outcoupling of Organic Light-Emitting Devices Using a Light-Scattering Dielectric Layer. <i>ACS Photonics</i> , <b>2018</b> , 5, 3315-3321	6.3	12	
57	Nonideal Diode Behavior and Bandgap Renormalization in Carbon Nanotube p-n Junctions. <i>IEEE Nanotechnology Magazine</i> , <b>2014</b> , 13, 41-45	2.6	9	
56	Epitaxial lift-off of GaAs thin-film solar cells followed by substrate reuse <b>2012</b> ,		9	

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55	Surprisingly High Conductivity and Efficient Exciton Blocking in Fullerene/Wide-Energy-Gap Small Molecule Mixtures. <i>Nano Letters</i> , <b>2015</b> , 15, 3994-9	11.5	8	
54	Theory of the perfect lens. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	8	
53	Reciprocal carrier collection in organic photovoltaics. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	8	
52	Low-threshold 1.3-fh wavelength, InGaAsP strained-layer multiple quantum well lasers grown by gas source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 892-894	3.4	8	
51	Reliability of Mixed-Heterojunction Organic Photovoltaics Grown via Organic Vapor Phase Deposition. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401952	21.8	7	
50	Quantum Confinement of Hybrid Charge Transfer Excitons in GaN/InGaN/Organic Semiconductor Quantum Wells. <i>Nano Letters</i> , <b>2017</b> , 17, 7853-7858	11.5	7	
49	Using Fourier-Plane Imaging Microscopy for Determining Transition-Dipole-Moment Orientations in Organic Light-Emitting Devices. <i>Physical Review Applied</i> , <b>2020</b> , 14,	4.3	7	
48	Ultrastrong coupling of vibrationally dressed organic Frenkel excitons with Bloch surface waves in a one-sided all-dielectric structure. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	6	
47	Temperature dependence of the exciton dynamics in DCM2:Alq3. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	6	
46	Mass Transport through the Carrier Gas Boundary Layer in Organic Vapor Phase Deposition. <i>Physical Review Applied</i> , <b>2014</b> , 1,	4.3	6	
45	Singlets lead to photogeneration in C60-based organic heterojunctions. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	6	
44	Response to Comment on Thermodynamic limits of quantum photovoltaic cell efficiency [Appl. Phys. Lett.92, 066101 (2008)]. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 066102	3.4	6	
43	Surface passivation of lnP/ln0.53Ga0.47As heterojunction bipolar transistors for opto-electronic integration. <i>Journal of Electronic Materials</i> , <b>1996</b> , 25, 537-540	1.9	6	
42	Mechanistic Study of Charge Separation in a Nonfullerene Organic Donor-Acceptor Blend Using Multispectral Multidimensional Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 3410-341	6 <sup>6.4</sup>	6	
41	Tuning the Photophysical and Electrochemical Properties of Aza-Boron-Dipyridylmethenes for Fluorescent Blue OLEDs. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101175	15.6	6	
40	Kirigami-Based Compliant Mechanism for Multiaxis Optical Tracking and Energy-Harvesting Applications. <i>Advanced Engineering Materials</i> , <b>2021</b> , 23, 2001079	3.5	6	
39	Temperature-Dependence of an Amorphous Organic Thin Film Polariton Laser. <i>ACS Photonics</i> , <b>2020</b> , 7, 867-872	6.3	5	
38	Novel methods to analyze and fabricate electrically small antennas 2011,		5	

37	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> , <b>2005</b> , 36, 1058	0.5	5
36	Transient capacitance analysis of III-V semiconductors with organic-on-inorganic semiconductor contact barrier diodes. <i>Applied Physics Letters</i> , <b>1985</b> , 46, 506-508	3.4	5
35	Modifying the Spectral Weights of Vibronic Transitions via Strong Coupling to Surface Plasmons. <i>ACS Photonics</i> , <b>2020</b> , 7, 43-48	6.3	5
34	Molecular Alignment of Homoleptic Iridium Phosphors in Organic Light-Emitting Diodes. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102882	24	5
33	Preserving voltage and long wavelength photoresponse in GaSb/GaAs quantum dot solar cells <b>2013</b> ,		4
32	Polymer photovoltaic cells with a graded active region achieved using double stamp transfer printing. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 193301	3.4	4
31	A subwavelength near-infrared negative index material. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 131107	3.4	4
30	47.4: Blue Phosphorescent Organic Light Emitting Device Stability Analysis. <i>Digest of Technical Papers SID International Symposium</i> , <b>2008</b> , 39, 712	0.5	4
29	Integratable High Linearity Compact Waveguide Coupled Tapered InGaAsP Photodetectors. <i>IEEE Journal of Quantum Electronics</i> , <b>2007</b> , 43, 597-606	2	4
28	27.4: Modeling and Fabrication of Organic Vapor Phase Deposition (OVPD) Equipment for OLED Display Manufacturing. <i>Digest of Technical Papers SID International Symposium</i> , <b>2002</b> , 33, 894	0.5	4
27	Waiting for Act 2: what lies beyond organic light-emitting diode (OLED) displays for organic electronics?. <i>Nanophotonics</i> , <b>2020</b> , 10, 31-40	6.3	4
26	Reducing Energy Losses at the Organic Enode-buffer Interface of Organic Photovoltaics. <i>Physical Review Applied</i> , <b>2020</b> , 13,	4.3	3
25	New D-A-A'-Configured Small Molecule Donors Employing Conjugation to Red-shift the Absorption for Photovoltaics. <i>Chemistry - an Asian Journal</i> , <b>2020</b> , 15, 2520-2531	4.5	3
24	A high throughput, linear molecular beam epitaxy system for reduced cost manufacturing of GaAs photovoltaic cells: will GaAs ever be inexpensive enough?. Sustainable Energy and Fuels, 2020, 4, 2035-2	20 <del>4</del> 2	3
23	Efficient bulk heterojunction photovoltaic cells using small-molecular-weight organic thin films <b>2010</b> , 94-98		3
22	Theory of Stark shifts in quantum wells consisting of highly anisotropic molecular-crystalline layers. <i>Physical Review B</i> , <b>1993</b> , 48, 17584-17587	3.3	3
21	Formation and tuning of moiré excitons in large-twist angle WS2/MoSe2 heterobilayers		3
20	Photogeneration and the bulk quantum efficiency of organic photovoltaics. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1584-1593	35.4	3

19	Nanoscale Mapping of Morphology of Organic Thin Films. <i>Nano Letters</i> , <b>2020</b> , 20, 8290-8297	11.5	2
18	Organic Charge-Coupled Device. ACS Photonics, 2019, 6, 2090-2095	6.3	2
17	Organic Photodetector Focal Plane Arrays Fabricated on Hemispherical Substrates by Three-Dimensional Stamping <b>2007</b> ,		2
16	25.1: Invited Paper: Achieving Efficient Solid State Lighting Using Organic Light Emitting Devices. <i>Digest of Technical Papers SID International Symposium</i> , <b>2007</b> , 38, 1109-1109	0.5	2
15	27.2: Single Dopant p-i-n White Organic Light Emitting Devices. <i>Digest of Technical Papers SID International Symposium</i> , <b>2003</b> , 34, 967	0.5	2
14	Nanoscale Control of Morphology in Fullerene-Based Electron-Conducting Buffers via Organic Vapor Phase Deposition. <i>Nano Letters</i> , <b>2016</b> , 16, 3905-10	11.5	2
13	Neutralizing Defect States in MoS Monolayers. ACS Applied Materials & amp; Interfaces, 2021, 13, 44686	5-4 <b>46</b> 92	2 2
12	Highly efficient (11.1%) small molecule multi-junction organic photovoltaic cells <b>2014</b> ,		1
11	Conformal, structurally integrated antenna with a thin-film solar cell array for flapping-wing robots <b>2013</b> ,		1
10	A 10🛮 0 all-organic passive pixel sensor array <b>2010</b> ,		1
9	Helium ion-implanted InGaAsP tunnel junction current blocking layers. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 984-986	3.4	1
8	Symmetric <b>D</b> ouble Spirol Wide Energy Gap Hosts for Blue Phosphorescent OLED Devices.  Advanced Optical Materials, <b>2022</b> , 10, 2101530	8.1	1
7			
6	Fast Organic Vapor Phase Deposition of Thin Films in Light-Emitting Diodes. ACS Nano, 2020, 14, 1415	7-14:16	3 1
5	Printable Organic Electronic Materials for Precisely Positioned Cell Attachment. <i>Langmuir</i> , <b>2021</b> , 37, 18	87 <b>4</b> -188	811
4	Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices <b>1998</b> , 10, 1108		1
3	Organic Vapor Phase Deposition <b>1998</b> , 10, 1505		1
2	Patterning: Direct Transfer Patterning of Electrically Small Antennas onto Three-Dimensionally Contoured Substrates (Adv. Mater. 9/2012). <i>Advanced Materials</i> , <b>2012</b> , 24, 1138-1138	24	

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6.3