

# Stephen R Forrest

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180  
papers

26,943  
citations

54  
h-index

164  
g-index

195  
ext. papers

28,924  
ext. citations

10.8  
avg, IF

7.5  
L-index

#	Paper	IF	Citations
180	Symmetric Double Spiro-Wide Energy Gap Hosts for Blue Phosphorescent OLED Devices. <i>Advanced Optical Materials</i> , <b>2022</b> , 10, 2101530	8.1	1
179	Van der Waals heterostructure polaritons with moiré-induced nonlinearity. <i>Nature</i> , <b>2021</b> , 591, 61-65	50.4	28
178	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, 3410-3416	6.4	6
177	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
176	Large-Area Organic-Transition Metal Dichalcogenide Hybrid Light-Emitting Device. <i>ACS Photonics</i> , <b>2021</b> , 8, 1152-1158	6.3	
175	Molecular Alignment of Homoleptic Iridium Phosphors in Organic Light-Emitting Diodes. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102882	24	5
174	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
173	Photogeneration and the bulk quantum efficiency of organic photovoltaics. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1584-1593	35.4	3
172	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
171	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
170	Neutralizing Defect States in MoS Monolayers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 44686-44692	4.92	2
169	Non-fullerene acceptor organic photovoltaics with intrinsic operational lifetimes over 30 years. <i>Nature Communications</i> , <b>2021</b> , 12, 5419	17.4	25
168	Printable Organic Electronic Materials for Precisely Positioned Cell Attachment. <i>Langmuir</i> , <b>2021</b> , 37, 1874-1881	4.1	
167	Nanoscale Mapping of Morphology of Organic Thin Films. <i>Nano Letters</i> , <b>2020</b> , 20, 8290-8297	11.5	2
166	Reducing Energy Losses at the Organic-Node-buffer Interface of Organic Photovoltaics. <i>Physical Review Applied</i> , <b>2020</b> , 13,	4.3	3
165	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
164	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

163	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> , <b>2020</b> , 4, 2035-2042	5.8	3
162	Temperature-Dependence of an Amorphous Organic Thin Film Polariton Laser. <i>ACS Photonics</i> , <b>2020</b> , 7, 867-872	6.3	5
161	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
160	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
159	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
158	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
157	Fast Organic Vapor Phase Deposition of Thin Films in Light-Emitting Diodes. <i>ACS Nano</i> , <b>2020</b> , 14, 14157-14163	11.63	1
156	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
155	Twist-angle dependence of moiré excitons in WS <sub>2</sub> /MoSe <sub>2</sub> heterobilayers. <i>Nature Communications</i> , <b>2020</b> , 11, 5888	17.4	31
154	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	11.5	44
153	Near-perfect photon utilization in an air-bridge thermophotovoltaic cell. <i>Nature</i> , <b>2020</b> , 586, 237-241	50.4	48
152	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
151	Intrinsically stable organic solar cells under high-intensity illumination. <i>Nature</i> , <b>2019</b> , 573, 394-397	50.4	104
150	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
149	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> , <b>2019</b> , 116, 3968-3973	11.5	15
148	Energy Loss in Organic Photovoltaics: Nonfullerene Versus Fullerene Acceptors. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	51
147	Enhanced Light Utilization in Semitransparent Organic Photovoltaics Using an Optical Outcoupling Architecture. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903173	24	64
146	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

145	Organic Charge-Coupled Device. <i>ACS Photonics</i> , <b>2019</b> , 6, 2090-2095	6.3	2
144	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
143	Charge Transfer and Collection in Dilute Organic Donor-Acceptor Heterojunction Blends. <i>Nano Letters</i> , <b>2018</b> , 18, 3180-3184	11.5	20
142	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
141	Centimetre-scale electron diffusion in photoactive organic heterostructures. <i>Nature</i> , <b>2018</b> , 554, 77-80	50.4	55
140	Donor-Acceptor-Acceptor's Molecules for Vacuum-Deposited Organic Photovoltaics with Efficiency Exceeding 9%. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1703603	21.8	27
139	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
138	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
137	Near-Infrared Ternary Tandem Solar Cells. <i>Advanced Materials</i> , <b>2018</b> , 30, e1804416	24	50
136	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
135	Thin-Film Architectures with High Spectral Selectivity for Thermophotovoltaic Cells. <i>ACS Photonics</i> , <b>2018</b> , 5, 2748-2754	6.3	33
134	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
133	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
132	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
131	Bilayer Interdiffused Heterojunction Organic Photodiodes Fabricated by Double Transfer Stamping. <i>Advanced Optical Materials</i> , <b>2017</b> , 5, 1600784	8.1	16
130	Isomeric Effects of Solution Processed Ladder-Type Non-Fullerene Electron Acceptors. <i>Solar Rrl</i> , <b>2017</b> , 1, 1700107	7.1	41
129	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
128	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

127	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
126	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
125	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
124	Origami Solar-Tracking Concentrator Array for Planar Photovoltaics. <i>ACS Photonics</i> , <b>2016</b> , 3, 2134-2140	6.3	16
123	Charge Balance and Exciton Confinement in Phosphorescent Organic Light Emitting Diodes. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 889-895	8.1	18
122	Flexible Thin-Film InGaAs Photodiode Focal Plane Array. <i>ACS Photonics</i> , <b>2016</b> , 3, 670-676	6.3	28
121	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
120	Charge Transfer States in Dilute Donor-Acceptor Blend Organic Heterojunctions. <i>ACS Nano</i> , <b>2016</b> , 10, 7619-26	16.7	41
119	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
118	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
117	Photochemical origins of burn-in degradation in small molecular weight organic photovoltaic cells. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1005-1010	35.4	59
116	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
115	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
114	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
113	Dynamic kirigami structures for integrated solar tracking. <i>Nature Communications</i> , <b>2015</b> , 6, 8092	17.4	240
112	Singlets lead to photogeneration in C60-based organic heterojunctions. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	6
111	Charge transport and exciton dissociation in organic solar cells consisting of dipolar donors mixed with C70. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	40
110	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

109	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
108	Room temperature Frenkel-Wannier-Mott hybridization of degenerate excitons in a strongly coupled microcavity. <i>Physical Review Letters</i> , <b>2014</b> , 112, 076401	7.4	46
107	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
106	Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4284-4291	15.6	46
105	An electrophosphorescent organic light emitting concentrator. <i>Light: Science and Applications</i> , <b>2014</b> , 3, e181-e181	16.7	22
104	Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. II. Experiment. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	26
103	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
102	Temperature dependence of the exciton dynamics in DCM2:Alq3. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	6
101	Tenfold increase in the lifetime of blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , <b>2014</b> , 5, 5008	17.4	310
100	Excited state and charge dynamics of hybrid organic/inorganic heterojunctions. I. Theory. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	37
99	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
98	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
97	Highly efficient (11.1%) small molecule multi-junction organic photovoltaic cells <b>2014</b> ,		1
96	Understanding tandem organic photovoltaic cell performance. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 214505	2.5	18
95	A hybrid planar-mixed tetraphenyldibenzoperiflanthene/C70 photovoltaic cell. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 073302	3.4	90
94	Preserving voltage and long wavelength photoresponse in GaSb/GaAs quantum dot solar cells <b>2013</b> ,		4
93	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
92	Conformal, structurally integrated antenna with a thin-film solar cell array for flapping-wing robots <b>2013</b> ,		1

91	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	
90	Epitaxial lift-off of GaAs thin-film solar cells followed by substrate reuse <b>2012</b> ,		9
89	Tandem organic photovoltaics using both solution and vacuum deposited small molecules. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 063303	3.4	54
88	Temperature dependence of polariton lasing in a crystalline anthracene microcavity. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	21
87	Snow cleaning of substrates increases yield of large-area organic photovoltaics. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 133901	3.4	28
86	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
85	Thermodynamic efficiency limit of excitonic solar cells. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	138
84	Theory of the perfect lens. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	8
83	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
82	Existence of continuous-wave threshold for organic semiconductor lasers. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	79
81	Solvent-Annealed Crystalline Squaraine: PC70BM (1:6) Solar Cells. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 184-187	21.8	242
80	Novel methods to analyze and fabricate electrically small antennas <b>2011</b> ,		5
79	Reciprocal carrier collection in organic photovoltaics. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	8
78	Ordered organic-organic multilayer growth. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	26
77	Organic photovoltaics incorporating electron conducting exciton blocking layers. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 243307	3.4	68
76	Measurement of exciton diffusion lengths in optically thin organic films. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 243303	3.4	28
75	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
74	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

73	Efficient bulk heterojunction photovoltaic cells using small-molecular-weight organic thin films <b>2010</b> , 94-98		3
72	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
71	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
70	A 10 $\times$ 10 all-organic passive pixel sensor array <b>2010</b> ,		1
69	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
68	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
67	Organic Photovoltaics Using Tetraphenylbenzoporphyrin Complexes as Donor Layers. <i>Advanced Materials</i> , <b>2009</b> , 21, 1517-1520	24	48
66	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
65	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
64	A subwavelength near-infrared negative index material. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 131107	3-4	4
63	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
62	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
61	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
60	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
59	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
58	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
57	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
56	Inverted small molecule organic photovoltaic cells on reflective substrates. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 173304	3-4	15



55	Simultaneous heterojunction organic solar cells with broad spectral sensitivity. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 053310	3.4	46
54	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
53	Organic Photodetector Focal Plane Arrays Fabricated on Hemispherical Substrates by Three-Dimensional Stamping <b>2007</b> ,		2
52	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
51	Integratable High Linearity Compact Waveguide Coupled Tapered InGaAsP Photodetectors. <i>IEEE Journal of Quantum Electronics</i> , <b>2007</b> , 43, 597-606	2	4
50	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
49	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
48	Direct mask-free patterning of molecular organic semiconductors using organic vapor jet printing. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 4500-4507	2.5	32
47	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
46	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
45	Controlled growth of a molecular bulk heterojunction photovoltaic cell. <i>Nature Materials</i> , <b>2004</b> , 4, 37-41	27	489
44	The path to ubiquitous and low-cost organic electronic appliances on plastic. <i>Nature</i> , <b>2004</b> , 428, 911-8	50.4	4347
43	4.2% efficient organic photovoltaic cells with low series resistances. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3013-3015	3.4	498
42	Ultrahigh Energy Gap Hosts in Deep Blue Organic Electrophosphorescent Devices. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 4743-4747	9.6	450
41	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
40	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	2.5	42
39	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
38	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

37	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
36	Organic optical bistable switch. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 136-138	3.4	34
35	Effects of exciton and charge confinement on the performance of white organic p-i-n electrophosphorescent emissive excimer devices. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 3101-3109	2.5	68
34	High efficiency single dopant white electrophosphorescent light emitting diodes. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 1171-1178	3.6	450
33	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, 268-270	3.4	602
32	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
31	Helium ion-implanted InGaAsP tunnel junction current blocking layers. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 984-986	3.4	1
30	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
29	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
28	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
27	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
26	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
25	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
24	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
23	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
22	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
21	Micropatterning of organic electronic devices by cold-welding. <i>Science</i> , <b>2000</b> , 288, 831-3	33.3	216
20	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

19	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
18	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
17	Organic Vapor Phase Deposition. <i>Advanced Materials</i> , <b>1998</b> , 10, 1505-1514	24	122
16	Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices <b>1998</b> , 10, 1108		1
15	Organic Vapor Phase Deposition <b>1998</b> , 10, 1505		1
14	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
13	Three-Color, Tunable, Organic Light-Emitting Devices. <i>Science</i> , <b>1997</b> , 276, 2009-2011	33.3	522
12	Surface passivation of InP/In <sub>0.53</sub> Ga <sub>0.47</sub> As heterojunction bipolar transistors for opto-electronic integration. <i>Journal of Electronic Materials</i> , <b>1996</b> , 25, 537-540	1.9	6
11	Growth of abrupt InGaAs(P)/In(GaAs)P heterointerfaces by gas source molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1995</b> , 77, 201-209	2.5	12
10	Low-threshold 1.3- $\mu$ m 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
9	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
8	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
7	Optical nonlinearities in crystalline organic multiple quantum wells. <i>Physical Review Letters</i> , <b>1991</b> , 66, 1614-1617	7-4	50
6	Optically powered arrays for optoelectronic interconnection networks. <i>Applied Optics</i> , <b>1991</b> , 30, 1335-46	1.7	16
5	Optical detectors: Three contenders: Depending on the application, the photoconductor, 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
4	Novel organic-on-InP field-effect transistor. <i>Applied Physics Letters</i> , <b>1985</b> , 47, 1217-1219	3-4	19
3	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
2	Formation and tuning of moiré excitons in large-twist angle WS <sub>2</sub> /MoSe <sub>2</sub> heterobilayers		3

