Karl Leo

List of Publications by Year in Descending Order

197 papers	15,628 citations	59 h-index	122 g-index
212 ext. papers	17,318 ext. citations	10.8 avg, IF	6.69 L-index

#	Paper	IF	Citations
197	Photomultiplication-Type Organic Photodetectors for Near-Infrared Sensing with High and Bias-Independent Specific Detectivity.. *Advanced Science*, **2022**, e2105113	13.6	7
196	Highly efficient modulation doping: A path toward superior organic thermoelectric devices.. *Science Advances*, **2022**, 8, eabl9264	14.3	1
195	Narrowband organic photodetectors - towards miniaturized, spectroscopic sensing. *Materials Horizons*, **2021**,	14.4	12
194	Roadmap on organic–inorganic hybrid perovskite semiconductors and devices. *APL Materials*, **2021**, 9, 109202	5.7	28
193	Efficient and low-voltage vertical organic permeable base light-emitting transistors. *Nature Materials*, **2021**, 20, 1007-1014	27	15
192	Enhanced Charge Selectivity via Anodic-C Layer Reduces Nonradiative Losses in Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 12603-12609	9.5	1
191	Vacuum processed large area doped thin-film crystals: A new approach for high-performance organic electronics. *Materials Today Physics*, **2021**, 17, 100352	8	7
190	Resonant Enhancement of Cavity Exciton–Polaritons via a Fano-Type Interaction in Organic Microcavities. *ACS Photonics*, **2021**, 8, 1034-1040	6.3	0
189	Optical Distance Measurement Based on Induced Nonlinear Photoresponse of High-Performance Organic Near-Infrared Photodetectors. *ACS Applied Materials & Interfaces*, **2021**, 13, 23239-23246	9.5	6
188	One-dimensional planar topological laser. *Nanophotonics*, **2021**, 10, 2459-2465	6.3	2
187	Temperature-Dependent Charge-Transfer-State Absorption and Emission Reveal the Dominant Role of Dynamic Disorder in Organic Solar Cells. *Physical Review Applied*, **2021**, 15,	4.3	12
186	Band gap engineering in blended organic semiconductor films based on dielectric interactions. *Nature Materials*, **2021**, 20, 1407-1413	27	4
185	Efficient Thermally Evaporated CsPbI3 Perovskite Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2100299	21.8	11
184	Reducing Non-Radiative Voltage Losses by Methylation of Push-Pull Molecular Donors in Organic Solar Cells. *ChemSusChem*, **2021**, 14, 3622-3631	8.3	3
183	Electrical Pumping of Perovskite Diodes: Toward Stimulated Emission. *Advanced Science*, **2021**, 8, e2101663	15.6	10
182	Organic Solar Cells—The Path to Commercial Success. *Advanced Energy Materials*, **2021**, 11, 2002653	21.8	90
181	Reverse dark current in organic photodetectors and the major role of traps as source of noise. *Nature Communications*, **2021**, 12, 551	17.4	40

180	New charge-transfer states in blends of ZnPC with F8ZnPC. *AIP Advances*, **2021**, 11, 025230	1.5	1
179	Modulation Doping for Threshold Voltage Control in Organic Field-Effect Transistors. *ACS Applied Materials & Interfaces*, **2021**, 13, 8664-8671	9.5	5
178	Defect-State Lasing in Photonic Lattices of Metal‐Organic Microcavities. *Advanced Photonics Research*, **2021**, 2, 2000116	1.9	
177	Integrated complementary inverters and ring oscillators based on vertical-channel dual-base organic thin-film transistors. *Nature Electronics*, **2021**, 4, 588-594	28.4	7
176	Enhancing sub-bandgap external quantum efficiency by photomultiplication for narrowband organic near-infrared photodetectors. *Nature Communications*, **2021**, 12, 4259	17.4	11
175	Directed Growth of Dendritic Polymer Networks for Organic Electrochemical Transistors and Artificial Synapses. *Advanced Electronic Materials*, **2021**, 7, 2100586	6.4	8
174	Reservoir computing with biocompatible organic electrochemical networks for brain-inspired biosignal classification. *Science Advances*, **2021**, 7,	14.3	13
173	Reduced Intrinsic Non-Radiative Losses Allow Room-Temperature Triplet Emission from Purely Organic Emitters. *Advanced Materials*, **2021**, 33, e2101844	24	10
172	Solution-processed pseudo-vertical organic transistors based on TIPS-pentacene. *Materials Today Energy*, **2021**, 21, 100697	7	5
171	Miniaturized VIS-NIR Spectrometers Based on Narrowband and Tunable Transmission Cavity Organic Photodetectors with Ultrahigh Specific Detectivity above 10 Jones. *Advanced Materials*, **2021**, 33, e2102967	24	16
170	Membrane-Free, Selective Ion Sensing by Combining Organic Electrochemical Transistors and Impedance Analysis of Ionic Diffusion. *ACS Applied Electronic Materials*, **2021**, 3, 3898-3903	4	4
169	Coherent optical interaction between plasmonic nanoparticles and small organic dye molecules in microcavities. *Applied Physics Letters*, **2021**, 118, 013301	3.4	0
168	Doped Highly Crystalline Organic Films: Toward High-Performance Organic Electronics. *Advanced Science*, **2021**, 8, 2003519	13.6	6
167	Stacked Dual-Wavelength Near-Infrared Organic Photodetectors. *Advanced Optical Materials*, **2021**, 9, 2001784	8.1	13
166	Effects of photon recycling and scattering in high-performance perovskite solar cells.. *Science Advances*, **2021**, 7, eabj1363	14.3	1
165	Anodization for Simplified Processing and Efficient Charge Transport in Vertical Organic Field-Effect Transistors. *Advanced Functional Materials*, **2020**, 30, 2001703	15.6	5
164	Unraveling Structure and Device Operation of Organic Permeable Base Transistors. *Advanced Electronic Materials*, **2020**, 6, 2000230	6.4	4
163	Surface and mechanical analysis of metallized poly(dimethylsiloxane) gel for varifocal micromirrors. *Surface and Interface Analysis*, **2020**, 52, 1163-1170	1.5	2

162	Energy Level Engineering in Organic Thin Films by Tailored Halogenation. *Advanced Functional Materials*, **2020**, 30, 2002987	15.6	4
161	Organic Thin-Film Red-Light Photodiodes with Tunable Spectral Response Via Selective Exciton Activation. *ACS Applied Materials & Interfaces*, **2020**, 12, 13061-13067	9.5	4
160	Modulating the Electronic and Solid-State Structure of Organic Semiconductors by Site-Specific Substitution: The Case of Tetrafluoropentacenes. *Chemistry - A European Journal*, **2020**, 26, 3420-3434	4.8	9
159	A Review of Vertical Organic Transistors. *Advanced Functional Materials*, **2020**, 30, 1907113	15.6	49
158	Thermally evaporated methylammonium-free perovskite solar cells. *Journal of Materials Chemistry C*, **2020**, 8, 7725-7733	7.1	24
157	Controlling and Optimizing Amplified Spontaneous Emission in Perovskites. *ACS Applied Materials & Interfaces*, **2020**, 12, 35242-35249	9.5	12
156	Bioinspiration in light harvesting and catalysis. *Nature Reviews Materials*, **2020**, 5, 828-846	73.3	54
155	Universal Limit for Air-Stable Molecular n-Doping in Organic Semiconductors. *ACS Applied Materials & Interfaces*, **2020**, 12, 40566-40571	9.5	4
154	High-Performance Static Induction Transistors Based on Small-Molecule Organic Semiconductors. *Advanced Materials Technologies*, **2020**, 5, 2000361	6.8	4
153	Controllable coherent absorption of counterpropagating laser beams in organic microcavities. *Applied Physics Letters*, **2020**, 117, 053301	3.4	2
152	Vertical organic permeable dual-base transistors for logic circuits. *Nature Communications*, **2020**, 11, 4725	17.4	7
151	Precise patterning of organic semiconductors by reactive ion etching. *Organic Electronics*, **2020**, 76, 105357	3.5	9
150	Generating semi-metallic conductivity in polymers by laser-driven nanostructural reorganization. *Materials Horizons*, **2019**, 6, 2143-2151	14.4	10
149	Molecular parameters responsible for thermally activated transport in doped organic semiconductors. *Nature Materials*, **2019**, 18, 242-248	27	73
148	Intracavity metal contacts for organic microlasers. *Journal of Materials Research*, **2019**, 34, 571-578	2.5	4
147	Locking excitons in two-dimensional emitting layers for efficient monochrome and white organic light-emitting diodes. *Journal of Materials Chemistry C*, **2019**, 7, 8929-8937	7.1	2
146	Strategic-tuning of radiative excitons for efficient and stable fluorescent white organic light-emitting diodes. *Nature Communications*, **2019**, 10, 2380	17.4	60
145	Impact of molecular quadrupole moments on the energy levels at organic heterojunctions. *Nature Communications*, **2019**, 10, 2466	17.4	56

144	Effect of H- and J-Aggregation on the Photophysical and Voltage Loss of Boron Dipyrromethene Small Molecules in Vacuum-Deposited Organic Solar Cells. *Journal of Physical Chemistry Letters*, **2019**, 10, 2684-2691	6.4	21
143	Vertical Organic Thin-Film Transistors with an Anodized Permeable Base for Very Low Leakage Current. *Advanced Materials*, **2019**, 31, e1900917	24	11
142	High-Performance Ultra-Short Channel Field-Effect Transistor Using Solution-Processable Colloidal Nanocrystals. *Journal of Physical Chemistry Letters*, **2019**, 10, 4025-4031	6.4	11
141	Electrically Stable Organic Permeable Base Transistors for Display Applications. *Advanced Electronic Materials*, **2019**, 5, 1900576	6.4	12
140	High Electron Affinity Molecular Dopant CN6-CP for Efficient Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 11660-11666	9.5	17
139	Heteroquinoid Merocyanine Dyes with High Thermal Stability as Absorber Materials in Vacuum-Processed Organic Solar Cells. *European Journal of Organic Chemistry*, **2019**, 2019, 845-851	3.2	7
138	Ultrathin MoO3 Layers in Composite Metal Electrodes: Improved Optics Allow Highly Efficient Organic Light-Emitting Diodes. *Advanced Optical Materials*, **2019**, 7, 1801262	8.1	9
137	Insight into doping efficiency of organic semiconductors from the analysis of the density of states in n-doped C and ZnPc. *Nature Materials*, **2018**, 17, 439-444	27	72
136	Naphthalenetetracarboxylic Diimide Derivatives: Molecular Structure, Thin Film Properties and Solar Cell Applications. *Zeitschrift Fur Physikalische Chemie*, **2018**, 232, 1717-1732	3.1	4
135	Elementary steps in electrical doping of organic semiconductors. *Nature Communications*, **2018**, 9, 1182	17.4	133
134	Optically pumped lasing of an electrically active hybrid OLED-microcavity. *Applied Physics Letters*, **2018**, 112, 113301	3.4	13
133	Optimized coil design for magnetic local positioning systems **2018**,		1
132	Analyzing the n-Doping Mechanism of an Air-Stable Small-Molecule Precursor. *ACS Applied Materials & Interfaces*, **2018**, 10, 1340-1346	9.5	26
131	Balance of Horizontal and Vertical Charge Transport in Organic Field-Effect Transistors. *Physical Review Applied*, **2018**, 10,	4.3	15
130	Boron dipyrromethene (BODIPY) with meso-perfluorinated alkyl substituents as near infrared donors in organic solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 18583-18591	13	21
129	A Pulse-Biasing Small-Signal Measurement Technique Enabling 40 MHz Operation of Vertical Organic Transistors. *Scientific Reports*, **2018**, 8, 7643	4.9	30
128	Optical In-Coupling in Organic Solar Cells. *Small Methods*, **2018**, 2, 1800123	12.8	12
127	Non-Linear Self-Heating in Organic Transistors Reaching High Power Densities. *Scientific Reports*, **2018**, 8, 9806	4.9	11

126	Three-terminal RGB full-color OLED pixels for ultrahigh density displays. *Scientific Reports*, **2018**, 8, 9684	4.9	29
125	Phase-Locked Lasing in 1D and 2D Patterned Metal□Organic Microcavities. *Laser and Photonics Reviews*, **2018**, 12, 1800054	8.3	2
124	Exciton Diffusion Length and Charge Extraction Yield in Organic Bilayer Solar Cells. *Advanced Materials*, **2017**, 29, 1604424	24	25
123	Very Small Inverted Hysteresis in Vacuum-Deposited Mixed Organic□norganic Hybrid Perovskite Solar Cells. *Energy Technology*, **2017**, 5, 1606-1611	3.5	10
122	H-aggregated small molecular nanowires as near infrared absorbers for organic solar cells. *Organic Electronics*, **2017**, 45, 198-202	3.5	9
121	Influence of aging climate and cathode adhesion on organic solar cell stability. *Solar Energy Materials and Solar Cells*, **2017**, 168, 1-7	6.4	10
120	Aza-BODIPY dyes with heterocyclic substituents and their derivatives bearing a cyanide co-ligand: NIR donor materials for vacuum-processed solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 10696-10703	13	28
119	Organic narrowband near-infrared photodetectors based on intermolecular charge-transfer absorption. *Nature Communications*, **2017**, 8, 15421	17.4	146
118	3-2: Invited Paper: Color on Demand □Color-Tunable OLEDs for Lighting and Displays. *Digest of Technical Papers SID International Symposium*, **2017**, 48, 5-8	0.5	2
117	Organic Power Electronics: Transistor Operation in the kA/cm Regime. *Scientific Reports*, **2017**, 7, 44713	4.9	31
116	Tuning Near-Infrared Absorbing Donor Materials: A Study of Electronic, Optical, and Charge-Transport Properties of aza-BODIPYs. *Chemistry of Materials*, **2017**, 29, 5525-5536	9.6	21
115	Microcavity-Enhanced Semitransparent Electrodes for Oligothiophene Small-Molecule Organic Solar Cells. *Advanced Electronic Materials*, **2017**, 3, 1600518	6.4	13
114	Small Molecule Near-Infrared Boron Dipyrromethene Donors for Organic Tandem Solar Cells. *Journal of the American Chemical Society*, **2017**, 139, 13636-13639	16.4	56
113	Polymer:Fullerene Bimolecular Crystals for Near-Infrared Spectroscopic Photodetectors. *Advanced Materials*, **2017**, 29, 1702184	24	105
112	Doping-induced carrier profiles in organic semiconductors determined from capacitive extraction-current transients. *Scientific Reports*, **2017**, 7, 5397	4.9	11
111	Controlling Tamm Plasmons for Organic Narrowband Near-Infrared Photodetectors. *ACS Photonics*, **2017**, 4, 2228-2234	6.3	33
110	Electrically Tunable Dye Emission via Microcavity Integrated PDMS Gel Actuator. *ACS Applied Materials & Interfaces*, **2017**, 9, 29193-29202	9.5	2
109	Nonlinearity-induced Laguerre-Gauss modes in organic vertical cavity lasers. *Applied Physics Letters*, **2017**, 111, 063303	3.4	2

108	Nonlinear Contact Effects in Staggered Thin-Film Transistors. *Physical Review Applied*, **2017**, 8,	4.3	23
107	Aza-BODIPY Derivatives Containing BF(CN) and B(CN) Moieties. *ChemPlusChem*, **2017**, 82, 190-194	2.8	4
106	Plasmon-Induced Sub-Bandgap Photodetection with Organic Schottky Diodes. *Advanced Functional Materials*, **2016**, 26, 5741-5747	15.6	23
105	Optical display film as flexible and light trapping substrate for organic photovoltaics. *Optics Express* , **2016**, 24, A974-80	3.3	21
104	Influence of organic ligands on the line shape of the Kondo resonance. *Physical Review B*, **2016**, 93,	3.3	7
103	Adjustable white-light emission from a photo-structured micro-OLED array. *Light: Science and Applications*, **2016**, 5, e16121	16.7	75
102	The impact of molecular weight, air exposure and molecular doping on the charge transport properties and electronic defects in dithienyl-diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymers. *Journal of Materials Chemistry C*, **2016**, 4, 10827-10838	7.1	10
101	Degradation of Flexible, ITO-Free Oligothiophene Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 14709-16	9.5	10
100	Efficient flexible organic photovoltaics using silver nanowires and polymer based transparent electrodes. *Organic Electronics*, **2016**, 36, 68-72	3.5	35
99	Band structure engineering in organic semiconductors. *Science*, **2016**, 352, 1446-9	33.3	186
98	Passivation of Molecular n-Doping: Exploring the Limits of Air Stability. *Advanced Functional Materials*, **2016**, 26, 3730-3737	15.6	34
97	Influence of Meso and Nanoscale Structure on the Properties of Highly Efficient Small Molecule Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1501280	21.8	21
96	Degradation of Sexithiophene Cascade Organic Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1502432	21.8	13
95	PEDOT:PSS with embedded TiO2 nanoparticles as light trapping electrode for organic photovoltaics. *Applied Physics Letters*, **2016**, 108, 253302	3.4	27
94	10.4% Efficient triple organic solar cells containing near infrared absorbers. *Applied Physics Letters*, **2016**, 108, 103302	3.4	30
93	Flexible, light trapping substrates for organic photovoltaics. *Applied Physics Letters*, **2016**, 109, 093301	3.4	24
92	Reduced contact resistance in top-contact organic field-effect transistors by interface contact doping. *Applied Physics Letters*, **2016**, 108, 103303	3.4	30
91	Cross-coupled composite-cavity organic microresonators. *Applied Physics Letters*, **2016**, 109, 043302	3.4	4

90	Operation mechanism of high performance organic permeable base transistors with an insulated and perforated base electrode. *Journal of Applied Physics*, **2016**, 120, 094501	2.5	17
89	Contact Doping for Vertical Organic Field-Effect Transistors. *Advanced Functional Materials*, **2016**, 26, 768-775	15.6	60
88	From Fluorine to Fluorene—A Route to Thermally Stable aza-BODIPYs for Organic Solar Cell Application. *Advanced Electronic Materials*, **2016**, 2, 1600152	6.4	22
87	Light trapping for flexible organic photovoltaics **2016**,		1
86	Get it white: color-tunable AC/DC OLEDs. *Light: Science and Applications*, **2015**, 4, e247-e247	16.7	92
85	Doped Organic Semiconductors: Trap-Filling, Impurity Saturation, and Reserve Regimes. *Advanced Functional Materials*, **2015**, 25, 2701-2707	15.6	123
84	Experimental and theoretical study of phase separation in ZnPc:C60 blends. *Organic Electronics*, **2015**, 27, 183-191	3.5	4
83	Density of states determination in organic donor-acceptor blend layers enabled by molecular doping. *Journal of Applied Physics*, **2015**, 117, 245501	2.5	14
82	Color temperature tuning of white organic light-emitting diodes via spatial control of micro-cavity effects based on thin metal strips. *Organic Electronics*, **2015**, 26, 334-339	3.5	17
81	Hole mobility in thermally evaporated pentacene: Morphological and directional dependence. *Applied Physics Letters*, **2015**, 106, 233301	3.4	25
80	Impact of mesoscale order on open-circuit voltage in organic solar cells. *Nature Materials*, **2015**, 14, 434-9	27	154
79	Controlling threshold voltage and leakage currents in vertical organic field-effect transistors by inversion mode operation. *Applied Physics Letters*, **2015**, 107, 233302	3.4	8
78	Controlling morphology: A vertical organic transistor with a self-structured permeable base using the bottom electrode as seed layer. *Applied Physics Letters*, **2015**, 107, 033301	3.4	12
77	White organic light-emitting diodes with 4 nm metal electrode. *Applied Physics Letters*, **2015**, 107, 163302	3.4	21
76	Advanced Organic Permeable-Base Transistor with Superior Performance. *Advanced Materials*, **2015**, 27, 7734-9	24	24
75	Vertical organic transistors. *Journal of Physics Condensed Matter*, **2015**, 27, 443003	1.8	47
74	Materials Meets Concepts in Molecule-Based Electronics. *Advanced Functional Materials*, **2015**, 25, 1933-1954	15.6	44
73	Transparent Conductive Metal Thin-Film Electrodes Structured by Direct Laser Interference Patterning. *Advanced Engineering Materials*, **2015**, 17, 1215-1219	3.5	16

72	Increased open-circuit voltage of organic solar cells by reduced donor-acceptor interface area. *Advanced Materials*, **2014**, 26, 3839-43	24	152
71	Highly efficient p-dopants in amorphous hosts. *Organic Electronics*, **2014**, 15, 365-371	3.5	32
70	Unusually High Optical Transmission in Ca:Ag Blend Films: High-Performance Top Electrodes for Efficient Organic Solar Cells. *Advanced Functional Materials*, **2014**, 24, 6668-6676	15.6	34
69	Coherent mode coupling in highly efficient top-emitting OLEDs on periodically corrugated substrates. *Optics Express*, **2014**, 22, 7524-37	3.3	49
68	Photonic confinement in laterally structured metal-organic microcavities. *Applied Physics Letters*, **2014**, 105, 051108	3.4	15
67	Molecular doping for control of gate bias stress in organic thin film transistors. *Applied Physics Letters*, **2014**, 104, 013507	3.4	33
66	Highly efficient organic multi-junction solar cells with a thiophene based donor material. *Applied Physics Letters*, **2014**, 105, 063306	3.4	70
65	We Want Our Photons Back: Simple Nanostructures for White Organic Light-Emitting Diode Outcoupling. *Advanced Functional Materials*, **2014**, 24, 2553-2559	15.6	61
64	ITO-Free, Small-Molecule Organic Solar Cells on Spray-Coated Copper-Nanowire-Based Transparent Electrodes. *Advanced Energy Materials*, **2014**, 4, 1300737	21.8	91
63	Color-stable, ITO-free white organic light-emitting diodes with enhanced efficiency using solution-processed transparent electrodes and optical outcoupling layers. *Organic Electronics*, **2014**, 15, 1028-1034	3.5	33
62	Highly Efficient Color Stable Inverted White Top-Emitting OLEDs with Ultra-Thin Wetting Layer Top Electrodes. *Advanced Optical Materials*, **2013**, 1, 707-713	8.1	67
61	Self-passivation of molecular n-type doping during air exposure using a highly efficient air-instable dopant. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 2188-2198	1.6	15
60	Nano-particle based scattering layers for optical efficiency enhancement of organic light-emitting diodes and organic solar cells. *Journal of Applied Physics*, **2013**, 113, 204502	2.5	125
59	Quantification of deep hole-trap filling by molecular p-doping: Dependence on the host material purity. *Organic Electronics*, **2013**, 14, 2348-2352	3.5	30
58	Electric potential mapping by thickness variation: A new method for model-free mobility determination in organic semiconductor thin films. *Organic Electronics*, **2013**, 14, 3460-3471	3.5	20
57	Quantifying charge transfer energies at donor-acceptor interfaces in small-molecule solar cells with constrained DFTB and spectroscopic methods. *Journal of Physics Condensed Matter*, **2013**, 25, 473201	1.8	33
56	Doping of organic semiconductors. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 9-43	1.6	425
55	Improvement of Transparent Metal Top Electrodes for Organic Solar Cells by Introducing a High Surface Energy Seed Layer. *Advanced Energy Materials*, **2013**, 3, 438-443	21.8	183

54	High-performance vertical organic transistors. *Small*, **2013**, 9, 3670-7	11	60
53	Color in the corners: ITO-free white OLEDs with angular color stability. *Advanced Materials*, **2013**, 25, 4006-13	24	212
52	Open-Circuit Voltage and Effective Gap of Organic Solar Cells. *Advanced Functional Materials*, **2013**, 23, 5814-5821	15.6	68
51	Evaluation and Control of the Orientation of Small Molecules for Strongly Absorbing Organic Thin Films. *Journal of Physical Chemistry C*, **2013**, 117, 11600-11609	3.8	43
50	Achieving High Efficiency and Improved Stability in ITO-Free Transparent Organic Light-Emitting Diodes with Conductive Polymer Electrodes. *Advanced Functional Materials*, **2013**, 23, 3763-3769	15.6	112
49	Eliminating Micro-Cavity Effects in White Top-Emitting OLEDs by Ultra-Thin Metallic Top Electrodes. *Advanced Optical Materials*, **2013**, 1, 921-925	8.1	46
48	Correlation of open-circuit voltage and energy levels in zinc-phthalocyanine: C60 bulk heterojunction solar cells with varied mixing ratio. *Physical Review B*, **2013**, 88,	3.3	61
47	Self-heating, bistability, and thermal switching in organic semiconductors. *Physical Review Letters*, **2013**, 110, 126601	7.4	35
46	Pentacene Schottky diodes studied by impedance spectroscopy: Doping properties and trap response. *Physical Review B*, **2013**, 88,	3.3	59
45	Doped organic transistors operating in the inversion and depletion regime. *Nature Communications*, **2013**, 4, 2775	17.4	146
44	Structural phase transition in pentacene caused by molecular doping and its effect on charge carrier mobility. *Organic Electronics*, **2012**, 13, 58-65	3.5	97
43	Direct structuring of C60 thin film transistors by photo-lithography under ambient conditions. *Organic Electronics*, **2012**, 13, 506-513	3.5	23
42	Fluorinated Zinc Phthalocyanine as Donor for Efficient Vacuum-Deposited Organic Solar Cells. *Advanced Functional Materials*, **2012**, 22, 405-414	15.6	65
41	Efficiency enhancement of organic solar cells by fabricating periodic surface textures using direct laser interference patterning. *Advanced Materials*, **2012**, 24, 906-10	24	145
40	Interrelation between crystal packing and small-molecule organic solar cell performance. *Advanced Materials*, **2012**, 24, 675-80	24	120
39	2-(2-Methoxyphenyl)-1,3-dimethyl-1H-benzoimidazol-3-ium iodide as a new air-stable n-type dopant for vacuum-processed organic semiconductor thin films. *Journal of the American Chemical Society*, **2012**, 134, 3999-4002	16.4	127
38	Phase separation analysis of bulk heterojunctions in small-molecule organic solar cells using zinc-phthalocyanine and C60. *Physical Review B*, **2012**, 85,	3.3	47
37	Self-heating effects in organic semiconductor crossbar structures with small active area. *Organic Electronics*, **2012**, 13, 2461-2468	3.5	27

36	Correlation of π-conjugated oligomer structure with film morphology and organic solar cell performance. *Journal of the American Chemical Society*, **2012**, 134, 11064-7	16.4	243
35	Efficiency and rate of spontaneous emission in organic electroluminescent devices. *Physical Review B*, **2012**, 85,	3.3	198
34	Phase-locked coherent modes in a patterned metal–organic microcavity. *Nature Photonics*, **2012**, 6, 322-326	39.9	88
33	Optimum mobility, contact properties, and open-circuit voltage of organic solar cells: A drift-diffusion simulation study. *Physical Review B*, **2012**, 85,	3.3	154
32	Fermi level shift and doping efficiency in p-doped small molecule organic semiconductors: A photoelectron spectroscopy and theoretical study. *Physical Review B*, **2012**, 86,	3.3	135
31	An all C60 vertical transistor for high frequency and high current density applications. *Applied Physics Letters*, **2012**, 101, 213303	3.4	41
30	Bidirectional operation of vertical organic triodes. *Journal of Applied Physics*, **2012**, 111, 044507	2.5	19
29	In-situ conductivity and Seebeck measurements of highly efficient n-dopants in fullerene C60. *Applied Physics Letters*, **2012**, 100, 093304	3.4	105
28	Side chain variations on a series of dicyanovinyl-terthiophenes: a photoinduced absorption study. *Journal of Physical Chemistry A*, **2011**, 115, 8437-46	2.8	28
27	Hybrid optical Tamm states in a planar dielectric microcavity. *Physical Review B*, **2011**, 83,	3.3	58
26	Dicyanovinyl-Substituted Oligothiophenes: Structure-Property Relationships and Application in Vacuum-Processed Small Molecule Organic Solar Cells. *Advanced Functional Materials*, **2011**, 21, 897-910	15.6	234
25	Highly Conductive PEDOT:PSS Electrode with Optimized Solvent and Thermal Post-Treatment for ITO-Free Organic Solar Cells. *Advanced Functional Materials*, **2011**, 21, 1076-1081	15.6	1066
24	Efficient Organic Tandem Solar Cells based on Small Molecules. *Advanced Functional Materials*, **2011**, 21, 3019-3028	15.6	206
23	Water and oxygen induced degradation of small molecule organic solar cells. *Solar Energy Materials and Solar Cells*, **2011**, 95, 1268-1277	6.4	118
22	Zinc phthalocyanine – Influence of substrate temperature, film thickness, and kind of substrate on the morphology. *Thin Solid Films*, **2011**, 519, 3939-3945	2.2	72
21	Quantification of energy loss mechanisms in organic light-emitting diodes. *Applied Physics Letters*, **2010**, 97, 253305	3.4	272
20	Correlation between morphology and performance of low bandgap oligothiophene:C60 mixed heterojunctions in organic solar cells. *Journal of Applied Physics*, **2010**, 107, 014517	2.5	49
19	Efficient semitransparent small-molecule organic solar cells. *Applied Physics Letters*, **2009**, 95, 213306	3.4	32

18	Photoelectron spectroscopy study of systematically varied doping concentrations in an organic semiconductor layer using a molecular p-dopant. *Journal of Applied Physics*, **2009**, 106, 103711	2.5	117
17	Organic thin film photovoltaic cells based on planar and mixed heterojunctions between fullerene and a low bandgap oligothiophene. *Journal of Applied Physics*, **2009**, 106, 054509	2.5	40
16	White organic light-emitting diodes with fluorescent tube efficiency. *Nature*, **2009**, 459, 234-8	50.4	2874
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