

Paul Heremans

List of Publications by Year in descending order

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257
papers

14,904
citations

18482

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21540

114
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all docs

263
docs citations

263
times ranked

15770
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic Transistors in Optical Displays and Microelectronic Applications. <i>Advanced Materials</i> , 2010, 22, 3778-3798.	21.0	576
2	Polymer and Organic Nonvolatile Memory Devices. <i>Chemistry of Materials</i> , 2011, 23, 341-358.	6.7	506
3	8.4% efficient fullerene-free organic solar cells exploiting long-range exciton energy transfer. <i>Nature Communications</i> , 2014, 5, 3406.	12.8	506
4	Dopant-Free Hole-Transporting Material with a C_{3h} Symmetrical Truxene Core for Highly Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 2528-2531.	13.7	446
5	Solar cells utilizing small molecular weight organic semiconductors. <i>Progress in Photovoltaics: Research and Applications</i> , 2007, 15, 659-676.	8.1	439
6	Static solvent contact angle measurements, surface free energy and wettability determination of various self-assembled monolayers on silicon dioxide. <i>Thin Solid Films</i> , 2006, 515, 1433-1438.	1.8	385
7	Strategies for Increasing the Efficiency of Heterojunction Organic Solar Cells: Material Selection and Device Architecture. <i>Accounts of Chemical Research</i> , 2009, 42, 1740-1747.	15.6	367
8	Influence of the dielectric roughness on the performance of pentacene transistors. <i>Applied Physics Letters</i> , 2004, 85, 4400.	3.3	362
9	Solution-Processed MoO_3 Thin Films As a Hole-Injection Layer for Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3244-3247.	8.0	280
10	Influence of cathode oxidation via the hole extraction layer in polymer:fullerene solar cells. <i>Organic Electronics</i> , 2011, 12, 736-744.	2.6	255
11	Pinhole-free perovskite films for efficient solar modules. <i>Energy and Environmental Science</i> , 2016, 9, 484-489.	30.8	252
12	50 MHz rectifier based on an organic diode. <i>Nature Materials</i> , 2005, 4, 597-600.	27.5	240
13	Nucleation of organic semiconductors on inert substrates. <i>Physical Review B</i> , 2003, 68, .	3.2	231
14	Printable anodes for flexible organic solar cell modules. <i>Thin Solid Films</i> , 2004, 451-452, 22-25.	1.8	224
15	Mechanical and Electronic Properties of Thin-Film Transistors on Plastic, and Their Integration in Flexible Electronic Applications. <i>Advanced Materials</i> , 2016, 28, 4266-4282.	21.0	218
16	Design of Transparent Anodes for Resonant Cavity Enhanced Light Harvesting in Organic Solar Cells. <i>Advanced Materials</i> , 2012, 24, 728-732.	21.0	216
17	Electronic Structure and Geminate Pair Energetics at Organic-Organic Interfaces: The Case of Pentacene/ C_{60} Heterojunctions. <i>Advanced Functional Materials</i> , 2009, 19, 3809-3814.	14.9	208
18	High-Performance Organic Solar Cells with Spray-Coated Hole-Transport and Active Layers. <i>Advanced Functional Materials</i> , 2011, 21, 64-72.	14.9	197

#	ARTICLE	IF	CITATIONS
19	Recent progress in 2D/quasi-2D layered metal halide perovskites for solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11063-11077.	10.3	183
20	Exploring spray coating as a deposition technique for the fabrication of solution-processed solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 454-458.	6.2	181
21	On the Extraction of Charge Carrier Mobility in High-Mobility Organic Transistors. <i>Advanced Materials</i> , 2016, 28, 151-155.	21.0	178
22	An 8-Bit, 40-Instructions-Per-Second Organic Microprocessor on Plastic Foil. <i>IEEE Journal of Solid-State Circuits</i> , 2012, 47, 284-291.	5.4	177
23	Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics. <i>Advanced Energy Materials</i> , 2016, 6, 1600386.	19.5	158
24	On the Role of Bathocuproine in Organic Photovoltaic Cells. <i>Advanced Functional Materials</i> , 2008, 18, 3686-3691.	14.9	155
25	Perfluorinated Subphthalocyanine as a New Acceptor Material in a Small-Molecule Bilayer Organic Solar Cell. <i>Advanced Functional Materials</i> , 2009, 19, 3435-3439.	14.9	147
26	Long-term operational lifetime and degradation analysis of P3HT:PCBM photovoltaic cells. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 1303-1307.	6.2	147
27	Energy Level Tuning of Non-Fullerene Acceptors in Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 8991-8997.	13.7	147
28	A Fully Integrated Δ ADC in Organic Thin-Film Transistor Technology on Flexible Plastic Foil. <i>IEEE Journal of Solid-State Circuits</i> , 2011, 46, 276-284.	5.4	142
29	Dual-Gate Thin-Film Transistors, Integrated Circuits and Sensors. <i>Advanced Materials</i> , 2011, 23, 3231-3242.	21.0	142
30	Controlled Deposition of Highly Ordered Soluble Acene Thin Films: Effect of Morphology and Crystal Orientation on Transistor Performance. <i>Advanced Materials</i> , 2009, 21, 4926-4931.	21.0	133
31	Rapid composition screening for perovskite photovoltaics via concurrently pumped ultrasonic spray coating. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3792-3797.	10.3	130
32	Plastic circuits and tags for 13.56MHz radio-frequency communication. <i>Solid-State Electronics</i> , 2009, 53, 1220-1226.	1.4	127
33	On the Interface Dipole at the Pentacene-Fullerene Heterojunction: A Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3215-3224.	3.1	122
34	Molecular microelectrostatic view on electronic states near pentacene grain boundaries. <i>Physical Review B</i> , 2007, 75, .	3.2	120
35	An electron beam evaporated TiO ₂ layer for high efficiency planar perovskite solar cells on flexible polyethylene terephthalate substrates. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22824-22829.	10.3	116
36	Unipolar Organic Transistor Circuits Made Robust by Dual-Gate Technology. <i>IEEE Journal of Solid-State Circuits</i> , 2011, 46, 1223-1230.	5.4	114

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37	Unraveling the Mechanism of Molecular Doping in Organic Semiconductors. <i>Advanced Materials</i> , 2012, 24, 1535-1539.	21.0	114
38	A 4% Efficient Organic Solar Cell Using a Fluorinated Fused Subphthalocyanine Dimer as an Electron Acceptor. <i>Advanced Energy Materials</i> , 2011, 1, 565-568.	19.5	110
39	Correlation between bias stress instability and phototransistor operation of pentacene thin-film transistors. <i>Applied Physics Letters</i> , 2007, 91, 103508.	3.3	104
40	Comparison of organic diode structures regarding high-frequency rectification behavior in radio-frequency identification tags. <i>Journal of Applied Physics</i> , 2006, 99, 114519.	2.5	103
41	Nanoparticle-based, spray-coated silver top contacts for efficient polymer solar cells. <i>Organic Electronics</i> , 2009, 10, 735-740.	2.6	103
42	Predictive Model for the Meniscus-Guided Coating of High-Quality Organic Single-Crystalline Thin Films. <i>Advanced Materials</i> , 2016, 28, 8007-8013.	21.0	96
43	Highly oriented two-dimensional formamidinium lead iodide perovskites with a small bandgap of 1.51 eV. <i>Materials Chemistry Frontiers</i> , 2018, 2, 121-128.	5.9	95
44	Inorganic and Layered Perovskites for Optoelectronic Devices. <i>Advanced Materials</i> , 2019, 31, e1807095.	21.0	94
45	Reduced Efficiency Roll-Off and Improved Stability of Mixed 2D/3D Perovskite Light Emitting Diodes by Balancing Charge Injection. <i>Advanced Functional Materials</i> , 2019, 29, 1904101.	14.9	93
46	High efficiency perovskite solar cells using a PCBM/ZnO double electron transport layer and a short air-agging step. <i>Organic Electronics</i> , 2015, 26, 30-35.	2.6	92
47	Design and realization of a flexible QQVGA AMOLED display with organic TFTs. <i>Organic Electronics</i> , 2012, 13, 1729-1735.	2.6	89
48	X-ray imager using solution processed organic transistor arrays and bulk heterojunction photodiodes on thin, flexible plastic substrate. <i>Organic Electronics</i> , 2013, 14, 2602-2609.	2.6	89
49	High-performance a-In-Ga-Zn-O Schottky diode with oxygen-treated metal contacts. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	81
50	Uniform Aerosol Jet printed polymer lines with 30 $\frac{1}{4}$ m width for 140ppi resolution RGB organic light emitting diodes. <i>Organic Electronics</i> , 2015, 22, 40-43.	2.6	77
51	Plasmonic Efficiency Enhancement of High Performance Organic Solar Cells with a Nanostructured Rear Electrode. <i>Advanced Energy Materials</i> , 2013, 3, 145-150.	19.5	76
52	Novel bis-C60 derivative compared to other fullerene bis-adducts in high efficiency polymer photovoltaic cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 17345.	6.7	75
53	New quinoxaline and pyridopyrazine-based polymers for solution-processable photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2012, 105, 280-286.	6.2	75
54	Decreased Recombination Through the Use of a Non-Fullerene Acceptor in a 6.4% Efficient Organic Planar Heterojunction Solar Cell. <i>Advanced Energy Materials</i> , 2014, 4, 1301413.	19.5	75

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55	An integrated double half-wave organic Schottky diode rectifier on foil operating at 13.56 MHz. Applied Physics Letters, 2008, 93, 093305.	3.3	71
56	A thin-film microprocessor with inkjet print-programmable memory. Scientific Reports, 2014, 4, 7398.	3.3	71
57	Electrode Considerations for the Optical Enhancement of Organic Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2011, 1, 930-935.	19.5	70
58	Optimized circuit design for flexible 8-bit RFID transponders with active layer of ink-jet printed small molecule semiconductors. Organic Electronics, 2013, 14, 768-774.	2.6	70
59	Highly Crystalline C8-BTBT Thin-Film Transistors by Lateral Homo-Epitaxial Growth on Printed Templates. Advanced Materials, 2017, 29, 1703864.	21.0	70
60	An Interdiffusion Method for Highly Performing Cesium/Formamidinium Double Cation Perovskites. Advanced Functional Materials, 2017, 27, 1700920.	14.9	68
61	Stacked organic solar cells based on pentacene and C60. Solar Energy Materials and Solar Cells, 2007, 91, 399-404.	6.2	66
62	Adhesion properties of inverted polymer solarcells: Processing and film structure parameters. Organic Electronics, 2013, 14, 1262-1270.	2.6	66
63	Mixed Lead-Tin Halide Perovskites for Efficient and Wavelength-Tunable Near-Infrared Light-Emitting Diodes. Advanced Materials, 2019, 31, e1806105.	21.0	66
64	Gigahertz Operation of a-IGZO Schottky Diodes. IEEE Transactions on Electron Devices, 2013, 60, 3407-3412.	3.0	64
65	Localized trions in conjugated polymers. Physical Review B, 2007, 76, .	3.2	62
66	Charge carrier mobility in thin films of organic semiconductors by the gated van der Pauw method. Nature Communications, 2017, 8, 14975.	12.8	62
67	Low voltage complementary organic inverters. Applied Physics Letters, 2006, 88, 162116.	3.3	61
68	Structural Evolution of Evaporated Lead Phthalocyanine Thin Films for Near-Infrared Sensitive Solar Cells. Chemistry of Materials, 2011, 23, 886-895.	6.7	61
69	Numerical simulation of tetracene light-emitting transistors: A detailed balance of exciton processes. Applied Physics Letters, 2004, 85, 2405-2407.	3.3	59
70	Enhanced photocurrent and open-circuit voltage in a 3-layer cascade organic solar cell. Applied Physics Letters, 2012, 101, 143301.	3.3	59
71	The characterization of chloroboron (iii) subnaphthalocyanine thin films and their application as a donor material for organic solar cells. Journal of Materials Chemistry, 2009, 19, 5295.	6.7	58
72	Noise-Margin Analysis for Organic Thin-Film Complementary Technology. IEEE Transactions on Electron Devices, 2010, 57, 201-208.	3.0	58

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73	Determination of Solvent Systems for Blade Coating Thin Film Photovoltaics. <i>Advanced Functional Materials</i> , 2015, 25, 3393-3398.	14.9	57
74	Organic solar cells with sensitized phosphorescent absorbing layers. <i>Organic Electronics</i> , 2009, 10, 1015-1019.	2.6	56
75	Oxygen vacancies effects in a-IGZO: Formation mechanisms, hysteresis, and negative bias stress effects. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1600889.	1.8	56
76	Bulk heterojunction organic solar cells based on soluble poly(thienylene vinylene) derivatives. <i>Organic Electronics</i> , 2008, 9, 740-746.	2.6	55
77	Controlling the Texture and Crystallinity of Evaporated Lead Phthalocyanine Thin Films for Near-Infrared Sensitive Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 8505-8515.	8.0	53
78	Integrated shadow mask method for patterning small molecule organic semiconductors. <i>Applied Physics Letters</i> , 2006, 88, 103501.	3.3	52
79	Triplet Excitation Scavenging in Films of Conjugated Polymers. <i>ChemPhysChem</i> , 2009, 10, 1071-1076.	2.1	50
80	Microcrystalline Organic Thin-Film Solar Cells. <i>Advanced Materials</i> , 2013, 25, 5504-5507.	21.0	50
81	Highly efficient perovskite solar cells with crosslinked PCBM interlayers. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2466-2472.	10.3	49
82	Black Phosphorus Quantum Dots Induced High-Quality Perovskite Film for Efficient and Thermally Stable Planar Perovskite Solar Cells. <i>Solar Rrl</i> , 2019, 3, 1900132.	5.8	49
83	Mitigating Dark Current for High-Performance Near-Infrared Organic Photodiodes via Charge Blocking and Defect Passivation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16766-16774.	8.0	49
84	Analog Building Blocks for Organic Smart Sensor Systems in Organic Thin-Film Transistor Technology on Flexible Plastic Foil. <i>IEEE Journal of Solid-State Circuits</i> , 2012, 47, 1712-1720.	5.4	48
85	Modelling the short-circuit current of polymer bulk heterojunction solar cells. <i>Thin Solid Films</i> , 2004, 451-452, 498-502.	1.8	47
86	Patterned growth of pentacene. <i>Applied Physics Letters</i> , 2004, 85, 5550-5552.	3.3	46
87	Low-temperature and scalable complementary thin-film technology based on solution-processed metal oxide n-TFTs and pentacene p-TFTs. <i>Organic Electronics</i> , 2011, 12, 1909-1913.	2.6	45
88	Compact Model for Organic Thin-Film Transistor. <i>IEEE Electron Device Letters</i> , 2010, 31, 210-212.	3.9	44
89	Concurrently pumped ultrasonic spray coating for donor:acceptor and thickness optimization of organic solar cells. <i>Organic Electronics</i> , 2013, 14, 1002-1008.	2.6	44
90	An Integrated a-IGZO UHF Energy Harvester for Passive RFID Tags. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 3289-3295.	3.0	44

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91	Power saving through state retention in IGZO-TFT AMOLED displays for wearable applications. Journal of the Society for Information Display, 2017, 25, 222-228.	2.1	44
92	Integration of PbS Quantum Dot Photodiodes on Silicon for NIR Imaging. IEEE Sensors Journal, 2020, 20, 6841-6848.	4.7	44
93	Pentacene devices and logic gates fabricated by organic vapor phase deposition. Applied Physics Letters, 2006, 89, 203502.	3.3	43
94	Interplay between hopping and band transport in high-mobility disordered semiconductors at large carrier concentrations: The case of the amorphous oxide InGaZnO. Physical Review B, 2016, 93, .	3.2	43
95	Infrared Colloidal Quantum Dot Image Sensors. IEEE Transactions on Electron Devices, 2022, 69, 2840-2850.	3.0	43
96	Patterning of organic thin film transistors by oxygen plasma etch. Applied Physics Letters, 2006, 89, 183503.	3.3	42
97	Correlating the Polymorphism of Titanyl Phthalocyanine Thin Films with Solar Cell Performance. Journal of Physical Chemistry Letters, 2012, 3, 2395-2400.	4.6	42
98	Triplet energy transfer in conjugated polymers. II. A polaron theory description addressing the influence of disorder. Physical Review B, 2008, 78, .	3.2	41
99	A Growth and Morphology Study of Organic Vapor Phase Deposited Perylene Diimide Thin Films for Transistor Applications. Journal of Physical Chemistry C, 2010, 114, 2730-2737.	3.1	41
100	A novel organic n-type material: fluorinated perylene diimide. Solar Energy Materials and Solar Cells, 2005, 87, 521-527.	6.2	40
101	Organic CuTCNQ non-volatile memories for integration in the CMOS backend-of-line: Preparation from gas/solid reaction and downscaling to an area of 0.25 μ m ² . Solid-State Electronics, 2006, 50, 601-605.	1.4	40
102	Single-source dual-layer amorphous IGZO thin-film transistors for display and circuit applications. Journal of the Society for Information Display, 2013, 21, 129-136.	2.1	40
103	Optimization of Charge Carrier Extraction in Colloidal Quantum Dots Short-Wave Infrared Photodiodes through Optical Engineering. Advanced Functional Materials, 2018, 28, 1804502.	14.9	40
104	Microscopic Description of Elementary Growth Processes and Classification of Structural Defects in Pentacene Thin Films. Journal of Physical Chemistry B, 2007, 111, 139-150.	2.6	39
105	High-Performance a-IGZO Thin Film Diode as Selector for Cross-Point Memory Application. IEEE Electron Device Letters, 2014, 35, 642-644.	3.9	39
106	Nafion-Modified MoO _x as Effective Room-Temperature Hole Injection Layer for Stable, High-Performance Inverted Organic Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 3581-3589.	8.0	38
107	Electric field-dependent charge transport in organic semiconductors. Applied Physics Letters, 2009, 95, .	3.3	37
108	Analog techniques for reliable organic circuit design on foil applied to an 18dB single-stage differential amplifier. Organic Electronics, 2010, 11, 1357-1362.	2.6	37

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109	Multiscale Modeling of the Electrostatic Impact of Self-Assembled Monolayers used as Gate Dielectric Treatment in Organic Thin-Film Transistors. ACS Applied Materials & Interfaces, 2014, 6, 15372-15378.	8.0	37
110	Light-emitting organic field-effect transistor using an organic heterostructure within the transistor channel. Applied Physics Letters, 2006, 89, 223504.	3.3	36
111	Structural templating of chloro-aluminum phthalocyanine layers for planar and bulk heterojunction organic solar cells. Organic Electronics, 2011, 12, 2131-2139.	2.6	36
112	Thin-Film Quantum Dot Photodiode for Monolithic Infrared Image Sensors. Sensors, 2017, 17, 2867.	3.8	36
113	Origin of multiple memory states in organic ferroelectric field-effect transistors. Applied Physics Letters, 2012, 101, .	3.3	35
114	Self-aligned surface treatment for thin-film organic transistors. Applied Physics Letters, 2006, 88, 222103.	3.3	34
115	Organic complementary oscillators with stage-delays below 1â€¼s. Applied Physics Letters, 2010, 96, 133307.	3.3	34
116	Electric Field Confinement Effect on Charge Transport in Organic Field-Effect Transistors. Physical Review Letters, 2012, 108, 066601.	7.8	34
117	Thin-Film Photodetector Optimization for High-Performance Short-Wavelength Infrared Imaging. IEEE Electron Device Letters, 2021, 42, 1196-1199.	3.9	34
118	A low-temperature-cross-linked poly(4-vinylphenol) gate-dielectric for organic thin film transistors. Thin Solid Films, 2010, 519, 391-393.	1.8	32
119	An 8b organic microprocessor on plastic foil. , 2011, , .		31
120	High performance aâ€GZO thinâ€film transistors with mfaâ€PVD SiO₂ as an etchâ€stopâ€layer. Journal of the Society for Information Display, 2014, 22, 23-28.	2.1	31
121	Ultrathin Ammonium Heptamolybdate Films as Efficient Room-Temperature Hole Transport Layers for Organic Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 16335-16343.	8.0	31
122	Amorphous indium-gallium-zinc-oxide as electron transport layer in organic photodetectors. Applied Physics Letters, 2015, 106, .	3.3	31
123	Photocurrent enhancement in polymer:fullerene bulk heterojunction solar cells doped with a phosphorescent molecule. Applied Physics Letters, 2009, 95, 173304.	3.3	30
124	Scaling down of organic complementary logic gates for compact logic on foil. Organic Electronics, 2014, 15, 1229-1234.	2.6	30
125	Photolithographic patterning of organic photodetectors with a non-fluorinated photoresist system. Organic Electronics, 2014, 15, 2355-2359.	2.6	29
126	Novel backâ€channelâ€etch process flow based aâ€GZO TFTs for circuit and display applications on PEN foil. Journal of the Society for Information Display, 2013, 21, 369-375.	2.1	27

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127	Back-channel-etch amorphous indium-gallium-zinc oxide thin-film transistors: The impact of source/drain metal etch and final passivation. Japanese Journal of Applied Physics, 2014, 53, 111401.	1.5	27
128	20.1: Flexible AMOLED Display and Gate-driver with Self-aligned IGZO TFT on Plastic Foil. Digest of Technical Papers SID International Symposium, 2014, 45, 248-251.	0.3	27
129	Bidirectional Communication in an HF Hybrid Organic/Solution-Processed Metal-Oxide RFID Tag. IEEE Transactions on Electron Devices, 2014, 61, 2387-2393.	3.0	27
130	Ultrasonic Spray Coating of 6.5% Efficient Diketopyrrolopyrrole-Based Organic Photovoltaics. IEEE Journal of Photovoltaics, 2014, 4, 1538-1544.	2.5	26
131	Characteristics improvement of top-gate self-aligned amorphous indium gallium zinc oxide thin-film transistors using a dual-gate control. Journal of the Society for Information Display, 2017, 25, 349-355.	2.1	26
132	A compact model for polycrystalline pentacene thin-film transistor. Journal of Applied Physics, 2010, 107, .	2.5	24
133	Bidirectional communication in an HF hybrid organic/solution-processed metal-oxide RFID tag. , 2012, , .		24
134	Organic Thin-Film Transistors with Anodized Gate Dielectric Patterned by Self-Aligned Embossing on Flexible Substrates. Advanced Functional Materials, 2012, 22, 1209-1214.	14.9	24
135	Deep-level transient spectroscopy on an amorphous InGaZnO Schottky diode. Applied Physics Letters, 2014, 104, 082112.	3.3	24
136	Circuits and AMOLED display with self-aligned a-IGZO TFTs on polyimide foil. Journal of the Society for Information Display, 2014, 22, 509-517.	2.1	23
137	Low-temperature formation of source-drain contacts in self-aligned amorphous oxide thin-film transistors. Journal of Information Display, 2015, 16, 111-117.	4.0	23
138	Interfacial Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS Applied Materials & Interfaces, 2016, 8, 2211-2219.	8.0	23
139	Flexible NAND-Like Organic Ferroelectric Memory Array. IEEE Electron Device Letters, 2014, 35, 539-541.	3.9	22
140	Overlapping-gate Organic Light-emitting Transistors. Advanced Electronic Materials, 2019, 5, 1800437.	5.1	22
141	Growth of pentacene thin films by in-line organic vapor phase deposition. Organic Electronics, 2010, 11, 100-108.	2.6	21
142	UHF IGZO Schottky diode. , 2012, , .		21
143	Improved cathode buffer layer to decrease exciton recombination in organic planar heterojunction solar cells. Applied Physics Letters, 2013, 102, .	3.3	21
144	Structure induced conductivity enhancement in metal-doped molybdenum oxide thin films. Journal of Applied Physics, 2013, 113, .	2.5	21

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145	16.3 Flexible thin-film NFC tags powered by commercial USB reader device at 13.56MHz. , 2015, , .		21
146	Integrated Line Driver for Digital Pulse-Width Modulation Driven AMOLED Displays on Flex. IEEE Journal of Solid-State Circuits, 2015, 50, 282-290.	5.4	20
147	Integration of highly crystalline C8-BTBT thin-films into simple logic gates and circuits. Organic Electronics, 2019, 67, 64-71.	2.6	20
148	Electrodeposition of copper tetracyanoquinodimethane for bipolar resistive switching non-volatile memories. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 4191-4201.	3.4	19
149	Robust digital design in organic electronics by dual-gate technology. , 2010, , .		19
150	DC-DC converter assisted two-stage amplifier in organic thin-film transistor technology on foil. , 2011, , .		19
151	Solution-processed and low-temperature metal oxide n-channel thin-film transistors and low-voltage complementary circuitry on large-area flexible polyimide foil. Journal of the Society for Information Display, 2012, 20, 499-507.	2.1	19
152	30.1 8b Thin-film microprocessor using a hybrid oxide-organic complementary technology with inkjet-printed P&sup>2&sup>;ROM memory. , 2014, , .		19
153	Influence of the Surface Treatment on the Solution Coating of Single-Crystalline Organic Thin-Films. Advanced Materials Interfaces, 2018, 5, 1800147.	3.7	19
154	Near-Field Interactions between Metal Nanoparticle Surface Plasmons and Molecular Excitons in Thin-Films. Part I: Absorption. Journal of Physical Chemistry C, 2012, 116, 24206-24214.	3.1	18
155	Determination of crystal orientation in organic thin films using optical microscopy. Organic Electronics, 2016, 37, 100-107.	2.6	18
156	Influence of Solute Concentration on Meniscus-Guided Coating of Highly Crystalline Organic Thin Films. Advanced Materials Interfaces, 2019, 6, 1900614.	3.7	18
157	Exploiting Two-Step Processed Mixed 2D/3D Perovskites for Bright Green Light Emitting Diodes. Advanced Optical Materials, 2019, 7, 1900465.	7.3	18
158	Perovskite Light Emitting Diode Characteristics: The Effects of Electroluminescence Transient and Hysteresis. Advanced Optical Materials, 2020, 8, 2000941.	7.3	18
159	Accounting for variability in the design of circuits with organic thin-film transistors. Organic Electronics, 2014, 15, 937-942.	2.6	17
160	Double Charge Transfer Dominates in Carrier Localization in Low Bandgap Sites of Heterogeneous Lead Halide Perovskites. Advanced Functional Materials, 2021, 31, 2010076.	14.9	17
161	Two-dimensional perovskites with alternating cations in the interlayer space for stable light-emitting diodes. Nanophotonics, 2021, 10, 2145-2156.	6.0	17
162	Detailed Characterization of Short-Wave Infrared Colloidal Quantum Dot Image Sensors. IEEE Transactions on Electron Devices, 2022, 69, 2900-2906.	3.0	17

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163	Photodetectors Based on Lead Sulfide Quantum Dot and Organic Absorbers for Multispectral Sensing in the Visible to Short-Wave Infrared Range. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	17
164	Bipolar Resistive Electrical Switching of CuTCNQ Memories Incorporating a Dedicated Switching Layer. <i>IEEE Electron Device Letters</i> , 2009, 30, 620-622.	3.9	16
165	Impact of the Low Temperature Gate Dielectrics on Device Performance and Bias-Stress Stabilities of a-IGZO Thin-Film Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, N99-N102.	1.8	16
166	Organic Light-Emitting Diodes with Field-Effect-Assisted Electron Transport Based on C_{60} -Diphenylfluorohexyl-Quaterthiophene. <i>Advanced Functional Materials</i> , 2008, 18, 3645-3652.	14.9	15
167	An organic charge trapping memory transistor with bottom source and drain contacts. <i>Applied Physics Letters</i> , 2009, 95, 103311.	3.3	15
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