Paul Heremans

List of Publications by Year in descending order

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257 papers

14,904 citations

18482 62 h-index 21540 114 g-index

263 all docs

263 docs citations

263 times ranked 15770 citing authors

#	Article	IF	CITATIONS
1	Infrared Colloidal Quantum Dot Image Sensors. IEEE Transactions on Electron Devices, 2022, 69, 2840-2850.	3.0	43
2	Electromechanical Equivalent Circuit Model for Axisymmetric PMUTs With Elastic Boundary Conditions. Journal of Microelectromechanical Systems, 2022, 31, 457-472.	2.5	7
3	Detailed Characterization of Short-Wave Infrared Colloidal Quantum Dot Image Sensors. IEEE Transactions on Electron Devices, 2022, 69, 2900-2906.	3.0	17
4	Photodetectors Based on Lead Sulfide Quantum Dot and Organic Absorbers for Multispectral Sensing in the Visible to Shortâ€Wave Infrared Range. Advanced Functional Materials, 2022, 32, .	14.9	17
5	Intense Electrical Pulsing of Perovskite Light Emitting Diodes under Cryogenic Conditions. Advanced Optical Materials, 2022, 10, .	7.3	4
6	Random band-edge model description of thermoelectricity in high-mobility disordered semiconductors: Application to the amorphous oxide In-Ga-Zn-O. Physical Review B, 2022, 105, .	3.2	1
7	59â€1: <i>Invited Paper:</i> Scaling Down of OLED Pixels Enabled by Photolithography. Digest of Technical Papers SID International Symposium, 2022, 53, 768-771.	0.3	1
8	Systematic Study on the Amorphous, <i>C</i> -Axis-Aligned Crystalline, and Protocrystalline Phases in In–Ga–Zn Oxide Thin-Film Transistors. ACS Applied Electronic Materials, 2021, 3, 1268-1278.	4. 3	15
9	55.1: Invited Paper: Photolithographic patterning of OLED and OPD for invisible sensor integration in mobile display. Digest of Technical Papers SID International Symposium, 2021, 52, 398-401.	0.3	2
10	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
11	Mitigating Dark Current for High-Performance Near-Infrared Organic Photodiodes via Charge Blocking and Defect Passivation. ACS Applied Materials & Samp; Interfaces, 2021, 13, 16766-16774.	8.0	49
12	11â€2: Technology Developments in Highâ€Resolution FMMâ€free OLED and BEOL IGZO TFTs for Powerâ€Efficient Microdisplays. Digest of Technical Papers SID International Symposium, 2021, 52, 127-130.	0.3	4
13	Operationally Stable Perovskite Light Emitting Diodes with High Radiance. Advanced Optical Materials, 2021, 9, 2100586.	7.3	13
14	55.1: Invited Paper: FMMâ€free OLED Manufacturing Enabled by Photolithographic Patterning Processes. Digest of Technical Papers SID International Symposium, 2021, 52, 655-658.	0.3	3
15	Thin-Film Photodetector Optimization for High-Performance Short-Wavelength Infrared Imaging. IEEE Electron Device Letters, 2021, 42, 1196-1199.	3.9	34
16	Active area dependence of optoelectronic characteristics of perovskite LEDs. Journal of Materials Chemistry C, 2021, 9, 12661-12670.	5 . 5	8
17	Two-dimensional perovskites with alternating cations in the interlayer space for stable light-emitting diodes. Nanophotonics, 2021, 10, 2145-2156.	6.0	17
18	lon Motion Determines Multiphase Performance Dynamics of Perovskite LEDs. Advanced Optical Materials, 2021, 9, 2101560.	7.3	9

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19	Integration of PbS Quantum Dot Photodiodes on Silicon for NIR Imaging. IEEE Sensors Journal, 2020, 20, 6841-6848.	4.7	44
20	Perovskite Light Emitting Diode Characteristics: The Effects of Electroluminescence Transient and Hysteresis. Advanced Optical Materials, 2020, 8, 2000941.	7.3	18
21	44â€3: Invited Paper: Integration of additional functionalities into the frontplane of AMOLED displays. Digest of Technical Papers SID International Symposium, 2020, 51, 646-649.	0.3	3
22	Carrier Mobility, Lifetime, and Diffusion Length in Optically Thin Quantum Dot Semiconductor Films. ACS Applied Materials & Diffusion Length in Optically Thin Quantum Dot Semiconductor Films.	8.0	4
23	Influence of Solute Concentration on Meniscusâ€Guided Coating of Highly Crystalline Organic Thin Films. Advanced Materials Interfaces, 2019, 6, 1900614.	3.7	18
24	Reduced Efficiency Rollâ€Off and Improved Stability of Mixed 2D/3D Perovskite Light Emitting Diodes by Balancing Charge Injection. Advanced Functional Materials, 2019, 29, 1904101.	14.9	93
25	Integration of highly crystalline C8-BTBT thin-films into simple logic gates and circuits. Organic Electronics, 2019, 67, 64-71.	2.6	20
26	9â€1: <i>Invited Paper:</i> Metalâ€oxide readout electronics based on Indiumâ€Galliumâ€Zincâ€Oxide and Indiumâ€Tinâ€Zincâ€Oxide for inâ€panel fingerprint detection application. Digest of Technical Papers SID International Symposium, 2019, 50, 95-98.	0.3	9
27	Pâ€12: High Performance Dualâ€gate Dualâ€layer Amorphous Oxide Semiconductors TFTs on PI Foil for Display Application. Digest of Technical Papers SID International Symposium, 2019, 50, 1255-1258.	0.3	6
28	71â€3: Organic photolithography for displays with integrated fingerprint scanner. Digest of Technical Papers SID International Symposium, 2019, 50, 1007-1010.	0.3	9
29	Exploiting Twoâ€Step Processed Mixed 2D/3D Perovskites for Bright Green Light Emitting Diodes. Advanced Optical Materials, 2019, 7, 1900465.	7.3	18
30	Inorganic and Layered Perovskites for Optoelectronic Devices. Advanced Materials, 2019, 31, e1807095.	21.0	94
31	Black Phosphorus Quantum Dots Induced Highâ€Quality Perovskite Film for Efficient and Thermally Stable Planar Perovskite Solar Cells. Solar Rrl, 2019, 3, 1900132.	5.8	49
32	Mixed Lead–Tin Halide Perovskites for Efficient and Wavelengthâ€Tunable Nearâ€Infrared Lightâ€Emitting Diodes. Advanced Materials, 2019, 31, e1806105.	21.0	66
33	Overlappingâ€Gate Organic Lightâ€Emitting Transistors. Advanced Electronic Materials, 2019, 5, 1800437.	5.1	22
34	Recent progress in 2D/quasi-2D layered metal halide perovskites for solar cells. Journal of Materials Chemistry A, 2018, 6, 11063-11077.	10.3	183
35	Influence of the Surface Treatment on the Solution Coating of Singleâ€Crystalline Organic Thinâ€Films. Advanced Materials Interfaces, 2018, 5, 1800147.	3.7	19
36	Integrated Tin Monoxide P-Channel Thin-Film Transistors for Digital Circuit Applications. IEEE Transactions on Electron Devices, 2018, 65, 514-519.	3.0	11

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37	Negative field-dependent charge mobility in crystalline organic semiconductors with delocalized transport. Chemical Papers, 2018, 72, 1685-1695.	2.2	5
38	Highly oriented two-dimensional formamidinium lead iodide perovskites with a small bandgap of 1.51 eV. Materials Chemistry Frontiers, 2018, 2, 121-128.	5.9	95
39	Optimization of Charge Carrier Extraction in Colloidal Quantum Dots Shortâ€Wave Infrared Photodiodes through Optical Engineering. Advanced Functional Materials, 2018, 28, 1804502.	14.9	40
40	Highly efficient perovskite solar cells with crosslinked PCBM interlayers. Journal of Materials Chemistry A, 2017, 5, 2466-2472.	10.3	49
41	Oxygen vacancies effects in aâ€ŀGZO: Formation mechanisms, hysteresis, and negative bias stress effects. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600889.	1.8	56
42	Origin of the apparent delocalization of the conduction band in a high-mobility amorphous semiconductor. Journal of Physics Condensed Matter, 2017, 29, 255702.	1.8	5
43	Charge carrier mobility in thin films of organic semiconductors by the gated van der Pauw method. Nature Communications, 2017, 8, 14975.	12.8	62
44	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
45	An Interdiffusion Method for Highly Performing Cesium/Formamidinium Double Cation Perovskites. Advanced Functional Materials, 2017, 27, 1700920.	14.9	68
46	Characteristics improvement of topâ€gate selfâ€aligned amorphous indium gallium zinc oxide thinâ€film transistors using a dualâ€gate control. Journal of the Society for Information Display, 2017, 25, 349-355.	2.1	26
47	44â€1: <i>Invited Paper</i> : Photolithography as Enabler of AMOLED Displays Beyond 1000 ppi. Digest of Technical Papers SID International Symposium, 2017, 48, 623-626.	0.3	7
48	Highly Crystalline C8â€BTBT Thinâ€Film Transistors by Lateral Homoâ€Epitaxial Growth on Printed Templates. Advanced Materials, 2017, 29, 1703864.	21.0	70
49	Role of transport band edge variation on delocalized charge transport in high-mobility crystalline organic semiconductors. Physical Review B, 2017, 96, .	3.2	8
50	Growth Of Organic Semiconductor Thin Films with Multi-Micron Domain Size and Fabrication of Organic Transistors Using a Stencil Nanosieve. ACS Applied Materials & Samp; Interfaces, 2017, 9, 23314-23318.	8.0	4
51	Thin-Film Quantum Dot Photodiode for Monolithic Infrared Image Sensors. Sensors, 2017, 17, 2867.	3.8	36
52	74-3: Multicolor 1250 ppi OLED Arrays Patterened by Photolithography. Digest of Technical Papers SID International Symposium, 2016, 47, 1009-1012.	0.3	3
53	Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics. Advanced Energy Materials, 2016, 6, 1600386.	19.5	158
54	Mechanical and Electronic Properties of Thinâ€Film Transistors on Plastic, and Their Integration in Flexible Electronic Applications. Advanced Materials, 2016, 28, 4266-4282.	21.0	218

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55	On the Extraction of Charge Carrier Mobility in Highâ€Mobility Organic Transistors. Advanced Materials, 2016, 28, 151-155.	21.0	178
56	Predicting the optimal process window for the coating of single-crystalline organic films with mobilities exceeding 7 cm2/Vs , 2016, , .		0
57	Photovoltaics: Nonhazardous Solvent Systems for Processing Perovskite Photovoltaics (Adv. Energy) Tj ETQq $1\ 1$	0.784314 19.5	rgBT /Overlo
58	Predictive Model for the Meniscusâ€Guided Coating of Highâ€Quality Organic Singleâ€Crystalline Thin Films. Advanced Materials, 2016, 28, 8007-8013.	21.0	96
59	Determination of crystal orientation in organic thin films using optical microscopy. Organic Electronics, 2016, 37, 100-107.	2.6	18
60	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
61	Arrays of Pentacene Single Crystals by Stencil Evaporation. Crystal Growth and Design, 2016, 16, 4694-4700.	3.0	4
62	Conduction mechanism in amorphous InGaZnO thin film transistors. Japanese Journal of Applied Physics, 2016, 55, 014301.	1.5	14
63	Dopant-Free Hole-Transporting Material with a <i>C</i> _{3<i>h</i>} Symmetrical Truxene Core for Highly Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 2528-2531.	13.7	446
64	Rapid composition screening for perovskite photovoltaics via concurrently pumped ultrasonic spray coating. Journal of Materials Chemistry A, 2016, 4, 3792-3797.	10.3	130
65	Interfacial Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS Applied Materials & Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS Applied Materials & Depletion Regions: Beyond the Space Charge Limit in Thick Bulk Heterojunctions. ACS	8.0	23
66	Pinhole-free perovskite films for efficient solar modules. Energy and Environmental Science, 2016, 9, 484-489.	30.8	252
67	Electrical properties of patterned photoactive layers in organic photovoltaic modules. Solar Energy Materials and Solar Cells, 2016, 144, 493-499.	6.2	7
68	Paper No S12.5: Selfâ€Aligned aâ€IGZO TFTs: Impact of S/D Contacts Formation on Their Negativeâ€Biasâ€Illuminationâ€Stress (NBIS) Instability. Digest of Technical Papers SID International Symposium, 2015, 46, 55-55.	0.3	0
69	Pâ€6: Impact of Buffer Layers on the Selfâ€Aligned Topâ€Gate aâ€IGZO TFT Characteristics. Digest of Technical Papers SID International Symposium, 2015, 46, 1139-1142.	0.3	4
70	Impact of source/drain contacts formation of selfâ€aligned amorphousâ€lGZO TFTs on their negativeâ€biasâ€lluminationâ€stress stabilities. Journal of the Society for Information Display, 2015, 23, 397-402.	2.1	4
71	16.3: Trueâ€Color 640 ppi OLED Arrays Patterned by CA iâ€line Photolithography. Digest of Technical Papers SID International Symposium, 2015, 46, 215-218.	0.3	9
72	29.4: Flexible AMOLED Display with Integrated Gate Driver Operating at Operation Speed Compatible with 4k2k. Digest of Technical Papers SID International Symposium, 2015, 46, 427-430.	0.3	8

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73	Absorptive carbon nanotube electrodes: Consequences of optical interference loss in thin film solar cells. Nanoscale, 2015, 7, 7259-7266.	5.6	8
74	Blade coating of diketopyrrolopyrrole based organic photovoltaics from non-halogenated solvent systems. , 2015, , .		0
75	Organic photodetectors with active layer patterned by lithography. , 2015, , .		0
76	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
77	Nafion-Modified MoO _{<i>x</i>} as Effective Room-Temperature Hole Injection Layer for Stable, High-Performance Inverted Organic Solar Cells. ACS Applied Materials & Samp; Interfaces, 2015, 7, 3581-3589.	8.0	38
78	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
79	Amorphous indium-gallium-zinc-oxide as electron transport layer in organic photodetectors. Applied Physics Letters, 2015, 106, .	3.3	31
80	Energy Level Tuning of Non-Fullerene Acceptors in Organic Solar Cells. Journal of the American Chemical Society, 2015, 137, 8991-8997.	13.7	147
81	High efficiency perovskite solar cells using a PCBM/ZnO double electron transport layer and a short air-aging step. Organic Electronics, 2015, 26, 30-35.	2.6	92
82	Impact of the Low Temperature Gate Dielectrics on Device Performance and Bias-Stress Stabilities of a-IGZO Thin-Film Transistors. ECS Journal of Solid State Science and Technology, 2015, 4, N99-N102.	1.8	16
83	16.3 Flexible thin-film NFC tags powered by commercial USB reader device at 13.56MHz., 2015, , .		21
84	Uniform Aerosol Jet printed polymer lines with $30\hat{1}/4$ m width for 140ppi resolution RGB organic light emitting diodes. Organic Electronics, 2015, 22, 40-43.	2.6	77
85	Determination of Solvent Systems for Blade Coating Thin Film Photovoltaics. Advanced Functional Materials, 2015, 25, 3393-3398.	14.9	57
86	An electron beam evaporated TiO ₂ layer for high efficiency planar perovskite solar cells on flexible polyethylene terephthalate substrates. Journal of Materials Chemistry A, 2015, 3, 22824-22829.	10.3	116
87	Medium Frequency Physical Vapor Deposited Al ₂ O ₃ and SiO ₂ as Etch-Stop-Layers for Amorphous Indium-Gallium-Zinc-Oxide Thin-Film-Transistors. ECS Journal of Solid State Science and Technology, 2015, 4, Q38-Q42.	1.8	10
88	Back-channel-etch amorphous indiumâ€"galliumâ€"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
89	Organic Imager on Readout Backplane Based on TFTs With Cross-Linkable Dielectrics. IEEE Photonics Technology Letters, 2014, 26, 2197-2200.	2.5	5
90	Comparative study of source–drain contact metals for amorphous InGaZnO thinâ€film transistors. Journal of the Society for Information Display, 2014, 22, 310-315.	2.1	6

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91	An Integrated a-IGZO UHF Energy Harvester for Passive RFID Tags. IEEE Transactions on Electron Devices, 2014, 61, 3289-3295.	3.0	44
92	Ultralow power transponder in thin film circuit technology on foil with sub & amp; $\#x2212; 1V$ operation voltage., 2014, , .		4
93	X-ray imaging sensor arrays on foil using solution processed organic photodiodes and organic transistors. , 2014, , .		3
94	Organic photovoltaic cell relying on energy transfer with over 20% efficiency in indoor lighting. , 2014, , .		2
95	30.1 8b Thin-film microprocessor using a hybrid oxide-organic complementary technology with inkjet-printed P ² ROM memory. , 2014, , .		19
96	High performance aâ€IGZO thinâ€film transistors with mfâ€PVD SiO ₂ as an etchâ€stopâ€layer. Journal of the Society for Information Display, 2014, 22, 23-28.	2.1	31
97	Reducing exciton-polaron annihilation in organic planar heterojunction solar cells. Physical Review B, 2014, 90, .	3.2	14
98	20.1: Flexible AMOLED Display and Gateâ€driver with Selfâ€aligned IGZO TFT on Plastic Foil. Digest of Technical Papers SID International Symposium, 2014, 45, 248-251.	0.3	27
99	13.4: Flexible Low Temperature Solution Processed Oxide Semiconductor TFT Backplanes for Use in AMOLED Displays. Digest of Technical Papers SID International Symposium, 2014, 45, 161-163.	0.3	13
100	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
101	Accounting for variability in the design of circuits with organic thin-film transistors. Organic Electronics, 2014, 15, 937-942.	2.6	17
102	8.4% efficient fullerene-free organic solar cells exploiting long-range exciton energy transfer. Nature Communications, 2014, 5, 3406.	12.8	506
103	Deep-level transient spectroscopy on an amorphous InGaZnO ₄ Schottky diode. Applied Physics Letters, 2014, 104, 082112.	3.3	24
104	Decreased Recombination Through the Use of a Nonâ€Fullerene Acceptor in a 6.4% Efficient Organic Planar Heterojunction Solar Cell. Advanced Energy Materials, 2014, 4, 1301413.	19.5	75
105	30.2 Digital PWM-driven AMOLED display on flex reducing static power consumption. , 2014, , .		15
106	Flexible NAND-Like Organic Ferroelectric Memory Array. IEEE Electron Device Letters, 2014, 35, 539-541.	3.9	22
107	Ultrasonic Spray Coating of 6.5% Efficient Diketopyrrolopyrrole-Based Organic Photovoltaics. IEEE Journal of Photovoltaics, 2014, 4, 1538-1544.	2.5	26
108	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

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109	Solving the technology barriers in flexible AMOLED displays. , 2014, , .		O
110	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
111	Electronics on plastic foil, for applications in flexible OLED displays, sensor arrays and circuits. , 2014, , .		6
112	Photolithographic patterning of organic photodetectors with a non-fluorinated photoresist system. Organic Electronics, 2014, 15, 2355-2359.	2.6	29
113	Ultrathin Ammonium Heptamolybdate Films as Efficient Room-Temperature Hole Transport Layers for Organic Solar Cells. ACS Applied Materials & Solar Cells. ACS ACS Applied Materials & Solar Cells. ACS Applied Materials & Solar Cells. ACS	8.0	31
114	Multiscale Modeling of the Electrostatic Impact of Self-Assembled Monolayers used as Gate Dielectric Treatment in Organic Thin-Film Transistors. ACS Applied Materials & Samp; Interfaces, 2014, 6, 15372-15378.	8.0	37
115	Scaling down of organic complementary logic gates for compact logic on foil. Organic Electronics, 2014, 15, 1229-1234.	2.6	30
116	Impact of etch stop layer on negative bias illumination stress of amorphous Indium Gallium Zinc Oxide transistors. , 2014, , .		2
117	A thin-film microprocessor with inkjet print-programmable memory. Scientific Reports, 2014, 4, 7398.	3.3	71
118	Microcrystalline Organic Thinâ€Film Solar Cells. Advanced Materials, 2013, 25, 5504-5507.	21.0	50
119	Organic RFID Tags. Integrated Circuits and Systems, 2013, , 133-155.	0.2	4
120	Controlling the Texture and Crystallinity of Evaporated Lead Phthalocyanine Thin Films for Near-Infrared Sensitive Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 8505-8515.	8.0	53
121	Concurrently pumped ultrasonic spray coating for donor:acceptor and thickness optimization of organic solar cells. Organic Electronics, 2013, 14, 1002-1008.	2.6	44
122	Analog Organic Electronics. , 2013, , .		14
123	Singleâ€source dualâ€layer amorphous IGZO thinâ€film transistors for display and circuit applications. Journal of the Society for Information Display, 2013, 21, 129-136.	2.1	40
124	X-ray imager using solution processed organic transistor arrays and bulk heterojunction photodiodes on thin, flexible plastic substrate. Organic Electronics, 2013, 14, 2602-2609.	2.6	89
125	Gigahertz Operation of a-IGZO Schottky Diodes. IEEE Transactions on Electron Devices, 2013, 60, 3407-3412.	3.0	64
126	Analog Circuit Design in Organic Thin-Film Transistor Technologies on Foil: An Overview. , 2013, , 269-279.		1

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127	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
128	Adhesion properties of inverted polymer solarcells: Processing and film structure parameters. Organic Electronics, 2013, 14, 1262-1270.	2.6	66
129	Improved cathode buffer layer to decrease exciton recombination in organic planar heterojunction solar cells. Applied Physics Letters, 2013, 102, .	3.3	21
130	Plasmonic Efficiency Enhancement of High Performance Organic Solar Cells with a Nanostructured Rear Electrode. Advanced Energy Materials, 2013, 3, 145-150.	19.5	76
131	Resonant cavity enhanced light harvesting in flexible thin-film organic solar cells. Optics Letters, 2013, 38, 1431.	3.3	9
132	The Influence of Alkoxy Substitutions on the Properties of Diketopyrrolopyrrole-Phenyl Copolymers for Solar Cells. Materials, 2013, 6, 3022-3034.	2.9	8
133	Integrated UHF a-IGZO energy harvester for passive RFID tags. , 2013, , .		12
134	Novel backâ€channelâ€etch process flow based aâ€lGZO TFTs for circuit and display applications on PEN foil. Journal of the Society for Information Display, 2013, 21, 369-375.	2.1	27
135	Structure induced conductivity enhancement in metal-doped molybdenum oxide thin films. Journal of Applied Physics, 2013, 113, .	2.5	21
136	A/D Conversion. , 2013, , 93-109.		0
137	Organic Thin-Film Transistor Technology: Properties and Functionality. , 2013, , 15-57.		0
138	Crystallization kinetics and morphology relations on thermally annealed bulk heterojunction solar cell blends studied by rapid heat cool calorimetry (RHC). , 2012, , .		1
139	Enhanced photocurrent and open-circuit voltage in a 3-layer cascade organic solar cell. Applied Physics Letters, 2012, 101, 143301.	3.3	59
140	UHF IGZO Schottky diode. , 2012, , .		21
141	Origin of multiple memory states in organic ferroelectric field-effect transistors. Applied Physics Letters, 2012, 101, .	3.3	35
142	The effect of anneal, solar irradiation and humidity on the adhesion/cohesion properties of P3HT:PCBM based inverted polymer solar cells. , 2012, , .		15
143	Low-cost lithographically patterned source/drain bottom contacts for high mobility p-type organic thin film transistors. Materials Research Society Symposia Proceedings, 2012, 1435, 12.	0.1	0
144	High-performance a-In-Ga-Zn-O Schottky diode with oxygen-treated metal contacts. Applied Physics Letters, 2012, 101, .	3.3	81

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145	Analog Building Blocks for Organic Smart Sensor Systems in Organic Thin-Film Transistor Technology on Flexible Plastic Foil. IEEE Journal of Solid-State Circuits, 2012, 47, 1712-1720.	5.4	48
146	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
147	New quinoxaline and pyridopyrazine-based polymers for solution-processable photovoltaics. Solar Energy Materials and Solar Cells, 2012, 105, 280-286.	6.2	7 5
148	Solutionâ€processed and lowâ€temperature metal oxide nâ€channel thinâ€film transistors and lowâ€voltage complementary circuitry on largeâ€area flexible polyimide foil. Journal of the Society for Information Display, 2012, 20, 499-507.	2.1	19
149	Correlating the Polymorphism of Titanyl Phthalocyanine Thin Films with Solar Cell Performance. Journal of Physical Chemistry Letters, 2012, 3, 2395-2400.	4.6	42
150	Design and realization of a flexible QQVGA AMOLED display with organic TFTs. Organic Electronics, 2012, 13, 1729-1735.	2.6	89
151	Electric Field Confinement Effect on Charge Transport in Organic Field-Effect Transistors. Physical Review Letters, 2012, 108, 066601.	7.8	34
152	On the Other Applications of Organic Electronics on Foil. IEEE Solid-State Circuits Magazine, 2012, 4, 43-49.	0.4	8
153	Understanding metal doping for organic electron transport layers. Applied Physics Letters, 2012, 100, 053305.	3.3	14
154	Near-Field Interactions between Metal Nanoparticle Surface Plasmons and Molecular Excitons in Thin-Films. Part II: Emission. Journal of Physical Chemistry C, 2012, 116, 24215-24223.	3.1	9
155	1D and 2D analog 1.5kHz air-stable organic capacitive touch sensors on plastic foil. , 2012, , .		4
156	Bidirectional communication in an HF hybrid organic/solution-processed metal-oxide RFID tag. , 2012, , .		24
157	Organic Thinâ€Film Transistors with Anodized Gate Dielectric Patterned by Selfâ€Aligned Embossing on Flexible Substrates. Advanced Functional Materials, 2012, 22, 1209-1214.	14.9	24
158	Vapor Phase Growth of Functional Pentacene Films at Atmospheric Pressure. Advanced Functional Materials, 2012, 22, 5050-5059.	14.9	12
159	Functionalized Dithienylthiazolo[5,4â€ <i>d</i>]thiazoles For Solutionâ€Processable Organic Fieldâ€Effect Transistors. ChemPlusChem, 2012, 77, 923-930.	2.8	12
160	An 8-Bit, 40-Instructions-Per-Second Organic Microprocessor on Plastic Foil. IEEE Journal of Solid-State Circuits, 2012, 47, 284-291.	5.4	177
161	Unraveling the Mechanism of Molecular Doping in Organic Semiconductors. Advanced Materials, 2012, 24, 1535-1539.	21.0	114
162	Design of Transparent Anodes for Resonant Cavity Enhanced Light Harvesting in Organic Solar Cells. Advanced Materials, 2012, 24, 728-732.	21.0	216

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163	An 8b organic microprocessor on plastic foil. , 2011, , .		31
164	DC-DC converter assisted two-stage amplifier in organic thin-film transistor technology on foil. , $2011, , .$		19
165	Polymer and Organic Nonvolatile Memory Devices. Chemistry of Materials, 2011, 23, 341-358.	6.7	506
166	Structural Evolution of Evaporated Lead Phthalocyanine Thin Films for Near-Infrared Sensitive Solar Cells. Chemistry of Materials, 2011, 23, 886-895.	6.7	61
167	Solution-Processed MoO ₃ Thin Films As a Hole-Injection Layer for Organic Solar Cells. ACS Applied Materials & Diterfaces, 2011, 3, 3244-3247.	8.0	280
168	A Fully Integrated \$Delta Sigma\$ ADC in Organic Thin-Film Transistor Technology on Flexible Plastic Foil. IEEE Journal of Solid-State Circuits, 2011, 46, 276-284.	5.4	142
169	Unipolar Organic Transistor Circuits Made Robust by Dual-Gate Technology. IEEE Journal of Solid-State Circuits, 2011, 46, 1223-1230.	5.4	114
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Paul Heremans

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