

Björn L  ssem

List of Publications by Year in descending order

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143
papers

11,079
citations

57758

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30087

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144
all docs

144
docs citations

144
times ranked

9311
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of Injection Barrier on Vertical Organic Field Effect Transistors. ACS Applied Materials & Interfaces, 2022, 14, 7063-7072.	8.0	10
2	Ionic liquid crystal elastomers-based flexible organic electrochemical transistors: Effect of director alignment of the solid electrolyte. Applied Physics Reviews, 2022, 9, .	11.3	7
3	The Transient Response of Organic Electrochemical Transistors. Advanced Theory and Simulations, 2022, 5, .	2.8	18
4	Top-contact organic electrochemical transistors. AIP Advances, 2022, 12, .	1.3	2
5	The influence of contact material and flat-band voltage on threshold voltage of organic field-effect transistors. Organic Electronics, 2022, 105, 106483.	2.6	0
6	Tuning the Transconductance of Organic Electrochemical Transistors. Advanced Functional Materials, 2021, 31, 2004939.	14.9	45
7	Organic electrochemical transistors "from device models to a targeted design of materials. Journal of Materials Chemistry C, 2021, 9, 9761-9790.	5.5	42
8	Organic Doping at Ultralow Concentrations. Advanced Optical Materials, 2021, 9, 2100089.	7.3	5
9	Device Engineering in Organic Electrochemical Transistors toward Multifunctional Applications. ACS Applied Electronic Materials, 2021, 3, 2434-2448.	4.3	16
10	Organic Electronics and Beyond. Advanced Optical Materials, 2021, 9, 2101108.	7.3	1
11	Stainless-Steel Antenna on Conductive Substrate for an SHM Sensor System with High Power Demand. Sensors, 2021, 21, 7841.	3.8	0
12	Analytic Device Model of Organic Field-Effect Transistors with Doped Channels. ACS Applied Materials & Interfaces, 2020, 12, 49857-49865.	8.0	6
13	Finding the equilibrium of organic electrochemical transistors. Nature Communications, 2020, 11, 2515.	12.8	61
14	Vertical Organic Tunnel Field-Effect Transistors. ACS Applied Electronic Materials, 2019, 1, 1506-1516.	4.3	4
15	Electroresponsive Ionic Liquid Crystal Elastomers. Macromolecular Rapid Communications, 2019, 40, e1900299.	3.9	45
16	Suppressing Base Currents in Organic Permeable-Base Transistors by Anodization of the Base Electrode. ACS Applied Electronic Materials, 2019, 1, 1756-1761.	4.3	4
17	Modeling tunnel currents in organic permeable-base transistors. Synthetic Metals, 2019, 252, 82-90.	3.9	5
18	Doped N-type Organic Field-Effect Transistors Based on Faux-Hawk Fullerene. Advanced Electronic Materials, 2019, 5, 1900109.	5.1	11

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19	Stability of organic permeable base transistors. Applied Physics Letters, 2019, 115, .	3.3	5
20	Scaling of High-Performance Organic Permeable Base Transistors. Advanced Electronic Materials, 2019, 5, 1800728.	5.1	12
21	Beyond 100% doping efficiency. Nature Materials, 2019, 18, 93-94.	27.5	9
22	Tuning charge carrier transport and optical birefringence in liquid-crystalline thin films: A new design space for organic light-emitting diodes. Scientific Reports, 2018, 8, 699.	3.3	26
23	Doped bottom-contact organic field-effect transistors. Nanotechnology, 2018, 29, 284001.	2.6	7
24	Organic Electrochemical Transistors Based on Room Temperature Ionic Liquids: Performance and Stability. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800631.	1.8	19
25	Patterning organic transistors by dry-etching: The double layer lithography. Organic Electronics, 2017, 45, 124-130.	2.6	13
26	Reaching saturation in patterned source vertical organic field effect transistors. Journal of Applied Physics, 2017, 121, .	2.5	31
27	Removing the current-limit of vertical organic field effect transistors. Journal of Applied Physics, 2017, 122, .	2.5	12
28	Principle of topography-directed inkjet printing for functional micro-tracks in flexible substrates. Journal of Applied Physics, 2017, 121, 244902.	2.5	6
29	Reduced contact resistance in top-contact organic field-effect transistors by interface contact doping. Applied Physics Letters, 2016, 108, .	3.3	36
30	Charge trapping in doped organic Zener diodes. Organic Electronics, 2016, 39, 77-84.	2.6	4
31	Doped Organic Transistors. Chemical Reviews, 2016, 116, 13714-13751.	47.7	477
32	Contact Resistance Effects in Highly Doped Organic Electrochemical Transistors. Advanced Materials, 2016, 28, 8766-8770.	21.0	50
33	Minority Currents in n-Doped Organic Transistors. ACS Applied Materials & Interfaces, 2016, 8, 32432-32439.	8.0	14
34	Quantifying charge trapping and molecular doping in organic p-i-n diodes. Proceedings of SPIE, 2016, , .	0.8	0
35	Passivation of Molecular n-Doping: Exploring the Limits of Air Stability. Advanced Functional Materials, 2016, 26, 3730-3737.	14.9	46
36	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.	3.3	13

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37	Advanced Organic Permeable-Base Transistor with Superior Performance. <i>Advanced Materials</i> , 2015, 27, 7734-7739.	21.0	30
38	Vertical organic transistors. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 443003.	1.8	56
39	Degradation Mechanisms and Reactions in Organic Light-Emitting Devices. <i>Chemical Reviews</i> , 2015, 115, 8449-8503.	47.7	519
40	Doped Organic Semiconductors: Trap-Filling, Impurity Saturation, and Reserve Regimes. <i>Advanced Functional Materials</i> , 2015, 25, 2701-2707.	14.9	138
41	OLEDs: light-emitting thin film thermistors revealing advanced self-heating effects. , 2015, , .		1
42	Performance and lifetime of vacuum deposited organic light-emitting diodes: Influence of residual gases present during device fabrication. <i>Organic Electronics</i> , 2014, 15, 3251-3258.	2.6	15
43	Molecular doping for control of gate bias stress in organic thin film transistors. <i>Applied Physics Letters</i> , 2014, 104, 013507.	3.3	40
44	Beyond conventional organic transistors: novel approaches with improved performance and stability. <i>Proceedings of SPIE</i> , 2014, , .	0.8	3
45	Color-stable, ITO-free white organic light-emitting diodes with enhanced efficiency using solution-processed transparent electrodes and optical outcoupling layers. <i>Organic Electronics</i> , 2014, 15, 1028-1034.	2.6	35
46	Organic Junction Field-Effect Transistor. <i>Advanced Functional Materials</i> , 2014, 24, 1011-1016.	14.9	9
47	Functionalized p-dopants as self-assembled monolayers for enhanced charge carrier injection in organic electronic devices. <i>Organic Electronics</i> , 2014, 15, 654-660.	2.6	19
48	Feel the Heat: Nonlinear Electrothermal Feedback in Organic LEDs. <i>Advanced Functional Materials</i> , 2014, 24, 3367-3374.	14.9	44
49	Effect of trap states on the electrical doping of organic semiconductors. <i>Organic Electronics</i> , 2014, 15, 16-21.	2.6	30
50	Engineering Blue Fluorescent Bulk Emitters for OLEDs: Triplet Harvesting by Green Phosphors. <i>Chemistry of Materials</i> , 2014, 26, 2414-2426.	6.7	19
51	Self-passivation of molecular n-type doping during air exposure using a highly efficient air-insoluble dopant. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 2188-2198.	1.8	16
52	White organic light-emitting diodes: Status and perspective. <i>Reviews of Modern Physics</i> , 2013, 85, 1245-1293.	45.6	540
53	Nano-particle based scattering layers for optical efficiency enhancement of organic light-emitting diodes and organic solar cells. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	147
54	Quantification of deep hole-trap filling by molecular p-doping: Dependence on the host material purity. <i>Organic Electronics</i> , 2013, 14, 2348-2352.	2.6	30

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55	High Mobility n-Type Transistors Based on Solution-Gated Doped 6,13-Bis(triisopropylsilylethynyl)pentacene Thin Films. <i>Advanced Materials</i> , 2013, 25, 4663-4667.	21.0	97
56	Organic light-emitting diodes (OLEDs). , 2013, , 508-534.		4
57	Chemical degradation mechanisms of highly efficient blue phosphorescent emitters used for organic light emitting diodes. <i>Organic Electronics</i> , 2013, 14, 115-123.	2.6	127
58	Doping of organic semiconductors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 9-43.	1.8	500
59	Reverse breakdown behavior in organic pin-diodes comprising C60 and pentacene: Experiment and theory. <i>Organic Electronics</i> , 2013, 14, 193-199.	2.6	15
60	Straight-forward control of the degree of micro-cavity effects in organic light-emitting diodes based on a thin striped metal layer. <i>Organic Electronics</i> , 2013, 14, 2444-2450.	2.6	9
61	Enhancing the efficiency of alternating current driven organic light-emitting devices by optimizing the operation frequency. <i>Organic Electronics</i> , 2013, 14, 809-813.	2.6	29
62	Molecular-scale simulation of electroluminescence in a multilayer white organic light-emitting diode. <i>Nature Materials</i> , 2013, 12, 652-658.	27.5	146
63	High-Performance Vertical Organic Transistors. <i>Small</i> , 2013, 9, 3670-3677.	10.0	77
64	p-Channel Field-Effect Transistors Based on C ₆₀ Doped with Molybdenum Trioxide. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2337-2341.	8.0	22
65	Color in the Corners: ITO-Free White OLEDs with Angular Color Stability. <i>Advanced Materials</i> , 2013, 25, 4006-4013.	21.0	241
66	Quantitative allocation of Bragg scattering effects in highly efficient OLEDs fabricated on periodically corrugated substrates. <i>Optics Express</i> , 2013, 21, 16319.	3.4	40
67	Enhanced and balanced efficiency of white bi-directional organic light-emitting diodes. <i>Optics Express</i> , 2013, 21, 28040.	3.4	10
68	Highly efficient pin-type OLEDs. , 2013, , 173-191.		1
69	Investigation of triplet harvesting and outcoupling efficiency in highly efficient two-color hybrid white organic light-emitting diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 1467-1475.	1.8	35
70	Self-Heating, Bistability, and Thermal Switching in Organic Semiconductors. <i>Physical Review Letters</i> , 2013, 110, 126601.	7.8	39
71	Pentacene Schottky diodes studied by impedance spectroscopy: Doping properties and trap response. <i>Physical Review B</i> , 2013, 88, .	3.2	65
72	Bi-directional organic light-emitting diodes with nanoparticle-enhanced light outcoupling. <i>Laser and Photonics Reviews</i> , 2013, 7, 1079-1087.	8.7	17

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73	Doped organic transistors operating in the inversion and depletion regime. Nature Communications, 2013, 4, 2775.	12.8	164
74	Combined effects of microcavity and dielectric capping layer on bidirectional organic light-emitting diodes. Optics Letters, 2012, 37, 2007.	3.3	4
75	Controlled formation of charge depletion zones by molecular doping in organic pin-diodes and its description by the Mott-Schottky relation. Journal of Applied Physics, 2012, 111, .	2.5	27
76	Lambertian white top-emitting organic light emitting device with carbon nanotube cathode. Journal of Applied Physics, 2012, 112, .	2.5	24
77	Organic light-emitting diodes for lighting: High color quality by controlling energy transfer processes in host-guest-systems. Journal of Applied Physics, 2012, 111, 033102.	2.5	44
78	High brightness alternating current electroluminescence with organic light emitting material. Applied Physics Letters, 2012, 100, 103307.	3.3	42
79	Fermi level shift and doping efficiency in p -doped small molecule organic semiconductors: A photoelectron spectroscopy and theoretical study. Physical Review B, 2012, 86, .	3.2	152
80	Non-volatile organic memory devices comprising SiO ₂ and C60 showing 104 switching cycles. Applied Physics Letters, 2012, 100, .	3.3	16
81	An all C60 vertical transistor for high frequency and high current density applications. Applied Physics Letters, 2012, 101, .	3.3	42
82	Bidirectional operation of vertical organic triodes. Journal of Applied Physics, 2012, 111, 044507.	2.5	22
83	Influence of phosphorescent dopants in organic light-emitting diodes with an organic homojunction. Applied Physics Letters, 2012, 101, .	3.3	15
84	Analysis of the external and internal quantum efficiency of multi-emitter, white organic light emitting diodes. Applied Physics Letters, 2012, 101, 143304.	3.3	24
85	Storage of charge carriers on emitter molecules in organic light-emitting diodes. Physical Review B, 2012, 86, .	3.2	98
86	Highly Efficient White Top-Emitting Organic Light-Emitting Diodes Comprising Laminated Microlens Films. Nano Letters, 2012, 12, 424-428.	9.1	136
87	Ultra-bright alternating current organic electroluminescence. Organic Electronics, 2012, 13, 1589-1593.	2.6	28
88	Chemical degradation processes of highly stable red phosphorescent organic light emitting diodes. Organic Electronics, 2012, 13, 1900-1907.	2.6	26
89	Coupled plasmonic modes in organic planar microcavities. Applied Physics Letters, 2012, 100, 253301.	3.3	11
90	A high performance liquid chromatography method to determine phenanthroline derivatives used in OLEDs and OSCs. Synthetic Metals, 2012, 162, 1834-1838.	3.9	5

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91	Quantification of charge carrier density in organic light-emitting diodes by time-resolved electroluminescence. Proceedings of SPIE, 2012, , .	0.8	0
92	Comparing the emissive dipole orientation of two similar phosphorescent green emitter molecules in highly efficient organic light-emitting diodes. Applied Physics Letters, 2012, 101, .	3.3	124
93	Efficiency and rate of spontaneous emission in organic electroluminescent devices. Physical Review B, 2012, 85, .	3.2	254
94	Singlet exciton diffusion length in organic light-emitting diodes. Physical Review B, 2012, 85, .	3.2	48
95	Structural phase transition in pentacene caused by molecular doping and its effect on charge carrier mobility. Organic Electronics, 2012, 13, 58-65.	2.6	105
96	Hydrofluoroethers as heat-transfer fluids for OLEDs: Operational range, stability, and efficiency improvement. Organic Electronics, 2012, 13, 356-360.	2.6	37
97	Direct structuring of C60 thin film transistors by photo-lithography under ambient conditions. Organic Electronics, 2012, 13, 506-513.	2.6	28
98	Organic pin-diodes approaching ultra-high-frequencies. Organic Electronics, 2012, 13, 1114-1120.	2.6	28
99	Novel Approach for Alternating Current (AC)-Driven Organic Light-Emitting Devices. Advanced Functional Materials, 2012, 22, 210-217.	14.9	76
100	Investigation of C60F36 as low-volatility <i>p</i> -dopant in organic optoelectronic devices. Journal of Applied Physics, 2011, 109, .	2.5	55
101	Improvement of voltage and charge balance in inverted top-emitting organic electroluminescent diodes comprising doped transport layers by thermal annealing. Applied Physics Letters, 2011, 98, .	3.3	53
102	Quantitative description of charge-carrier transport in a white organic light-emitting diode. Physical Review B, 2011, 84, .	3.2	36
103	Top-emitting organic light-emitting diodes. Optics Express, 2011, 19, A1250.	3.4	173
104	Influence of organic capping layers on the performance of transparent organic light-emitting diodes. Optics Letters, 2011, 36, 1443.	3.3	31
105	Increased and balanced light emission of transparent organic light-emitting diodes by enhanced microcavity effects. Optics Letters, 2011, 36, 2931.	3.3	12
106	Investigation on the origin of the memory effect in metal/organic semiconductor/metal structures. Journal of Applied Physics, 2011, 110, .	2.5	14
107	White top-emitting organic light-emitting diodes employing a heterostructure of down-conversion layers. Organic Electronics, 2011, 12, 2126-2130.	2.6	27
108	Analysis of chemical degradation mechanism within sky blue phosphorescent organic light emitting diodes by laser-desorption/ionization time-of-flight mass spectrometry. Organic Electronics, 2011, 12, 341-347.	2.6	118

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109	Systematic investigation of transparent organic light-emitting diodes depending on top metal electrode thickness. <i>Organic Electronics</i> , 2011, 12, 1383-1388.	2.6	26
110	Photoelectron spectroscopy investigation of thin metal films employed as top contacts in transparent organic solar cells. <i>Thin Solid Films</i> , 2011, 519, 1872-1875.	1.8	10
111	Role of oxygen-bonds in the degradation process of phosphorescent organic light emitting diodes. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	42
112	Highly efficient bi-directional organic light-emitting diodes by strong micro-cavity effects. <i>Applied Physics Letters</i> , 2011, 99, 073303.	3.3	18
113	Efficiency enhancement of top-emitting organic light-emitting diodes using conversion dyes. <i>Journal of Applied Physics</i> , 2011, 110, 083118.	2.5	12
114	Novel concepts for OLED lighting. <i>Proceedings of SPIE</i> , 2010, , .	0.8	5
115	Improved High-Brightness Efficiency of Phosphorescent Organic LEDs Comprising Emitter Molecules with Small Permanent Dipole Moments. <i>Advanced Materials</i> , 2010, 22, 3189-3193.	21.0	82
116	A novel printing technique for highly integrated organic devices. <i>Microelectronic Engineering</i> , 2010, 87, 614-619.	2.4	4
117	White top-emitting organic light-emitting diodes with forward directed emission and high color quality. <i>Organic Electronics</i> , 2010, 11, 1676-1682.	2.6	67
118	Built-in Potential of a Pentacene Pin Homo Junction Studied by Ultraviolet Photoemission Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1270, 1.	0.1	1
119	Highly efficient inverted top-emitting organic electroluminescent devices with doped charge transport layers. <i>Proceedings of SPIE</i> , 2010, , .	0.8	5
120	Measurement of triplet exciton diffusion in organic light-emitting diodes. <i>Physical Review B</i> , 2010, 81, .	3.2	54
121	Influence of the hole blocking layer on blue phosphorescent organic light-emitting devices using 3,6-di(9-carbazolyl)-9-(2-ethylhexyl)carbazole as host material. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	48
122	Quantification of energy loss mechanisms in organic light-emitting diodes. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	302
123	White organic light-emitting diodes with top-emitting structure for high color quality and forward-directed light emission. <i>Proceedings of SPIE</i> , 2010, , .	0.8	1
124	Top-emitting organic light-emitting diodes: Influence of cavity design. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	106
125	Outcoupling efficiency in small-molecule OLEDs: from theory to experiment. <i>Proceedings of SPIE</i> , 2010, , .	0.8	42
126	Organic Zener Diodes: Tunneling across the Gap in Organic Semiconductor Materials. <i>Nano Letters</i> , 2010, 10, 4929-4934.	9.1	64

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127	Single carrier devices with electrical doped layers for the characterization of charge-carrier transport in organic thin-films. <i>Applied Physics Letters</i> , 2010, 97, 013303.	3.3	16
128	Comparison of ultraviolet- and charge-induced degradation phenomena in blue fluorescent organic light emitting diodes. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	22
129	Highly efficient white organic light-emitting diodes based on fluorescent blue emitters. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	78
130	Photoelectron spectroscopy study of systematically varied doping concentrations in an organic semiconductor layer using a molecular p-dopant. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	128
131	Efficiency and Stability of p-i-n Type Organic Light Emitting Diodes for Display and Lighting Applications. <i>Proceedings of the IEEE</i> , 2009, 97, 1606-1626.	21.3	110
132	Chemical changes on the green emitter tris(8-hydroxy-quinolinato)aluminum during device aging of p-i-n-structured organic light emitting diodes. <i>Applied Physics Letters</i> , 2009, 95, 183309.	3.3	22
133	White organic light-emitting diodes with fluorescent tube efficiency. <i>Nature</i> , 2009, 459, 234-238.	27.8	3,172
134	46.1: <i>Invited Paper</i>: Exciton Induced Chemical Reactions in Organic Light Emitting Devices. <i>Digest of Technical Papers SID International Symposium</i> , 2009, 40, 681-684.	0.3	6
135	Laser desorption/ionization time-of-flight mass spectrometry: A predictive tool for the lifetime of organic light emitting devices. <i>Applied Physics Letters</i> , 2009, 94, 043314.	3.3	31
136	Self Assembly of Mixed Monolayers of Mercaptoundecylferrocene and Undecanethiol studied by STM. <i>Journal of Physics: Conference Series</i> , 2007, 61, 852-855.	0.4	11
137	Electrical and Structural Characterization of Biphenylethanethiol SAMs. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6392-6397.	3.1	18
138	STM Study of Mixed Alkanethiol/Biphenylthiol Self-Assembled Monolayers on Au(111). <i>Langmuir</i> , 2006, 22, 3021-3027.	3.5	53
139	Resistive switching of rose bengal devices: A molecular effect?. <i>Journal of Applied Physics</i> , 2006, 100, 094504.	2.5	48
140	Molecular structure of ferrocenethiol islands embedded into alkanethiol self-assembled monolayers by UHV-STM. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 1448-1452.	1.8	18
141	The origin of faceting of ultraflat gold films epitaxially grown on mica. <i>Applied Surface Science</i> , 2005, 249, 197-202.	6.1	57
142	Rectangular (3 Å ⁻²) Superlattice of a Dodecanethiol Self-Assembled Monolayer on Au(111) Observed by Ultra-High-Vacuum Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry B</i> , 2005, 109, 11424-11426.	2.6	18
143	A New Phase of the c(4 Å ⁻²) Superstructure of Alkanethiols Grown by Vapor Phase Deposition on Gold. <i>Langmuir</i> , 2005, 21, 5256-5258.	3.5	56