Bo Ram Lee

List of Publications by Year
in descending order

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83 papers	5,066 citations	101543 36 h-index	88630 70 g-index
85 all docs	85 docs citations	85 times ranked	7049 citing authors

#	Article	IF	Citations
1	Guanidinium-Pseudohalide Perovskite Interfaces Enable Surface Reconstruction of Colloidal Quantum Dots for Efficient and Stable Photovoltaics. ACS Nano, 2022, 16, 1649-1660.	14.6	18
2	Enhanced phase separation in PEDOT:PSS hole transport layer by introducing phenylethylammonium iodide for efficient perovskite solar cells. Journal of Renewable and Sustainable Energy, 2022, 14, 013502.	2.0	3
3	Design of Nonfused Nonfullerene Acceptors Based on Pyrido- or Benzothiadiazole Cores for Organic Solar Cells. ACS Applied Energy Materials, 2022, 5, 2202-2210.	5.1	14
4	A polymer/small-molecule binary-blend hole transport layer for enhancing charge balance in blue perovskite light emitting diodes. Journal of Materials Chemistry A, 2022, 10, 13928-13935.	10.3	15
5	Curvature effects of electron-donating polymers on the device performance of non-fullerene organic solar cells. Journal of Power Sources, 2021, 482, 229045.	7.8	12
6	Boosting the efficiency of quasi-2D perovskites light-emitting diodes by using encapsulation growth method. Nano Energy, 2021, 80, 105511.	16.0	54
7	Luminance efficiency roll-off mechanism in CsPbBr_{3â”x}Cl_x mixed-halide perovskite quantum dot blue light-emitting diodes. Journal of Materials Chemistry C, 2021, 9, 3608-3619.	5.5	32
8	Recent progress of ultra-narrow-bandgap polymer donors for NIR-absorbing organic solar cells. Nanoscale Advances, 2021, 3, 4306-4320.	4.6	22
9	Ce 3+ /Tb 3+ â€coactived NaMgBO 3 phosphors toward versatile applications in white LED, FED, and optical antiâ€counterfeiting. Journal of the American Ceramic Society, 2021, 104, 5086-5098.	3.8	11
10	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
11	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. Nature, 2021, 591, 72-77.	27.8	471
12	Multi-Scalable Grain Growth via Phenyl-C60-Butyric Acid Methyl Ester Molecular Aggregation in Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 5985-5994.	5.1	4
13	Water-Repellent Perovskites Induced by a Blend of Organic Halide Salts for Efficient and Stable Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 33172-33181.	8.0	7
14	Solvent Engineering of Colloidal Quantum Dot Inks for Scalable Fabrication of Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 36992-37003.	8.0	17
15	Designing multi-mode optical thermometers via the thermochromic LaNbO4:Bi3+/Ln3+ (LnÂ=ÂEu, Tb, Dy,) Tj ETQq1 1 0.784314 rgBT /O	12.7	155
16	In situ cadmium surface passivation of perovskite nanocrystals for blue LEDs. Journal of Materials Chemistry A, 2021, 9, 26750-26757.	10.3	18
17	NUV light induced visible emission in Er³⁺â€activated NaSrLa(MoO₄)O₃ phosphors for green LEDs and thermometer. Journal of the American Ceramic Society, 2020, 103, 1174-1186.	3.8	17
18	Near-ultraviolet light induced red emission in Sm3+-activated NaSrLa(MoO4)O3 phosphors for solid-state illumination. Journal of Alloys and Compounds, 2020, 817, 152705.	5.5	61

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19	Molecular aggregation method for perovskiteâ€“fullerene bulk heterostructure solar cells. Journal of Materials Chemistry A, 2020, 8, 1326-1334.	10.3	15
20	Preparation of Transparent Conductive Electrode via Layer-By-Layer Deposition of Silver Nanowires and Its Application in Organic Photovoltaic Device. Nanomaterials, 2020, 10, 46.	4.1	24
21	Impact of Chalcogenophenes on Donor-Acceptor Copolymers for Bulk Heterojunction Solar Cells. Macromolecular Research, 2020, 28, 1111-1115.	2.4	11
22	Water-stable polymer hole transport layer in organic and perovskite light-emitting diodes. Journal of Power Sources, 2020, 478, 228810.	7.8	6
23	Cost-effective centrifuge coating method for silver nanowire-based transparent conducting electrode. Electrochimica Acta, 2020, 337, 135839.	5.2	10
24	Fabrication of Conjugated Porous Polymer Catalysts for Oxygen Reduction Reactions: A Bottom-Up Approach. Catalysts, 2020, 10, 1224.	3.5	1
25	A-Site Cation Engineering for Efficient Blue-Emissive Perovskite Light-Emitting Diodes. Energies, 2020, 13, 6689.	3.1	5
26	Bilateral Interface Engineering for Efficient and Stable Perovskite Solar Cells Using Phenylethylammonium Iodide. ACS Applied Materials & Interfaces, 2020, 12, 24827-24836.	8.0	27
27	Enhanced performance of ternary polymer solar cells via property modulation of co-absorbing wide band-gap polymers. Journal of Power Sources, 2020, 471, 228457.	7.8	6
28	2D Perovskite Seeding Layer for Efficient Airâ€Processable and Stable Planar Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2003081.	14.9	48
29	Solution processable small molecules as efficient electron transport layers in organic optoelectronic devices. Journal of Materials Chemistry A, 2020, 8, 13501-13508.	10.3	19
30	Solution-processable ambipolar organic field-effect transistors with bilayer transport channels. Polymer Journal, 2020, 52, 581-588.	2.7	10
31	Lead Acetate Assisted Interface Engineering for Highly Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 7186-7197.	8.0	20
32	Addendum: Camic, B. T. et al. Preparation of Transparent Conductive Electrode via Layer-By-Layer Deposition of Silver Nanowires and Its Application in Organic Photovoltaic Device. Nanomaterials 2020, 10, 46. Nanomaterials, 2020, 10, 497.	4.1	3
33	Cation substitution induced excellent quantum efficiency and thermal stability in (Ca1â^'xSrx)9La(PO4)7:Eu2+ phosphors. New Journal of Chemistry, 2019, 43, 12325-12330.	2.8	6
34	Oneâ€Pot Exfoliation of Graphitic C₃N₄ Quantum Dots for Blue QLEDs by Methylamine Intercalation. Small, 2019, 15, e1902735.	10.0	26
35	Versatile Defect Passivation Methods for Metal Halide Perovskite Materials and their Application to Lightâ€Emitting Devices. Advanced Materials, 2019, 31, e1805244.	21.0	92
36	WO₃ nanolayer coated 3D-graphene/sulfur composites for high performance lithium/sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 4596-4603.	10.3	47

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37	Study on Na3Lu1-xEux(PO4)2 phosphor: High efficient Na3Eu(PO4)2 red emitting phosphor with excellent thermal stability. Journal of Alloys and Compounds, 2019, 805, 346-354.	5.5	19
38	Efficient Polymeric Donor for Both Visible and Near-Infrared-Absorbing Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 4284-4291.	5.1	6
39	Dual-functional light-emitting perovskite solar cells enabled by soft-covered annealing process. Nano Energy, 2019, 61, 251-258.	16.0	14
40	Application of thermally coupled energy levels in Er3+ doped CdMoO4 phosphors: Enhanced solid-state lighting and non-contact thermometry. Materials Research Bulletin, 2019, 117, 63-71.	5.2	28
41	Simultaneous bifunctional application of solid-state lighting and ratiometric optical thermometer based on double perovskite LiLaMgWO₆:Er³⁺ thermochromic phosphors. RSC Advances, 2019, 9, 7189-7195.	3.6	25
42	Er³⁺-Activated NaLaMgWO₆ double perovskite phosphors and their bifunctional application in solid-state lighting and non-contact optical thermometry. Dalton Transactions, 2019, 48, 4405-4412.	3.3	74
43	Synthesis of Alkoxyaceneâ€Based Random Copolymers and Binary Solvent Additive for High Efficiency Organic Photovoltaics. Macromolecular Chemistry and Physics, 2019, 220, 1900409.	2.2	0
44	Improved Moisture Stability of Perovskite Solar Cells with a Surfaceâ€Treated PCBM Layer. Solar Rrl, 2019, 3, 1800289.	5.8	20
45	Facile Synthesis of Stable and Highly Luminescent Methylammonium Lead Halide Nanocrystals for Efficient Light Emitting Devices. Journal of the American Chemical Society, 2019, 141, 1269-1279.	13.7	108
46	Effects of inserting keto-functionalized side-chains instead of imide-functionalized side-chain on the pyrrole backbone of 2,5-bis(2-thienyl)pyrrole-based polymers for organic solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 371, 387-394.	3.9	5
47	A Study on the Electrical Properties in Nanocrystals-based Perovskite Light-emitting Diodes with Thermal Annealing. New Physics: Sae Mulli, 2019, 69, 895-899.	0.1	0
48	Conjugated Polyelectrolytes Bearing Various Ion Densities: Spontaneous Dipole Generation, Polingâ€Induced Dipole Alignment, and Interfacial Energy Barrier Control for Optoelectronic Device Applications. Advanced Materials, 2018, 30, e1706034.	21.0	12
49	Growth of Nanosized Single Crystals for Efficient Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 3417-3423.	14.6	109
50	Control of Interface Defects for Efficient and Stable Quasiâ€2D Perovskite Lightâ€Emitting Diodes Using Nickel Oxide Hole Injection Layer. Advanced Science, 2018, 5, 1801350.	11.2	92
51	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 5826-5833.	14.6	56
52	Amine-Based Passivating Materials for Enhanced Optical Properties and Performance of Organicâ€“Inorganic Perovskites in Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2017, 8, 1784-1792.	4.6	220
53	Improving the Stability and Performance of Perovskite Lightâ€Emitting Diodes by Thermal Annealing Treatment. Advanced Materials, 2016, 28, 6906-6913.	21.0	111
54	Integrative Approach toward Uncovering the Origin of Photoluminescence in Dual Heteroatom-Doped Carbon Nanodots. Chemistry of Materials, 2016, 28, 6840-6847.	6.7	128

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55	Improved performance of perovskite light-emitting diodes using a PEDOT:PSS and MoO₃ composite layer. Journal of Materials Chemistry C, 2016, 4, 8161-8165.	5.5	75
56	Highly efficient inverted bulk-heterojunction solar cells with a gradiently-doped ZnO layer. Energy and Environmental Science, 2016, 9, 240-246.	30.8	93
57	High-performance perovskite light-emitting diodes via morphological control of perovskite films. Nanoscale, 2016, 8, 7036-7042.	5.6	170
58	Amineâ€Based Interfacial Molecules for Inverted Polymerâ€Based Optoelectronic Devices. Advanced Materials, 2015, 27, 3553-3559.	21.0	77
59	High-resolution electrohydrodynamic jet printing of small-molecule organic light-emitting diodes. Nanoscale, 2015, 7, 13410-13415.	5.6	122
60	A well-aligned simple cubic blue phase for a liquid crystal laser. Journal of Materials Chemistry C, 2015, 3, 5383-5388.	5.5	47
61	Highâ€Performance Planar Perovskite Optoelectronic Devices: A Morphological and Interfacial Control by Polar Solvent Treatment. Advanced Materials, 2015, 27, 3492-3500.	21.0	205
62	Highly efficient flexible optoelectronic devices using metal nanowire-conducting polymer composite transparent electrode. Electronic Materials Letters, 2015, 11, 906-914.	2.2	38
63	Amineâ€Based Polar Solvent Treatment for Highly Efficient Inverted Polymer Solar Cells. Advanced Materials, 2014, 26, 494-500.	21.0	159
64	Highly Efficient Polymer-Based Optoelectronic Devices Using PEDOT:PSS and a GO Composite Layer as a Hole Transport Layer. ACS Applied Materials & Interfaces, 2014, 6, 2067-2073.	8.0	90
65	Interface-Controlled Synthesis of Heterodimeric Silverâ€“Carbon Nanoparticles Derived from Polysaccharides. ACS Nano, 2014, 8, 11377-11385.	14.6	67
66	Enhanced performance of polymer bulk heterojunction solar cells employing multifunctional iridium complexes. Journal of Materials Chemistry C, 2014, 2, 10195-10200.	5.5	18
67	Combination effect of polar solvent treatment on ZnO and polyfluorene-based polymer blends for highly efficient blue-based hybrid organicâ€“inorganic polymer light-emitting diodes. Journal of Materials Chemistry C, 2014, 2, 8673-8677.	5.5	8
68	Highly efficient inverted polymer light-emitting diodes using surface modifications of ZnO layer. Nature Communications, 2014, 5, 4840.	12.8	138
69	Versatile surface plasmon resonance of carbon-dot-supported silver nanoparticles in polymer optoelectronic devices. Nature Photonics, 2013, 7, 732-738.	31.4	501
70	Liquidâ€Crystalline Blue Phase Laser with Widely Tunable Wavelength. Advanced Materials, 2013, 25, 3002-3006.	21.0	83
71	Highly Efficient Red-Emitting Hybrid Polymer Light-Emitting Diodes via FÃ¶rster Resonance Energy Transfer Based on Homogeneous Polymer Blends with the Same Polyfluorene Backbone. ACS Applied Materials & Interfaces, 2013, 5, 5690-5695.	8.0	35
72	Highly efficient plasmonic organic optoelectronic devices based on a conducting polymer electrode incorporated with silver nanoparticles. Energy and Environmental Science, 2013, 6, 1949.	30.8	69

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73	Liquid-Crystalline Blue Phase Laser with Widely Tunable Wavelength (Adv. Mater. 21/2013). Advanced Materials, 2013, 25, 3001-3001.	21.0	0
74	Highly circularly polarized white light using a combination of white polymer light-emitting diode and wideband cholesteric liquid crystal reflector. Optics Express, 2012, 20, 24472.	3.4	5
75	Highly Efficient Polymer Light-Emitting Diodes Using Graphene Oxide as a Hole Transport Layer. ACS Nano, 2012, 6, 2984-2991.	14.6	127
76	Highly efficient polymer light-emitting diodes using graphene oxide-modified flexible single-walled carbon nanotube electrodes. Journal of Materials Chemistry, 2012, 22, 21481.	6.7	21
77	A ZnO/N-doped carbon nanotube nanocomposite charge transport layer for high performance optoelectronics. Journal of Materials Chemistry, 2012, 22, 12695.	6.7	86
78	Surface modification of metal oxide using ionic liquid molecules in hybrid organicâ€“inorganic optoelectronic devices. Journal of Materials Chemistry, 2011, 21, 2051.	6.7	93
79	Combination of Titanium Oxide and a Conjugated Polyelectrolyte for Highâ€Performance Invertedâ€Type Organic Optoelectronic Devices. Advanced Materials, 2011, 23, 2759-2763.	21.0	242
80	High performance polymer light-emitting diodes with N-type metal oxide/conjugated polyelectrolyte hybrid charge transport layers. Applied Physics Letters, 2011, 99, 163305.	3.3	38
81	Hybrid organic-inorganic light-emitting electrochemical cells using fluorescent polymer and ionic liquid blend as an active layer. Applied Physics Letters, 2011, 98, 253309.	3.3	18
82	Efficient hybrid organic-inorganic light emitting diodes with self-assembled dipole molecule deposited metal oxides. Applied Physics Letters, 2010, 96, 243306.	3.3	83
83	Influence of an Amide-Functionalized Monomeric Unit on the Morphology and Electronic Properties of Non-Fullerene Polymer Solar Cells. International Journal of Precision Engineering and Manufacturing - Green Technology, 0, , 1.	4.9	1