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	Versatile surface plasmon resonance of carbon-dot-supported silver nanoparticles in polymer optoelectronic devices. Nature Photonics, 2013, 7, 732-738.	31.4	501
2	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. Nature, 2021, 591, 72-77.	27.8	471
3	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
4	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
5	Highâ€Performance Planar Perovskite Optoelectronic Devices: A Morphological and Interfacial Control by Polar Solvent Treatment. Advanced Materials, 2015, 27, 3492-3500.	21.0	205
6	High-performance perovskite light-emitting diodes via morphological control of perovskite films. Nanoscale, 2016, 8, 7036-7042.	5.6	170
7	Amineâ€Based Polar Solvent Treatment for Highly Efficient Inverted Polymer Solar Cells. Advanced Materials, 2014, 26, 494-500.	21.0	159
8	Designing multi-mode optical thermometers via the thermochromic LaNbO4:Bi3+/Ln3+ (LnÂ=ÂEu, Tb, Dy,) Tj ETQq0 0 0 rgBT /Overlock	12.7	155
9	Highly efficient inverted polymer light-emitting diodes using surface modifications of ZnO layer. Nature Communications, 2014, 5, 4840.	12.8	138
10	Integrative Approach toward Uncovering the Origin of Photoluminescence in Dual Heteroatom-Doped Carbon Nanodots. Chemistry of Materials, 2016, 28, 6840-6847.	6.7	128
11	Highly Efficient Polymer Light-Emitting Diodes Using Graphene Oxide as a Hole Transport Layer. ACS Nano, 2012, 6, 2984-2991.	14.6	127
12	High-resolution electrohydrodynamic jet printing of small-molecule organic light-emitting diodes. Nanoscale, 2015, 7, 13410-13415.	5.6	122
13	Improving the Stability and Performance of Perovskite Lightâ€Emitting Diodes by Thermal Annealing Treatment. Advanced Materials, 2016, 28, 6906-6913.	21.0	111
14	Growth of Nanosized Single Crystals for Efficient Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 3417-3423.	14.6	109
15	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
16	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
17	Highly efficient inverted bulk-heterojunction solar cells with a gradiently-doped ZnO layer. Energy and Environmental Science, 2016, 9, 240-246.	30.8	93
18	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

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19	Versatile Defect Passivation Methods for Metal Halide Perovskite Materials and their Application to Lightâ€Emitting Devices. Advanced Materials, 2019, 31, e1805244.	21.0	92
20	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
21	A ZnO/N-doped carbon nanotube nanocomposite charge transport layer for high performance optoelectronics. Journal of Materials Chemistry, 2012, 22, 12695.	6.7	86
22	Efficient hybrid organic-inorganic light emitting diodes with self-assembled dipole molecule deposited metal oxides. Applied Physics Letters, 2010, 96, 243306.	3.3	83
23	Liquidâ€Crystalline Blue Phase Laser with Widely Tunable Wavelength. Advanced Materials, 2013, 25, 3002-3006.	21.0	83
24	Amineâ€Based Interfacial Molecules for Inverted Polymerâ€Based Optoelectronic Devices. Advanced Materials, 2015, 27, 3553-3559.	21.0	77
25	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
26	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
27	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
28	Interface-Controlled Synthesis of Heterodimeric Silverâ€“Carbon Nanoparticles Derived from Polysaccharides. ACS Nano, 2014, 8, 11377-11385.	14.6	67
29	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
30	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. ACS Nano, 2018, 12, 5826-5833.	14.6	56
31	Boosting the efficiency of quasi-2D perovskites light-emitting diodes by using encapsulation growth method. Nano Energy, 2021, 80, 105511.	16.0	54
32	2D Perovskite Seeding Layer for Efficient Airâ€Processable and Stable Planar Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2003081.	14.9	48
33	A well-aligned simple cubic blue phase for a liquid crystal laser. Journal of Materials Chemistry C, 2015, 3, 5383-5388.	5.5	47
34	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
35	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
36	Highly efficient flexible optoelectronic devices using metal nanowire-conducting polymer composite transparent electrode. Electronic Materials Letters, 2015, 11, 906-914.	2.2	38

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37	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
38	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
39	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
40	Bilateral Interface Engineering for Efficient and Stable Perovskite Solar Cells Using Phenylethylammonium Iodide. ACS Applied Materials & Interfaces, 2020, 12, 24827-24836.	8.0	27
41	Oneâ€Pot Exfoliation of Graphitic C₃N₄ Quantum Dots for Blue QLEDs by Methylamine Intercalation. Small, 2019, 15, e1902735.	10.0	26
42	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
43	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
44	Recent progress of ultra-narrow-bandgap polymer donors for NIR-absorbing organic solar cells. Nanoscale Advances, 2021, 3, 4306-4320.	4.6	22
45	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
46	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
47	Improved Moisture Stability of Perovskite Solar Cells with a Surfaceâ€Treated PCBM Layer. Solar Rrl, 2019, 3, 1800289.	5.8	20
48	Lead Acetate Assisted Interface Engineering for Highly Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 7186-7197.	8.0	20
49	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
50	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
51	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
52	Enhanced performance of polymer bulk heterojunction solar cells employing multifunctional iridium complexes. Journal of Materials Chemistry C, 2014, 2, 10195-10200.	5.5	18
53	In situ cadmium surface passivation of perovskite nanocrystals for blue LEDs. Journal of Materials Chemistry A, 2021, 9, 26750-26757.	10.3	18
54	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

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55	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
56	Solvent Engineering of Colloidal Quantum Dot Inks for Scalable Fabrication of Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 36992-37003.	8.0	17
57	Molecular aggregation method for perovskiteâ€“fullerene bulk heterostructure solar cells. Journal of Materials Chemistry A, 2020, 8, 1326-1334.	10.3	15
58	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
59	Dual-functional light-emitting perovskite solar cells enabled by soft-covered annealing process. Nano Energy, 2019, 61, 251-258.	16.0	14
60	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
61	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
62	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
63	Impact of Chalcogenophenes on Donor-Acceptor Copolymers for Bulk Heterojunction Solar Cells. Macromolecular Research, 2020, 28, 1111-1115.	2.4	11
64	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
65	Cost-effective centrifuge coating method for silver nanowire-based transparent conducting electrode. Electrochimica Acta, 2020, 337, 135839.	5.2	10
66	Solution-processable ambipolar organic field-effect transistors with bilayer transport channels. Polymer Journal, 2020, 52, 581-588.	2.7	10
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	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
69	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
70	Efficient Polymeric Donor for Both Visible and Near-Infrared-Absorbing Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 4284-4291.	5.1	6
71	Water-stable polymer hole transport layer in organic and perovskite light-emitting diodes. Journal of Power Sources, 2020, 478, 228810.	7.8	6
72	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

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73	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
74	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
75	A-Site Cation Engineering for Efficient Blue-Emissive Perovskite Light-Emitting Diodes. Energies, 2020, 13, 6689.	3.1	5
76	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
77	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
78	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
79	Fabrication of Conjugated Porous Polymer Catalysts for Oxygen Reduction Reactions: A Bottom-Up Approach. Catalysts, 2020, 10, 1224.	3.5	1
80	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
81	Liquid-Crystalline Blue Phase Laser with Widely Tunable Wavelength (Adv. Mater. 21/2013). Advanced Materials, 2013, 25, 3001-3001.	21.0	0
82	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
83	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