Gi-Hwan Kim

List of Publications by Year
in descending order

50 papers	4,988 citations	186265 28 h-index	182427 51 g-index
51 all docs	51 docs citations	51 times ranked	7195 citing authors

#	Article	IF	Citations
1	Suppression of halide migration and immobile ionic surface passivation for blue perovskite light-emitting diodes. Journal of Materials Chemistry C, 2022, 10, 2060-2066.	5.5	12
2	Enhanced electrical properties of Li-salts doped mesoporous TiO2 in perovskite solar cells. Joule, 2021, 5, 659-672.	24.0	127
3	Highly Stable Bulk Perovskite for Blue LEDs with Anion-Exchange Method. Nano Letters, 2021, 21, 3473-3479.	9.1	36
4	Development of perovskite solar cells with >25% conversion efficiency. Joule, 2021, 5, 1033-1035.	24.0	137
5	An intermediate phase stability for high performance of perovskite solar cells. Matter, 2021, 4, 3377-3378.	10.0	2
6	Origin of the luminescence spectra width in perovskite nanocrystals with surface passivation. Nanoscale, 2020, 12, 21695-21702.	5.6	16
7	Effects of cation size and concentration of cationic chlorides on the properties of formamidinium lead iodide based perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 3753-3763.	4.9	17
8	Functionalized PFN-X (X = Cl, Br, or I) for Balanced Charge Carriers of Highly Efficient Blue Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 35740-35747.	8.0	31
9	High-Performance Perovskite Light-Emitting Diodes with Surface Passivation of CsPbBr<i>_x</i>I_{3â€“<i>x</i>} Nanocrystals via Antisolvent-Triggered Ion-Exchange. ACS Applied Materials & Interfaces, 2020, 12, 31582-31590.	8.0	22
10	Methylammonium Chloride Induces Intermediate Phase Stabilization for Efficient Perovskite Solar Cells. Joule, 2019, 3, 2179-2192.	24.0	1,228
11	A thermally stable, barium-stabilized Î±-CsPbI₃ perovskite for optoelectronic devices. Journal of Materials Chemistry A, 2019, 7, 21740-21746.	10.3	37
12	Vivid and Fully Saturated Blue Light-Emitting Diodes Based on Ligand-Modified Halide Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 23401-23409.	8.0	60
13	Spectra stable blue perovskite light-emitting diodes. Nature Communications, 2019, 10, 1868.	12.8	344
14	The optimization of intermediate semiâ€“bonding structure using solvent vapor annealing for high performance p-i-n structure perovskite solar cells. Organic Electronics, 2019, 65, 300-304.	2.6	5
15	Reversible, Full-Color Luminescence by Post-treatment of Perovskite Nanocrystals. Joule, 2018, 2, 2105-2116.	24.0	61
16	The introduction of a perovskite seed layer for high performance perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 20138-20144.	10.3	12
17	Ambient-Stable Cubic-Phase Hybrid Perovskite Reaching the Shockleyâ€“Queisser Fill Factor Limit via Inorganic Additive-Assisted Process. ACS Applied Energy Materials, 2018, 1, 5865-5871.	5.1	13
18	Formamidinium-based planar heterojunction perovskite solar cells with alkali carbonate-doped zinc oxide layer. RSC Advances, 2018, 8, 24110-24115.	3.6	10

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19	Fast vaporizing anti-solvent for high crystalline perovskite to achieve high performance perovskite solar cells. Thin Solid Films, 2018, 661, 122-127.	1.8	11
20	High-Temperatureâ€“Short-Time Annealing Process for High-Performance Large-Area Perovskite Solar Cells. ACS Nano, 2017, 11, 6057-6064.	14.6	142
21	Field-emission from quantum-dot-in-perovskite solids. Nature Communications, 2017, 8, 14757.	12.8	83
22	Fluorine Functionalized Graphene Nano Platelets for Highly Stable Inverted Perovskite Solar Cells. Nano Letters, 2017, 17, 6385-6390.	9.1	106
23	Ternary Halide Perovskites for Highly Efficient Solution-Processed Hybrid Solar Cells. ACS Energy Letters, 2016, 1, 712-718.	17.4	24
24	Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi₂I₇ for Thinâ€Film Photovoltaics. Angewandte Chemie - International Edition, 2016, 55, 9586-9590.	13.8	201
25	Pure Cubicâ€Phase Hybrid Iodobismuthates AgBi₂I₇ for Thinâ€Film Photovoltaics. Angewandte Chemie, 2016, 128, 9738-9742.	2.0	42
26	Clean thermal decomposition of tertiary-alkyl metal thiolates to metal sulfides: environmentally-benign, non-polar inks for solution-processed chalcopyrite solar cells. Scientific Reports, 2016, 6, 36608.	3.3	11
27	Photocurrent Extraction Efficiency near Unity in a Thick Polymer Bulk Heterojunction. Advanced Functional Materials, 2016, 26, 3324-3330.	14.9	48
28	Passivation Using Molecular Halides Increases Quantum Dot Solar Cell Performance. Advanced Materials, 2016, 28, 299-304.	21.0	312
29	Doubleâ€Sided Junctions Enable Highâ€Performance Colloidalâ€Quantumâ€Dot Photovoltaics. Advanced Materials, 2016, 28, 4142-4148.	21.0	121
30	Colloidal CdSe_{1â€“<i>x</i>}S_{<i>x</i>} Nanoplatelets with Narrow and Continuously-Tunable Electroluminescence. Nano Letters, 2015, 15, 4611-4615.	9.1	114
31	Synergistic photocurrent addition in hybrid quantum dot: Bulk heterojunction solar cells. Nano Energy, 2015, 13, 491-499.	16.0	18
32	High-Efficiency Colloidal Quantum Dot Photovoltaics via Robust Self-Assembled Monolayers. Nano Letters, 2015, 15, 7691-7696.	9.1	198
33	Colloidal Quantum Dot Photovoltaics Enhanced by Perovskite Shelling. Nano Letters, 2015, 15, 7539-7543.	9.1	173
34	Optimal top electrodes for inverted polymer solar cells. Physical Chemistry Chemical Physics, 2015, 17, 2152-2159.	2.8	27
35	Synthesis of PCDTBT-Based Fluorinated Polymers for High Open-Circuit Voltage in Organic Photovoltaics: Towards an Understanding of Relationships between Polymer Energy Levels Engineering and Ideal Morphology Control. ACS Applied Materials & Interfaces, 2014, 6, 7523-7534.	8.0	88
36	Cesium-doped methylammonium lead iodide perovskite light absorber for hybrid solar cells. Nano Energy, 2014, 7, 80-85.	16.0	459

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37	Inverted Colloidal Quantum Dot Solar Cells. Advanced Materials, 2014, 26, 3321-3327.	21.0	59
38	Semicrystalline Dâ€“A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. Macromolecules, 2014, 47, 1604-1612.	4.8	95
39	Solution-processed CdS transistors with high electron mobility. RSC Advances, 2014, 4, 3153-3157.	3.6	19
40	Vapor Coating Method Using Small-Molecule Organic Surface Modifiers to Replace N-Type Metal Oxide Layers in Inverted Polymer Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 6504-6509.	8.0	4
41	Effects of Ionic Liquid Molecules in Hybrid PbS Quantum Dotâ€“Organic Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 1757-1760.	8.0	39
42	Dithieno[3,2â€<i>b</i>:2â€²,3â€²â€<i>d</i>]pyrrole and Benzothiadiazoleâ€Based Semicrystalline Copolymer for Photovoltaic Devices with Indeneâ€C₆₀ Bisadduct. Macromolecular Chemistry and Physics, 2013, 214, 2083-2090.	2.2	7
43	Observation of ambipolar field-effect behavior in donorâ€“acceptor conjugated copolymers. Journal of Materials Chemistry, 2012, 22, 21238.	6.7	12
44	Replacing 2,1,3-benzothiadiazole with 2,1,3-naphthothiadiazole in PCDTBT: towards a low bandgap polymer with deep HOMO energy level. Polymer Chemistry, 2012, 3, 3276.	3.9	27
45	Molecular engineering of conjugated polymers for solar cells and fieldâ€effect transistors: Sideâ€chain versus mainâ€chain electron acceptors. Journal of Polymer Science Part A, 2012, 50, 271-279.	2.3	6
46	Ladder-type heteroacenepolymers bearing carbazole and thiophene ring units and their use in field-effect transistors and photovoltaic cells. Journal of Materials Chemistry, 2011, 21, 843-850.	6.7	48
47	Synthesis and photovoltaic properties of conjugated copolymers based on benzimidazole and various thiophene. Journal of Polymer Science Part A, 2011, 49, 3751-3758.	2.3	4
48	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
49	The effect of introducing a buffer layer to polymer solar cells on cell efficiency. Solar Energy Materials and Solar Cells, 2011, 95, 1119-1122.	6.2	37
50	Towards optimization of P3HT:bisPCBM composites for highly efficient polymer solar cells. Journal of Materials Chemistry, 2010, 20, 7710.	6.7	31