Zeke Liu

List of Publications by Year
in descending order

45 papers	2,959 citations	218677 26 h-index	243625 44 g-index
45 all docs	45 docs citations	45 times ranked	4433 citing authors

#	Article	IF	Citations
1	Insight into the Ligand-Mediated Synthesis of Colloidal CsPbBr₃ Perovskite Nanocrystals: The Role of Organic Acid, Base, and Cesium Precursors. ACS Nano, 2016, 10, 7943-7954.	14.6	713
2	Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted Cs₄PbBr₆ Nanocrystals. Journal of the American Chemical Society, 2017, 139, 5309-5312.	13.7	389
3	Highâ€Efficiency Hybrid Solar Cells Based on Polymer/PbS_xSe_{1â€x} Nanocrystals Benefiting from Vertical Phase Segregation. Advanced Materials, 2013, 25, 5772-5778.	21.0	154
4	Highâ€Efficiency PbS Quantumâ€Dot Solar Cells with Greatly Simplified Fabrication Processing via â€œSolventâ€Curingâ€. Advanced Materials, 2018, 30, e1707572.	21.0	139
5	In Situ Passivation for Efficient PbS Quantum Dot Solar Cells by Precursor Engineering. Advanced Materials, 2018, 30, e1704871.	21.0	125
6	Room-temperature direct synthesis of semi-conductive PbS nanocrystal inks for optoelectronic applications. Nature Communications, 2019, 10, 5136.	12.8	107
7	Efficient PbS quantum dot solar cells employing a conventional structure. Journal of Materials Chemistry A, 2017, 5, 23960-23966.	10.3	104
8	Inverted Planar Heterojunction Perovskite Solar Cells Employing Polymer as the Electron Conductor. ACS Applied Materials & Interfaces, 2015, 7, 3994-3999.	8.0	100
9	Stable PbS quantum dot ink for efficient solar cells by solution-phase ligand engineering. Journal of Materials Chemistry A, 2019, 7, 15951-15959.	10.3	72
10	Pulsed Lasers Employing Solutionâ€Processed Plasmonic Cu_{3âˆ’}<i>_x</i>P Colloidal Nanocrystals. Advanced Materials, 2016, 28, 3535-3542.	21.0	68
11	Synthesis of cesium-doped ZnO nanoparticles as an electron extraction layer for efficient PbS colloidal quantum dot solar cells. Journal of Materials Chemistry A, 2018, 6, 17688-17697.	10.3	65
12	Tuning infrared plasmon resonances in doped metal-oxide nanocrystals through cation-exchange reactions. Nature Communications, 2019, 10, 1394.	12.8	64
13	Flexible Broadband Graphene Photodetectors Enhanced by Plasmonic Cu_{3âˆ’}<i>_x</i>P Colloidal Nanocrystals. Small, 2017, 13, 1701881.	10.0	63
14	High-efficiency polymerâ€“PbS hybrid solar cells via molecular engineering. Journal of Materials Chemistry A, 2015, 3, 2572-2579.	10.3	59
15	Broadband Enhancement of PbS Quantum Dot Solar Cells by the Synergistic Effect of Plasmonic Gold Nanobipyramids and Nanospheres. Advanced Energy Materials, 2018, 8, 1701194.	19.5	56
16	Stable and Highly Efficient PbS Quantum Dot Tandem Solar Cells Employing a Rationally Designed Recombination Layer. Advanced Energy Materials, 2017, 7, 1602667.	19.5	55
17	Hybrid Quantum Dot/Organic Heterojunction: A Route to Improve Open-Circuit Voltage in PbS Colloidal Quantum Dot Solar Cells. ACS Energy Letters, 2020, 5, 2335-2342.	17.4	54
18	Site-specific growth of AgPd nanodendrites on highly purified Au bipyramids with remarkable catalytic performance. Nanoscale, 2014, 6, 12971-12980.	5.6	45

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19	The effect of water on colloidal quantum dot solar cells. Nature Communications, 2021, 12, 4381.	12.8	44
20	Combinative Effect of Additive and Thermal Annealing Processes Delivers High Efficiency All-Polymer Solar Cells. Journal of Physical Chemistry C, 2015, 119, 25298-25306.	3.1	41
21	Photovoltaic Devices Based on Colloidal PbX Quantum Dots: Progress and Prospects. Solar Rrl, 2017, 1, 1600021.	5.8	39
22	PbSe Quantum Dot Solar Cells Based on Directly Synthesized Semiconductive Inks. ACS Energy Letters, 2020, 5, 3797-3803.	17.4	34
23	Polymer selection toward efficient polymer/PbSe planar heterojunction hybrid solar cells. Organic Electronics, 2015, 24, 263-271.	2.6	30
24	Finely Interpenetrating Bulk Heterojunction Structure for Lead Sulfide Colloidal Quantum Dot Solar Cells by Convective Assembly. ACS Energy Letters, 2019, 4, 960-967.	17.4	30
25	Asymmetric AgPdâ€"AuNR heterostructure with enhanced photothermal performance and SERS activity. Nanoscale, 2016, 8, 2242-2248.	5.6	29
26	Broadband Tunable Mid-infrared Plasmon Resonances in Cadmium Oxide Nanocrystals Induced by Size-Dependent Nonstoichiometry. Nano Letters, 2020, 20, 2821-2828.	9.1	29
27	Toward printable solar cells based on PbX colloidal quantum dot inks. Nanoscale Horizons, 2021, 6, 8-23.	8.0	29
28	Facile synthesis of ultra-small PbSe nanorods for photovoltaic application. Nanoscale, 2015, 7, 2461-2470.	5.6	24
29	Matrix Manipulation of Directlyâ€Synthesized PbS Quantum Dot Inks Enabled by Coordination Engineering. Advanced Functional Materials, 2021, 31, 2104457.	14.9	24
30	Photovoltaic devices employing ternary PbS Te1- nanocrystals. Journal of Materials Science and Technology, 2017, 33, 418-423.	10.7	20
31	Room-Temperature Direct Synthesis of PbSe Quantum Dot Inks for High-Detectivity Near-Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 51198-51204.	8.0	20
32	Towards scalable synthesis of high-quality PbS colloidal quantum dots for photovoltaic applications. Journal of Materials Chemistry C, 2019, 7, 1575-1583.	5.5	19
33	The Impact of Precursor Ratio on the Synthetic Production, Surface Chemistry, and Photovoltaic Performance of CsPbI₃ Perovskite Quantum Dots. Solar Rrl, 2021, 5, 2100090.	5.8	17
34	<i>In Situ</i> Growth of Strained Matrix on CsPbI₃ Perovskite Quantum Dots for Balanced Conductivity and Stability. ACS Nano, 2022, 16, 10534-10544.	14.6	16
35	Highly stable and repeatable femtosecond soliton pulse generation from saturable absorbers based on two-dimensional Cu3â^'xP nanocrystals. Frontiers of Optoelectronics, 2020, 13, 139-148.	3.7	13
36	Packing State Management to Realize Dense and Semiconducting Lead Sulfide Nanocrystals Film via a Single-Step Deposition. Cell Reports Physical Science, 2020, 1, 100183.	5.6	11

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37	Perovskite bridging PbS quantum dot/polymer interface enables efficient solar cells. Nano Research, 2022, 15, 6121-6127.	10.4	11
38	Ultraâ€Sensitive and Lowâ€Powerâ€Consumption Organic Phototransistor Enables Nighttime Illumination Perception for Bionic Mesopic Vision. Laser and Photonics Reviews, 2022, 16, .	8.7	10
39	Effects of cyano (CN)-groups on the planarity, film morphology and photovoltaic performance of benzodithiophene-based polymers. Polymer Chemistry, 2014, 5, 4772-4780.	3.9	8
40	Controlling Infrared Plasmon Resonances in Inverse-Spinel Cadmium Stannate Nanocrystals via Site-Selective Cation-Exchange Reactions. Chemistry of Materials, 2021, 33, 1954-1963.	6.7	8
41	Enhanced performance for polymer/fullerene solar cells by using bromobenzene/1,8-diiodooctane co-solvent. Applied Physics Letters, 2014, 104, .	3.3	6
42	Efficient all polymer solar cells employing donor polymer based on benzo[1,2-b:4,5-bâ€™]dithiophene unit. AIP Advances, 2015, 5, 117126.	1.3	5
43	The effect of molecular geometry on the polymer/fullerene ratio in polymer solar cells. Polymer Chemistry, 2015, 6, 7550-7557.	3.9	5
44	Multifunctional Sensors Based on Doped Indium Oxide Nanocrystals. ACS Applied Materials & Interfaces, 2022, 14, 24648-24658.	8.0	5
45	Pulsed Lasers: Pulsed Lasers Employing Solutionâ€Processed Plasmonic Cu_{3âˆ’}<i>_x</i>P Colloidal Nanocrystals (Adv. Mater. 18/2016). Advanced Materials, 2016, 28, 3604-3604.	21.0	0