Min-Jae Choi

List of Publications by Year
in descending order

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44 papers	3,429 citations	172386 29 h-index	233338 45 g-index
46 all docs	46 docs citations	46 times ranked	4947 citing authors

#	Article	IF	Citations
1	Facetâ€Oriented Coupling Enables Fast and Sensitive Colloidal Quantum Dot Photodetectors. Advanced Materials, 2021, 33, e2101056.	11.1	42
2	Ligand Exchange at a Covalent Surface Enables Balanced Stoichiometry in IIIâ€“V Colloidal Quantum Dots. Nano Letters, 2021, 21, 6057-6063.	4.5	34
3	Bright and Stable Light-Emitting Diodes Based on Perovskite Quantum Dots in Perovskite Matrix. Journal of the American Chemical Society, 2021, 143, 15606-15615.	6.6	94
4	Control Over Ligand Exchange Reactivity in Hole Transport Layer Enables High-Efficiency Colloidal Quantum Dot Solar Cells. ACS Energy Letters, 2021, 6, 468-476.	8.8	32
5	Stabilizing Surface Passivation Enables Stable Operation of Colloidal Quantum Dot Photovoltaic Devices at Maximum Power Point in an Air Ambient. Advanced Materials, 2020, 32, e1906497.	11.1	47
6	Cascade surface modification of colloidal quantum dot inks enables efficient bulk homojunction photovoltaics. Nature Communications, 2020, 11, 103.	5.8	181
7	A Tuned Alternating Dâ€“A Copolymer Holeâ€Transport Layer Enables Colloidal Quantum Dot Solar Cells with Superior Fill Factor and Efficiency. Advanced Materials, 2020, 32, e2004985.	11.1	56
8	Efficient and Stable Colloidal Quantum Dot Solar Cells with a Greenâ€Solvent Holeâ€Transport Layer. Advanced Energy Materials, 2020, 10, 2002084.	10.2	23
9	Orthogonal colloidal quantum dot inks enable efficient multilayer optoelectronic devices. Nature Communications, 2020, 11, 4814.	5.8	48
10	Monolithic Organic/Colloidal Quantum Dot Hybrid Tandem Solar Cells via Buffer Engineering. Advanced Materials, 2020, 32, e2004657.	11.1	16
11	Suppression of Auger Recombination by Gradient Alloying in InAs/CdSe/CdS QDs. Chemistry of Materials, 2020, 32, 7703-7709.	3.2	15
12	Colloidal Quantum Dot Bulk Heterojunction Solids with Nearâ€Unity Charge Extraction Efficiency. Advanced Science, 2020, 7, 2000894.	5.6	22
13	Thermodynamic-driven polychromatic quantum dot patterning for light-emitting diodes beyond eye-limiting resolution. Nature Communications, 2020, 11, 3040.	5.8	53
14	Monolayer Perovskite Bridges Enable Strong Quantum Dot Coupling for Efficient Solar Cells. Joule, 2020, 4, 1542-1556.	11.7	143
15	A Chemically Orthogonal Hole Transport Layer for Efficient Colloidal Quantum Dot Solar Cells. Advanced Materials, 2020, 32, e1906199.	11.1	59
16	Bipolar-shell resurfacing for blue LEDs based on strongly confined perovskite quantum dots. Nature Nanotechnology, 2020, 15, 668-674.	15.6	541
17	Ligand-Assisted Reconstruction of Colloidal Quantum Dots Decreases Trap State Density. Nano Letters, 2020, 20, 3694-3702.	4.5	46
18	Accelerated solution-phase exchanges minimize defects in colloidal quantum dot solids. Nano Energy, 2019, 63, 103876.	8.2	12

#	Article	IF	Citations
19	Suppressing Interfacial Dipoles to Minimize Openâ€Circuit Voltage Loss in Quantum Dot Photovoltaics. Advanced Energy Materials, 2019, 9, 1901938.	10.2	14
20	Mixed Lead Halide Passivation of Quantum Dots. Advanced Materials, 2019, 31, e1904304.	11.1	81
21	Machine Learning Accelerates Discovery of Optimal Colloidal Quantum Dot Synthesis. ACS Nano, 2019, 13, 11122-11128.	7.3	108
22	Stable Colloidal Quantum Dot Inks Enable Inkjet-Printed High-Sensitivity Infrared Photodetectors. ACS Nano, 2019, 13, 11988-11995.	7.3	99
23	Nanostructured Back Reflectors for Efficient Colloidal Quantumâ€Dot Infrared Optoelectronics. Advanced Materials, 2019, 31, e1901745.	11.1	49
24	Tuning Soluteâ€Redistribution Dynamics for Scalable Fabrication of Colloidal Quantumâ€Dot Optoelectronics. Advanced Materials, 2019, 31, e1805886.	11.1	28
25	Lattice anchoring stabilizes solution-processed semiconductors. Nature, 2019, 570, 96-101.	13.7	208
26	A Facetâ€Specific Quantum Dot Passivation Strategy for Colloid Management and Efficient Infrared Photovoltaics. Advanced Materials, 2019, 31, e1805580.	11.1	87
27	Extremely Small Pyrrhotite Fe₇S₈ Nanocrystals with Simultaneous Carbonâ€Encapsulation for Highâ€Performance Naâ€“Ion Batteries. Small, 2018, 14, 1702816.	5.2	62
28	Infrared Cavity-Enhanced Colloidal Quantum Dot Photovoltaics Employing Asymmetric Multilayer Electrodes. ACS Energy Letters, 2018, 3, 2908-2913.	8.8	20
29	Butylamineâ€Catalyzed Synthesis of Nanocrystal Inks Enables Efficient Infrared CQD Solar Cells. Advanced Materials, 2018, 30, e1803830.	11.1	67
30	Activated Electronâ€Transport Layers for Infrared Quantum Dot Optoelectronics. Advanced Materials, 2018, 30, e1801720.	11.1	57
31	Metalâ€“Organic Frameworks Mediate Cu Coordination for Selective CO₂ Electroreduction. Journal of the American Chemical Society, 2018, 140, 11378-11386.	6.6	326
32	Acid-Assisted Ligand Exchange Enhances Coupling in Colloidal Quantum Dot Solids. Nano Letters, 2018, 18, 4417-4423.	4.5	57
33	Interfacial band-edge engineered TiO2 protection layer on Cu2O photocathodes for efficient water reduction reaction. Electronic Materials Letters, 2017, 13, 57-65.	1.0	33
34	Long-Term Stable 2H-MoS₂ Dispersion: Critical Role of Solvent for Simultaneous Phase Restoration and Surface Functionalization of Liquid-Exfoliated MoS₂. ACS Omega, 2017, 2, 4678-4687.	1.6	55
35	Highly Asymmetric n⁺â€“p Heterojunction Quantumâ€Dot Solar Cells with Significantly Improved Chargeâ€Collection Efficiencies. Advanced Materials, 2016, 28, 1780-1787.	11.1	29
36	Surfaceâ€Shielding Nanostructures Derived from Selfâ€Assembled Block Copolymers Enable Reliable Plasma Doping for Fewâ€Layer Transition Metal Dichalcogenides. Advanced Functional Materials, 2016, 26, 5631-5640.	7.8	19

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37	Controlled Doping of Vacancy-Containing Few-Layer MoS₂ via Highly Stable Thiol-Based Molecular Chemisorption. ACS Nano, 2015, 9, 12115-12123.	7.3	320
38	Single Nanoparticle Localization in the Perforated Lamellar Phase of Self-Assembled Block Copolymer Driven by Entropy Minimization. Macromolecules, 2015, 48, 7938-7944.	2.2	11
39	Tailoring of the PbS/metal interface in colloidal quantum dot solar cells for improvements of performance and air stability. Energy and Environmental Science, 2014, 7, 3052.	15.6	55
40	Extremely High Yield Conversion from Lowâ€Cost Sand to Highâ€Capacity Si Electrodes for Liâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400622.	10.2	75
41	Porous silicon nanowires for lithium rechargeable batteries. Nanotechnology, 2013, 24, 424008.	1.3	38
42	Ultraâ€High Optical Transparency of Robust, Gradedâ€Index, and Antiâ€Fogging Silica Coating Derived from Siâ€Containing Block Copolymers. Advanced Optical Materials, 2013, 1, 428-433.	3.6	29
43	Localized surface plasmon-enhanced nanosensor platform using dual-responsive polymer nanocomposites. Nanoscale, 2013, 5, 7403.	2.8	16
44	Evaluation of nonequibiaxial residual stress using Knoop indenter. Journal of Materials Research, 2012, 27, 121-125.	1.2	13