

# Zhengtao Deng

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6428830/publications.pdf>

Version: 2024-02-01

80  
papers

8,763  
citations

57758

44  
h-index

56724

83  
g-index

86  
all docs

86  
docs citations

86  
times ranked

11905  
citing authors

#	ARTICLE	IF	CITATIONS
1	Precursor Tailoring Enables Alkylammonium Tin Halide Perovskite Phosphors for Solid-State Lighting. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	17
2	Promoting the doping efficiency and photoluminescence quantum yield of Mn-doped perovskite nanocrystals via two-step hot-injection. <i>Chemical Communications</i> , 2022, 58, 941-944.	4.1	7
3	Bright and stable quaternary ammonium antimony halides for solid-state lighting. <i>Journal of Materials Chemistry C</i> , 2022, 10, 8938-8946.	5.5	5
4	Single-Layer Sheets of Alkylammonium Lead Iodide Perovskites with Tunable and Stable Green Emission for White Light-Emitting Devices. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	2
5	A general approach to realizing perovskite nanocrystals with insulating metal sulfate shells. <i>Nanoscale</i> , 2021, 13, 10329-10334.	5.6	9
6	Alkylamine screening and zinc doping of highly luminescent 2D tin-halide perovskites for LED lighting. <i>Materials Advances</i> , 2021, 2, 1320-1327.	5.4	20
7	Stable and Bright Pyridine Manganese Halides for Efficient White Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2021, 31, 2011191.	14.9	70
8	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{CsPbI}_3$ Perovskite. <i>Angewandte Chemie</i> , 2021, 133, 16300-16306.	2.0	1
9	All-Inorganic Quantum-Dot LEDs Based on a Phase-Stabilized $\text{CsPbI}_3$ Perovskite. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16164-16170.	13.8	210
10	Precise, sensitive, and reversible thermochromic luminescent sensing facilitated <i>via</i> bright high-temperature luminescent $\text{PEAMnBr}_3$ ( $x = 0/1/2/3$ ). <i>Journal of Materials Chemistry C</i> , 2021, 9, 2729-2737.	5.5	12
11	Synthesis of two-dimensional phenylethylamine tin-lead halide perovskites with bandgap bending behavior. <i>Nanoscale Advances</i> , 2021, 3, 3875-3880.	4.6	7
12	Lead-free Mn-doped antimony halide perovskite quantum dots with bright deep-red emission. <i>Chemical Communications</i> , 2021, 57, 2677-2680.	4.1	25
13	Enhanced stability and performance of light-emitting diodes based on <i>in situ</i> fabricated $\text{FAPbBr}_3$ nanocrystals <i>via</i> ligand compensation with <i>n</i> -octylphosphonic acid. <i>Journal of Materials Chemistry C</i> , 2020, 8, 9936-9944.	5.5	11
14	Efficient and Stable Thin-Film Luminescent Solar Concentrators Enabled by Near-Infrared Emission Perovskite Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7738-7742.	13.8	64
15	Efficient and Stable Thin-Film Luminescent Solar Concentrators Enabled by Near-Infrared Emission Perovskite Nanocrystals. <i>Angewandte Chemie</i> , 2020, 132, 7812-7816.	2.0	6
16	Wash-induced multicolor tuning of carbon nano-dot/micro-belt hybrids with full recyclability and stable color convertibility. <i>Nanoscale</i> , 2019, 11, 14592-14597.	5.6	3
17	Quench-resistant and stable nanocarbon dot/sheet emitters with tunable solid-state fluorescence <i>via</i> aggregation-induced color switching. <i>Nanoscale</i> , 2019, 11, 2131-2137.	5.6	18
18	Photo-oxidative degradation of methylammonium lead iodide perovskite: mechanism and protection. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2275-2282.	10.3	105

#	ARTICLE	IF	CITATIONS
19	Realizing 17.0% external quantum efficiency in red quantum dot light-emitting diodes by pursuing the ideal inkjet-printed film and interface. <i>Organic Electronics</i> , 2019, 73, 247-254.	2.6	40
20	Controlled synthesis of zero-dimensional phase-pure Cs <sub>4</sub> PbBr <sub>6</sub> perovskites crystals with high photoluminescence quantum yield. <i>Journal of Alloys and Compounds</i> , 2019, 797, 1151-1156.	5.5	20
21	Aqueous acid-based synthesis of lead-free tin halide perovskites with near-unity photoluminescence quantum efficiency. <i>Chemical Science</i> , 2019, 10, 4573-4579.	7.4	109
22	Direct Hot-Injection Synthesis of Lead Halide Perovskite Nanocubes in Acrylic Monomers for Ultrastable and Bright Nanocrystal-Polymer Composite Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 9317-9325.	8.0	67
23	Fabrication of highly emissive and highly stable perovskite nanocrystal-polymer slabs for luminescent solar concentrators. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4872-4880.	10.3	45
24	Reversible light-mediated compositional and structural transitions between CsPbBr <sub>3</sub> and CsPb <sub>2</sub> Br <sub>5</sub> nanosheets. <i>Chemical Communications</i> , 2018, 54, 2804-2807.	4.1	54
25	Biomimetic Bipolar Microcapsules Derived from <i>Staphylococcus aureus</i> for Enhanced Properties of Lithium-Sulfur Battery Cathodes. <i>Advanced Energy Materials</i> , 2018, 8, 1702373.	19.5	106
26	Colloidal synthesis of monolayer-thick formamidinium lead bromide perovskite nanosheets with a lateral size of micrometers. <i>Chemical Communications</i> , 2018, 54, 4021-4024.	4.1	14
27	Ligand-mediated synthesis of compositionally related cesium lead halide CsPb <sub>2</sub> X <sub>5</sub> nanowires with improved stability. <i>Nanoscale</i> , 2018, 10, 7658-7665.	5.6	30
28	In Situ Passivation of PbBr <sub>6</sub> <sup>4-</sup> Octahedra toward Blue Luminescent CsPbBr <sub>3</sub> Nanoplatelets with Near 100% Absolute Quantum Yield. <i>ACS Energy Letters</i> , 2018, 3, 2030-2037.	17.4	402
29	Highly Emissive and Color-Tunable Perovskite Cross-linkers for Luminescent Polymer Networks. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 28971-28978.	8.0	20
30	Robust and Reversible Vapoluminescent Organometallic Copper Polymers. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800165.	3.9	3
31	Controlled Synthesis of Composition Tunable Formamidinium Cesium Double Cation Lead Halide Perovskite Nanowires and Nanosheets with Improved Stability. <i>Chemistry of Materials</i> , 2017, 29, 2157-2166.	6.7	82
32	Stable and conductive lead halide perovskites facilitated by X-type ligands. <i>Nanoscale</i> , 2017, 9, 7252-7259.	5.6	62
33	Synthesis of highly fluorescent InP/ZnS small-core/thick-shell tetrahedral-shaped quantum dots for blue light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2017, 5, 8243-8249.	5.5	93
34	Alkyl-Thiol Ligand-Induced Shape- and Crystalline Phase-Controlled Synthesis of Stable Perovskite-Related CsPb <sub>2</sub> Br <sub>5</sub> Nanocrystals at Room Temperature. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3853-3860.	4.6	100
35	Controlled Synthesis of Lead-Free Cesium Tin Halide Perovskite Cubic Nanocages with High Stability. <i>Chemistry of Materials</i> , 2017, 29, 6493-6501.	6.7	133
36	Porous Cu Nanowire Aerosponges from One-Step Assembly and their Applications in Heat Dissipation. <i>Advanced Materials</i> , 2016, 28, 1413-1419.	21.0	109

#	ARTICLE	IF	CITATIONS
37	DNA Directed Self-Assembly of Fluorescent Colloidal Semiconductor Quantum Dots and Plasmonic Metal Nanoparticles Heterogeneous Nanomaterials. Chinese Journal of Chemistry, 2016, 34, 259-264.	4.9	7
38	Fine-tuning the metallic core-shell nanostructures for plasmonic perovskite solar cells. Applied Physics Letters, 2016, 109, .	3.3	32
39	Controlled Synthesis of Lead-Free and Stable Perovskite Derivative Cs <sub>2</sub> SnI <sub>6</sub> Nanocrystals via a Facile Hot-Injection Process. Chemistry of Materials, 2016, 28, 8132-8140.	6.7	310
40	Ligand-Mediated Synthesis of Shape-Controlled Cesium Lead Halide Perovskite Nanocrystals <i>via</i> Reprecipitation Process at Room Temperature. ACS Nano, 2016, 10, 3648-3657.	14.6	905
41	Synthesis and patterning of tunable multiscale materials with engineered cells. Nature Materials, 2014, 13, 515-523.	27.5	329
42	Infrared emitting quantum dots: DNA conjugation and DNA origami directed self-assembly. Nanoscale, 2014, 6, 4486-4490.	5.6	24
43	Strong underwater adhesives made by self-assembling multi-protein nanofibres. Nature Nanotechnology, 2014, 9, 858-866.	31.5	370
44	A perspective on functionalizing colloidal quantum dots with DNA. Nano Research, 2013, 6, 853-870.	10.4	31
45	DNA functionalization of colloidal II-VI semiconductor nanowires for multiplex nanoheterostructures. Chemical Science, 2013, 4, 2234.	7.4	18
46	Quantum Efficiency Modification of Organic Fluorophores Using Gold Nanoparticles on DNA Origami Scaffolds. Journal of Physical Chemistry C, 2013, 117, 12735-12744.	3.1	40
47	Aqueous Synthesis of Glutathione-Capped CdTe/CdS/ZnS and CdTe/CdSe/ZnS Core/Shell/Shell Nanocrystal Heterostructures. Langmuir, 2012, 28, 8205-8215.	3.5	98
48	Non-trioctylphosphine and chemical aerosol flow growth of high quality thiol-capped CdSe nanocrystals. CrystEngComm, 2012, 14, 3257.	2.6	2
49	Robust DNA-Functionalized Core/Shell Quantum Dots with Fluorescent Emission Spanning from UV-vis to Near-IR and Compatible with DNA-Directed Self-Assembly. Journal of the American Chemical Society, 2012, 134, 17424-17427.	13.7	108
50	Solution Synthesis of Ultrathin Single-Crystalline SnS Nanoribbons for Photodetectors <i>via</i> Phase Transition and Surface Processing. ACS Nano, 2012, 6, 6197-6207.	14.6	193
51	High-Quality Manganese-Doped Zinc Sulfide Quantum Rods with Tunable Dual-Color and Multiphoton Emissions. Journal of the American Chemical Society, 2011, 133, 5389-5396.	13.7	132
52	DNA Directed Self-Assembly of Anisotropic Plasmonic Nanostructures. Journal of the American Chemical Society, 2011, 133, 17606-17609.	13.7	214
53	DNA Origami with Complex Curvatures in Three-Dimensional Space. Science, 2011, 332, 342-346.	12.6	1,074
54	Colloidal synthesis of metastable zinc-blende IV-VI SnS nanocrystals with tunable sizes. Nanoscale, 2011, 3, 4346.	5.6	81

#	ARTICLE	IF	CITATIONS
55	Site-Specific Synthesis and In Situ Immobilization of Fluorescent Silver Nanoclusters on DNA Nanoscaffolds by Use of the Tollens Reaction. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4176-4179.	13.8	94
56	Gold Nanoparticle Self-Similar Chain Structure Organized by DNA Origami. <i>Journal of the American Chemical Society</i> , 2010, 132, 3248-3249.	13.7	502
57	Surfactant-Free Self-Assembly of Nanocrystals into Ellipsoidal Architectures. <i>ChemPhysChem</i> , 2010, 11, 3744-3751.	2.1	5
58	DNA-Origami-Directed Self-Assembly of Discrete Silver Nanoparticle Architectures. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 2700-2704.	13.8	278
59	Controlled Colloidal Growth of Ultrathin Single-Crystal ZnS Nanowires with a Magic-Size Diameter. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 8695-8698.	13.8	57
60	Self-Assembled Synthesis and Characterization of Dandelion-Like and Flower-Like Cupric Oxide Nanostructures. <i>Nanoscience and Nanotechnology Letters</i> , 2010, 2, 35-40.	0.4	0
61	Aqueous Synthesis of Zinc Blende CdTe/CdS Magic-Core/Thick-Shell Tetrahedral-Shaped Nanocrystals with Emission Tunable to Near-Infrared. <i>Journal of the American Chemical Society</i> , 2010, 132, 5592-5593.	13.7	114
62	Synthesis and purple-blue emission of antimony trioxide single-crystalline nanobelts with elliptical cross section. <i>Nano Research</i> , 2009, 2, 151-160.	10.4	42
63	Band Gap Engineering of Quaternary-Alloyed ZnCdSSe Quantum Dots via a Facile Phosphine-Free Colloidal Method. <i>Journal of the American Chemical Society</i> , 2009, 131, 17744-17745.	13.7	127
64	Self-Healing Self-Assembly of Aspect-Ratio-Tunable Chloroplast-Shaped Architectures. <i>Crystal Growth and Design</i> , 2009, 9, 4745-4751.	3.0	9
65	New Method to Single-Crystal Micrometer-Sized Ultra-Thin Silver Nanosheets: Synthesis and Characterization. <i>Journal of Physical Chemistry C</i> , 2009, 113, 867-873.	3.1	29
66	Simple Colloidal Synthesis of Single-Crystal Sb <sup>3+</sup> Se <sup>2-</sup> S Nanotubes with Composition Dependent Band-Gap Energy in the Near-Infrared. <i>Nano Letters</i> , 2009, 9, 2015-2020.	9.1	77
67	Water-Based Route to Ligand-Selective Synthesis of ZnSe and Cd-Doped ZnSe Quantum Dots with Tunable Ultraviolet A to Blue Photoluminescence. <i>Langmuir</i> , 2009, 25, 434-442.	3.5	119
68	Growth of Single-Crystal Double-Directional Tellurium Nanoneedles from CdTe Nanocrystals in Solution. <i>Crystal Growth and Design</i> , 2009, 9, 1823-1828.	3.0	9
69	Synthesis of two-dimensional single-crystal berzelianite nanosheets and nanoplates with near-infrared optical absorption. <i>Journal of Materials Chemistry</i> , 2009, 19, 6201.	6.7	46
70	From Bulk Metal Bi to Two-Dimensional Well-Crystallized BiOX (X = Cl, Br) Micro- and Nanostructures: Synthesis and Characterization. <i>Crystal Growth and Design</i> , 2008, 8, 2995-3003.	3.0	172
71	Strong blue photoluminescence from single-crystalline bismuth oxychloride nanoplates. <i>Nanotechnology</i> , 2008, 19, 295705.	2.6	75
72	A New Route to Self-Assembled Tin Dioxide Nanospheres: Fabrication and Characterization. <i>Langmuir</i> , 2008, 24, 11089-11095.	3.5	39

#	ARTICLE	IF	CITATIONS
73	Spherical hexagonal tellurium nanocrystals: fabrication and size-dependent structural phase transition at high pressure. <i>Nanotechnology</i> , 2008, 19, 045707.	2.6	9
74	Three-dimensional structure of CdX (X=Se,Te) nanocrystals by total x-ray diffraction. <i>Journal of Applied Physics</i> , 2007, 102, 044304.	2.5	17
75	Orientated Attachment Assisted Self-Assembly of Sb <sub>2</sub> O <sub>3</sub> Nanorods and Nanowires: End-to-End versus Side-by-Side. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5325-5330.	3.1	79
76	Green and Orange CdTe Quantum Dots as Effective pH-Sensitive Fluorescent Probes for Dual Simultaneous and Independent Detection of Viruses. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12024-12031.	2.6	162
77	Magnetic and fluorescent multifunctional chitosan nanoparticles as a smart drug delivery system. <i>Nanotechnology</i> , 2007, 18, 405102.	2.6	111
78	Using cadmium telluride quantum dots as a proton flux sensor and applying to detect H9 avian influenza virus. <i>Analytical Biochemistry</i> , 2007, 364, 122-127.	2.4	57
79	A Simple Solution Route to Single-Crystalline Sb <sub>2</sub> O <sub>3</sub> Nanowires with Rectangular Cross Sections. <i>Journal of Physical Chemistry B</i> , 2006, 110, 18225-18230.	2.6	95
80	A New Route to Zinc-Blende CdSe Nanocrystals: Mechanism and Synthesis. <i>Journal of Physical Chemistry B</i> , 2005, 109, 16671-16675.	2.6	285