

Stephen V Kershaw

List of Publications by Year in descending order

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papers

9,278
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50170

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11403
citing authors

#	ARTICLE	IF	CITATIONS
1	Co-Doping of Cerium and Bismuth into Lead-Free Double Perovskite Cs ₂ AgInCl ₆ Nanocrystals Results in Improved Photoluminescence Efficiency. ACS Nanoscience Au, 2022, 2, 93-101.	2.0	24
2	A Near-Infrared Absorbing and Emissive Quadruple Helicene Enabled by the Scholl Reaction of Perylene. Angewandte Chemie - International Edition, 2022, 61, .	7.2	50
3	Monodisperse CuInS ₂ /CdS and CuInZnS ₂ /CdS Core-Shell Nanorods with a Strong Near-Infrared Emission. Advanced Optical Materials, 2022, 10, .	3.6	11
4	Effects of Repetitive Pressure on the Photoluminescence of Bare and ZnS-Capped CuInS ₂ Quantum Dots: Implications for Nanoscale Stress Sensors. ACS Applied Nano Materials, 2022, 5, 5617-5624.	2.4	9
5	Proton Transfer-Driven Modification of 3D Hybrid Perovskites to Form Oriented 2D Ruddlesden-Popper Phases. Small Science, 2022, 2, .	5.8	6
6	Bright, Magnetic NIR-II Quantum Dot Probe for Sensitive Dual-Modality Imaging and Intensive Combination Therapy of Cancer. ACS Nano, 2022, 16, 8076-8094.	7.3	31
7	Amine-Terminated Carbon Dots Linking Hole Transport Layer and Vertically Oriented Quasi-2D Perovskites through Hydrogen Bonds Enable Efficient LEDs. ACS Nano, 2022, 16, 9679-9690.	7.3	41
8	Two-Dimensional and Subnanometer-Thin Quasi-Copper-Sulfide Semiconductor Formed upon Copper-Copper Bonding. ACS Nano, 2021, 15, 873-883.	7.3	12
9	Multidentate Ligand Polyethylenimine Enables Bright Color-Saturated Blue Light-Emitting Diodes Based on CsPbBr ₃ Nanoplatelets. ACS Energy Letters, 2021, 6, 477-484.	8.8	65
10	Smoothing the energy transfer pathway in quasi-2D perovskite films using methanesulfonate leads to highly efficient light-emitting devices. Nature Communications, 2021, 12, 1246.	5.8	274
11	Induction of Wurtzite to Zinc-Blende Phase Transformation in ZnSe Nanorods During Cu(I) Cation Exchange. Chemistry of Materials, 2021, 33, 2398-2407.	3.2	7
12	Carbon Dots Detect Water-to-Ice Phase Transition and Act as Alcohol Sensors via Fluorescence Turn-Off/On Mechanism. ACS Nano, 2021, 15, 6582-6593.	7.3	34
13	Phase-Dependent Shell Growth and Optical Properties of ZnSe/ZnS Core/Shell Nanorods. Chemistry of Materials, 2021, 33, 3413-3427.	3.2	12
14	Strongly Luminescent Dion-Jacobson Tin Bromide Perovskite Microcrystals Induced by Molecular Proton Donors Chloroform and Dichloromethane. Advanced Functional Materials, 2021, 31, 2102182.	7.8	24
15	Correction to Temperature Controlled Fragmentation and Ripening: Synthesis of ZnSe Nanorods with Variable Dimensions and Crystal Structure Starting from Ultrathin ZnSe Nanowires. Chemistry of Materials, 2021, 33, 4247-4247.	3.2	1
16	Bright and Stable Dion-Jacobson Tin Bromide Perovskite Microcrystals Realized by Primary Alcohol Dopants. Chemistry of Materials, 2021, 33, 5413-5421.	3.2	15
17	Continuous Flow Synthesis of Persistent Luminescent Chromium-Doped Zinc Gallate Nanoparticles. Journal of Physical Chemistry Letters, 2021, 12, 7067-7075.	2.1	8
18	Highly Luminescent and Stable 2D/3D Octadecylammonium/Formamidinium Lead Bromide Perovskite Films. Journal of Physical Chemistry C, 2021, 125, 17501-17508.	1.5	1

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19	Morphology Control of Luminescent Carbon Nanomaterials: From Dots to Rolls and Belts. ACS Nano, 2021, 15, 1579-1586.	7.3	35
20	Room Temperature Fabrication of Stable, Strongly Luminescent Dionâ€“Jacobson Tin Bromide Perovskite Microcrystals Achieved through Use of Primary Alcohols. Nanomaterials, 2021, 11, 2738.	1.9	9
21	Advances in metal halide perovskite nanocrystals: Synthetic strategies, growth mechanisms, and optoelectronic applications. Materials Today, 2020, 32, 204-221.	8.3	114
22	Broad-Band Photodetectors Based on Copper Indium Diselenide Quantum Dots in a Methylammonium Lead Iodide Perovskite Matrix. ACS Applied Materials & Interfaces, 2020, 12, 35201-35210.	4.0	21
23	Growth of Multinary Copper-Based Sulfide Shells on CuInSe ₂ Nanocrystals for Significant Improvement of Their Near-Infrared Emission. Chemistry of Materials, 2020, 32, 7842-7849.	3.2	15
24	Phase-Controlled Growth of CuInS ₂ Shells to Realize Colloidal CuInSe ₂ /CuInS ₂ Core/Shell Nanostructures. ACS Nano, 2020, 14, 11799-11808.	7.3	16
25	Solution Processed Hybrid Polymer: HgTe Quantum Dot Phototransistor with High Sensitivity and Fast Infrared Response up to 2400Ånm at Room Temperature. Advanced Science, 2020, 7, 2000068.	5.6	52
26	Cdâ€“Rich Alloyed CsPb _{1-x} Cd _x Br ₃ Perovskite Nanorods with Tunable Blue Emission and Fermi Levels Fabricated through Crystal Phase Engineering. Advanced Science, 2020, 7, 2000930.	5.6	52
27	Bright CsPb ₃ Perovskite Quantum Dot Light-Emitting Diodes with Top-Emitting Structure and a Low Efficiency Roll-Off Realized by Applying Zirconium Acetylacetonate Surface Modification. Nano Letters, 2020, 20, 2829-2836.	4.5	137
28	CsPb ₃ /PbSe Heterostructured Nanocrystals for High-Efficiency Solar Cells. ACS Energy Letters, 2020, 5, 2401-2410.	8.8	77
29	Synthesis of Anisotropic ZnSe Nanorods with Zinc Blende Crystal Structure. Angewandte Chemie, 2020, 132, 5423-5429.	1.6	2
30	Synthesis of Anisotropic ZnSe Nanorods with Zinc Blende Crystal Structure. Angewandte Chemie - International Edition, 2020, 59, 5385-5391.	7.2	12
31	Development of Synthetic Methods to Grow Long-Wavelength Infrared-Emitting HgTe Quantum Dots in Dimethylformamide. Chemistry of Materials, 2020, 32, 3930-3943.	3.2	17
32	Temperature-Controlled Fragmentation and Ripening: Synthesis of ZnSe Nanorods with Variable Dimensions and Crystal Structure Starting from Ultrathin ZnSe Nanowires. Chemistry of Materials, 2020, 32, 3960-3969.	3.2	13
33	Using Polar Alcohols for the Direct Synthesis of Cesium Lead Halide Perovskite Nanorods with Anisotropic Emission. ACS Nano, 2019, 13, 8237-8245.	7.3	84
34	Oxalic Acid Enabled Emission Enhancement and Continuous Extraction of Chloride from Cesium Lead Chloride/Bromide Perovskite Nanocrystals. Small, 2019, 15, e1901828.	5.2	24
35	Integrated Plasmonic Infrared Photodetector Based on Colloidal HgTe Quantum Dots. Advanced Materials Technologies, 2019, 4, 1900354.	3.0	36
36	Chemically Synthesized Carbon Nanorods with Dual Polarized Emission. ACS Nano, 2019, 13, 12024-12031.	7.3	31

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37	Spontaneous Self-Assembly of Cesium Lead Halide Perovskite Nanoplatelets into Cuboid Crystals with High Intensity Blue Emission. <i>Advanced Science</i> , 2019, 6, 1900462.	5.6	69
38	Improved Stability and Photodetector Performance of CsPbI ₃ Perovskite Quantum Dots by Ligand Exchange with Aminoethanethiol. <i>Advanced Functional Materials</i> , 2019, 29, 1902446.	7.8	206
39	Hydrogen Peroxide Assisted Synthesis of Highly Luminescent Sulfur Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7040-7044.	7.2	137
40	Hydrogen Peroxide Assisted Synthesis of Highly Luminescent Sulfur Quantum Dots. <i>Angewandte Chemie</i> , 2019, 131, 7114-7118.	1.6	29
41	Trifluoroacetate induced small-grained CsPbBr ₃ perovskite films result in efficient and stable light-emitting devices. <i>Nature Communications</i> , 2019, 10, 665.	5.8	350
42	Zn-Alloyed CsPbI ₃ Nanocrystals for Highly Efficient Perovskite Light-Emitting Devices. <i>Nano Letters</i> , 2019, 19, 1552-1559.	4.5	395
43	Thermally Stable Copper(II)-Doped Cesium Lead Halide Perovskite Quantum Dots with Strong Blue Emission. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 943-952.	2.1	274
44	Shape-Controlled Synthesis of Copper Indium Sulfide Nanostructures: Flowers, Platelets and Spheres. <i>Nanomaterials</i> , 2019, 9, 1779.	1.9	2
45	Synthesis and Optical Properties of Cubic Chalcopyrite/Hexagonal Wurtzite Core/Shell Copper Indium Sulfide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2019, 141, 20516-20524.	6.6	17
46	Cesium Lead Chloride/Bromide Perovskite Quantum Dots with Strong Blue Emission Realized via a Nitrate-Induced Selective Surface Defect Elimination Process. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 90-96.	2.1	103
47	Bright Orange Electroluminescence from Lead-Free Two-Dimensional Perovskites. <i>ACS Energy Letters</i> , 2019, 4, 242-248.	8.8	166
48	Au@HgxCd _{1-x} Te core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. <i>Nano Energy</i> , 2019, 57, 57-65.	8.2	38
49	Enhancement of the Fluorescence Quantum Yield of Thiol-Stabilized CdTe Quantum Dots Through Surface Passivation with Sodium Chloride and Bicarbonate. <i>Zeitschrift Fur Physikalische Chemie</i> , 2018, 232, 1399-1412.	1.4	4
50	A Building Brick Principle to Create Transparent Composite Films with Multicolor Emission and Self-Healing Function. <i>Small</i> , 2018, 14, e1800315.	5.2	21
51	Narrowing the Photoluminescence of Aqueous CdTe Quantum Dots via Ostwald Ripening Suppression Realized by Programmed Dropwise Precursor Addition. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11109-11118.	1.5	16
52	Revealing the Formation Mechanism of CsPbBr ₃ Perovskite Nanocrystals Produced via a Slowed-Down Microwave-Assisted Synthesis. <i>Angewandte Chemie</i> , 2018, 130, 5935-5939.	1.6	12
53	Revealing the Formation Mechanism of CsPbBr ₃ Perovskite Nanocrystals Produced via a Slowed-Down Microwave-Assisted Synthesis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5833-5837.	7.2	109
54	Polarization Sensitive Plasmonic Photodetector Based on HgTe Quantum Dots. , 2018, , .		0

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55	Reversible transformation between CsPbBr ₃ and Cs ₄ PbBr ₆ nanocrystals. CrystEngComm, 2018, 20, 4900-4904.	1.3	48
56	Materials aspects of semiconductor nanocrystals for optoelectronic applications. Materials Horizons, 2017, 4, 155-205.	6.4	78
57	Ruthenium(II) Complex Incorporated UiO-67 Metal-Organic Framework Nanoparticles for Enhanced Two-Photon Fluorescence Imaging and Photodynamic Cancer Therapy. ACS Applied Materials & Interfaces, 2017, 9, 5699-5708.	4.0	129
58	Investigation of the Exchange Kinetics and Surface Recovery of Cd _{1-x} Hg _x Te Quantum Dots during Cation Exchange Using a Microfluidic Flow Reactor. Chemistry of Materials, 2017, 29, 2756-2768.	3.2	26
59	Mercury Telluride Quantum Dot Based Phototransistor Enabling High-Sensitivity Room-Temperature Photodetection at 2000 nm. ACS Nano, 2017, 11, 5614-5622.	7.3	110
60	Ligand-Controlled Formation and Photoluminescence Properties of CH ₃ NH ₃ PbBr ₃ Nanocubes and Nanowires. ChemNanoMat, 2017, 3, 303-310.	1.5	57
61	Growth mechanism of strongly emitting CH ₃ NH ₃ PbBr ₃ perovskite nanocrystals with a tunable bandgap. Nature Communications, 2017, 8, 996.	5.8	210
62	Room Temperature Synthesis of HgTe Quantum Dots in an Aprotic Solvent Realizing High Photoluminescence Quantum Yields in the Infrared. Chemistry of Materials, 2017, 29, 7859-7867.	3.2	27
63	Lead Halide Perovskite Nanocrystals in the Research Spotlight: Stability and Defect Tolerance. ACS Energy Letters, 2017, 2, 2071-2083.	8.8	888
64	In Situ Fabrication of Flexible, Thermally Stable, Large-Area, Strongly Luminescent Copper Nanocluster/Polymer Composite Films. Chemistry of Materials, 2017, 29, 10206-10211.	3.2	58
65	Mesoporous Aluminum Hydroxide Synthesized by a Single-Source Precursor Decomposition Approach as a High-Yield Blue Phosphor for UV-Pumped White-Emitting Diodes. Advanced Materials, 2017, 29, 1604284.	11.1	47
66	Integrated near-infrared photodetector based on colloidal HgTe quantum dot loaded plasmonic waveguide. , 2017, , .		4
67	Carrier Multiplication Mechanisms and Competing Processes in Colloidal Semiconductor Nanostructures. Materials, 2017, 10, 1095.	1.3	24
68	Temperature-Dependent Exciton and Trap-Related Photoluminescence of CdTe Quantum Dots Embedded in a NaCl Matrix: Implication in Thermometry. Small, 2016, 12, 466-476.	5.2	107
69	Highly Integrated Supercapacitor-Sensor Systems via Material and Geometry Design. Small, 2016, 12, 3393-3399.	5.2	78
70	Nanothermometry: Temperature-Dependent Exciton and Trap-Related Photoluminescence of CdTe Quantum Dots Embedded in a NaCl Matrix: Implication in Thermometry (Small 4/2016). Small, 2016, 12, 548-548.	5.2	2
71	Aqueous Based Semiconductor Nanocrystals. Chemical Reviews, 2016, 116, 10623-10730.	23.0	364
72	Organic nanostructures of thermally activated delayed fluorescent emitters with enhanced intersystem crossing as novel metal-free photosensitizers. Chemical Communications, 2016, 52, 11744-11747.	2.2	68

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73	Stretchable and Thermally Stable Dual Emission Composite Films of On-Purpose Aggregated Copper Nanoclusters in Carboxylated Polyurethane for Remote White Light-Emitting Devices. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 33993-33998.	4.0	47
74	Polyhedral Oligomeric Silsesquioxane Enhances the Brightness of Perovskite Nanocrystal-Based Green Light-Emitting Devices. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4398-4404.	2.1	105
75	Impact of D ₂ O/H ₂ O Solvent Exchange on the Emission of HgTe and CdTe Quantum Dots: Polaron and Energy Transfer Effects. <i>ACS Nano</i> , 2016, 10, 4301-4311.	7.3	43
76	Control of Emission Color of High Quantum Yield CH ₃ NH ₃ PbBr ₃ Perovskite Quantum Dots by Precipitation Temperature. <i>Advanced Science</i> , 2015, 2, 1500194.	5.6	536
77	Insight into Strain Effects on Band Alignment Shifts, Carrier Localization and Recombination Kinetics in CdTe/CdS Core/Shell Quantum Dots. <i>Journal of the American Chemical Society</i> , 2015, 137, 2073-2084.	6.6	81
78	Infrared Emitting HgTe Quantum Dots and Their Waveguide and Optoelectronic Devices. <i>Zeitschrift Fur Physikalische Chemie</i> , 2015, 229, 23-64.	1.4	24
79	Solution-Processed Ambipolar Organic Thin-Film Transistors by Blending p- and n-Type Semiconductors: Solid Solution versus Microphase Separation. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 28019-28026.	4.0	51
80	Fast, Air-Stable Infrared Photodetectors based on Spray-Deposited Aqueous HgTe Quantum Dots. <i>Advanced Functional Materials</i> , 2014, 24, 53-59.	7.8	82
81	Highly luminescent covalently bonded layered double hydroxide-fluorescent dye nanohybrids. <i>Journal of Materials Chemistry C</i> , 2014, 2, 4490-4494.	2.7	27
82	Photocurrent Enhancement of HgTe Quantum Dot Photodiodes by Plasmonic Gold Nanorod Structures. <i>ACS Nano</i> , 2014, 8, 8208-8216.	7.3	116
83	Multiple exciton generation in cluster-free alloy Cd _x Hg _{1-x} Te colloidal quantum dots synthesized in water. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 25710-25722.	1.3	22
84	Magnetically Engineered Semiconductor Quantum Dots as Multimodal Imaging Probes. <i>Advanced Materials</i> , 2014, 26, 6367-6386.	11.1	145
85	Thickness-Dependent Full-Color Emission Tunability in a Flexible Carbon Dot Ionogel. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1412-1420.	2.1	361
86	Near-Infrared-Emitting Cd _x Hg _{1-x} Se Nanorods Fabricated by Ion Exchange in an Aqueous Medium. <i>ChemPhysChem</i> , 2013, 14, 2853-2858.	1.0	12
87	Color-Switchable Electroluminescence of Carbon Dot Light-Emitting Diodes. <i>ACS Nano</i> , 2013, 7, 11234-11241.	7.3	471
88	Shuttling Photoelectrochemical Electron Transport in Tricomponent CdS/rGO/TiO ₂ Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2013, 117, 20406-20414.	1.5	55
89	25th Anniversary Article: Ion Exchange in Colloidal Nanocrystals. <i>Advanced Materials</i> , 2013, 25, 6923-6944.	11.1	170
90	Cd _x Hg _(1-x) Te Alloy Colloidal Quantum Dots: Tuning Optical Properties from the Visible to Near-Infrared by Ion Exchange. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 346-354.	1.2	36

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91	Narrow bandgap colloidal metal chalcogenide quantum dots: synthetic methods, heterostructures, assemblies, electronic and infrared optical properties. <i>Chemical Society Reviews</i> , 2013, 42, 3033.	18.7	374
92	Fluorinated Eu ³⁺ -Doped SnO ₂ Nanostructures with Simultaneous Phase and Shape Control and Improved Photoluminescence. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 332-337.	1.2	13
93	Hydrothermal synthesis of hierarchical SnO ₂ microspheres for gas sensing and lithium-ion batteries applications: Fluoride-mediated formation of solid and hollow structures. <i>Journal of Materials Chemistry</i> , 2012, 22, 2140-2148.	6.7	112
94	In Situ versus ex Situ Assembly of Aqueous-Based Thioacid Capped CdSe Nanocrystals within Mesoporous TiO ₂ Films for Quantum Dot Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 484-489.	1.5	52
95	Infrared-Emitting Colloidal Nanocrystals: Synthesis, Assembly, Spectroscopy, and Applications. <i>Small</i> , 2007, 3, 536-557.	5.2	385
96	Colloidally Prepared HgTe Nanocrystals with Strong Room-Temperature Infrared Luminescence. <i>Advanced Materials</i> , 1999, 11, 552-555.	11.1	312