

Compound Copper Chalcogenide Nanocrystals

Chemical Reviews

117, 5865-6109

DOI: [10.1021/acs.chemrev.6b00376](https://doi.org/10.1021/acs.chemrev.6b00376)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Bottom-up engineering of thermoelectric nanomaterials and devices from solution-processed nanoparticle building blocks. <i>Chemical Society Reviews</i> , 2017, 46, 3510-3528.	18.7	184
2	Prospects of Chalcopyrite-Type Nanocrystals for Energy Applications. <i>ACS Energy Letters</i> , 2017, 2, 1076-1088.	8.8	104
3	Facile synthesis of Er:CuS flowers and their application in the photo-catalytic activity. <i>Materials Science in Semiconductor Processing</i> , 2017, 72, 32-36.	1.9	13
4	Growth Mechanism and Surface State of CuInS ₂ Nanocrystals Synthesized with Dodecanethiol. <i>Journal of the American Chemical Society</i> , 2017, 139, 15748-15759.	6.6	58
5	Biocompatible conjugated polymer nanoparticles for highly efficient photoacoustic imaging of orthotopic brain tumors in the second near-infrared window. <i>Materials Horizons</i> , 2017, 4, 1151-1156.	6.4	129
6	Switching between Plasmonic and Fluorescent Copper Sulfide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2017, 139, 13208-13217.	6.6	88
7	Photoluminescence Spectra of Cu ₂ GeSe ₃ Orthorhombic Semiconductor Compound. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1700332.	0.7	3
8	Nanocrystalline copper sulfide and copper selenide thin films with p-type metallic behavior. <i>Journal of Materials Science</i> , 2017, 52, 13886-13896.	1.7	10
9	Seed-mediated phase-selective growth of Cu ₂ GeS ₃ hollow nanoparticles with huge cavities. <i>CrystEngComm</i> , 2017, 19, 6736-6743.	1.3	5
10	Self-Assembled Cu-S Nanotubes with High (De)Lithiation Performance. <i>ACS Nano</i> , 2017, 11, 10347-10356.	7.3	35
11	Enhanced performance of solar cells via anchoring CuGaS ₂ quantum dots. <i>Science China Materials</i> , 2017, 60, 829-838.	3.5	6
12	Fabrication of dense CIGS film by mixing two types of nanoparticles for solar cell application. <i>Nano Structures Nano Objects</i> , 2017, 11, 129-134.	1.9	10
13	Shape Evolution of Biconcave Djurleite Cu _{1.94} S Nanoplatelets Produced from CuInS ₂ Nanoplatelets by Cation Exchange. <i>Journal of the American Chemical Society</i> , 2017, 139, 18598-18606.	6.6	32
14	Nanoparticles of Ag-In-S and Cu-In-S in Aqueous Media: Preparation, Spectral and Luminescent Properties. <i>Theoretical and Experimental Chemistry</i> , 2017, 53, 338-348.	0.2	5
15	Near-infrared electrochemiluminescence from non-toxic CuInS ₂ nanocrystals. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12393-12399.	2.7	33
16	Phase Transformation and Evolution of Localized Surface Plasmon Resonance in Cu ₂ S Thin Films Deposited at 60 °C. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25440-25446.	1.5	18
17	Low-temperature colloidal synthesis of CuBiS ₂ nanocrystals for optoelectronic devices. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24621-24625.	5.2	20
18	Facile solvothermal approach to pristine tetrahedrite nanostructures with unique multiply-voided morphology. <i>Nanoscale</i> , 2017, 9, 17865-17876.	2.8	14

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19	Roles of Sulfur Sources in the Formation of Alloyed Cu _{2-x} S _y Se _{1-y} Nanocrystals: Controllable Synthesis and Tuning of Plasmonic Resonance Absorption. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15922-15930.	1.5	32
20	Electrochemical Atomic Layer Deposition of Cu _(1-x) Ga _x Se ₂ on Mo Substrate. <i>Journal of the Electrochemical Society</i> , 2017, 164, D1006-D1014.	1.3	3
21	Structural properties of Cu ₂ ZnSnS ₄ thin films produced by nanoink spraying process. , 2017, , .		2
22	Biocompatible Semiconductor Quantum Dots as Cancer Imaging Agents. <i>Advanced Materials</i> , 2018, 30, e1706356.	11.1	227
23	Copper-Coupled Electron Transfer in Colloidal Plasmonic Copper-Sulfide Nanocrystals Probed by <i>in Situ</i> Spectroelectrochemistry. <i>Journal of the American Chemical Society</i> , 2018, 140, 3434-3442.	6.6	28
24	New Insights into the Formation and Color-Tunable Optical Properties of Multinary Cu-In-Zn-Based Chalcogenide Semiconductor Nanocrystals. <i>Advanced Optical Materials</i> , 2018, 6, 1701389.	3.6	37
25	Metal Oxide Aerogels with Controlled Crystallinity and Faceting from the Epoxide-Driven Cross-Linking of Colloidal Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16041-16048.	4.0	11
26	Insight into the crystal phase and shape evolution from monoclinic Cu _{1.94} S to wurtzite Cu ₂ ZnSnS ₄ nanocrystals. <i>CrystEngComm</i> , 2018, 20, 2351-2356.	1.3	9
27	Achieving deep-red-to-near-infrared emissions in Sn-doped Cu-In-S/ZnS quantum dots for red-enhanced white LEDs and near-infrared LEDs. <i>Nanoscale</i> , 2018, 10, 9788-9795.	2.8	23
28	Thermoelectric properties of polythiophenes partially substituted by ethylenedioxy groups. <i>Polymer</i> , 2018, 144, 43-50.	1.8	9
29	Nonoble-Metal-Based Plasmonic Nanomaterials: Recent Advances and Future Perspectives. <i>Advanced Materials</i> , 2018, 30, e1704528.	11.1	160
30	Synthesis of bornite Cu ₅ FeS ₄ nanoparticles via high energy ball milling: Photocatalytic and thermoelectric properties. <i>Powder Technology</i> , 2018, 333, 160-166.	2.1	28
31	Luminescence and photoelectrochemical properties of size-selected aqueous copper-doped Ag-In-S quantum dots. <i>RSC Advances</i> , 2018, 8, 7550-7557.	1.7	51
32	Atomically precise copper nanoclusters and their applications. <i>Coordination Chemistry Reviews</i> , 2018, 359, 112-126.	9.5	216
33	Enhanced Photocatalytic Activity of Zn-Ag-In-S Semiconductor Nanocrystals with a Dumbbell-Shaped Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13705-13715.	1.5	23
34	Investigation into the Selenization Mechanisms of Wurtzite CZTS Nanorods. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7117-7125.	4.0	12
35	Localized Surface Plasmon Resonance in Semiconductor Nanocrystals. <i>Chemical Reviews</i> , 2018, 118, 3121-3207.	23.0	656
36	Facial Grinding Method for Synthesis of High-Purity CuS Nanosheets. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 2759-2764.	1.8	27

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37	Perfect Energetic Crystals with Improved Performances Obtained by Thermally Metastable Interfacial Self-Assembly of Corresponding Nanocrystals. <i>Crystal Growth and Design</i> , 2018, 18, 1657-1665.	1.4	35
38	Synthesis of Cisplatin(IV) Prodrug-Tethered CuFeS ₂ Nanoparticles in Tumor-Targeted Chemotherapy and Photothermal Therapy. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4590-4602.	4.0	54
39	Optical Signatures of Impurity-Impurity Interactions in Copper Containing II-VI Alloy Semiconductors. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 635-640.	2.1	7
40	Valence Selectivity of Cation Incorporation into Covellite CuS Nanoplatelets. <i>Chemistry of Materials</i> , 2018, 30, 1399-1407.	3.2	46
41	Tuning the Composition of Multicomponent Semiconductor Nanocrystals: The Case of II-VI Materials. <i>Chemistry of Materials</i> , 2018, 30, 1446-1461.	3.2	155
42	Origin and Dynamics of Highly Efficient Broadband Photoluminescence of Aqueous Glutathione-Capped Size-Selected Ag-In-S Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13648-13658.	1.5	88
43	On the growth morphology and crystallography of the epitaxial Cu ₇ Te ₄ /CdTe interface. <i>CrystEngComm</i> , 2018, 20, 1050-1056.	1.3	4
44	Cosensitized Quantum Dot Solar Cells with Conversion Efficiency over 12%. <i>Advanced Materials</i> , 2018, 30, 1705746.	11.1	148
45	Environmentally friendly and earth-abundant colloidal chalcogenide nanocrystals for photovoltaic applications. <i>Journal of Materials Chemistry C</i> , 2018, 6, 414-445.	2.7	40
46	Solution Deposited Cu ₂ BaSnS ₄ Se from a Thiol-Amine Solvent Mixture. <i>Chemistry of Materials</i> , 2018, 30, 304-308.	3.2	39
47	Synthesis of Wurtzite Cu ₂ ZnSnS ₄ Nanosheets with Exposed High-Energy (002) Facets for Fabrication of Efficient Pt-Free Solar Cell Counter Electrodes. <i>Scientific Reports</i> , 2018, 8, 248.	1.6	30
48	Seebeck coefficients of regioregular poly(3-hexylthiophene) correlated with doping levels. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 738-741.	1.3	15
49	From Large-Scale Synthesis to Lighting Device Applications of Ternary II-VI Semiconductor Nanocrystals: Inspiring Greener Material Emitters. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 435-445.	2.1	136
50	Tunable intraparticle frameworks for creating complex heterostructured nanoparticle libraries. <i>Science</i> , 2018, 360, 513-517.	6.0	242
51	Towards Low-Toxic Colloidal Quantum Dots. <i>Zeitschrift Fur Physikalische Chemie</i> , 2018, 232, 1443-1455.	1.4	6
52	Nanoflowers of Cu _{1.8} S: Free and Decorated on Graphene Oxide (GO-Cu _{1.8} S) as Efficient and Recyclable Catalysts for C-O Coupling. <i>ACS Applied Nano Materials</i> , 2018, 1, 2164-2174.	2.4	19
53	Near-Infrared Cu-In-Se-Based Colloidal Nanocrystals via Cation Exchange. <i>Chemistry of Materials</i> , 2018, 30, 2607-2617.	3.2	45
54	Predominated Thermodynamically Controlled Reactions for Suppressing Cross Nucleations in Formation of Multinary Substituted Tetrahedrite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1907-1912.	2.1	10

#	ARTICLE	IF	CITATIONS
55	Synthesis, characterization and photovoltaic properties of phase pure Cu ₂ SnSe ₃ nanostructures using molecular precursors. Journal of Materials Science: Materials in Electronics, 2018, 29, 8937-8946.	1.1	8
56	Near-Infrared-Emitting CuInS ₂ /ZnS Dot-in-Rod Colloidal Heteronanorods by Seeded Growth. Journal of the American Chemical Society, 2018, 140, 5755-5763.	6.6	45
57	Influence of Selenization Time on Microstructural, Optical, and Electrical Properties of Cu ₂ ZnGeSe ₄ Films. Journal of Electronic Materials, 2018, 47, 800-810.	1.0	6
58	Supercritical methanol synthesis, phase evolution and formation mechanism of Cu _{1.8} S and Cu ₉ S ₅ /CuS complex microcrystal. Journal of Supercritical Fluids, 2018, 133, 429-436.	1.6	17
59	In situ growth of hollow Cu ₂ O spheres using anionic vesicles as soft templates. Journal of Industrial and Engineering Chemistry, 2018, 59, 410-415.	2.9	94
60	Selective formation of ternary Cu-Ge-S nanostructures in solution. CrystEngComm, 2018, 20, 6803-6810.	1.3	5
61	Evolution of cation ordering and crystal defects controlled by Zn substitutions in Cu ₂ SnS ₃ ceramics. AIP Advances, 2018, 8, 105322.	0.6	4
62	Road Map for Nanocrystal Based Infrared Photodetectors. Frontiers in Chemistry, 2018, 6, 575.	1.8	52
63	Synthesis of Curved CuIn _{1-x} Gax(S _{1-y} Se _y) ₂ Nanocrystals and Complete Characterization of Their Diffraction Contrast Effects. Chemistry of Materials, 2018, 30, 8679-8689.	3.2	10
64	Polyoxometalate as Control Agent for the Doping in HgSe Self-Doped Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 26680-26685.	1.5	16
65	Enhanced carrier mobility and thermoelectric performance in Cu ₂ FeSnSe ₄ diamond-like compound via manipulating the intrinsic lattice defects. Materials Today Physics, 2018, 7, 45-53.	2.9	28
66	Wavelength-Tunable Band-Edge Photoluminescence of Nonstoichiometric Ag ₃ In ₂ S Nanoparticles via Ga ³⁺ Doping. ACS Applied Materials & Interfaces, 2018, 10, 42844-42855.	4.0	55
67	Recent Progress in Fluorescence Imaging of the Near-Infrared-II Window. ChemBioChem, 2018, 19, 2522-2541.	1.3	71
68	Green and room-temperature synthesis of aqueous CuInS ₂ and Cu ₂ SnS ₃ nanocrystals for efficient photoelectrochemical water splitting. Materials Today Energy, 2018, 10, 200-207.	2.5	12
69	Near-Infrared Luminescent Ternary Ag ₃ Sb ₃ Quantum Dots by in situ Conversion of Ag Nanocrystals with Sb(C ₉ H ₁₉ COO) ₃ . Chemistry - A European Journal, 2018, 24, 18643-18647.	1.7	5
70	Ag ⁺ -Induced Shape and Composition Evolution of Covellite CuS Nanoplatelets To Produce Plate-Satellite and Biconcave Particle Heterostructures. Chemistry of Materials, 2018, 30, 8089-8098.	3.2	17
71	Colloidal Plasmonic Nanoparticles for Ultrafast Optical Switching and Laser Pulse Generation. Frontiers in Materials, 2018, 5, .	1.2	17
72	Non-injection synthesis of L-shaped wurtzite Cu-Ga-Zn-S alloyed nanorods and their advantageous application in photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 18649-18659.	5.2	21

#	ARTICLE	IF	CITATIONS
73	Preparation of Cu ₂ ZnSn(S,Se) ₄ thin film solar cells by a green and facile solution method. <i>Materials Research Express</i> , 2018, 5, 125503.	0.8	1
74	Uncovering the Mechanism for the Formation of Copper Thioantimonate (Sb ^V) Nanoparticles and Its Transition to Thioantimonide (Sb ^{III}). <i>Crystal Growth and Design</i> , 2018, 18, 6521-6527.	1.4	10
75	Rose-like CuS microflowers and their enhanced visible-light photocatalytic performance. <i>CrystEngComm</i> , 2018, 20, 6529-6537.	1.3	24
76	“Green” Aqueous Synthesis and Advanced Spectral Characterization of Size-Selected Cu ₂ ZnSnS ₄ Nanocrystal Inks. <i>Scientific Reports</i> , 2018, 8, 13677.	1.6	39
77	Role of annealing atmosphere on the crystal structure and composition of tetrahedrite“tennantite alloy nanoparticles. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10538-10546.	2.7	6
78	Chalcogen Impact on Covalency within Molecular [Cu ₃ ($\frac{1}{4}$)-E] ³⁺ Clusters (E = O, S, Se): A Synthetic, Spectroscopic, and Computational Study. <i>Inorganic Chemistry</i> , 2018, 57, 11382-11392.	1.9	9
79	Highly monodisperse beta-cyclodextrin-covellite nanoparticles for efficient photothermal and chemotherapy. <i>Nanoscale Horizons</i> , 2018, 3, 538-544.	4.1	17
80	Hierarchically Structured Thermoelectric Materials in Quaternary System Cu“Zn“Sn“S Featuring a Mosaic-type Nanostructure. <i>ACS Applied Nano Materials</i> , 2018, 1, 2579-2588.	2.4	13
81	Solar light harvesting with multinary metal chalcogenide nanocrystals. <i>Chemical Society Reviews</i> , 2018, 47, 5354-5422.	18.7	177
82	CuS nanoflowers/semipermeable collodion membrane composite for high-efficiency solar vapor generation. <i>Materials Today Energy</i> , 2018, 9, 285-294.	2.5	60
83	Doping and Surface Effects of CuFeS ₂ Nanocrystals Used in Thermoelectric Nanocomposites. <i>ChemNanoMat</i> , 2018, 4, 982-991.	1.5	26
84	Application of Nanomaterials Prepared by Thermolysis of Metal Chelates. <i>Springer Series on Polymer and Composite Materials</i> , 2018, , 459-541.	0.5	1
85	Research Update: Bismuth based materials for photovoltaics. <i>APL Materials</i> , 2018, 6, .	2.2	79
86	Lithiation of Copper Selenide Nanocrystals. <i>Angewandte Chemie</i> , 2018, 130, 9459-9463.	1.6	3
87	Utilizing Diselenide Precursors toward Rationally Controlled Synthesis of Metastable CuInSe ₂ Nanocrystals. <i>Chemistry of Materials</i> , 2018, 30, 5704-5713.	3.2	59
88	Controlling Morphology in Polycrystalline Films by Nucleation and Growth from Metastable Nanocrystals. <i>Nano Letters</i> , 2018, 18, 5530-5537.	4.5	4
89	Size-Dependent Band-Gap and Molar Absorption Coefficients of Colloidal CuInS ₂ Quantum Dots. <i>ACS Nano</i> , 2018, 12, 8350-8361.	7.3	122
90	Selective Cation Incorporation into Copper Sulfide Based Nanoheterostructures. <i>ACS Nano</i> , 2018, 12, 7803-7811.	7.3	46

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91	CuGaS ₂ and CuGaS ₂ @ZnS Porous Layers from Solution-Processed Nanocrystals. <i>Nanomaterials</i> , 2018, 8, 220.	1.9	7
92	Valence-Band Electronic Structures of Cu ⁺ -Doped ZnS, Alloyed CuIn ₂ S ₄ , and Ternary CuInS ₂ Nanocrystals: A Unified Description of Photoluminescence across Compositions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18124-18133.	1.5	42
93	Nanostructured binary copper chalcogenides: synthesis strategies and common applications. <i>Nanoscale</i> , 2018, 10, 15130-15163.	2.8	73
94	Colloidal Synthesis and Thermoelectric Properties of CuFeSe ₂ Nanocrystals. <i>Nanomaterials</i> , 2018, 8, 8.	1.9	29
95	Structural, optical and photocatalytic properties of spray deposited Cu ₂ ZnSnS ₄ thin films with various S/(Cu+Zn+Sn) ratio. <i>Materials Science in Semiconductor Processing</i> , 2018, 87, 54-64.	1.9	24
96	Modulated Triple Material Nano-Heterostructures: Where Gold Influenced the Chemical Activity of Silver in Nanocrystals. <i>Small</i> , 2018, 14, e1801598.	5.2	11
97	Anisotropic 2D Cu ₂ Se Nanocrystals from Dodecaneselenol and Their Conversion to CdSe and CuInSe ₂ Nanoparticles. <i>Chemistry of Materials</i> , 2018, 30, 3836-3846.	3.2	25
98	Aligned Copper Zinc Tin Sulfide Nanorods as Lithium-Ion Battery Anodes with High Specific Capacities. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20090-20098.	1.5	25
99	Thin Layer of Semiconductor Plasmonic Nanocrystals for the Enhancement of NIR Fluorophores. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20469-20475.	1.5	13
100	Janus Nanoparticle Structural Motif Control via Asymmetric Cation Exchange in Edge-Protected Cu _{1.81} S@Ir _{0.19} S Hexagonal Nanoplates. <i>ACS Nano</i> , 2018, 12, 7996-8005.	7.3	36
101	Lithiation of Copper Selenide Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9315-9319.	7.2	11
102	Tailoring Porosity in Copper-Based Multinary Sulfide Nanostructures for Energy, Biomedical, Catalytic, and Sensing Applications. <i>ACS Applied Nano Materials</i> , 2018, 1, 3042-3062.	2.4	40
103	Precursor-mediated synthesis of Cu ₂ Se nanoparticles and their composites with TiO ₂ for improved photocatalysis. <i>Dalton Transactions</i> , 2018, 47, 8897-8905.	1.6	30
104	Optical Properties of Cu ₂ ZnSn(S _x Se _{1-x}) ₄ by First-Principles Calculations. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700945.	0.8	4
105	Photocatalysis for Hydrogen Production and CO ₂ Reduction: The Case of Copper Catalysts. <i>ChemCatChem</i> , 2019, 11, 368-382.	1.8	131
106	Advances in green colloidal synthesis of metal selenide and telluride quantum dots. <i>Chinese Chemical Letters</i> , 2019, 30, 277-284.	4.8	13
107	A label-free turn ON-OFF chemiluminescence strategy for lysozyme detection by target-triggered Cu ₂ Se aggregation. <i>Analytical Methods</i> , 2019, 11, 4376-4381.	1.3	4
108	Biomimetic strategies to produce catalytically reactive CuS nanodisks. <i>Nanoscale Advances</i> , 2019, 1, 2857-2865.	2.2	6

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109	Enhanced upconversion luminescence in Cu _{1.8} S@NaYF ₄ : Yb@ NaYF ₄ : Yb, Er core-shell nanoparticles. <i>Ceramics International</i> , 2019, 45, 21557-21563.	2.3	8
110	Synthesis, characterization and examination of photocatalytic performance of hexagonal covellite CuS nanoplates. <i>Materials Chemistry and Physics</i> , 2019, 237, 121823.	2.0	28
111	Role of monoethanolamine concentration for physical properties of Cu ₂ CoSnS ₄ nanoparticles via one-pot hydrothermal synthesis: Toward low temperature, high performance nanocrystalline CCTS photodetectors by hybrid UV-vacuum annealing. <i>Materials Letters</i> , 2019, 254, 9-12.	1.3	11
112	Complete self-recovery of photoluminescence of photodegraded cesium lead bromide quantum dots. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8546-8550.	2.7	16
113	Sulfur-Mediated Mechanochemical Synthesis of Spherical and Needle-Like Copper Sulfide Nanocrystals with Antibacterial Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 12897-12909.	3.2	42
114	Highly Conductive Copper Selenide Nanocrystal Thin Films for Advanced Electronics. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1560-1569.	2.0	19
115	Template free and facile microwave-assisted synthesis method to prepare mesoporous copper sulfide nanosheets for high-performance hybrid supercapacitor. <i>Electrochimica Acta</i> , 2019, 319, 49-60.	2.6	39
116	CuGaSe ₂ and Cu _{1-x} Ga _{1-x} Se ₂ Nanocrystals with Sphalerite or Wurtzite Phase for Optoelectronic Applications. <i>ACS Applied Nano Materials</i> , 2019, 2, 4673-4680.	2.4	8
117	Low-Temperature Synthesis of Highly Efficient, Deep-Red Zn-Cu-In-Se/ZnSe Fluorescence Quantum Dots. <i>Nano</i> , 2019, 14, 1950070.	0.5	0
118	Recent Advances in Cu-Based Cocatalysts toward Solar-Driven Hydrogen Evolution: Categories and Roles. <i>Solar Rrl</i> , 2019, 3, 1900256.	3.1	41
119	Versatile Colloidal Syntheses of Metal Chalcogenide Nanoparticles from Elemental Precursors Using Amine-Thiol Chemistry. <i>Chemistry of Materials</i> , 2019, 31, 9087-9097.	3.2	34
120	Tailoring Cu ⁺ for Ga ³⁺ Cation Exchange in Cu _{2-x} S and CuInS ₂ Nanocrystals by Controlling the Ga Precursor Chemistry. <i>ACS Nano</i> , 2019, 13, 12880-12893.	7.3	28
121	Quasifractal Networks as Current Collectors for Transparent Flexible Supercapacitors. <i>Advanced Functional Materials</i> , 2019, 29, 1906618.	7.8	28
122	Boosting the Performance of Environmentally Friendly Quantum Dot-Sensitized Solar Cells over 13% Efficiency by Dual Sensitizers with Cascade Energy Structure. <i>Advanced Materials</i> , 2019, 31, e1903696.	11.1	51
123	Colloidal Synthesis and Optical Properties of All-Inorganic Low-Dimensional Cesium Copper Halide Nanocrystals. <i>Angewandte Chemie</i> , 2019, 131, 16233-16237.	1.6	78
124	Controlled Surface for Enhanced Luminescence Quantum Yields of Silicon Nanocrystals. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2019, 66, 145-157.	0.1	1
125	Investigation of Photophysical Properties of Ternary Zn-Ga-S Quantum Dots: Band Gap versus Sub-Band-Gap Excitations and Emissions. <i>ACS Omega</i> , 2019, 4, 18327-18333.	1.6	12
126	Superbase-Assisted Selective Synthesis of Triarylphosphines from Aryl Halides and Red Phosphorus: Three Consecutive Different S _N Ar Reactions in One Pot. <i>European Journal of Organic Chemistry</i> , 2019, 2019, 6240-6245.	1.2	10

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127	Laser induced structural phase transitions in Cu ₃ SbS ₄ thin films. <i>Semiconductor Science and Technology</i> , 2019, 34, 105026.	1.0	8
128	Protective effect of apple phlorizin on hydrogen peroxide-induced cell damage in HepG2 cells. <i>Journal of Food Biochemistry</i> , 2019, 43, e13052.	1.2	22
129	Colloidal Synthesis and Optical Properties of All-Inorganic Low-Dimensional Cesium Copper Halide Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16087-16091.	7.2	192
130	Near-Infrared Absorbing Solid Lipid Nanoparticles Encapsulating Plasmonic Copper Sulfide Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 23205-23213.	1.5	9
131	Ethanol sensing with pure and boric acid doped electrospun CuInS ₂ nanofibers in the presence of relative humidity. <i>Materials Science in Semiconductor Processing</i> , 2019, 104, 104651.	1.9	3
132	Synthesis, photophysical properties and surface chemistry of chalcopyrite-type semiconductor nanocrystals. <i>Journal of Materials Chemistry C</i> , 2019, 7, 11665-11709.	2.7	67
133	In Situ Observation of Thermally Induced Structural Transitions in Vacancy-Doped Cuprous Telluride (Cu _{2-x} Te) Nanowires Using Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24763-24771.	1.5	10
134	Recent advances in copper sulphide-based nanoheterostructures. <i>Chemical Society Reviews</i> , 2019, 48, 4950-4965.	18.7	85
135	Chemical epitaxy of a new orthorhombic phase of Cu _{2-x} S on GaAs. <i>CrystEngComm</i> , 2019, 21, 6063-6071.	1.3	5
136	Ternary Metal Chalcogenides: Into the Exciton and Biexciton Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6227-6238.	2.1	21
137	Janus to Core-Shell to Janus: Facile Cation Movement in Cu _{2-x} S/Ag _{2-x} S Hexagonal Nanoplates Induced by Surface Strain Control. <i>ACS Nano</i> , 2019, 13, 11834-11842.	7.3	23
138	Longitudinal Strain Engineering of Cu _{2-x} S by the Juxtaposed Cu ₅ FeS ₄ Phase in the Cu ₅ FeS ₄ /Cu _{2-x} S/Cu ₅ FeS ₄ Nanosandwich. <i>Chemistry of Materials</i> , 2019, 31, 9070-9077.	3.2	12
139	Insights into Reaction Intermediates to Predict Synthetic Pathways for Shape-Controlled Metal Nanocrystals. <i>Journal of the American Chemical Society</i> , 2019, 141, 16312-16322.	6.6	47
140	Hot injection synthesis of CuInS ₂ nanocrystals using metal xanthates and their application in hybrid solar cells. <i>New Journal of Chemistry</i> , 2019, 43, 356-363.	1.4	15
141	From one-dimensional to two-dimensional wurtzite CuGaS ₂ nanocrystals: non-injection synthesis and photocatalytic evolution. <i>Nanoscale</i> , 2019, 11, 158-169.	2.8	38
142	Solvothermal synthesis of copper cadmium sulphide (CuCdS ₂) nanoparticles and its structural, optical and morphological properties. <i>Materials Science in Semiconductor Processing</i> , 2019, 93, 345-356.	1.9	15
143	Air-Stable CuInSe ₂ Nanocrystal Transistors and Circuits via Post-Deposition Cation Exchange. <i>ACS Nano</i> , 2019, 13, 2324-2333.	7.3	24
144	Effects of Oleic Acid on the Stability of Perovskite CsPbBr ₃ Quantum Dot Dispersions. <i>Chemistry Letters</i> , 2019, 48, 349-352.	0.7	16

#	ARTICLE	IF	CITATIONS
145	Visual detection of cancer cells by using <i>in situ</i> grown functional Cu ₂ S/Se/reduced graphene oxide hybrids acting as an efficient nanozyme. <i>Analyst</i> , The, 2019, 144, 716-721.	1.7	11
146	CuSbSe ₂ /TiO ₂ : novel type-II heterojunction nano-photocatalyst. <i>Materials Chemistry Frontiers</i> , 2019, 3, 437-449.	3.2	22
147	CuInSe ₂ quantum dots grown by molecular beam epitaxy on amorphous SiO ₂ surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1103-1111.	1.5	4
148	Recent advances in metal sulfides: from controlled fabrication to electrocatalytic, photocatalytic and photoelectrochemical water splitting and beyond. <i>Chemical Society Reviews</i> , 2019, 48, 4178-4280.	18.7	810
149	Solution-Processed <i>In Situ</i> Growth of CuInS ₂ Nanoparticle Films for Efficient Planar Heterojunction Solar Cells with a Dual Nature of Charge Generation. <i>ACS Applied Energy Materials</i> , 2019, 2, 5231-5242.	2.5	29
150	Combined High Catalytic Activity and Efficient Polar Tubular Nanostructure in Urchin-Like Metallic NiCo ₂ Se ₄ for High-Performance Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1903842.	7.8	153
151	Compositional engineering of multinary Cu-In-Zn-based semiconductor nanocrystals for efficient and solution-processed red-emitting quantum-dot light-emitting diodes. <i>Organic Electronics</i> , 2019, 74, 46-51.	1.4	12
152	Pyridyl and pyrimidyl chalcogenolates of coinage metals and their utility as molecular precursors for the preparation of metal chalcogenides. <i>New Journal of Chemistry</i> , 2019, 43, 11034-11040.	1.4	4
153	Engineering the Optoelectronic Properties of Colloidal Alloyed Copper Chalcogenide Quantum Dots for High-Efficiency Solar Energy Conversion. <i>Solar Rrl</i> , 2019, 3, 1900186.	3.1	19
154	Nanostructured materials for photocatalysis. <i>Chemical Society Reviews</i> , 2019, 48, 3868-3902.	18.7	744
155	Electron-transfer cascade from CdSe@ZnSe core-shell quantum dot accelerates photoelectrochemical H ₂ evolution on TiO ₂ nanotube arrays. <i>Journal of Catalysis</i> , 2019, 375, 81-94.	3.1	49
157	Copper deficiency induced varying electronic structure and optoelectronic properties of Cu ₂ S thin films. <i>Applied Surface Science</i> , 2019, 488, 477-484.	3.1	17
158	The release and detection of copper ions from ultrasmall theranostic Cu ₂ S/Se nanoparticles. <i>Nanoscale</i> , 2019, 11, 11819-11829.	2.8	37
159	Semiconductor nanocrystal-polymer hybrid nanomaterials and their application in molecular imprinting. <i>Nanoscale</i> , 2019, 11, 12030-12074.	2.8	50
160	Carbon-Encapsulated Copper Sulfide Leading to Enhanced Thermoelectric Properties. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 22457-22463.	4.0	45
161	Earth-abundant transition metal and metal oxide nanomaterials: Synthesis and electrochemical applications. <i>Progress in Materials Science</i> , 2019, 106, 100574.	16.0	184
162	Direct Synthesis of Novel Cu ₂ S/Se Wurtzite Phase. <i>Chemistry of Materials</i> , 2019, 31, 4619-4624.	3.2	27
163	Flow-driven disclination lines of nematic liquid crystals inside a rectangular microchannel. <i>Soft Matter</i> , 2019, 15, 5638-5643.	1.2	13

#	ARTICLE	IF	CITATIONS
164	Enhanced Photoelectrochemical Properties of Zn ²⁺ /Ag ⁺ /In ³⁺ /Te Nanocrystals with High Energy Photon Excitation. <i>ChemNanoMat</i> , 2019, 5, 1028-1035.	1.5	5
165	Engineering Ternary Copper-Cobalt Sulfide Nanosheets as High-performance Electrocatalysts toward Oxygen Evolution Reaction. <i>Catalysts</i> , 2019, 9, 459.	1.6	21
166	High-Resolution 3D NIR-Photoacoustic Imaging of Cerebral and Tumor Vasculatures Using Conjugated Polymer Nanoparticles as Contrast Agent. <i>Advanced Materials</i> , 2019, 31, e1808355.	11.1	133
167	A facile preparation of CuS-BSA nanocomposite as enzyme mimics: Application for selective and sensitive sensing of Cr(VI) ions. <i>Sensors and Actuators B: Chemical</i> , 2019, 294, 253-262.	4.0	64
168	Photoluminescence of Ag-In-S/ZnS quantum dots: Excitation energy dependence and low-energy electronic structure. <i>Nano Research</i> , 2019, 12, 1595-1603.	5.8	43
169	Parallel Multistream Training of High-Dimensional Neural Network Potentials. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 3075-3092.	2.3	124
170	Indium insertions in non-stoichiometric copper sulfides, Cu _x S, and their effect on the localized surface plasmon resonance of the nanocrystals. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	4
171	Syntheses of Colloidal F ₂ O ₃ Cubes: Fluorine-Induced Faceting and Infrared Plasmonic Response. <i>Chemistry of Materials</i> , 2019, 31, 2661-2676.	3.2	41
172	Optoelectronic Properties of Ternary In ₂ VI Semiconductor Nanocrystals: Bright Prospects with Elusive Origins. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1600-1616.	2.1	122
173	Microwave-Assisted Synthesis of Porous Aggregates of CuS Nanoparticles for Sunlight Photocatalysis. <i>ACS Omega</i> , 2019, 4, 4825-4831.	1.6	57
174	Highly Selective Optical Detection of Fe ³⁺ Ions in Aqueous Solution Using Label-Free Silicon Nanocrystals. <i>Particle and Particle Systems Characterization</i> , 2019, 36, 1900034.	1.2	5
175	Highly crystalline, large grain Cu ₂ CoSnS ₄ films with reproducible stoichiometry via direct solution spin coating for optoelectronic device application. <i>Ceramics International</i> , 2019, 45, 12399-12405.	2.3	16
176	Pervasive Cation Vacancies and Antisite Defects in Copper Indium Diselenide (CuInSe ₂) Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9544-9551.	1.5	26
177	Cd-Cu-Fe-S quaternary nanocrystals exhibiting excellent optical/optoelectronic properties. <i>Nanoscale</i> , 2019, 11, 6533-6537.	2.8	3
178	Dye-Sensitized Ternary Copper Chalcogenide Nanocrystals: Optoelectronic Properties, Air Stability, and Photosensitivity. <i>Chemistry of Materials</i> , 2019, 31, 2443-2449.	3.2	12
179	Nanosized Copper Selenide Functionalized Zeolitic Imidazolate Framework-8 (CuSe/ZIF-8) for Efficient Immobilization of Gas-Phase Elemental Mercury. <i>Advanced Functional Materials</i> , 2019, 29, 1807191.	7.8	74
180	Accessing copper-tin-sulfide nanostructures from diorganotin(IV) and copper(I) 2-pyrazinyl thiolates. <i>Journal of Organometallic Chemistry</i> , 2019, 887, 24-31.	0.8	12
181	Self-Confined Precipitation of Ultrasmall Plasmonic Cu ₂ Se Particles in Transparent Solid Medium. <i>Journal of Physical Chemistry C</i> , 2019, 123, 9394-9399.	1.5	8

#	ARTICLE	IF	CITATIONS
182	Bimetallic metal-organic frameworks-derived mesoporous $Cd_xZn_{1-x}S$ polyhedrons for enhanced photocatalytic hydrogen evolution. <i>Journal of Materials Research</i> , 2019, 34, 1773-1784.	1.2	20
183	One-Pot Synthesis of $BiCuSO$ Nanosheets under Ambient Atmosphere as Broadband Spectrum Photocatalyst. <i>Nanomaterials</i> , 2019, 9, 540.	1.9	5
184	Synthesis and Characterization of Copper Sulfide-Manganese Sulfide Nanoparticles with Chestnut Morphology and Study on the Semiconducting Properties. <i>ChemistrySelect</i> , 2019, 4, 3898-3904.	0.7	4
185	<i>In situ</i> formation of Ni_3S_2 - $Cu_{1.8}S$ nanosheets to promote hybrid supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11044-11052.	5.2	71
186	Exploring the $Cu_5In_8S_8$ System under Solvothermal Conditions near the Composition $CuIn_5S_8$. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2019, 645, 198-206.	0.6	2
187	Chiral Semiconductor Nanoparticles for Protein Catalysis and Profiling. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7371-7374.	7.2	82
188	Chiral Semiconductor Nanoparticles for Protein Catalysis and Profiling. <i>Angewandte Chemie</i> , 2019, 131, 7449-7452.	1.6	28
189	Tuning the Metal/Chalcogen Composition in Copper(I)-Chalcogenide Clusters with Cyclic (Alkyl)(amino)carbene Ligands. <i>Inorganic Chemistry</i> , 2019, 58, 3338-3348.	1.9	20
190	Electrospray deposition-induced ambient phase transition in copper sulphide nanostructures. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6387-6394.	5.2	21
191	11. Applications of metal selenium/tellurium compounds in materials science. , 2019, , 383-444.		3
192	Hybrid materials based on conjugated polymers and inorganic semiconductors as photocatalysts: from environmental to energy applications. <i>Chemical Society Reviews</i> , 2019, 48, 5454-5487.	18.7	228
193	Recent progress in quantum dot-sensitized solar cells employing metal chalcogenides. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26205-26226.	5.2	35
194	Recent advancement of imidazolate framework (ZIF-8) based nanoformulations for synergistic tumor therapy. <i>Nanoscale</i> , 2019, 11, 21030-21045.	2.8	109
195	Nanosized Copper Selenide for Mercury Removal from Indoor Air and Emergency Disposal of Liquid Mercury Leakage. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21881-21889.	1.8	28
196	Synthesis and Characterization of $CuZnSe_2$ Nanocrystals in Wurtzite, Zinc Blende, and Core-Shell Polytypes. <i>Chemistry of Materials</i> , 2019, 31, 10085-10093.	3.2	10
197	Multicomponent Plasmonic Nanoparticles: From Heterostructured Nanoparticles to Colloidal Composite Nanostructures. <i>Chemical Reviews</i> , 2019, 119, 12208-12278.	23.0	289
198	Shape-Controlled Synthesis of Copper Indium Sulfide Nanostructures: Flowers, Platelets and Spheres. <i>Nanomaterials</i> , 2019, 9, 1779.	1.9	2
199	Optically Active Nanomaterials for Bioimaging and Targeted Therapy. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 320.	2.0	44

#	ARTICLE	IF	CITATIONS
200	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
201	Electrodeposition of nanowires of a high copper content thiourea precursor of copper sulfide. <i>RSC Advances</i> , 2019, 9, 31900-31910.	1.7	7
202	Synthesis and Size-Dependent Optical Properties of Intermediate Band Gap Cu ₃ VS ₄ Nanocrystals. <i>Chemistry of Materials</i> , 2019, 31, 532-540.	3.2	39
203	Copper's Role in the Photoluminescence of Ag _{1-x} Cu _x /InS ₂ Nanocrystals, from Copper-Doped AgInS ₂ ($x = 0$) to CuInS ₂ ($x = 1$). <i>Nano Letters</i> , 2019, 19, 1318-1325.	4.5	34
204	Water-Dispersible Copper Sulfide Nanocrystals via Ligand Exchange of 1-Dodecanethiol. <i>Chemistry of Materials</i> , 2019, 31, 541-552.	3.2	37
205	Chinese sesame stick-inspired nano-fibrous scaffolds for tumor therapy and skin tissue reconstruction. <i>Biomaterials</i> , 2019, 194, 25-35.	5.7	53
206	Highly Luminescent Ag-In-Zn-S Quaternary Nanocrystals: Growth Mechanism and Surface Chemistry Elucidation. <i>Inorganic Chemistry</i> , 2019, 58, 1358-1370.	1.9	27
207	Large lateral sized two-dimensional Cu _{2-x} S nanoplates formed by Ostwald ripening. <i>Materials Letters</i> , 2019, 237, 88-91.	1.3	6
208	Applications of metal selenium/tellurium compounds in materials science. <i>Physical Sciences Reviews</i> , 2019, 4, .	0.8	4
209	Effect of solvent for tailoring the nanomorphology of multinary CuCo ₂ S ₄ for overall water splitting and energy storage. <i>Journal of Alloys and Compounds</i> , 2019, 784, 1-7.	2.8	62
210	Safer-by-Design Fluorescent Nanocrystals: Metal Halide Perovskites vs Semiconductor Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12527-12541.	1.5	66
211	A comparison study of graphene-cyclodextrin conjugates for enhanced electrochemical performance of tyramine compounds. <i>Carbohydrate Polymers</i> , 2019, 209, 258-265.	5.1	14
212	Freeze-Resistant Cadmium-Free Quantum Dots for Live-Cell Imaging. <i>ACS Applied Nano Materials</i> , 2019, 2, 661-666.	2.4	13
213	Phase transfer reaction for the preparation of stable polymer-quantum dot conjugates. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 371, 91-97.	2.0	3
214	Annealing temperature and stabilizer effects on morphological evolution of Cu ₂ CoSnS ₄ films on thermally oxidized Si wafers via direct spin-coating. <i>Journal of Alloys and Compounds</i> , 2019, 781, 1091-1100.	2.8	17
215	Superstructural Ordering in Hexagonal CuInSe ₂ Nanoparticles. <i>Chemistry of Materials</i> , 2019, 31, 260-267.	3.2	20
216	Cu _{2-x} S loaded diatom nanocomposites as novel photocatalysts for efficient photocatalytic degradation of organic pollutants. <i>Catalysis Today</i> , 2019, 335, 228-235.	2.2	27
217	Low-Dimensional Copper Selenide Nanostructures: Controllable Morphology and its Dependence on Electrocatalytic Performance. <i>ChemElectroChem</i> , 2019, 6, 574-580.	1.7	8

#	ARTICLE	IF	CITATIONS
218	Semiconductor Nanocrystals for Environmental Catalysis. , 2020, , 119-163.		1
219	Galvanic exchange-induced growth of Au nanocrystals on CuS nanoplates for imaging guided photothermal ablation of tumors. Chemical Engineering Journal, 2020, 381, 122613.	6.6	62
220	Tuning crystal phase and morphology of copper selenide nanostructures and their visible-light photocatalytic applications to degrade organic pollutants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124196.	2.3	20
221	Microwave-Assisted synthesis of Anisotropic copper-silver nanoparticles. Materials Chemistry and Physics, 2020, 241, 122348.	2.0	14
222	A stable and high-energy hybrid supercapacitor using porous Cu ₂ O-Cu _{1.8} S nanowire arrays. Journal of Materials Chemistry A, 2020, 8, 1920-1928.	5.2	29
223	Optical properties of biomass-derived nanomaterials for sensing, catalytic, biomedical and environmental applications. TrAC - Trends in Analytical Chemistry, 2020, 124, 115800.	5.8	35
224	Mechanochemistry as a versatile and scalable tool for nanomaterials synthesis: Recent achievements in Košice, Slovakia. Current Opinion in Green and Sustainable Chemistry, 2020, 24, 7-13.	3.2	17
225	Synthesis of Copper Sulfide Nanoparticles by Thermal Decomposition Approach and Morphology Dependent Peroxidase-Like Activity. Journal of Nanoscience and Nanotechnology, 2020, 20, 2763-2780.	0.9	5
226	III-VI core/shell QDs: Synthesis, characterizations and applications. Journal of Luminescence, 2020, 219, 116912.	1.5	63
227	Synthesis and Reaction Chemistry of Zinc-Diarylphosphido Clusters with Phosphorus Precursors. European Journal of Inorganic Chemistry, 2020, 2020, 57-63.	1.0	0
228	Salt-Assisted Growth of p-type Cu ₉ S ₅ Nanoflakes for p-n Heterojunction Photodetectors with High Responsivity. Advanced Functional Materials, 2020, 30, 1908382.	7.8	40
229	A Multifunctional Separator Enables Safe and Durable Lithium/Magnesium-Sulfur Batteries under Elevated Temperature. Advanced Energy Materials, 2020, 10, 1902023.	10.2	51
230	Hydrogen photogeneration using ternary CuGaS ₂ -TiO ₂ -Pt nanocomposites. International Journal of Hydrogen Energy, 2020, 45, 1510-1520.	3.8	24
231	Dispersive optical constants and electrical properties of nanocrystalline CuInS ₂ thin films prepared by chemical spray pyrolysis. Ceramics International, 2020, 46, 7396-7402.	2.3	12
232	Dark and illuminated electrical characteristics of Si-based photodiode interlayered with CuCo ₅ S ₈ nanocrystals. Journal of Materials Science: Materials in Electronics, 2020, 31, 935-948.	1.1	24
233	A Selective Reduction Approach to Construct Robust Cu _{1.8} S Truss Structures for High-Performance Sodium Storage. Matter, 2020, 2, 428-439.	5.0	35
234	Synthesis, structural and spectroscopic properties of orthorhombic compounds BaLnCu ₃ (Ln = Pr, Tj). Journal of Materials Chemistry C, 2020, 8, 2826-2836.	2.8	26
235	Preparation of quinary CuNi ₂ Zn ₂ InS ₄ nanocrystals with wurtzite structure and tunable band gap. Journal of Alloys and Compounds, 2020, 820, 153436.	2.8	5

#	ARTICLE	IF	CITATIONS
236	Made-to-Order Heterostructured Nanoparticle Libraries. <i>Accounts of Chemical Research</i> , 2020, 53, 2558-2568.	7.6	34
237	Sustainable Nanoplasmon-Enhanced Photoredox Reactions: Synthesis, Characterization, and Applications. <i>Advanced Energy Materials</i> , 2020, 10, 2002402.	10.2	44
238	Understanding the high capacity contributions of Cu ₃ PS ₄ towards lithium storage. <i>Journal of Power Sources</i> , 2020, 478, 229066.	4.0	7
239	Shaping non-noble metal nanocrystals <i>via</i> colloidal chemistry. <i>Chemical Science</i> , 2020, 11, 11394-11403.	3.7	17
240	Controllable preparation, formation mechanism and photocatalytic performance of copper base sulfide nanoparticles. <i>Materials Chemistry and Physics</i> , 2020, 254, 123504.	2.0	11
241	Biominalization of Cu ₂ S Nanoparticles by <i>Geobacter sulfurreducens</i> . <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	17
242	A Series of Homoleptic Linear Trimethylsilylchalcogenido Cuprates, Argentates and Aurates Cat[Me ₃ SiE ⁻ SiMe ₃] (M = Cu, Ag, Au; E = S, Se). <i>Inorganic Chemistry</i> , 2020, 59, 17565-17572.	1.9	3
243	Colloidal Nanoparticles of a Metastable Copper Selenide Phase with Near-Infrared Plasmon Resonance. <i>Chemistry of Materials</i> , 2020, 32, 10227-10234.	3.2	19
244	Colloidal Synthesis of Cu ^{II} S (M = V, Cr, Mn) Nanocrystals by Tuning the Copper Precursor Reactivity. <i>Chemistry of Materials</i> , 2020, 32, 9780-9786.	3.2	15
245	Solution-Processed CuSb ₂ Thin Films and Superstrate Solar Cells with CdS/In ₂ S ₃ Buffer Layers. <i>ACS Applied Energy Materials</i> , 2020, 3, 7885-7895.	2.5	25
246	Phosphine-Induced Phase Transition in Copper Sulfide Nanoparticles Prior to Initiation of a Cation Exchange Reaction. <i>Journal of the American Chemical Society</i> , 2020, 142, 13345-13349.	6.6	26
247	Efficient and stoichiometric controlled oleic acid assisted hydrothermal synthesis of Ag incorporated Cu ₂ ZnSnS ₄ chalcogenide nanoparticles. <i>Optik</i> , 2020, 221, 165342.	1.4	2
248	Cu/(Co+Sn) ratio effects on physical and photodetective properties for visible light absorbing Cu ₂ CoSnS ₄ nanoparticles via a one-pot hydrothermal process. <i>Journal of Alloys and Compounds</i> , 2020, 847, 156174.	2.8	12
249	Formation, evolution and characteristics of copper sulfide nanoparticles in the reactions of aqueous cupric and sulfide ions. <i>Materials Chemistry and Physics</i> , 2020, 255, 123600.	2.0	14
250	Monitoring the insertion of Pt into Cu ₂ xSe nanocrystals: a combined structural and chemical approach for the analysis of new ternary phases. <i>Nanoscale</i> , 2020, 12, 16627-16638.	2.8	6
251	Size-Tunable Cu ₃ Se ₂ Nanocubes Possessing Surface Plasmon Resonance Properties for Photothermal Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 8446-8452.	2.4	16
252	Accessing photoresponsive copper selenide nanomaterials and thin films through tetranuclear Cu(I) pyridylselenolate cluster. <i>Journal of Materials Science</i> , 2020, 55, 15439-15453.	1.7	14
253	Doped Zero-Dimensional Cesium Zinc Halides for High-Efficiency Blue Light Emission. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21414-21418.	7.2	97

#	ARTICLE	IF	CITATIONS
254	Doped Zero-Dimensional Cesium Zinc Halides for High-Efficiency Blue Light Emission. <i>Angewandte Chemie</i> , 2020, 132, 21598-21602.	1.6	19
255	Atomically Precise Nanocrystals. <i>Journal of the American Chemical Society</i> , 2020, 142, 15627-15637.	6.6	45
256	Synthesis and Characterization of $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}_2$ Semiconductor Nanocrystals. <i>Nanomaterials</i> , 2020, 10, 2066.	1.9	14
257	From Red to Green Luminescence via Surface Functionalization. Effect of 2-(5-Mercaptothien-2-yl)-8-(thien-2-yl)-5-hexylthieno[3,4- <i>c</i>]pyrrole-4,6-dione Ligands on the Photoluminescence of Alloyed AgInZnS Nanocrystals. <i>Inorganic Chemistry</i> , 2020, 59, 14594-14604.	1.9	5
258	Synthetic versatility, reaction pathway, and thermal stability of tetrahedrite nanoparticles. <i>Journal of Materials Chemistry C</i> , 2020, 8, 14219-14229.	2.7	4
259	Dual-Plasmonic Gold@Copper Sulfide Core-Shell Nanoparticles: Phase-Selective Synthesis and Multimodal Photothermal and Photocatalytic Behaviors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46146-46161.	4.0	52
260	Electrodeposition Fabrication of Chalcogenide Thin Films for Photovoltaic Applications. <i>Electrochem</i> , 2020, 1, 286-321.	1.7	24
261	Phase-Controlled Growth of CuInS_2 Shells to Realize Colloidal $\text{CuInSe}_2/\text{CuInS}_2$ Core/Shell Nanostructures. <i>ACS Nano</i> , 2020, 14, 11799-11808.	7.3	16
262	An Aqueous Route Synthesis of Transition-Metal-Ions-Doped Quantum Dots by Bimetallic Cluster Building Blocks. <i>Journal of the American Chemical Society</i> , 2020, 142, 16177-16181.	6.6	22
263	Precursor-Mediated Linear- and Branched-Polytypism Control in $\text{Cu}_2\text{ZnSnSe}_4$ Colloidal Nanocrystals Using a Dual-Injection Method. <i>Chemistry of Materials</i> , 2020, 32, 7254-7262.	3.2	7
264	Metal chalcogenide semiconductor nanocrystals synthesized from ion-conducting seeds and their applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 13868-13895.	2.7	17
265	Shape-controlled template-driven growth of large CuS hexagonal nanoplates. <i>Bulletin of Materials Science</i> , 2020, 43, 1.	0.8	1
266	A Fluorescent Turn-On Probe Based on Zn-doped AgIn_5S_8 Quantum Dots for Imaging of Hydrogen Sulfide in Living Cells. <i>ChemistrySelect</i> , 2020, 5, 13545-13549.	0.7	0
267	Facile sub-/supercritical water synthesis of nanoflake MoVTaNbO_x -mixed metal oxides without post-heat treatment and their catalytic performance. <i>RSC Advances</i> , 2020, 10, 39922-39930.	1.7	9
268	The dielectric performance of $\text{Au/CuCo}_5\text{S}_8/\text{p-Si}$ heterojunction for various frequencies. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 22408-22416.	1.1	13
269	Composition Tuning of Nanostructured Binary Copper Selenides through Rapid Chemical Synthesis and Their Thermoelectric Property Evaluation. <i>Nanomaterials</i> , 2020, 10, 854.	1.9	17
270	Effect of Gallium Substitution in $\text{Cu}_3\text{AlGaSn}_5$ Nanobulk Materials on Thermoelectric Properties. <i>ACS Applied Energy Materials</i> , 2020, 3, 5784-5791.	2.5	2
271	49.25% efficient cyan emissive sulfur dots via a microwave-assisted route. <i>RSC Advances</i> , 2020, 10, 17266-17269.	1.7	32

#	ARTICLE	IF	CITATIONS
272	Hybrid Ligand Exchange of Cu(In,Ga)S ₂ Nanoparticles for Carbon Impurity Removal in Solution-Processed Photovoltaics. Chemistry of Materials, 2020, 32, 5091-5103.	3.2	23
273	Synthesis and dimensional control of CsPbBr ₃ perovskite nanocrystals using phosphorous based ligands. Journal of Chemical Physics, 2020, 152, 174702.	1.2	26
274	Surface passivation enabled-structural engineering of I-III-VI ₂ nanocrystal photocatalysts. Journal of Materials Chemistry A, 2020, 8, 9951-9962.	5.2	12
275	Colloidal quantum dot hybrids: an emerging class of materials for ambient lighting. Journal of Materials Chemistry C, 2020, 8, 10676-10695.	2.7	46
276	Electrochemical Fingerprint of CuS-Hexagonal Chemistry from		

#	ARTICLE	IF	CITATIONS
290	Controllable Ag Migration To Form One-Dimensional Ag/Ag ₂ S@ZnS for Bifunctional Catalysis. ACS Applied Energy Materials, 2020, 3, 6146-6154.	2.5	18
291	Synthesis, modification and bioapplications of nanoscale copper chalcogenides. Journal of Materials Chemistry B, 2020, 8, 4778-4812.	2.9	45
292	Synthesis of water soluble CuGaS ₂ /ZnS quantum dots for ultrasensitive fluorescent detection of alkaline phosphatase based on inner filter effect. Colloids and Surfaces B: Biointerfaces, 2020, 191, 110984.	2.5	14
293	An Innovative Lithium Ion Battery System Based on a Cu ₂ S Anode Material. ACS Applied Materials & Interfaces, 2020, 12, 17396-17405.	4.0	24
294	Over 6% Efficient Cu(In,Ga)Se ₂ Solar Cell Screen-Printed from Oxides on Fluorine-Doped Tin Oxide. ACS Applied Energy Materials, 2020, 3, 3120-3126.	2.5	13
295	Theoretical investigation of spin-orbit coupling on structural, electronic and optical properties for CuAB ₂ (A = Sb, Bi; B = S, Se) compounds using Tran-Blaha-modified Becke-Johnson method: A first-principles approach. Journal of Alloys and Compounds, 2020, 830, 154621.	2.8	18
296	Core/Shell Quantum Dots. Lecture Notes in Nanoscale Science and Technology, 2020, , .	0.4	3
297	Graphene templated growth of copper sulphide "flowers" can suppress electromagnetic interference. Nanoscale Advances, 2020, 2, 3292-3303.	2.2	18
298	Hydrothermal Synthesis of Aqueous-Soluble Copper Indium Sulfide Nanocrystals and Their Use in Quantum Dot Sensitized Solar Cells. Nanomaterials, 2020, 10, 1252.	1.9	14
299	Near-infrared-emitting CIZSe/CIZS/ZnS colloidal heteronanonail structures. Nanoscale, 2020, 12, 15295-15303.	2.8	9
300	Manipulation of Precursor Reactivity for the Facile Synthesis of Heterostructured and Hollow Metal Selenide Nanocrystals. Chemistry of Materials, 2020, 32, 2304-2312.	3.2	11
301	Ag ₂ ZnSnS ₄ Nanocrystals Expand the Availability of RoHS Compliant Colloidal Quantum Dots. Chemistry of Materials, 2020, 32, 2148-2155.	3.2	17
302	Self-Assembled Monolayers of Copper Sulfide Nanoparticles on Glass as Antibacterial Coatings. Nanomaterials, 2020, 10, 352.	1.9	24
303	Seed-mediated growth of heterostructured Cu _{1.94} S ₂ MS (M = Zn, Cd, Mn) and alloyed CuNS ₂ (N = In, Ga) nanocrystals for use in structure- and composition-dependent photocatalytic hydrogen evolution. Nanoscale, 2020, 12, 6111-6120.	2.8	21
304	Cu ₂ AgInSe ₄ QDs sensitized electrospun porous TiO ₂ nanofibers as an efficient photoanode for quantum dot sensitized solar cells. Solar Energy, 2020, 199, 317-325.	2.9	19
305	Al/Zn co-incorporated CuInSe quantum dots for high efficiency quantum dot sensitized solar cells. New Journal of Chemistry, 2020, 44, 4304-4310.	1.4	8
306	Ultrasml CuS-BSA-Cu ₃ (PO ₄) ₂ nanozyme for highly efficient colorimetric sensing of H ₂ O ₂ and glucose in contact lens care solutions and human serum. Analytica Chimica Acta, 2020, 1109, 78-89.	2.6	34
307	Tailored Photoluminescence Properties of Ag(In,Ga)Se ₂ Quantum Dots for Near-Infrared <i>in Vivo</i> Imaging. ACS Applied Nano Materials, 2020, 3, 3275-3287.	2.4	32

#	ARTICLE	IF	CITATIONS
308	Designing of Seebeck coefficient and electrical conductivity in CZTS thin films for giant power factor. <i>Ceramics International</i> , 2020, 46, 9646-9655.	2.3	22
309	Rational construction of a scalable heterostructured nanorod megalibrary. <i>Science</i> , 2020, 367, 418-424.	6.0	163
310	Multinary copper-based chalcogenide semiconductor nanocrystals: synthesis and applications in light-emitting diodes and bioimaging. <i>Journal of Nanoparticle Research</i> , 2020, 22, 1.	0.8	19
311	Synthesis of the first chiral polynuclear copper(i) complex based on (R)-1-(1-phenyl)ethyl-3-(O,O-diethylthiophosphoryl)thiourea and its characterization in the solid state and solution. <i>New Journal of Chemistry</i> , 2020, 44, 3224-3231.	1.4	2
312	Correlation between Surface Chemistry and Optical Properties in Colloidal Cu ₂ O Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4810-4819.	1.5	13
313	Simple one-pot synthesis of Cu ₄ Sn ₄ nanoplates and temperature-induced phase transformation mechanism. <i>CrystEngComm</i> , 2020, 22, 1220-1229.	1.3	9
314	Improving the performance of light-emitting diodes via plasmonic-based strategies. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	30
315	Efficient Control of Atom Arrangement in Ternary Metal Chalcogenide Nanoparticles Using Precursor Oxidation State. <i>Chemistry of Materials</i> , 2020, 32, 1322-1331.	3.2	8
316	Recent advances in amphiphilic block copolymer templated mesoporous metal-based materials: assembly engineering and applications. <i>Chemical Society Reviews</i> , 2020, 49, 1173-1208.	18.7	103
317	Universal Gelation of Metal Oxide Nanocrystals via Depletion Attractions. <i>Nano Letters</i> , 2020, 20, 4007-4013.	4.5	16
318	Hetero-epitaxial growth of Cu ₂ ZnSn(S _{1-x} Se _x) ₄ -Au nanocomposites: Microstructures and corresponding impacts on optoelectronic properties. <i>Materials Characterization</i> , 2020, 163, 110289.	1.9	5
319	Mercaptoalkanoic Acid-Induced Band Gap Attenuation of Copper Selenide Quantum Dot. <i>ChemistrySelect</i> , 2020, 5, 4994-5005.	0.7	10
320	Efficient and stable catalysis of hollow Cu ₉ S ₅ nanospheres in the Fenton-like degradation of organic dyes. <i>Journal of Hazardous Materials</i> , 2020, 396, 122735.	6.5	113
321	Template synthesis of porous hierarchical Cu ₂ ZnSnS ₄ nanostructures for photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 2862-2870.	3.8	12
322	Recent progress in copper sulfide based nanomaterials for high energy supercapacitor applications. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114825.	1.9	59
323	In-Situ Chemical Synthesis, Microstructural, Morphological and Charge Transport Studies of Polypyrrole-CuS Hybrid Nanocomposites. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2021, 31, 437-445.	1.9	9
324	Synthesis of CuInS ₂ and CuInS ₂ @ZnX (X = S, Se) nanoparticles for bioimaging of cancer cells using electrochemically generated S ²⁻ and Se ²⁻ . <i>Journal of Alloys and Compounds</i> , 2021, 853, 156926.	2.8	19
325	Thermoelectric performance of Cu ₂ Se doped with rapidly synthesized gel-like carbon dots. <i>Journal of Alloys and Compounds</i> , 2021, 864, 157916.	2.8	22

#	ARTICLE	IF	CITATIONS
326	Maxwell-Boltzmann statistics to elucidate the luminescent emission bands in Co(OH) ₂ and Co ₃ O ₄ nanocrystals. <i>Optik</i> , 2021, 227, 165473.	1.4	10
327	Zn-Cu-In-S-Se Quinary Green-Alloyed Quantum-Dot-Sensitized Solar Cells with a Certified Efficiency of 14.4%. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6137-6144.	7.2	72
328	Design of experiments a powerful tool to improve the selectivity of copper antimony sulfide nanoparticles synthesis. <i>CrystEngComm</i> , 2021, 23, 397-403.	1.3	6
329	Inorganic Nanomaterials for Photothermal-Based Cancer Theranostics. <i>Advanced Therapeutics</i> , 2021, 4, 2000207.	1.6	11
330	Semiconductor photothermal materials enabling efficient solar steam generation toward desalination and wastewater treatment. <i>Desalination</i> , 2021, 500, 114853.	4.0	179
331	Nanoscale metal-organic framework composites for phototherapy and synergistic therapy of cancer. <i>Materials Chemistry Frontiers</i> , 2021, 5, 1632-1654.	3.2	30
332	Use of chalcogenides-based nanomaterials for photocatalytic heavy metal reduction and ions removal. , 2021, , 261-283.		2
333	Topological semimetal state with triply degenerate nodal points in a stable Cu ₂ Te structure. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 3116-3122.	1.3	2
334	Electronic structure: From basic principles to photocatalysis. <i>Interface Science and Technology</i> , 2021, 32, 1-53.	1.6	11
335	Influencing Factors and Research Progress of Local Surface Plasmon Resonance. <i>Advances in Analytical Chemistry</i> , 2021, 11, 182-199.	0.1	0
336	Copper nanoclusters: designed synthesis, structural diversity, and multiplatform applications. <i>Nanoscale</i> , 2021, 13, 6283-6340.	2.8	105
337	Colloidal Nanocrystals as Precursors and Intermediates in Solid State Reactions for Multinary Oxide Nanomaterials. <i>Accounts of Chemical Research</i> , 2021, 54, 754-764.	7.6	11
338	Transition metal sulfides for supercapacitors. , 2021, , 407-445.		5
339	The crystal structure of Cu ₂ GeSe ₃ and the structure-types of the I ₂ -IV-VI ₃ family of semiconducting compounds. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2021, 77, 158-167.	0.5	4
340	Zn-Cu-In-S-Se Quinary Green-Alloyed Quantum-Dot-Sensitized Solar Cells with a Certified Efficiency of 14.4%. <i>Angewandte Chemie</i> , 2021, 133, 6202-6209.	1.6	8
341	Plasmonic Cu ₂ S nanoparticles: a brief introduction of optical properties and applications. <i>Materials Advances</i> , 2021, 2, 907-926.	2.6	45
342	Colloidal semiconductor nanocrystals: synthesis, optical nonlinearity, and related device applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6686-6721.	2.7	8
343	Preparation of Cu cluster catalysts by simultaneous cooling-microwave heating: application in radical cascade annulation. <i>Nanoscale Advances</i> , 2021, 3, 1087-1095.	2.2	4

#	ARTICLE	IF	CITATIONS
344	Luminescent Photonic Crystals with Extreme UV Bandgaps Made of CuInSe ₂ Quantum Dots. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000757.	0.8	1
345	Heterogeneity induced dual luminescence properties of AgInS ₂ and AgInS ₂ -ZnS alloyed nanocrystals. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 3450-3462.	3.0	8
346	Binary and Ternary Colloidal Cu ₃ SnFe Nanocrystals for Thermoelectric Thin Films. <i>Small</i> , 2021, 17, e2006729.	5.2	8
347	Open-air solvothermal synthesis and photoresponse of plate-shaped Cu ₃ ZnInSnSe ₆ nanocrystals. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	0.8	1
348	Use of Triangular Silver Nanoplates as Low Potential Redox Mediators for Electrochemical Sensing. <i>Analytical Chemistry</i> , 2021, 93, 3295-3300.	3.2	12
349	Iron-Content-Dependent, Quasi-Static Dielectric Resonances and Oxidative Transitions in Bornite and Chalcopyrite Copper Iron Sulfide Nanocrystals. <i>Chemistry of Materials</i> , 2021, 33, 1821-1831.	3.2	17
350	Thrombolysis Combined Therapy Using CuS@SiO ₂ -PEG/uPA Nanoparticles. <i>Frontiers in Chemistry</i> , 2021, 9, 643411.	1.8	6
351	Ultra-thin 2D transition metal monochalcogenide crystals by planarized reactions. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	5
352	Organic-to-Aqueous Phase Transfer of Alloyed AgInS ₂ -ZnS Nanocrystals Using Simple Hydrophilic Ligands: Comparison of 11-Mercaptoundecanoic Acid, Dihydrolipoic Acid and Cysteine. <i>Nanomaterials</i> , 2021, 11, 843.	1.9	6
353	In-situ Growth of Cu ₄ SnS ₄ Nanoplates on Reduced Graphene Oxide (rGO) with Ligand Exchange Exhibiting Enhanced Photodegradation Property. <i>Nanotechnology</i> , 2021, . .	1.3	2
354	Analysis of the indium insertions in non-stoichiometric copper sulfide roxbyte, and their effect on the localized surface plasmon resonance of the nanocrystals. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	1.1	1
355	Induction of Wurtzite to Zinc-Blende Phase Transformation in ZnSe Nanorods During Cu(I) Cation Exchange. <i>Chemistry of Materials</i> , 2021, 33, 2398-2407.	3.2	7
356	Effect of the Annealing Atmosphere on Crystal Phase and Thermoelectric Properties of Copper Sulfide. <i>ACS Nano</i> , 2021, 15, 4967-4978.	7.3	39
357	In-situ drug generation and controllable loading: rational design of copper-based nanosystems for chemo-photothermal cancer therapy. <i>Chemical Engineering Journal</i> , 2021, 409, 128222.	6.6	49
358	Large-Scale Synthesis of Semiconducting Cu(In,Ga)Se ₂ Nanoparticles for Screen Printing Application. <i>Nanomaterials</i> , 2021, 11, 1148.	1.9	10
359	<sc> Cu ₂ AgInS ₂ Se ₂ </sc> quantum dots sensitized porous <sc> TiO ₂ </sc> nanofibers as a photoanode for high-performance quantum dot sensitized solar cell. <i>International Journal of Energy Research</i> , 2021, 45, 13563-13574.	2.2	7
360	Nanomaterials: Applications, waste-handling, environmental toxicities, and future challenges – A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105028.	3.3	133
361	Efficient quantum dot sensitized solar cells via improved loading amount management. <i>Green Energy and Environment</i> , 2023, 8, 213-223.	4.7	4

#	ARTICLE	IF	CITATIONS
362	One-Dimensional Superlattice Heterostructure Library. <i>Journal of the American Chemical Society</i> , 2021, 143, 7013-7020.	6.6	16
363	Stoichiometric phases and mechanism of crystal phase selectivity of copper-based ternary sulphides. <i>Materials Science in Semiconductor Processing</i> , 2021, 125, 105627.	1.9	7
364	Designing Nanostructured Metal Chalcogenides as Cathode Materials for Rechargeable Magnesium Batteries. <i>Small</i> , 2021, 17, e2007683.	5.2	52
365	Cracking Shells and Scrambling Eggs: Intermediate Shell Formation and Anion Rearrangement in the Cation Exchange from In-Sn to $\text{Cu}_{1.8}\text{S}$. <i>Chemistry of Materials</i> , 2021, 33, 3011-3019.	3.2	6
366	Dithiocarbamate Complexes as Single Source Precursors to Nanoscale Binary, Ternary and Quaternary Metal Sulfides. <i>Chemical Reviews</i> , 2021, 121, 6057-6123.	23.0	91
367	Experimental evidences of defect luminescence spanning red to near-infrared in strongly quantum confined sub-4Ånm CuInSe_2 quantum dots approaching crystallization limit. <i>Applied Physics Express</i> , 2021, 14, 075001.	1.1	2
368	Near-Infrared II Thermoplasmonics of Cuprous Selenide Multilayer Nanoshells: The Role of the Plasmonic Core. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4928-4935.	2.1	11
369	Real-Time Monitoring of Competing Nanoparticle Formation Pathways during Cation Exchange Using Benchtop Light Scattering. <i>Chemistry of Materials</i> , 2021, 33, 3936-3944.	3.2	6
370	Investigation of dual plasmonic core-shell Ag@CuS nanoparticles for potential surface-enhanced Raman spectroscopy-guided photothermal therapy. <i>Nanomedicine</i> , 2021, 16, 909-923.	1.7	12
371	Stoichiometric Doping of Highly Coupled Cu_2S Nanocrystal Assemblies. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26330-26338.	4.0	3
372	Near-Infrared II Plasmonic Au@Au@Ag Dot-In-Cubic Nanoframes for In Vivo Surface-Enhanced Raman Spectroscopic Detection and Photoacoustic Imaging. <i>Advanced Functional Materials</i> , 2021, 31, 2103186.	7.8	34
373	Plasmonic Saturable Absorbers. <i>Advanced Photonics Research</i> , 2021, 2, 2100003.	1.7	17
374	Shape-Controlled Synthesis of Colloidal Nanorods and Nanoparticles of Barium Titanium Sulfide. <i>Chemistry of Materials</i> , 2021, 33, 5137-5146.	3.2	17
375	Enzyme-like antibacterial activities of Cu_9S_5 nanoflowers with vacancy-type dependence. <i>Cell Reports Physical Science</i> , 2021, 2, 100456.	2.8	9
376	Dual Plasmonic $\text{Au@Cu}_2\text{S}$ Nanocomposites: Design Strategies and Photothermal Properties. <i>Chemistry - A European Journal</i> , 2021, 27, 11030-11040.	1.7	19
377	A scalable broadband plasmonic cuprous telluride nanowire-based hybrid photothermal membrane for efficient solar vapor generation. <i>Nano Energy</i> , 2021, 84, 105868.	8.2	33
378	The Preparation of CuInS_2 -ZnS-Glutathione Quantum Dots and Their Application on the Sensitive Determination of Cytochrome <i>c</i> and Imaging of HeLa Cells. <i>ACS Omega</i> , 2021, 6, 17501-17509.	1.6	13
379	Three-dimensional macroassembly of chromic hydroxide. <i>European Journal of Chemistry</i> , 2021, 12, 165-167.	0.3	0

#	ARTICLE	IF	CITATIONS
380	Recent energy targeted applications of localized surface plasmon resonance semiconductor nanocrystals: a mini-review. <i>Materials Today Energy</i> , 2021, 20, 100629.	2.5	16
381	Covalent Si δ O Bonding Enables Enhanced Photoelectrochemical Performance of Cu ₂ S/Fe ₂ O ₃ Heterojunction for Water Splitting. <i>Small</i> , 2021, 17, e2100320.	5.2	62
382	Localized surface plasmon resonance properties and biomedical applications of copper selenide nanomaterials. <i>Materials Today Chemistry</i> , 2021, 20, 100402.	1.7	37
383	Controlled Synthesis of CuS and Cu ₉ S ₅ and Their Application in the Photocatalytic Mineralization of Tetracycline. <i>Catalysts</i> , 2021, 11, 899.	1.6	9
384	High piezo-photocatalytic efficiency of H ₂ production by CuS/ZnO nanostructure under solar and ultrasonic exposure. <i>Materials Letters</i> , 2021, 294, 129752.	1.3	11
385	Synthesis of flower and biconcave shape CuS: Enhancement of super-capacitance properties via Ni@CuS nanocomposite formation. <i>Solid State Sciences</i> , 2021, 117, 106631.	1.5	7
386	Doping-mediated stabilization of copper vacancies to promote thermoelectric properties of Cu ₂ xS. <i>Nano Energy</i> , 2021, 85, 105991.	8.2	26
387	Growth of nanostructured cobalt sulfide-based nanocomposite as faradaic binder-free electrode for supercapattery. <i>Journal of Energy Storage</i> , 2021, 39, 102599.	3.9	25
388	Synthesis, structure, melting and optical properties of three complex orthorhombic sulfides BaDyCuS ₃ , BaHoCuS ₃ and BaYbCuS ₃ . <i>Materials Research Bulletin</i> , 2021, 140, 111314.	2.7	11
389	A Competitive Reaction Strategy toward Binary Metal Sulfides for Tailoring Electromagnetic Wave Absorption. <i>Advanced Functional Materials</i> , 2021, 31, 2105018.	7.8	133
390	Gram-scale Production of Photothermally Active Tetrahedrite Nanoparticles for Solar-Driven Water Evaporation. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3326-3330.	1.7	2
391	Temperature-dependent phase transition of CuZnS thin films and its effects on morphological, optical and electrical properties. <i>Thin Solid Films</i> , 2021, 733, 138810.	0.8	3
392	Fabrication of metal chalcogenide thin films by a facile thermolysis process under air ambient using metal-3-mercaptopropionic acid complex. <i>Materials Research Bulletin</i> , 2021, 141, 111346.	2.7	4
393	High-performance aqueous polysulfide-iodide flow battery realized by an efficient bifunctional catalyst based on copper sulfide. <i>Materials Today Energy</i> , 2021, 21, 100746.	2.5	14
394	Optothermal properties of plasmonic inorganic nanoparticles for photoacoustic applications. <i>Photoacoustics</i> , 2021, 23, 100281.	4.4	18
395	Investigation on in-situ thermal treatment of room-temperature pulsed laser deposition technique: How to improve Cu ₂ ZnSnS ₄ films for photoelectric application without sulfurization. <i>Applied Surface Science</i> , 2021, 562, 150111.	3.1	1
396	Self-assembly of mercury-ion recognizing CuS nanocrystals into 3D sponge-like aerogel towards superior mercury capturer with outstanding selectivity and efficiency. <i>Chemical Engineering Journal</i> , 2021, 426, 130868.	6.6	10
397	High-performance CuS/n-Si heterojunction photodetectors prepared by e-beam evaporation of Cu films as precursor layers. <i>Journal of Alloys and Compounds</i> , 2021, 884, 161121.	2.8	13

#	ARTICLE	IF	CITATIONS
398	CuS, In ₂ S ₃ and CuInS ₂ nanoparticles by microwave-assisted solvothermal route and their electrochemical studies. <i>Journal of Physics and Chemistry of Solids</i> , 2022, 160, 110319.	1.9	13
399	Tunable structural, morphological and optical properties of undoped, Mn, Ni and Ag-doped CuInS ₂ thin films prepared by AACVD. <i>Materials Science in Semiconductor Processing</i> , 2022, 137, 106224.	1.9	5
400	Tunable structural and optical properties of CuInS ₂ colloidal quantum dots as photovoltaic absorbers. <i>RSC Advances</i> , 2021, 11, 21351-21358.	1.7	8
401	Positively charged collective oscillations induce efficient Au@Cu ₂ S core/shell nanorods fibril degradation in the presence of novel Au@Cu ₂ S core/shell nanorods. <i>Chemical Communications</i> , 2021, 57, 6384-6387.	2.2	9
402	Photocatalytic H ₂ evolution of selective phase CZTS synthesized by ultrasonic spray pyrolysis method. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 4125-4131.	1.1	7
403	Deterministic synthesis of Cu ₉ S ₅ flakes assisted by single-layer graphene arrays. <i>Nanoscale Advances</i> , 2021, 3, 1352-1361.	2.2	1
404	Controlled synthesis of luminescent CuInS ₂ /ZnS/ZnS core/shell/shell nanoheterostructures. <i>CrystEngComm</i> , 0, , .	1.3	1
405	Electronic Structure Insights into the Tunable Luminescence of CuAlxFe _{1-x} S ₂ /ZnS Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 2511-2518.	1.5	6
406	A facile route toward hydrophilic plasmonic copper selenide nanocrystals: new perspectives for SEIRA applications. <i>New Journal of Chemistry</i> , 2021, 45, 15753-15760.	1.4	3
407	Cation Exchange Protocols to Radiolabel Aqueous Stabilized ZnS, ZnSe, and CuFeS ₂ Nanocrystals with ⁶⁴ Cu for Dual Radio- and Photo-thermal Therapy. <i>Advanced Functional Materials</i> , 2020, 30, 2002362.	7.8	11
408	The chemistry of colloidal semiconductor nanocrystals: From metal-chalcogenides to emerging perovskite. <i>Coordination Chemistry Reviews</i> , 2020, 418, 213333.	9.5	23
409	Seeded Growth Combined with Cation Exchange for the Synthesis of Anisotropic Cu ₂ S/ZnS, Cu ₂ S, and CuInS ₂ Nanorods. <i>Chemistry of Materials</i> , 2021, 33, 102-116.	3.2	12
410	Organophosphorus chemistry based on elemental phosphorus: advances and horizons. <i>Russian Chemical Reviews</i> , 2020, 89, 225-249.	2.5	31
411	Free-standing NiCoSe ₂ nanostructure on Ni foam via electrodeposition as high-performance asymmetric supercapacitor electrode. <i>Nanotechnology</i> , 2020, 31, 335706.	1.3	20
412	Rational design of multinary copper chalcogenide nanocrystals for photocatalytic hydrogen evolution. <i>Journal of Semiconductors</i> , 2020, 41, 091706.	2.0	8
413	Self-powered lead-free quantum dot plasmonic phototransistor with multi-wavelength response. <i>Photonics Research</i> , 2019, 7, 149.	3.4	6
414	<i>In situ</i> insight into thermally-induced reversible transitions of the crystal structure and photoluminescence properties in a Cu ₂ Te nanoplate. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26095-26104.	5.2	8
415	Starch Capped Atomically Thin CuS Nanocrystals for Efficient Photothermal Therapy. <i>Small</i> , 2021, 17, e2103461.	5.2	25

#	ARTICLE	IF	CITATIONS
416	Optical Transitions in Silver Indium Selenide Nanocrystals: Implications for Light-Emitting and Light-Imaging Applications. ACS Applied Nano Materials, 2021, 4, 11239-11248.	2.4	3
417	Improving Solution Processed CIGS _{Se} Devices Through Colloidal Nanoparticle Ligand Exchange. , 2020, , ,		0
418	Covellite Nanodisks and Digenite Nanorings: Colloidal Synthesis, Phase Transitions, and Optical Properties. Chemistry of Materials, 2021, 33, 8546-8558.	3.2	10
420	Cation Exchange on Colloidal Copper Selenide Nanosheets: A Route to Two-Dimensional Metal Selenide Nanomaterials. Journal of Materials Chemistry C, 0, , ,	2.7	6
422	Ultrafast optical switches and pulse lasers based on strong nonlinear optical response of plasmon nanostructures. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 189101.	0.2	0
423	Unique Luminescent Properties of Composition-/Size-Selected Aqueous Ag-In-S and Core/Shell Ag-In-S/ZnS Quantum Dots. Lecture Notes in Nanoscale Science and Technology, 2020, , 67-122.	0.4	2
424	Synthesis of metal sulfides via ionic liquid-mediated assembly strategy and their photocatalytic degradation of dyes in water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 633, 127848.	2.3	11
425	Consolidation of 2D Frameworks Based on Corner-Shared Supertetrahedral T ₅ Clusters via M ₂ OS ₂ Units for Tunable Photoluminescent and Semiconductor Properties. Inorganic Chemistry, 2021, 60, 18307-18313.	1.9	2
426	Review of Functionalized Nanomaterials for Photothermal Therapy of Cancers. ACS Applied Nano Materials, 2021, 4, 11353-11385.	2.4	75
427	Tuning the Self-Trapped Emission: Reversible Transformation to 0D Copper Clusters Permits Bright Red Emission in Potassium and Rubidium Copper Bromides. ACS Energy Letters, 2021, 6, 4383-4389.	8.8	16
428	Direct Synthesis of Sulfide-Capped Nanoparticles for Carbon-Free Solution-Processed Photovoltaics. ACS Applied Nano Materials, 2021, 4, 11466-11472.	2.4	3
429	Localized Surface Plasmon Resonance in Colloidal Copper Sulphide (Cu _{2-x} S, x=0-1) Nanocrystals and Its Applications. Environmental Chemistry for A Sustainable World, 2022, , 1-23.	0.3	0
430	One-step synthesis of high-quality CdTe quantum dots using hydroxylamine hydrochloride to reduce sodium tellurite. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	0
431	Synthesis and structure design of In ^{III} VI quantum dots for white light-emitting diodes. Materials Chemistry Frontiers, 2022, 6, 418-429.	3.2	18
432	Electrochemiluminescent emission potential tunable Cu ^{II} Zn ^{II} In ^{III} S/ZnS nanocrystals for multiplex microRNAs potential-resolved detection. Biosensors and Bioelectronics, 2022, 201, 113980.	5.3	15
434	Facile preparation of Cu _{2-x} S supernanoparticles with an unambiguous SERS enhancement mechanism. Chemical Engineering Journal, 2022, 434, 134457.	6.6	20
435	High-Performance Memristors Based on Ultrathin 2D Copper Chalcogenides. Advanced Materials, 2022, 34, e2108313.	11.1	45
436	Open-Framework Chalcogenide Materials - from isolated clusters to highly ordered structures - and their photocatalytic applications. Coordination Chemistry Reviews, 2022, 453, 214243.	9.5	11

#	ARTICLE	IF	CITATIONS
437	Superhydrophobic palmitic acid modified Cu(OH)2/CuS nanocomposite-coated copper foam for efficient separation of oily wastewater. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 637, 128249.	2.3	16
438	Structural, Morphological and Thermoelectric Properties Of Copper Deficient and Excessive Cu _{2-X} S Nanoparticles with (X=0-0.3). <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
439	Lenvatinib and Cu ₂ S nanocrystals co-encapsulated in poly(<i>d</i> -lactide-co-glycolide) for synergistic chemo-photothermal therapy against advanced hepatocellular carcinoma. <i>Journal of Materials Chemistry B</i> , 2021, 9, 9908-9922.	2.9	10
440	Copper-induced tumor cell death mechanisms and antitumor theragnostic applications of copper complexes. <i>Nanomedicine</i> , 2022, 17, 303-324.	1.7	138
441	Ultrathin covalent and cuprophilic interaction-assembled copper-sulfur monolayer in organic metal chalcogenide for oriented photoconductivity. <i>Chemical Communications</i> , 2022, 58, 2858-2861.	2.2	7
442	Indium(III) Chloride as a Precursor in the Synthesis of Ternary (Ag-In-S) and Quaternary (Ag-In-Zn-S) Nanocrystals. <i>Chemistry of Materials</i> , 2022, 34, 809-825.	3.2	7
443	Two-dimensional copper based colloidal nanocrystals: synthesis and applications. <i>Nanoscale</i> , 2022, 14, 2885-2914.	2.8	13
444	Pressure-induced bandgap engineering and photoresponse enhancement of wurtzite CuInS ₂ nanocrystals. <i>Nanoscale</i> , 2022, 14, 2668-2675.	2.8	5
445	Modification of metallic and non-metallic sites in pentasupertetrahedral chalcogenidometalate clusters for third-order nonlinear optical response. <i>Dalton Transactions</i> , 2022, 51, 2660-2663.	1.6	2
446	Sample preparation induced phase transitions in solution deposited copper selenide thin films. <i>RSC Advances</i> , 2021, 12, 277-284.	1.7	4
447	Study on electrochemical performance of temperature-dependent Cu-Sb-S system. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 9650-9659.	1.1	5
448	Nanoscale Metal-Organic Frameworks and Their Nanomedicine Applications. <i>Frontiers in Chemistry</i> , 2021, 9, 834171.	1.8	15
449	A flexible copper sulfide composite membrane with tunable plasmonic resonance absorption for near-infrared light-driven seawater desalination. <i>Environmental Science Advances</i> , 2022, 1, 110-120.	1.0	3
450	Copper Sulfide-based Nanomaterials for Photothermal Applications. <i>RSC Nanoscience and Nanotechnology</i> , 2022, , 158-185.	0.2	1
451	„é“œ(l)ç³ç±³â>çç°‡çš,,â•æ^â€ç»“æž,,èš,,â¼«ä,žã...%ç”µæ€šè“. <i>Chinese Science Bulletin</i> , 2022, , .	0.4	1
452	Chemically Driven Phase Segregation of Alloy Nanoparticles: A Versatile Route to Dual-Plasmonic Gold@Copper Chalcogenide Heteronanostructures. <i>Chemistry of Materials</i> , 2022, 34, 1965-1975.	3.2	6
453	Synthesis and structural characterization using the Rietveld method of the quaternary compound CuAlGeSe4. <i>Revista Mexicana De Física</i> , 2022, 68, .	0.2	0
454	A review on advancements, challenges, and prospective of copper and non-copper based thin-film solar cells using facile spray pyrolysis technique. <i>Solar Energy</i> , 2022, 234, 81-102.	2.9	45

#	ARTICLE	IF	CITATIONS
455	Recent Progress in the Synthesis and Applications of Composite Photocatalysts: A Critical Review. <i>Small Methods</i> , 2022, 6, e2101395.	4.6	69
456	Chalcogenoethers as convenient synthons for low-temperature solution-phase synthesis of metal chalcogenide nanocrystals. , 2022, , 201-218.		1
457	Commercialization of single-source precursors: Applications, intellectual property, and technology transfer. , 2022, , 563-600.		2
458	Precursor design and impact of structure on the fabrication of materials. , 2022, , 3-53.		1
459	Single-source precursors for main group metal sulfides and solar cell applications. , 2022, , 357-387.		1
460	Coinage metal chalcogenides via single-source precursors. , 2022, , 531-562.		1
461	Novel solution synthesis of the overlooked cubic phase Cu ₂ GeTe ₃ nanocrystals for optoelectronic devices. <i>Dalton Transactions</i> , 2022, 51, 5792-5795.	1.6	5
462	Microscopic-Scale Examination of the Black and Orange "Yellow Colours of Architectural Glazes from AÅur, Khorsabad and Babylon in Ancient Mesopotamia. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 311.	0.8	5
463	Validation of Density Functional Theory Methods for Predicting the Optical Properties of Cu-Based Multinary Chalcogenide Semiconductors. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4684-4697.	1.5	6
464	A New Application of Solvent Extraction to Separate Copper from Extreme Acid Mine Drainage Producing Solutions for Electrochemical and Biological Recovery Processes. <i>Mine Water and the Environment</i> , 2022, 41, 387-401.	0.9	6
465	Band Structure Engineering and Defect Passivation of Cu _x Ag _{1-x} In ₂ /ZnS Quantum Dots to Enhance Photoelectrochemical Hydrogen Evolution. <i>ACS Omega</i> , 2022, 7, 9642-9651.	1.6	4
466	Tunable crystal structure of CuZnSnS nanocrystals for improving photocatalytic hydrogen evolution enabled by copper element regulation. <i>Journal of Semiconductors</i> , 2022, 43, 032701.	2.0	13
467	Templated Synthesis of Ultrathin Indium-Based Ternary Metal Sulfide (MIn ₂ S ₄ ,) Tj ETQq0.0.0 rgBT /Overlock 1 2022, 5, 4877-4884.	2.5	9
468	Biosynthesis and characterization of carbon quantum Dots@CuS composite using water hyacinth leaves and its usage in photocatalytic dilapidation of Brilliant Green dye. <i>Materials Chemistry and Physics</i> , 2022, 281, 125921.	2.0	17
469	Daphnia magna and mixture toxicity with nanomaterials " Current status and perspectives in data-driven risk prediction. <i>Nano Today</i> , 2022, 43, 101430.	6.2	20
470	Environmental-assisted shape-controlled synthesis and electrocatalytic performance of CuS nanostructures for vanillin detection in commercial food products. <i>Applied Materials Today</i> , 2022, 27, 101428.	2.3	10
471	Sulfurization-derived Cu ⁰ "Cu ⁺ sites for electrochemical CO ₂ reduction to ethanol. <i>Journal of Power Sources</i> , 2022, 533, 231393.	4.0	14
472	Synergetic Optimization of Electrical and Thermal Transport Properties by Cu Vacancies and Nanopores in Cu ₂ Se. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58936-58948.	4.0	14

#	ARTICLE	IF	CITATIONS
473	Phase-Controlled Synthesis and Quasi-Static Dielectric Resonances in Silver Iron Sulfide (AgFeS) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	5.2	2
474	Heat-Up Colloidal Synthesis of Shape-Controlled Cu-Se-S Nanostructures Role of Precursor and Surfactant Reactivity and Performance in N ₂ Electroreduction. <i>Nanomaterials</i> , 2021, 11, 3369.	1.9	6
475	Reversible Zn ²⁺ -induced 3D self-assembly aerogel of carboxyl modified copper indium diselenide quantum dots mechanism and application for inkjet printing anti-counterfeiting. <i>Soft Matter</i> , 2022, , .	1.2	0
476	Cu _x S Thin Films for Printed Memory Cells and Temperature Sensors. <i>Flexible and Printed Electronics</i> , 0, , .	1.5	0
477	Tuning Crystal Plane Orientation in Multijunction and Hexagonal Single Crystalline CsPbBr ₃ Perovskite Disc Nanocrystals. <i>Journal of the American Chemical Society</i> , 2022, 144, 7430-7440.	6.6	9
478	Synergistic Engineering of Sulfur Vacancies and Heterointerfaces in Copper Sulfide Anodes for Aqueous Zn-Ion Batteries with Fast Diffusion Kinetics and an Ultralong Lifespan. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	39
479	Phosphine free synthesis of copper telluride nanocrystals in 1-D and 2-D shapes using Diphylditelluride (DPDTe) as an air-stable source.. <i>Nanotechnology</i> , 2022, , .	1.3	3
480	Structural, morphological and thermoelectric properties of Copper deficient and excessive Cu _{2-x} S nanoparticles with (x=0-0.3). <i>Surfaces and Interfaces</i> , 2022, 30, 101965.	1.5	2
481	Self-assembled Cu _{2-x} S nanochains network with tunable diameters for efficient photothermal conversion. <i>Journal of Alloys and Compounds</i> , 2022, 910, 164958.	2.8	4
482	Advanced Dual-Function Hollow Cu ₂ -Xs-Based Polyimide Composite Window Film Combining Near-Infrared Thermal Shielding and Formaldehyde Photodegradation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
483	Water-Based Synthesis of Copper Chalcogenide Structures and Their Photodynamic Immunomodulatory Activities on Mammalian Macrophages. <i>Applied Biochemistry and Biotechnology</i> , 2022, 194, 3677-3688.	1.4	2
484	Sacrificial Dopant to Enhance the Activity and Durability of Electrochemical N ₂ Reduction Catalysis. <i>ACS Catalysis</i> , 2022, 12, 5684-5697.	5.5	12
485	Glow and Flash Adjustable Chemiluminescence with Tunable Waveband from the Same CuInS ₂ @ZnS Nanocrystal Luminophore. <i>Analytical Chemistry</i> , 2022, 94, 6902-6908.	3.2	4
486	Design of Experiments and Theoretical Investigation for Photoluminescence Optimization of Copper Aluminum Sulfide Nanoparticles through Controlling Crystalline Defects. <i>Crystal Growth and Design</i> , 0, , .	1.4	3
487	Heteroatom Modification of Heterostructured CuS/Mn ₃ O ₄ with Rich Defects for Solid-State Supercapacitors. <i>Energy & Fuels</i> , 2022, 36, 5433-5443.	2.5	5
488	Improvement of Plasmonic CuS Nanocrystals Optoelectronic Properties via Cation Exchange for Infrared Detection Enhancement. <i>ACS Applied Electronic Materials</i> , 2022, 4, 2203-2216.	2.0	10
489	Preparation and Investigation of Thermoelectric Properties of Cu ₃ Sb ₅ S ₄ -Cu ₃ SbSe ₄ Solid Solutions. <i>Journal of Korean Institute of Metals and Materials</i> , 2022, 60, 384-390.	0.4	1
490	The impact of a magnetic ion on the thermoelectric properties of copper-rich quaternary selenides. <i>JPhys Energy</i> , 2022, 4, 034001.	2.3	1

#	ARTICLE	IF	CITATIONS
491	Chemical Interface Damping in Nonstoichiometric Semiconductor Plasmonic Nanocrystals: An Effect of the Surrounding Environment. <i>Langmuir</i> , 2022, 38, 5339-5350.	1.6	3
492	Enhancement of the structural, optical and thermoelectric properties of thermally evaporated AgMoO ₃ thin film by post-annealing. <i>Optical Materials</i> , 2022, 128, 112406.	1.7	7
493	Copper-based metal-organic frameworks for biomedical applications. <i>Advances in Colloid and Interface Science</i> , 2022, 305, 102686.	7.0	79
494	Optoelectronic and vibrational properties of chalcogenides VCu ₃ Q ₄ (Q= Se, Te) for potential p-type transparent conducting materials: HSE06 approach. <i>Journal of Solid State Chemistry</i> , 2022, 312, 123190.	1.4	4
495	Colloidal synthesis of AgGa(S _{1-x} Se _x) ₂ solid solution nanocrystals with composition-dependent crystal phase for efficient photocatalytic degradation of methyl violet. <i>CrystEngComm</i> , 2022, 24, 4540-4545.	1.3	2
496	Cu ₉ S ₅ nanoparticles encapsulated in N, S co-doped carbon nanofibers as anodes for high-performance lithium-ion and sodium-ion batteries. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 334001.	1.3	4
497	Fast photodetection in eco-friendly wurtzite CuInS ₂ nanocrystals based photodiode with a planar geometry. <i>Materials Science in Semiconductor Processing</i> , 2022, 148, 106823.	1.9	4
498	Plasmon Resonances and Structures of Chalcogenide Alloy Nanocrystals. <i>Chemistry of Materials</i> , 2022, 34, 4992-4999.	3.2	6
499	The Rise and Future of Discrete Organic-Inorganic Hybrid Nanomaterials. <i>ACS Physical Chemistry Au</i> , 2022, 2, 364-387.	1.9	12
500	Vacancy assisted growth of copper tantalum sulfide nanocrystals. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19925-19934.	5.2	2
501	Plasmonic metal oxides and their biological applications. <i>Materials Horizons</i> , 2022, 9, 2288-2324.	6.4	7
502	Nanocrystals for electrochemical energy storage devices. , 2022, , 409-426.		0
503	Rational design, two-step synthesis of Cu ₂ GeS ₃ crystal with enhanced thermoelectric performance by Te alloying. <i>Journal of Materials Science: Materials in Electronics</i> , 0, , .	1.1	0
504	W ⁵⁺ -W ⁵⁺ Pair Induced LSPR of W ₁₈ O ₄₉ to Sensitize ZnIn ₂ S ₄ for Full-Spectrum Solar-Light-Driven Photocatalytic Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	48
505	Properties of Free Charge Carriers Govern Exciton Polarization in Plasmonic Semiconductor Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5545-5552.	2.1	5
506	High area-capacity Mg batteries enabled by sulfur/copper integrated cathode design. <i>Journal of Energy Chemistry</i> , 2022, 72, 370-378.	7.1	9
507	Sulfur-source-dependent phase-selective preparation of Cu ₃ NiInSnS ₆ nanocrystals and their optical and magnetic properties. <i>Dalton Transactions</i> , 0, , .	1.6	1
508	Coherent InP/ZnS core@shell quantum dots with narrow-band green emissions. <i>Nanoscale</i> , 2022, 14, 9900-9909.	2.8	10

#	ARTICLE	IF	CITATIONS
509	Phase Engineering of Defective Copper Selenide toward Robust Lithium–Sulfur Batteries. <i>ACS Nano</i> , 2022, 16, 11102-11114.	7.3	50
510	Energy-Saving Pathways for Thermoelectric Nanomaterial Synthesis: Hydrothermal/Solvothermal, Microwave-Assisted, Solution-Based, and Powder Processing. <i>Advanced Science</i> , 2022, 9, .	5.6	60
511	Nuclease-propelled target dual-recycling amplification strategy integrated with cascaded sensitization effect of ZnO/CuInS ₂ /Ag ₂ Se photoactive structures for lab-on-paper photoelectrochemical microRNA bioassay. <i>Sensors and Actuators B: Chemical</i> , 2022, 369, 132374.	4.0	9
512	Ternary and Quaternary Nanocrystalline Cu-Based Sulfides as Perspective Antibacterial Materials Mechanochemically Synthesized in a Scalable Fashion. <i>ACS Omega</i> , 2022, 7, 27164-27171.	1.6	8
513	Photo-assisted reductive cleavage and catalytic hydrolysis-mediated persulfate activation by mixed redox-couple-involved CuFeS ₂ for efficient trichloroethylene oxidation in groundwater. <i>Water Research</i> , 2022, 222, 118885.	5.3	10
514	Photocatalytic response of CuCdS ₂ nanoparticles under solar irradiation against degradation of Methylene Blue dye. <i>Chemical Physics Letters</i> , 2022, 804, 139883.	1.2	2
515	Comparative Study of Electrical Properties of Chalcogenide Films Produced by Reaction of Cu, Ag, Ni and Nicu with Sb ₂ S ₃ in Hot Wall Epitaxy. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
516	Expeditious Electrochemical Synthesis of Mesoporous Chalcogenide Flakes: Mesoporous Cu ₂ Se as a Potential High-Rate Anode for Sodium-Ion Battery. <i>Small</i> , 2022, 18, .	5.2	6
517	Aqueous-Based Synthesis of Photocatalytic Copper Sulfide Using Sulfur Waste as Sulfurizing Agent. <i>Materials</i> , 2022, 15, 5253.	1.3	1
518	Anisotropic Thermal Expansion and Electronic Structure of LiInSe ₂ . <i>Molecules</i> , 2022, 27, 5078.	1.7	10
519	Vacancy defect-promoted nanomaterials for efficient phototherapy and phototherapy-based multimodal Synergistic Therapy. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	1
520	Selective Epitaxial Hybrid of Tripartite Semiconducting Sulfides for Enhanced Solar-to-Hydrogen Conversion. <i>Small</i> , 0, , 2202109.	5.2	5
521	Advanced Dual-Function Hollow Copper-Sulfide-Based Polyimide Composite Window Film Combining Near-Infrared Thermal Shielding and Organic Pollutants™ Photodegradation. <i>Polymers</i> , 2022, 14, 3382.	2.0	1
522	Biodegradable copper telluride nanosheets for redox-homeostasis breaking-assisted chemodynamic cancer therapy boosted by mild-photothermal effect. <i>Chemical Engineering Journal</i> , 2022, 450, 138348.	6.6	5
523	Tuning plasmonic p–n junction for efficient infrared-light-responsive hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2022, 318, 121860.	10.8	13
524	Mechanochemical preparation of well-structured copper sulfide for elemental mercury sequestration from coal combustion flue gas. <i>Chemical Engineering Journal</i> , 2023, 452, 139278.	6.6	17
525	Tunable surface plasmonic resonance and infrared self-focusing propagation in Cu _x S nanoparticle suspensions. <i>Optics Communications</i> , 2023, 527, 128992.	1.0	3
526	All-Optical Detection of Biocompatible Quantum Dots. , 2022, , 35-65.		0

#	ARTICLE	IF	CITATIONS
527	Facile one pot synthesis of highly photoresponsive coinage metal selenides (Cu _{1.8} Se and Tj ETQqO O O rgBT /Overlock 10 Dalton Transactions, 2022, 51, 12670-12685.	1.6	8
528	Ultra-mild synthesis of nanometric metal chalcogenides using organyl chalcogenide precursors. Chemical Communications, 2022, 58, 10136-10153.	2.2	10
529	Halide Perovskite Cluster Precursors: A Paradigm for Obtaining Structure- and Color-Tunable Light-Emitting Nanocrystals. ACS Energy Letters, 2022, 7, 3177-3186.	8.8	7
530	CuBiSe ₂ Quantum Dots as Ecofriendly Photosensitizers for Solar Cells. ACS Sustainable Chemistry and Engineering, 2022, 10, 13176-13184.	3.2	3
531	A library of polytypic copper-based quaternary sulfide nanocrystals enables efficient solar-to-hydrogen conversion. Nature Communications, 2022, 13, .	5.8	14
532	Ligand-Engineered Quantum Dots Decorated Heterojunction Photoelectrodes for Self-Biased Solar Water Splitting. Small, 2022, 18, .	5.2	12
533	Solution-Processed Inorganic Thermoelectric Materials: Opportunities and Challenges. Chemistry of Materials, 2022, 34, 8471-8489.	3.2	12
534	Evolution of nanomaterial Electrochemiluminescence luminophores towards biocompatible materials. Bioelectrochemistry, 2023, 149, 108286.	2.4	2
535	Seed-Mediated Synthesis of Photoluminescent Cu ²⁺ Zn ²⁺ In ²⁺ S Nanoplatelets. Chemistry of Materials, 2022, 34, 9251-9260.	3.2	6
536	Precisely synthesized LiF-tipped CoF ₂ -nanorod heterostructures improve energy storage capacities. Chemical Science, 2022, 13, 12367-12373.	3.7	5
537	Design Principles of Colloidal Nanorod Heterostructures. Chemical Reviews, 2023, 123, 3761-3789.	23.0	16
538	Maneuvering Tellurium Chemistry to Design Metal-Telluride Heterostructures for Diverse Applications. Chemistry of Materials, 2022, 34, 9329-9343.	3.2	8
539	A tandem photoelectrochemical cell based on Cu _{2-x} Te nanocrystals for solar energy conversion to hydrogen. Solar Energy Materials and Solar Cells, 2023, 250, 112050.	3.0	0
540	Comparative study of electrical properties of chalcogenide films produced by reaction of Cu, Ag, Ni and NiCu with Sb ₂ S ₃ in hot wall epitaxy. Journal of Alloys and Compounds, 2023, 931, 167565.	2.8	2
541	Performance improvement of Cu ₂ ZnSn(S,Se) ₄ solar cells by introducing the tiny rare-earth Ce ³⁺ . Applied Surface Science, 2023, 610, 155439.	3.1	5
542	A high-performance Cu-Al dual-ion battery realized by high-concentration Cl ⁻ electrolyte and CuS cathode. Scientific Reports, 2022, 12, .	1.6	3
543	Highly active and stable Cu ₉ S ₅ -MoS ₂ heterostructures nanocages enabled by dual-functional Cu electrocatalyst with enhanced potassium storage. Journal of Materials Science and Technology, 2023, 143, 107-116.	5.6	13
544	Biological investigation of sonochemically synthesized CZTS nanoparticles. Applied Surface Science Advances, 2022, 12, 100338.	2.9	11

#	ARTICLE	IF	CITATIONS
545	Hot hole transfer at the plasmonic semiconductor/semiconductor interface. <i>Nanoscale</i> , 2023, 15, 657-666.	2.8	5
546	Rational construction of ZnO/CuS heterostructures-modified PVDF nanofiber photocatalysts with enhanced photocatalytic activity. <i>RSC Advances</i> , 2022, 12, 34107-34116.	1.7	9
547	Dynamically tunable multicolor emissions from zero-dimensional Cs ₃ LnCl ₆ (Ln: europium and terbium) nanocrystals with wide color gamut. <i>Nanoscale</i> , 2023, 15, 1513-1521.	2.8	2
548	Continuous Flow Aqueous Synthesis of Highly Luminescent AgInS ₂ and AgInS ₂ /ZnS Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2022, 126, 20524-20534.	1.5	10
549	Precursor-Mediated Colloidal Synthesis of Compositionally Tunable Cu ^{II} Sb ^{III} M ^{II} S (M = Zn, Co, and Ni) Nanocrystals and Their Transport Properties. <i>Chemistry of Materials</i> , 2022, 34, 10528-10537.	3.2	3
550	NIR-responsive 5-Fluorouracil delivery using polydopamine coated polygonal CuS nanoplates for synergistic chemo-photothermal therapy on breast cancer. <i>Journal of Drug Delivery Science and Technology</i> , 2023, 80, 104092.	1.4	6
551	Phonon Raman spectroscopy of nanocrystalline multinary chalcogenides as a probe of complex lattice structures. <i>Journal of Physics Condensed Matter</i> , 2023, 35, 103001.	0.7	4
552	Controlling optical properties and electronic energy structure of III-VI semiconductor quantum dots for improving their photofunctions. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2023, 54, 100569.	5.6	9
553	Customized dielectric-magnetic balance enhanced electromagnetic wave absorption performance in CuxS/CoFe ₂ O ₄ composites. <i>Chemical Engineering Journal</i> , 2023, 457, 140876.	6.6	26
554	Copper selenide sensitized low-cost porous coordination polymers towards efficient capture trace gaseous elemental mercury. <i>Chemical Engineering Journal</i> , 2023, 457, 141288.	6.6	8
555	Multimetallic post-synthetic modifications of copper selenide nanoparticles. <i>Nanoscale</i> , 2023, 15, 6655-6663.	2.8	1
556	Anisotropic Heavy-Metal-Free Semiconductor Nanocrystals: Synthesis, Properties, and Applications. <i>Chemical Reviews</i> , 2023, 123, 3625-3692.	23.0	9
557	High-performance broadband photodetector based on plasmonic semiconductor-semiconductor p-n Cu _{1.8} S/AZO interface. <i>Surfaces and Interfaces</i> , 2023, 37, 102725.	1.5	1
558	CuS as bifunctional catalyst for enhancing photocatalytic degradation efficiency of Bi ₄ Ti ₃ O ₁₂ . <i>Optical Materials</i> , 2023, 138, 113700.	1.7	2
559	First principles study on electronic and optical properties of Cu ₂ CoGeS ₄ for photovoltaic conversion and photocatalytic applications. <i>Materials Research Bulletin</i> , 2023, 164, 112235.	2.7	4
560	Recent Progress in Controlled Nanostructure of Colloidal Nanocrystal Powders for Efficient Light Emission. <i>KONA Powder and Particle Journal</i> , 2024, 41, 172-182.	0.9	0
561	Kinetic Analysis of the Cation Exchange in Nanorods from Cu ₂ S to CuInS ₂ : Influence of Djurleite's Phase Transition Temperature on the Mechanism. <i>ACS Nano</i> , 2023, 17, 3676-3685.	7.3	2
562	Copper Iron Chalcogenide Semiconductor Nanocrystals in Energy and Optoelectronics Applications—State of the Art, Challenges, and Future Potential. <i>Advanced Optical Materials</i> , 2023, 11, .	3.6	4

#	ARTICLE	IF	CITATIONS
563	Bimetal heterostructure NiCo ₂ Se ₄ anode confined by carbon nano boxes for ultrafast and stable potassium storage. <i>Chemical Engineering Journal</i> , 2023, 460, 141875.	6.6	4
564	Scalable Edge-Oriented Metallic Two-Dimensional Layered Cu ₂ Te Arrays for Electrocatalytic CO ₂ Methanation. <i>ACS Nano</i> , 2023, 17, 4790-4799.	7.3	14
565	Metal-Organic Frameworks: Synthesis and Applications in Material Chemistry. , 2023, , 58-82.		4
566	Uncovering the untapped potential of copper(I) sulphide toward lithium-ion storage under ultra-low temperatures. <i>Journal of Materials Chemistry A</i> , 2023, 11, 6168-6180.	5.2	0
567	Designing Atomic Interfaces in Chalcogenides for Boosting Photocatalysis. <i>Solar Rrl</i> , 2023, 7, .	3.1	0
568	Near-Infrared Light Driven ZnIn ₂ S ₄ -Based Photocatalysts for Environmental and Energy Applications: Progress and Perspectives. <i>Molecules</i> , 2023, 28, 2142.	1.7	6
569	Sensitive monitoring of refractive index by surface plasmon resonance (SPR) with a gold-iron (III) oxide thin film. <i>Instrumentation Science and Technology</i> , 2023, 51, 558-573.	0.9	1
570	Electrochemical lithium doping of Cu ₂ S nanocrystal assemblies for tuning their near infrared absorbance. <i>Journal of Materials Chemistry C</i> , 2023, 11, 4466-4473.	2.7	0
571	Formation and Transformation of Cu ₂ Se ₁ Te ₁ Nanoparticles Synthesized by Tellurium Anion Exchange of Copper Selenide. <i>Inorganic Chemistry</i> , 2023, 62, 4550-4557.	1.9	5
572	Remarkable Electrical Conductivity Increase and Pure Metallic Properties from Semiconducting Colloidal Nanocrystals by Cation Exchange for Solution-Processable Optoelectronic Applications. <i>Small</i> , 0, , 2207511.	5.2	0
573	Activating Earth-Abundant Element-Based Colloidal Copper Chalcogenide Quantum Dots for Photodetector and Optoelectronic Synapse Applications. , 2023, 5, 1209-1218.		10
574	III-VI Quantum Dots and Derivatives: Design, Synthesis, and Properties for Light-Emitting Diodes. <i>Nano Letters</i> , 2023, 23, 2443-2453.	4.5	11
575	In situ acid etching boosts mercury accommodation capacities of transition metal sulfides. <i>Nature Communications</i> , 2023, 14, .	5.8	14
576	Thermal and electrical properties of nanocrystalline superionic Na _x Cu _{1.75} S (x=0.1, 0.15, 0.2, 25) compounds. <i>Eurasian Journal of Physics and Functional Materials</i> , 2023, 7, 60-72.	0.2	0
577	Resin-derived carbon to in-situ support Cu-Cu _{2-x} S heteroparticles for efficient photocatalytic reduction of Cr(VI). <i>Molecular Catalysis</i> , 2023, 542, 113137.	1.0	2
578	Slot-Die Coated Copper Indium Disulfide as Hole-Transport Material for Perovskite Solar Cells. <i>Sustainability</i> , 2023, 15, 6562.	1.6	1
579	Hierarchical Cu ₃ BiS ₃ Nanostructures with Thermally Controlled Morphology for Photoconductive, Photothermal, and Catalytic Applications. <i>ACS Applied Nano Materials</i> , 2023, 6, 6784-6797.	2.4	1
580	Thermoelectric Performance of Surface-Engineered Cu _{1.5} Te-Cu ₂ Se Nanocomposites. <i>ACS Nano</i> , 2023, 17, 8442-8452.	7.3	6

#	ARTICLE	IF	CITATIONS
581	Luminescent quantum dots: Synthesis, optical properties, bioimaging and toxicity. <i>Advanced Drug Delivery Reviews</i> , 2023, 197, 114830.	6.6	25
582	Matched Ligands for Small, Stable Colloidal Nanoparticles of Copper, Cuprous Oxide and Cuprous Sulfide. <i>Chemistry - A European Journal</i> , 2023, 29, .	1.7	2
583	Hg-Based Narrow Bandgap II-VI Semiconductors. , 2023, , 67-86.		1
586	Smart Design of Noble Metalâ€“Copper Chalcogenide Dual Plasmonic Heteronanoarchitectures for Emerging Applications: Progress and Prospects. <i>Chemistry of Materials</i> , 2023, 35, 4598-4620.	3.2	10
587	Nonlinear photonics in plasmonic semiconductors. , 2023, , 349-380.		0
597	Controlling Phase Conversion of Cu-Sb-Se Nanoparticles through the Use of an Amide Base. <i>Nano Letters</i> , 2023, 23, 5460-5466.	4.5	0
598	Ligand-Controlled Electroreduction of CO ₂ to Formate over Facet-Defined Bimetallic Sulfide Nanoplates. <i>Nano Letters</i> , 2023, 23, 5911-5918.	4.5	2
601	Photothermal Nanomaterials: A Powerful Light-to-Heat Converter. <i>Chemical Reviews</i> , 2023, 123, 6891-6952.	23.0	137
604	Temperature-driven reversible structural transformation and conductivity switching in ultrathin Cu ₉ S ₅ crystals. <i>Nano Research</i> , 2023, 16, 10515-10521.	5.8	1
639	Recent advances in copper chalcogenides for CO ₂ electroreduction. <i>Physical Chemistry Chemical Physics</i> , 0, , .	1.3	0
640	Molecular precursor approach to develop catalytically relevant nanosized metals, palladium chalcogenides and ternary/quaternary metal chalcogenides. <i>New Journal of Chemistry</i> , 2023, 47, 20688-20702.	1.4	1
644	High Performance Quaternary Chalcogenides for Solar Energy Conversion. , 2023, , .		0
659	Metal-chalcogenides nanocomposites as counter electrodes for quantum dots sensitized solar cells. , 2024, , 167-185.		0