Meng Zhang

List of Publications by Year
in descending order

57 papers	1,089 citations	331259 21 h-index	433756 31 g-index
59 all docs	59 docs citations	59 times ranked	890 citing authors

#	Article	IF	Citations
1	Individual Pathways in the Formation of Magic-Size Clusters and Conventional Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 3660-3666.	2.1	62
2	Interpreting the Ultraviolet Absorption in the Spectrum of 415 nm-Bandgap CdSe Magic-Size Clusters. Journal of Physical Chemistry Letters, 2018, 9, 2818-2824.	2.1	57
3	Precursor Selfâ€Assembly Identified as a General Pathway for Colloidal Semiconductor Magicâ€Size Clusters. Advanced Science, 2018, 5, 1800632.	5.6	56
4	Formation of colloidal alloy semiconductor CdTeSe magic-size clusters at room temperature. Nature Communications, 2019, 10, 1674.	5.8	49
5	Demonstration of Nonlinear-Energy-Spread Compensation in Relativistic Electron Bunches with Corrugated Structures. Physical Review Letters, 2015, 114, 114801.	2.9	48
6	Evolution of Two Types of CdTe Magic-Size Clusters from a Single Induction Period Sample. Journal of Physical Chemistry Letters, 2018, 9, 5288-5295.	2.1	46
7	CO₂-Switchable Self-Healing Hostâ€“Guest Hydrogels. Macromolecules, 2017, 50, 9696-9701.	2.2	45
8	Supramolecular hydrogelation with bile acid derivatives: structures, properties and applications. Journal of Materials Chemistry B, 2016, 4, 7506-7520.	2.9	44
9	Four Types of CdTe Magic-Size Clusters from One Prenucleation Stage Sample at Room Temperature. Journal of Physical Chemistry Letters, 2019, 10, 4345-4353.	2.1	44
10	Experimental Demonstration of Longitudinal Beam Phase-Space Linearizer in a Free-Electron Laser Facility by Corrugated Structures. Physical Review Letters, 2014, 113, 254802.	2.9	43
11	Transformations Among Colloidal Semiconductor Magic-Size Clusters. Accounts of Chemical Research, 2021, 54, 776-786.	7.6	35
12	Fragmentation of Magicâ€Size Cluster Precursor Compounds into Ultrasmall CdS Quantum Dots with Enhanced Particle Yield at Low Temperatures. Angewandte Chemie - International Edition, 2020, 59, 12013-12021.	7.2	33
13	Transformation of ZnS Precursor Compounds to Magic-Size Clusters Exhibiting Optical Absorption Peaking at 269 nm. Journal of Physical Chemistry Letters, 2020, 11, 75-82.	2.1	32
14	Morphology and rheology of poly(l-lactide)/polystyrene blends filled with silica nanoparticles. Journal of Materials Science, 2012, 47, 1339-1347.	1.7	25
15	One-Step Approach to Single-Ensemble CdS Magic-Size Clusters with Enhanced Production Yields. Journal of Physical Chemistry Letters, 2019, 10, 2725-2732.	2.1	25
16	Measurement of the average local energy spread of electron beam via coherent harmonic generation. Physical Review Special Topics: Accelerators and Beams, 2011, 14, .	1.8	24
17	Aggregated Gas Molecules: Toxic to Protein?. Scientific Reports, 2013, 3, 1660.	1.6	24
18	Photoluminescent Colloidal Nanohelices Self-Assembled from CdSe Magic-Size Clusters via Nanoplatelets. Journal of Physical Chemistry Letters, 2019, 10, 2794-2801.	2.1	24

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19	A Twoâ€Pathway Model for the Evolution of Colloidal Compound Semiconductor Quantum Dots and Magicâ€Size Clusters. Advanced Materials, 2022, 34, e2107940.	11.1	24
20	Self-Assembly of a Bile Acid Dimer in Aqueous Solutions: From Nanofibers to Nematic Hydrogels. Langmuir, 2017, 33, 1084-1089.	1.6	23
21	Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters. Angewandte Chemie - International Edition, 2020, 59, 16943-16952.	7.2	22
22	Room-temperature formation of CdS magic-size clusters in aqueous solutions assisted by primary amines. Nature Communications, 2020, 11, 4199.	5.8	21
23	Unveiling the Two-Step Formation Pathway of Cs₄PbBr₆ Nanocrystals. Chemistry of Materials, 2020, 32, 4574-4583.	3.2	21
24	Evolution of CdTe Magic-Size Clusters with Single Absorption Doublet Assisted by Adding Small Molecules during Prenucleation. Journal of Physical Chemistry Letters, 2020, 11, 2230-2240.	2.1	21
25	CO2 Sequestration by Bile Salt Aqueous Solutions and Formation of Supramolecular Hydrogels. ACS Sustainable Chemistry and Engineering, 2019, 7, 3949-3955.	3.2	17
26	Reversible Transformations at Room Temperature among Three Types of CdTe Magic-Size Clusters. Inorganic Chemistry, 2021, 60, 4243-4251.	1.9	17
27	Ophthalmic Drops with Nanoparticles Derived from a Natural Product for Treating Age-Related Macular Degeneration. ACS Applied Materials & Interfaces, 2020, 12, 57710-57720.	4.0	15
28	Transformation Pathway from CdSe Magicâ€Size Clusters with Absorption Doublets at 373/393â€…nm to Clusters at 434/460â€…nm. Angewandte Chemie - International Edition, 2021, 60, 20358-20365.	7.2	15
29	High brightness fully coherent x-ray amplifier seeded by a free-electron laser oscillator. Physical Review Accelerators and Beams, 2018, 21, .	0.6	15
30	The precursor compound of two types of ZnSe magic-sized clusters. Nano Research, 2022, 15, 465-474.	5.8	14
31	A Realâ€Time In Situ Demonstration of Direct and Indirect Transformation Pathways in CdTe Magicâ€Size Clusters at Room Temperature. Angewandte Chemie - International Edition, 2022, 61, .	7.2	14
32	Fragmentation of Magicâ€Size Cluster Precursor Compounds into Ultrasmall CdS Quantum Dots with Enhanced Particle Yield at Low Temperatures. Angewandte Chemie, 2020, 132, 12111-12119.	1.6	13
33	Design study for the cascaded HGHG experiment based on the SDUV-FEL. Science Bulletin, 2012, 57, 3423-3429.	1.7	11
34	Formation of molecular hydrogels from a bile acid derivative and selected carboxylic acids. RSC Advances, 2016, 6, 35436-35440.	1.7	11
35	Concentration of nitrogen molecules needed by nitrogen nanobubbles existing in bulk water. Applied Mathematics and Mechanics (English Edition), 2013, 34, 1433-1438.	1.9	10
36	CdS magic-size clusters exhibiting one sharp ultraviolet absorption singlet peaking at 361 nm. Nano Research, 2019, 12, 1437-1444.	5.8	9

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37	In situ SAXS probing the evolution of the precursors and onset of nucleation of ZnSe colloidal semiconductor quantum dots. Chemical Communications, 2020, 56, 2031-2034.	2.2	8
38	Nonlinear energy chirp compensation with corrugated structures. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.	1.3	7
39	Transformation Pathway from CdSe Nanoplatelets with Absorption Doublets at 373/393 nm to Nanoplatelets at 434/460 nm. Journal of Physical Chemistry Letters, 2022, 13, 3983-3989.	2.1	7
40	Performance of an electron linear accelerator for the first photoneutron source in China. Nuclear Science and Techniques/Hewuli, 2019, 30, 1.	1.3	6
41	Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters. Angewandte Chemie, 2020, 132, 17091-17100.	1.6	6
42	Evolution of Two Types of ZnTe Magic-Size Clusters Displaying Sharp Doublets in Optical Absorption. Journal of Physical Chemistry Letters, 2021, 12, 4762-4768.	2.1	6
43	DFT study for the absorption spectra evolution of CdS magic-size clusters. Chemical Physics Letters, 2021, 779, 138870.	1.2	6
44	Precursor compound enabled formation of aqueous-phase CdSe magic-size clusters at room temperature. Nano Research, 2022, 15, 2634-2642.	5.8	6
45	Cholic acid dimers as invertible amphiphilic pockets: synthesis, molecular modeling, and inclusion studies. Canadian Journal of Chemistry, 2017, 95, 792-798.	0.6	4
46	Transverse phase space reconstruction study in Shanghai soft X-ray FEL facility. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.	1.3	4
47	Energetics of Nonradiative Surface Trap States in Nanoparticles Monitored by Time-of-Flight Photoconduction Measurements on Nanoparticleâ€“Polymer Blends. ACS Applied Materials & Interfaces, 2019, 11, 37184-37192.	4.0	4
48	Identifying Clusters and/or Small-Size Quantum Dots in Colloidal CdSe Ensembles with Optical Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 6399-6408.	2.1	4
49	Probing the Relationship between Gelation and Crystallization by Using Salts of Lithocholic Acid. Crystal Growth and Design, 2022, 22, 643-652.	1.4	3
50	Evolution of Photoluminescent CdS Magic-Size Clusters Assisted by Adding Small Molecules with Carboxylic Group. ACS Omega, 2021, 6, 14458-14466.	1.6	2
51	Transformation Pathway from CdSe Magicâ€Size Clusters with Absorption Doublets at 373/393â€...nm to Clusters at 434/460â€...nm. Angewandte Chemie, 2021, 133, 20521-20528.	1.6	2
52	Size matters: Steric hindrance of precursor molecules controlling the evolution of CdSe magic-size clusters and quantum dots. Nano Research, 2022, 15, 8564-8572.	5.8	2
53	Effect of One-Coordinated Atoms on the Electronic and Optical Properties of ZnSe Clusters. ACS Omega, 2021, 6, 18711-18718.	1.6	1
54	Probing the Relationship between Crystallization and Gelation by Using Ammonium Salts of Bile Acids. Crystal Growth and Design, 0, , .	1.4	1

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55	AÂRealâ€Time Inâ€situ Demonstration of Direct and IndirectÂTransformation Pathways in CdTe Magicâ€size Clusters at Room Temperature. Angewandte Chemie, 0, , .	1.6	1
56	Innentitelbild: Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10	1.6	0
57	InnenrÃ¼cktitelbild: Transformation Pathway from CdSe Magicâ€Size Clusters with Absorption Doublets at 373/393â€…nm to Clusters at 434/460â€…nm (Angew. Chem. 37/2021). Angewandte Chemie, 2021, 133, 20731-20731.	1.6	0