Xingchen Ye

List of Publications by Year
in descending order

89	11,167	36203	42291
papers	citations	51 h-index	92 g-index

94	94	94	15776
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using Binary Surfactant Mixtures To Simultaneously Improve the Dimensional Tunability and Monodispersity in the Seeded Growth of Gold Nanorods. Nano Letters, 2013, 13, 765-771.	4.5	910
2	A Generalized Ligand-Exchange Strategy Enabling Sequential Surface Functionalization of Colloidal Nanocrystals. Journal of the American Chemical Society, 2011, 133, 998-1006.	6.6	770
3	Improved Size-Tunable Synthesis of Monodisperse Gold Nanorods through the Use of Aromatic Additives. ACS Nano, 2012, 6, 2804-2817.	7.3	749
4	Quasicrystalline order in self-assembled binary nanoparticle superlattices. Nature, 2009, 461, 964-967.	13.7	551
5	Morphologically controlled synthesis of colloidal upconversion nanophosphors and their shape-directed self-assembly. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22430-22435.	3.3	416
6	Platinum nanocrystals selectively shaped using facet-specific peptide sequences. Nature Chemistry, 2011, 3, 393-399.	6.6	404
7	Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted Cs₄PbBr₆ Nanocrystals. Journal of the American Chemical Society, 2017, 139, 5309-5312.	6.6	389
8	Biomolecule-Assisted Synthesis and Electrochemical Hydrogen Storage of Bi2S3Flowerlike Patterns with Well-Aligned Nanorods. Journal of Physical Chemistry B, 2006, 110, 8978-8985.	1.2	334
9	Thiocyanate-Capped Nanocrystal Colloids: Vibrational Reporter of Surface Chemistry and Solution-Based Route to Enhanced Coupling in Nanocrystal Solids. Journal of the American Chemical Society, 2011, 133, 15753-15761.	6.6	309
10	Competition of shape and interaction patchiness for self-assembling nanoplates. Nature Chemistry, 2013, 5, 466-473.	6.6	278
11	Synthesis, Shape Control, and Methanol Electro-oxidation Properties of Ptâ€“Zn Alloy and Pt₃Zn Intermetallic Nanocrystals. ACS Nano, 2012, 6, 5642-5647.	7.3	273
12	Metal-Enhanced Upconversion Luminescence Tunable through Metal Nanoparticleâ€“Nanophosphor Separation. ACS Nano, 2012, 6, 8758-8766.	7.3	262
13	Exploiting the colloidal nanocrystal library to construct electronic devices. Science, 2016, 352, 205-208.	6.0	234
14	Single-particle mapping of nonequilibrium nanocrystal transformations. Science, 2016, 354, 874-877.	6.0	204
15	Seeded Growth of Monodisperse Gold Nanorods Using Bromide-Free Surfactant Mixtures. Nano Letters, 2013, 13, 2163-2171.	4.5	200
16	Plasmonic Enhancement of Nanophosphor Upconversion Luminescence in Au Nanohole Arrays. ACS Nano, 2013, 7, 7186-7192.	7.3	199
17	Structural diversity in binary superlattices self-assembled from polymer-grafted nanocrystals. Nature Communications, 2015, 6, 10052.	5.8	199
18	Sizeâ€•and Shapeâ€Selective Synthesis of Metal Nanocrystals and Nanowires Using CO as a Reducing Agent. Angewandte Chemie - International Edition, 2010, 49, 6156-6159.	7.2	195

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19	Design of Ptâ€“Pd Binary Superlattices Exploiting Shape Effects and Synergistic Effects for Oxygen Reduction Reactions. Journal of the American Chemical Society, 2013, 135, 42-45.	6.6	180
20	Biomolecule-Assisted Synthesis and Electrochemical Hydrogen Storage of Porous Spongelike Ni3S2 Nanostructures Grown Directly on Nickel Foils. Chemistry - A European Journal, 2006, 12, 2337-2342.	1.7	169
21	Shape-Controlled Synthesis of Pt Nanocrystals: The Role of Metal Carbonyls. ACS Nano, 2013, 7, 645-653.	7.3	162
22	Two-Dimensional Binary and Ternary Nanocrystal Superlattices: The Case of Monolayers and Bilayers. Nano Letters, 2011, 11, 1804-1809.	4.5	159
23	Doubling the Efficiency of Third Harmonic Generation by Positioning ITO Nanocrystals into the Hot-Spot of Plasmonic Gap-Antennas. Nano Letters, 2014, 14, 2867-2872.	4.5	155
24	Collective Dipolar Interactions in Self-Assembled Magnetic Binary Nanocrystal Superlattice Membranes. Nano Letters, 2010, 10, 5103-5108.	4.5	143
25	Highâ€Efficiency PbS Quantumâ€Dot Solar Cells with Greatly Simplified Fabrication Processing via â€œSolventâ€Curingâ€• Advanced Materials, 2018, 30, e1707572.	11.1	139
26	Plasmon-Enhanced Upconversion Luminescence in Single Nanophosphorâ€“Nanorod Heterodimers Formed through Template-Assisted Self-Assembly. ACS Nano, 2014, 8, 9482-9491.	7.3	127
27	Tunable Plasmonic Coupling in Self-Assembled Binary Nanocrystal Superlattices Studied by Correlated Optical Microspectrophotometry and Electron Microscopy. Nano Letters, 2013, 13, 1291-1297.	4.5	125
28	Engineering Catalytic Contacts and Thermal Stability: Gold/Iron Oxide Binary Nanocrystal Superlattices for CO Oxidation. Journal of the American Chemical Society, 2013, 135, 1499-1505.	6.6	122
29	Interaction Potentials of Anisotropic Nanocrystals from the Trajectory Sampling of Particle Motion using in Situ Liquid Phase Transmission Electron Microscopy. ACS Central Science, 2015, 1, 33-39.	5.3	121
30	Expanding the Spectral Tunability of Plasmonic Resonances in Doped Metal-Oxide Nanocrystals through Cooperative Cationâ€“Anion Codoping. Journal of the American Chemical Society, 2014, 136, 11680-11686.	6.6	119
31	Quasicrystalline nanocrystal superlattice with partial matching rules. Nature Materials, 2017, 16, 214-219.	13.3	114
32	In vivo multiple color lymphatic imaging using upconverting nanocrystals. Journal of Materials Chemistry, 2009, 19, 6481.	6.7	112
33	Study of Heat Transfer Dynamics from Gold Nanorods to the Environment via Time-Resolved Infrared Spectroscopy. ACS Nano, 2016, 10, 2144-2151.	7.3	109
34	1D Tellurium Nanostructures: Photothermally Assisted Morphology-Controlled Synthesis and Applications in Preparing Functional Nanoscale Materials. Advanced Functional Materials, 2007, 17, 486-492.	7.8	104
35	Shape Alloys of Nanorods and Nanospheres from Self-Assembly. Nano Letters, 2013, 13, 4980-4988.	4.5	104
36	Probing Single-Particle Electrocatalytic Activity at Facet-Controlled Gold Nanocrystals. Nano Letters, 2020, 20, 1233-1239.	4.5	103

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37	Chemical Control of Plasmons in Metal Chalcogenide and Metal Oxide Nanostructures. Advanced Materials, 2015, 27, 5830-5837.	11.1	98
38	Dendritic upconverting nanoparticles enable in vivo multiphoton microscopy with low-power continuous wave sources. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20826-20831.	3.3	88
39	Chemically Tailored Dielectric-to-Metal Transition for the Design of Metamaterials from Nanoimprinted Colloidal Nanocrystals. Nano Letters, 2013, 13, 350-357.	4.5	87
40	Bistable Magnetoresistance Switching in Exchange-Coupled CoFe₂O₄â€“Fe₃O₄ Binary Nanocrystal Superlattices by Self-Assembly and Thermal Annealing. ACS Nano, 2013, 7, 1478-1486.	7.3	85
41	Polymorphism in Self-Assembled AB₆ Binary Nanocrystal Superlattices. Journal of the American Chemical Society, 2011, 133, 2613-2620.	6.6	84
42	Biomolecule-assisted synthesis of single-crystalline selenium nanowires and nanoribbons via a novel flake-cracking mechanism. Nanotechnology, 2006, 17, 385-390.	1.3	79
43	Multiscale Periodic Assembly of Striped Nanocrystal Superlattice Films on a Liquid Surface. Nano Letters, 2011, 11, 841-846.	4.5	79
44	Large-Area Nanoimprinted Colloidal Au Nanocrystal-Based Nanoantennas for Ultrathin Polarizing Plasmonic Metasurfaces. Nano Letters, 2015, 15, 5254-5260.	4.5	73
45	Photothermally Assisted Solution-Phase Synthesis of Microscale Tubes, Rods, Shuttles, and an Urchin-Like Assembly of Single-Crystalline Trigonal Selenium. Angewandte Chemie - International Edition, 2006, 45, 2571-2574.	7.2	65
46	Seeded Growth of Metal-Doped Plasmonic Oxide Heterodimer Nanocrystals and Their Chemical Transformation. Journal of the American Chemical Society, 2014, 136, 5106-5115.	6.6	65
47	Tuning infrared plasmon resonances in doped metal-oxide nanocrystals through cation-exchange reactions. Nature Communications, 2019, 10, 1394.	5.8	64
48	Tolerance to structural disorder and tunable mechanical behavior in self-assembled superlattices of polymer-grafted nanocrystals. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2836-2841.	3.3	63
49	Gold Nanorod Translocations and Charge Measurement through Solid-State Nanopores. Nano Letters, 2014, 14, 5358-5364.	4.5	59
50	Tailoring Morphology of Cuâ€“Ag Nanocrescents and Coreâ€“Shell Nanocrystals Guided by a Thermodynamic Model. Journal of the American Chemical Society, 2018, 140, 8569-8577.	6.6	57
51	Enhanced Thermal Stability and Magnetic Properties in NaCl-Type FePtâ€“MnO Binary Nanocrystal Superlattices. Journal of the American Chemical Society, 2011, 133, 13296-13299.	6.6	54
52	Systematic Electron Crystallographic Studies of Self-Assembled Binary Nanocrystal Superlattices. ACS Nano, 2010, 4, 2374-2381.	7.3	52
53	Near-Infrared Absorption of Monodisperse Silver Telluride (Ag₂Te) Nanocrystals and Photoconductive Response of Their Self-Assembled Superlattices. Chemistry of Materials, 2011, 23, 4657-4659.	3.2	51
54	Heterometallic Seed-Mediated Growth of Monodisperse Colloidal Copper Nanorods with Widely Tunable Plasmonic Resonances. Nano Letters, 2020, 20, 7263-7271.	4.5	49

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55	Probing the Structure, Composition, and Spatial Distribution of Ligands on Gold Nanorods. Nano Letters, 2015, 15, 5730-5738.	4.5	46
56	Air-Stable, Nanostructured Electronic and Plasmonic Materials from Solution-Processable, Silver Nanocrystal Building Blocks. ACS Nano, 2014, 8, 2746-2754.	7.3	40
57	Solution-Phase Synthesis and Electrochemical Hydrogen Storage of Ultra-Long Single-Crystal Selenium Submicrotubes. Journal of Physical Chemistry B, 2005, 109, 22830-22835.	1.2	38
58	Three-Dimensional Self-Assembly of Chalcopyrite Copper Indium Diselenide Nanocrystals into Oriented Films. ACS Nano, 2013, 7, 4307-4315.	7.3	38
59	Imaging the kinetics of anisotropic dissolution of bimetallic coreâ€“shell nanocubes using graphene liquid cells. Nature Communications, 2020, 11, 3041.	5.8	36
60	Tracking the Effects of Ligands on Oxidative Etching of Gold Nanorods in Graphene Liquid Cell Electron Microscopy. ACS Nano, 2020, 14, 10239-10250.	7.3	35
61	Mineralizer-Assisted Shape-Control of Rare Earth Oxide Nanoplates. Chemistry of Materials, 2014, 26, 6328-6332.	3.2	31
62	Broadband Tunable Mid-infrared Plasmon Resonances in Cadmium Oxide Nanocrystals Induced by Size-Dependent Nonstoichiometry. Nano Letters, 2020, 20, 2821-2828.	4.5	29
63	Gold nanorod length controls dispersion, local ordering, and optical absorption in polymer nanocomposite films. Soft Matter, 2014, 10, 3404-3413.	1.2	28
64	A facile solution-phase deposition approach to porous selenium materials. Journal of Materials Chemistry, 2007, 17, 2706.	6.7	27
65	Rapid Large-Scale Assembly and Pattern Transfer of One-Dimensional Gold Nanorod Superstructures. ACS Applied Materials & Interfaces, 2017, 9, 25513-25521.	4.0	27
66	Cooperative interactions among CTA+, Brâ€“ and Ag+ during seeded growth of gold nanorods. Nano Research, 2017, 10, 2146-2155.	5.8	25
67	Three novel missense mutations in the filamin B gene are associated with isolated congenital talipes equinovarus. Human Genetics, 2016, 135, 1181-1189.	1.8	22
68	Large-size niobium disulfide nanoflakes down to bilayers grown by sulfurization. Nano Research, 2018, 11, 5978-5988.	5.8	21
69	Surface-Limited Galvanic Replacement Reactions of Pd, Pt, and Au onto Ag Core Nanoparticles through Redox Potential Tuning. Chemistry of Materials, 2022, 34, 1897-1904.	3.2	17
70	Kinetically Controlled Self-Assembly of Binary Polymer-Grafted Nanocrystals into Ordered Superstructures via Solvent Vapor Annealing. Nano Letters, 2021, 21, 5053-5059.	4.5	15
71	Macromolecular Ligand Engineering for Programmable Nanoprism Assembly. Journal of the American Chemical Society, 2021, 143, 16163-16172.	6.6	15
72	Multiarmed Tubular Selenium with Potentially Unique Electrical Properties: Solution-Phase Synthesis and First-Principles Calculation. Small, 2007, 3, 101-105.	5.2	13

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73	Manipulating atomic defects in plasmonic vanadium dioxide for superior solar and thermal management. Materials Horizons, 2021, 8, 1700-1710.	6.4	13
74	Enhanced mid-wavelength infrared refractive index of organically modified chalcogenide (ORMOCHALC) polymer nanocomposites with thermomechanical stability. Optical Materials, 2020, 108, 110197.	1.7	12
75	Packing State Management to Realize Dense and Semiconducting Lead Sulfide Nanocrystals Film via a Single-Step Deposition. Cell Reports Physical Science, 2020, 1, 100183.	2.8	11
76	The effect of loading methods and parameters on defect detection in digital shearography. Results in Physics, 2017, 7, 3744-3755.	2.0	10
77	Colloidal Synthesis of Nanohelices via Bilayer Lattice Misfit. Journal of the American Chemical Society, 2020, 142, 12777-12783.	6.6	10
78	Nanorod position and orientation in vertical cylinder block copolymer films. Soft Matter, 2020, 16, 3005-3014.	1.2	9
79	Amifostine inhibited the differentiation of RAW264.7 cells into osteoclasts by reducing the production of ROS under 2â€‰Gy radiation. Journal of Cellular Biochemistry, 2020, 121, 497-507.	1.2	8
80	Controlling Infrared Plasmon Resonances in Inverse-Spinel Cadmium Stannate Nanocrystals via Site-Selective Cation-Exchange Reactions. Chemistry of Materials, 2021, 33, 1954-1963.	3.2	8
81	Optically and Structurally Stabilized Plasmoâ€Bio Interlinking Networks. Advanced Materials Interfaces, 2021, 8, .	1.9	7
82	Shape control in the synthesis of colloidal semiconductor nanocrystals. , 2018, , 37-54.		5
83	Electrospray deposition for single nanoparticle studies. Analytical Methods, 2021, 13, 4105-4113.	1.3	5
84	Ultrafast Dynamics of Colloidal Copper Nanorods: Intraband versus Interband Excitation. Small Science, 2022, 2, 2100103.	5.8	5
85	Microscopic mechanisms of deformation transfer in high dynamic range branched nanoparticle deformation sensors. Nature Communications, 2018, 9, 1155.	5.8	4
86	Characterization of Ligand Adsorption at Individual Gold Nanocubes. Langmuir, 2021, 37, 7701-7711.	1.6	4
87	Novel computational design of high refractive index nanocomposites and effective refractive index tuning based on nanoparticle morphology effect. Composites Part B: Engineering, 2021, 223, 109128.	5.9	4
88	Response To Comment On â€œ1D Tellurium Nanostructures: Photothermally Assisted Morphologyâ€Controlled Synthesis and Applications in Preparing Functional Nanoscale Materialsâ€• Advanced Functional Materials, 2009, 19, 3193-3194.	7.8	2
89	Hydrophobic Cargo Encapsulation into Virus Protein Cages by Self-Assembly in an Aprotic Organic Solvent. Bioconjugate Chemistry, 2021, 32, 2366-2376.	1.8	1