Xingchen Ye

List of Publications by Citations

90	9,400	47	94
papers	citations	h-index	g-index
94	10,391	13.1	6.02
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
90	Using binary surfactant mixtures to simultaneously improve the dimensional tunability and monodispersity in the seeded growth of gold nanorods. *Nano Letters*, **2013**, 13, 765-71	11.5	708
89	Improved size-tunable synthesis of monodisperse gold nanorods through the use of aromatic additives. *ACS Nano*, **2012**, 6, 2804-17	16.7	641
88	A generalized ligand-exchange strategy enabling sequential surface functionalization of colloidal nanocrystals. *Journal of the American Chemical Society*, **2011**, 133, 998-1006	16.4	631
87	Quasicrystalline order in self-assembled binary nanoparticle superlattices. *Nature*, **2009**, 461, 964-7	50.4	485
86	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, 22430-5	11.5	385
85	Platinum nanocrystals selectively shaped using facet-specific peptide sequences. *Nature Chemistry*, **2011**, 3, 393-9	17.6	361
84	Biomolecule-assisted synthesis and electrochemical hydrogen storage of Bi2S3 flowerlike patterns with well-aligned nanorods. *Journal of Physical Chemistry B*, **2006**, 110, 8978-85	3.4	307
83	Ligand Mediated Transformation of Cesium Lead Bromide Perovskite Nanocrystals to Lead Depleted CsPbBr Nanocrystals. *Journal of the American Chemical Society*, **2017**, 139, 5309-5312	16.4	301
82	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, 15753-61	16.4	278
81	Competition of shape and interaction patchiness for self-assembling nanoplates. *Nature Chemistry*, **2013**, 5, 466-73	17.6	253
80	Synthesis, shape control, and methanol electro-oxidation properties of Pt-Zn alloy and Pt3Zn intermetallic nanocrystals. *ACS Nano*, **2012**, 6, 5642-7	16.7	242
79	Metal-enhanced upconversion luminescence tunable through metal nanoparticle-nanophosphor separation. *ACS Nano*, **2012**, 6, 8758-66	16.7	240
78	Exploiting the colloidal nanocrystal library to construct electronic devices. *Science*, **2016**, 352, 205-8	33.3	189
77	Size- and shape-selective synthesis of metal nanocrystals and nanowires using CO as a reducing agent. *Angewandte Chemie - International Edition*, **2010**, 49, 6156-9	16.4	181
76	Plasmonic enhancement of nanophosphor upconversion luminescence in Au nanohole arrays. *ACS Nano*, **2013**, 7, 7186-92	16.7	174
75	Design of Pt-Pd binary superlattices exploiting shape effects and synergistic effects for oxygen reduction reactions. *Journal of the American Chemical Society*, **2013**, 135, 42-5	16.4	166
74	Single-particle mapping of nonequilibrium nanocrystal transformations. *Science*, **2016**, 354, 874-877	33.3	165

73	Structural diversity in binary superlattices self-assembled from polymer-grafted nanocrystals. *Nature Communications*, **2015**, 6, 10052	17.4	162
72	Biomolecule-assisted synthesis and electrochemical hydrogen storage of porous spongelike Ni3S2 nanostructures grown directly on nickel foils. *Chemistry - A European Journal*, **2006**, 12, 2337-42	4.8	162
71	Seeded growth of monodisperse gold nanorods using bromide-free surfactant mixtures. *Nano Letters*, **2013**, 13, 2163-71	11.5	161
70	Shape-controlled synthesis of Pt nanocrystals: the role of metal carbonyls. *ACS Nano*, **2013**, 7, 645-53	16.7	149
69	Two-dimensional binary and ternary nanocrystal superlattices: the case of monolayers and bilayers. *Nano Letters*, **2011**, 11, 1804-9	11.5	144
68	Doubling the efficiency of third harmonic generation by positioning ITO nanocrystals into the hot-spot of plasmonic gap-antennas. *Nano Letters*, **2014**, 14, 2867-72	11.5	137
67	Collective dipolar interactions in self-assembled magnetic binary nanocrystal superlattice membranes. *Nano Letters*, **2010**, 10, 5103-8	11.5	125
66	Engineering catalytic contacts and thermal stability: gold/iron oxide binary nanocrystal superlattices for CO oxidation. *Journal of the American Chemical Society*, **2013**, 135, 1499-505	16.4	107
65	High-Efficiency PbS Quantum-Dot Solar Cells with Greatly Simplified Fabrication Processing via "Solvent-Curing". *Advanced Materials*, **2018**, 30, e1707572	24	106
64	Plasmon-enhanced upconversion luminescence in single nanophosphor-nanorod heterodimers formed through template-assisted self-assembly. *ACS Nano*, **2014**, 8, 9482-91	16.7	105
63	In vivo multiple color lymphatic imaging using upconverting nanocrystals. *Journal of Materials Chemistry*, **2009**, 19, 6481		104
62	Tunable plasmonic coupling in self-assembled binary nanocrystal superlattices studied by correlated optical microspectrophotometry and electron microscopy. *Nano Letters*, **2013**, 13, 1291-7	11.5	103
61	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, 33-9	16.8	102
60	Quasicrystalline nanocrystal superlattice with partial matching rules. *Nature Materials*, **2017**, 16, 214-219	27	96
59	Expanding the spectral tunability of plasmonic resonances in doped metal-oxide nanocrystals through cooperative cation-anion codoping. *Journal of the American Chemical Society*, **2014**, 136, 11680-6	16.4	92
58	1D Tellurium Nanostructures: Photothermally Assisted Morphology-Controlled Synthesis and Applications in Preparing Functional Nanoscale Materials. *Advanced Functional Materials*, **2007**, 17, 486-492	15.6	90
57	Study of Heat Transfer Dynamics from Gold Nanorods to the Environment via Time-Resolved Infrared Spectroscopy. *ACS Nano*, **2016**, 10, 2144-51	16.7	89
56	Shape alloys of nanorods and nanospheres from self-assembly. *Nano Letters*, **2013**, 13, 4980-8	11.5	87

55	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, 20826-31	11.5	85
54	Chemical Control of Plasmons in Metal Chalcogenide and Metal Oxide Nanostructures. *Advanced Materials*, **2015**, 27, 5830-7	24	82
53	Polymorphism in self-assembled AB6 binary nanocrystal superlattices. *Journal of the American Chemical Society*, **2011**, 133, 2613-20	16.4	78
52	Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals. *Nano Letters*, **2013**, 13, 350-7	11.5	75
51	Biomolecule-assisted synthesis of single-crystalline selenium nanowires and nanoribbons via a novel flake-cracking mechanism. *Nanotechnology*, **2006**, 17, 385-390	3.4	74
50	Bistable magnetoresistance switching in exchange-coupled CoFe□□-Fe□□ binary nanocrystal superlattices by self-assembly and thermal annealing. *ACS Nano*, **2013**, 7, 1478-86	16.7	73
49	Multiscale periodic assembly of striped nanocrystal superlattice films on a liquid surface. *Nano Letters*, **2011**, 11, 841-6	11.5	73
48	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, 2571-4	16.4	64
47	Seeded growth of metal-doped plasmonic oxide heterodimer nanocrystals and their chemical transformation. *Journal of the American Chemical Society*, **2014**, 136, 5106-15	16.4	60
46	Large-Area Nanoimprinted Colloidal Au Nanocrystal-Based Nanoantennas for Ultrathin Polarizing Plasmonic Metasurfaces. *Nano Letters*, **2015**, 15, 5254-60	11.5	56
45	Probing Single-Particle Electrocatalytic Activity at Facet-Controlled Gold Nanocrystals. *Nano Letters* , **2020**, 20, 1233-1239	11.5	56
44	Gold nanorod translocations and charge measurement through solid-state nanopores. *Nano Letters* , **2014**, 14, 5358-64	11.5	48
43	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	11.5	47
42	Systematic electron crystallographic studies of self-assembled binary nanocrystal superlattices. *ACS Nano*, **2010**, 4, 2374-81	16.7	46
41	Enhanced thermal stability and magnetic properties in NaCl-type FePt-MnO binary nanocrystal superlattices. *Journal of the American Chemical Society*, **2011**, 133, 13296-9	16.4	45
40	Tailoring Morphology of Cu-Ag Nanocrescents and Core-Shell Nanocrystals Guided by a Thermodynamic Model. *Journal of the American Chemical Society*, **2018**, 140, 8569-8577	16.4	41
39	Near-Infrared Absorption of Monodisperse Silver Telluride (Ag2Te) Nanocrystals and Photoconductive Response of Their Self-Assembled Superlattices. *Chemistry of Materials*, **2011**, 23, 4657-4659	9.6	41
38	Tuning infrared plasmon resonances in doped metal-oxide nanocrystals through cation-exchange reactions. *Nature Communications*, **2019**, 10, 1394	17.4	39

37	Size- and Shape-Selective Synthesis of Metal Nanocrystals and Nanowires Using CO as a Reducing Agent. *Angewandte Chemie*, **2010**, 122, 6292-6295	3.6	39
36	Three-dimensional self-assembly of chalcopyrite copper indium diselenide nanocrystals into oriented films. *ACS Nano*, **2013**, 7, 4307-15	16.7	37
35	Solution-phase synthesis and electrochemical hydrogen storage of ultra-long single-crystal selenium submicrotubes. *Journal of Physical Chemistry B*, **2005**, 109, 22830-5	3.4	37
34	Probing the Structure, Composition, and Spatial Distribution of Ligands on Gold Nanorods. *Nano Letters*, **2015**, 15, 5730-8	11.5	33
33	Air-stable, nanostructured electronic and plasmonic materials from solution-processable, silver nanocrystal building blocks. *ACS Nano*, **2014**, 8, 2746-54	16.7	33
32	Mineralizer-Assisted Shape-Control of Rare Earth Oxide Nanoplates. *Chemistry of Materials*, **2014**, 26, 6328-6332	9.6	27
31	A facile solution-phase deposition approach to porous selenium materials. *Journal of Materials Chemistry*, **2007**, 17, 2706		27
30	Gold nanorod length controls dispersion, local ordering, and optical absorption in polymer nanocomposite films. *Soft Matter*, **2014**, 10, 3404-13	3.6	25
29	Rapid Large-Scale Assembly and Pattern Transfer of One-Dimensional Gold Nanorod Superstructures. *ACS Applied Materials & Interfaces*, **2017**, 9, 25513-25521	9.5	24
28	Cooperative interactions among CTA+, Br□and Ag+ during seeded growth of gold nanorods. *Nano Research*, **2017**, 10, 2146-2155	10	19
27	Heterometallic Seed-Mediated Growth of Monodisperse Colloidal Copper Nanorods with Widely Tunable Plasmonic Resonances. *Nano Letters*, **2020**, 20, 7263-7271	11.5	19
26	Imaging the kinetics of anisotropic dissolution of bimetallic core-shell nanocubes using graphene liquid cells. *Nature Communications*, **2020**, 11, 3041	17.4	18
25	Tracking the Effects of Ligands on Oxidative Etching of Gold Nanorods in Graphene Liquid Cell Electron Microscopy. *ACS Nano*, **2020**, 14, 10239-10250	16.7	18
24	Broadband Tunable Mid-infrared Plasmon Resonances in Cadmium Oxide Nanocrystals Induced by Size-Dependent Nonstoichiometry. *Nano Letters*, **2020**, 20, 2821-2828	11.5	16
23	Large-size niobium disulfide nanoflakes down to bilayers grown by sulfurization. *Nano Research*, **2018**, 11, 5978-5988	10	15
22	Three novel missense mutations in the filamin B gene are associated with isolated congenital talipes equinovarus. *Human Genetics*, **2016**, 135, 1181-9	6.3	15
21	Multiarmed tubular selenium with potentially unique electrical properties: solution-phase synthesis and first-principles calculation. *Small*, **2007**, 3, 101-5	11	13
20	Packing State Management to Realize Dense and Semiconducting Lead Sulfide Nanocrystals Film via a Single-Step Deposition. *Cell Reports Physical Science*, **2020**, 1, 100183	6.1	8

19	Enhanced mid-wavelength infrared refractive index of organically modified chalcogenide (ORMOCHALC) polymer nanocomposites with thermomechanical stability. *Optical Materials*, **2020**, 108, 110197	3.3	7
18	Kinetically Controlled Self-Assembly of Binary Polymer-Grafted Nanocrystals into Ordered Superstructures via Solvent Vapor Annealing. *Nano Letters*, **2021**, 21, 5053-5059	11.5	7
17	The effect of loading methods and parameters on defect detection in digital shearography. *Results in Physics*, **2017**, 7, 3744-3755	3.7	6
16	Colloidal Synthesis of Nanohelices via Bilayer Lattice Misfit. *Journal of the American Chemical Society*, **2020**, 142, 12777-12783	16.4	6
15	Photothermally Assisted Solution-Phase Synthesis of Microscale Tubes, Rods, Shuttles, and an Urchin-Like Assembly of Single-Crystalline Trigonal Selenium. *Angewandte Chemie*, **2006**, 118, 2633-2636	3.6	6
14	Nanorod position and orientation in vertical cylinder block copolymer films. *Soft Matter*, **2020**, 16, 3005-3014	3.4	5
13	Optically and Structurally Stabilized Plasmo-Bio Interlinking Networks. *Advanced Materials Interfaces*, **2021**, 8, 2001370	4.6	5
12	Shape control in the synthesis of colloidal semiconductor nanocrystals **2018**, 37-54		4
11	Manipulating atomic defects in plasmonic vanadium dioxide for superior solar and thermal management. *Materials Horizons*, **2021**, 8, 1700-1710	14.4	4
10	Microscopic mechanisms of deformation transfer in high dynamic range branched nanoparticle deformation sensors. *Nature Communications*, **2018**, 9, 1155	17.4	3
9	Controlling Infrared Plasmon Resonances in Inverse-Spinel Cadmium Stannate Nanocrystals via Site-Selective Cation-Exchange Reactions. *Chemistry of Materials*, **2021**, 33, 1954-1963	9.6	3
8	Amifostine inhibited the differentiation of RAW264.7 cells into osteoclasts by reducing the production of ROS under 2 Gy radiation. *Journal of Cellular Biochemistry*, **2020**, 121, 497-507	4.7	3
7	Characterization of Ligand Adsorption at Individual Gold Nanocubes. *Langmuir*, **2021**, 37, 7701-7711	4	2
6	Response To Comment On "1D Tellurium Nanostructures: Photothermally Assisted Morphology-Controlled Synthesis and Applications in Preparing Functional Nanoscale Materials" *Advanced Functional Materials*, **2009**, 19, 3193-3194	15.6	1
5	Electrospray deposition for single nanoparticle studies. *Analytical Methods*, **2021**, 13, 4105-4113	3.2	1
4	Macromolecular Ligand Engineering for Programmable Nanoprism Assembly. *Journal of the American Chemical Society*, **2021**, 143, 16163-16172	16.4	1
3	Ultrafast Dynamics of Colloidal Copper Nanorods: Intraband versus Interband Excitation. *Small Science*, **2022**, 2, 2100103		1
2	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	10	0

List of Publications

1	Hydrophobic Cargo Encapsulation into Virus Protein Cages by Self-Assembly in an Aprotic Organic Solvent. *Bioconjugate Chemistry*, **2021**, 32, 2366-2376	6.3