Jingyi Chen

List of Publications by Citations

129 papers	21,647 citations	60 h-index	147 g-index
150 ext. papers	23,013 ext. citations	9.4 avg, IF	6.61 L-index

#	Paper	IF	Citations
129	Gold nanostructures: engineering their plasmonic properties for biomedical applications. *Chemical Society Reviews*, **2006**, 35, 1084-94	58.5	1437
128	Gold nanocages covered by smart polymers for controlled release with near-infrared light. *Nature Materials*, **2009**, 8, 935-9	27	1232
127	Gold nanocages: synthesis, properties, and applications. *Accounts of Chemical Research*, **2008**, 41, 1587-95	24.3	1191
126	Immuno gold nanocages with tailored optical properties for targeted photothermal destruction of cancer cells. *Nano Letters*, **2007**, 7, 1318-22	11.5	911
125	Gold nanocages: bioconjugation and their potential use as optical imaging contrast agents. *Nano Letters*, **2005**, 5, 473-7	11.5	863
124	Shape-controlled synthesis of platinum nanocrystals for catalytic and electrocatalytic applications. *Nano Today*, **2009**, 4, 81-95	17.9	754
123	A comparison study of the catalytic properties of Au-based nanocages, nanoboxes, and nanoparticles. *Nano Letters*, **2010**, 10, 30-5	11.5	725
122	Gold nanocages: from synthesis to theranostic applications. *Accounts of Chemical Research*, **2011**, 44, 914-24	24.3	668
121	Gold nanostructures: a class of multifunctional materials for biomedical applications. *Chemical Society Reviews*, **2011**, 40, 44-56	58.5	662
120	Kinetically controlled synthesis of triangular and hexagonal nanoplates of palladium and their SPR/SERS properties. *Journal of the American Chemical Society*, **2005**, 127, 17118-27	16.4	590
119	Gold nanocages as photothermal transducers for cancer treatment. *Small*, **2010**, 6, 811-7	11	588
118	Poly(vinyl pyrrolidone): a dual functional reductant and stabilizer for the facile synthesis of noble metal nanoplates in aqueous solutions. *Langmuir*, **2006**, 22, 8563-70	4	535
117	Optical properties of Pd-Ag and Pt-Ag nanoboxes synthesized via galvanic replacement reactions. *Nano Letters*, **2005**, 5, 2058-62	11.5	475
116	Single-crystal nanowires of platinum can be synthesized by controlling the reaction rate of a polyol process. *Journal of the American Chemical Society*, **2004**, 126, 10854-5	16.4	439
115	Gold Nanocages for Biomedical Applications. *Advanced Materials*, **2007**, 19, 3177-3184	24	408
114	Understanding the role of oxidative etching in the polyol synthesis of Pd nanoparticles with uniform shape and size. *Journal of the American Chemical Society*, **2005**, 127, 7332-3	16.4	396
113	Functionalized single-walled carbon nanotubes as rationally designed vehicles for tumor-targeted drug delivery. *Journal of the American Chemical Society*, **2008**, 130, 16778-85	16.4	391

112	Facile synthesis of gold-silver nanocages with controllable pores on the surface. *Journal of the American Chemical Society*, **2006**, 128, 14776-7	16.4	389
111	In vivo molecular photoacoustic tomography of melanomas targeted by bioconjugated gold nanocages. *ACS Nano*, **2010**, 4, 4559-64	16.7	376
110	Polyol synthesis of platinum nanostructures: control of morphology through the manipulation of reduction kinetics. *Angewandte Chemie - International Edition*, **2005**, 44, 2589-92	16.4	373
109	Size-dependence of surface plasmon resonance and oxidation for Pd nanocubes synthesized via a seed etching process. *Nano Letters*, **2005**, 5, 1237-42	11.5	368
108	Polyol Synthesis of Platinum Nanoparticles: Control of Morphology with Sodium Nitrate. *Nano Letters*, **2004**, 4, 2367-2371	11.5	359
107	Seed-mediated synthesis of Ag nanocubes with controllable edge lengths in the range of 30-200 nm and comparison of their optical properties. *Journal of the American Chemical Society*, **2010**, 132, 11372-8	16.4	338
106	One-dimensional nanostructures of metals: large-scale synthesis and some potential applications. *Langmuir*, **2007**, 23, 4120-9	4	331
105	Mechanistic studies on the galvanic replacement reaction between multiply twinned particles of Ag and HAuCl4 in an organic medium. *Journal of the American Chemical Society*, **2007**, 129, 1733-42	16.4	313
104	Corrosion-based synthesis of single-crystal Pd nanoboxes and nanocages and their surface plasmon properties. *Angewandte Chemie - International Edition*, **2005**, 44, 7913-7	16.4	294
103	Rapid synthesis of small silver nanocubes by mediating polyol reduction with a trace amount of sodium sulfide or sodium hydrosulfide. *Chemical Physics Letters*, **2006**, 432, 491-496	2.5	292
102	Facile synthesis of Ag nanocubes of 30 to 70 nm in edge length with CF(3)COOAg as a precursor. *Chemistry - A European Journal*, **2010**, 16, 10234-9	4.8	252
101	Mechanism-based tumor-targeting drug delivery system. Validation of efficient vitamin receptor-mediated endocytosis and drug release. *Bioconjugate Chemistry*, **2010**, 21, 979-87	6.3	245
100	Shape-Controlled Synthesis of Silver and Gold Nanostructures. *MRS Bulletin*, **2005**, 30, 356-361	3.2	245
99	Carbon nanotube-nanocrystal heterostructures. *Chemical Society Reviews*, **2009**, 38, 1076-98	58.5	233
98	Inorganic nanoparticle-based contrast agents for molecular imaging. *Trends in Molecular Medicine*, **2010**, 16, 561-73	11.5	191
97	Gold Nanocages: A Novel Class of Multifunctional Nanomaterials for Theranostic Applications. *Advanced Functional Materials*, **2010**, 20, 3684-3694	15.6	189
96	Gold nanocages as contrast agents for spectroscopic optical coherence tomography. *Optics Letters*, **2005**, 30, 3048-50	3	187
95	Quantifying the coverage density of poly(ethylene glycol) chains on the surface of gold nanostructures. *ACS Nano*, **2012**, 6, 512-22	16.7	186

94	Comparison of the surface-enhanced Raman scattering on sharp and truncated silver nanocubes. *Chemical Physics Letters*, **2006**, 427, 122-126	2.5	180
93	Gold Nanoparticle Coated Carbon Nanotube Ring with Enhanced Raman Scattering and Photothermal Conversion Property for Theranostic Applications. *Journal of the American Chemical Society*, **2016**, 138, 7005-15	16.4	160
92	Trimeric clusters of silver in aqueous AgNO3 solutions and their role as nuclei in forming triangular nanoplates of silver. *Angewandte Chemie - International Edition*, **2007**, 46, 4917-21	16.4	145
91	Targeting gold nanocages to cancer cells for photothermal destruction and drug delivery. *Expert Opinion on Drug Delivery*, **2010**, 7, 577-87	8	140
90	Quantifying the cellular uptake of antibody-conjugated Au nanocages by two-photon microscopy and inductively coupled plasma mass spectrometry. *ACS Nano*, **2010**, 4, 35-42	16.7	137
89	Bright three-photon luminescence from gold/silver alloyed nanostructures for bioimaging with negligible photothermal toxicity. *Angewandte Chemie - International Edition*, **2010**, 49, 3485-8	16.4	118
88	Gold nanocages covered with thermally-responsive polymers for controlled release by high-intensity focused ultrasound. *Nanoscale*, **2011**, 3, 1724-30	7.7	117
87	Dissolving Ag from Au-Ag Alloy Nanoboxes with H(2)O(2): A Method for Both Tailoring the Optical Properties and Measuring the H(2)O(2) Concentration. *Journal of Physical Chemistry C*, **2010**, 114, 6396-6400	3.8	115
86	Measuring the Optical Absorption Cross-sections of Au-Ag Nanocages and Au Nanorods by Photoacoustic Imaging. *Journal of Physical Chemistry C*, **2009**, 113, 9023-9028	3.8	111
85	Synergistic Photothermal and Antibiotic Killing of Biofilm-Associated Using Targeted Antibiotic-Loaded Gold Nanoconstructs. *ACS Infectious Diseases*, **2016**, 2, 241-250	5.5	106
84	Ultrafast laser studies of the photothermal properties of gold nanocages. *Journal of Physical Chemistry B*, **2006**, 110, 1520-4	3.4	104
83	Polyol Synthesis of Platinum Nanostructures: Control of Morphology through the Manipulation of Reduction Kinetics. *Angewandte Chemie*, **2005**, 117, 2645-2648	3.6	99
82	Gold nanocage-photosensitizer conjugates for dual-modal image-guided enhanced photodynamic therapy. *Theranostics*, **2014**, 4, 163-74	12.1	95
81	Self-Assembled Responsive Bilayered Vesicles with Adjustable Oxidative Stress for Enhanced Cancer Imaging and Therapy. *Journal of the American Chemical Society*, **2019**, 141, 8158-8170	16.4	93
80	Anisotropic Seeded Growth of CuM (M = Au, Pt, or Pd) Bimetallic Nanorods with Tunable Optical and Catalytic Properties. *Journal of Physical Chemistry C*, **2013**, 117, 8924-8932	3.8	89
79	Direct 12-Electron Oxidation of Ethanol on a Ternary Au(core)-PtIr(Shell) Electrocatalyst. *Journal of the American Chemical Society*, **2019**, 141, 9629-9636	16.4	81
78	Production of Ag nanocubes on a scale of 0.1 g per batch by protecting the NaHS-mediated polyol synthesis with argon. *ACS Applied Materials & Interfaces*, **2009**, 1, 2044-8	9.5	79
77	Optical properties of Au-Ag nanoboxes studied by single nanoparticle spectroscopy. *Journal of Physical Chemistry B*, **2006**, 110, 19923-8	3.4	77

76	Surfactant-directed assembly of [corrected] Pt nanoparticles into colloidal spheres and their use [corrected] as substrates in forming Pt nanorods and nanowires. *Small*, **2006**, 2, 1340-3	11	72
75	Size- and Shape-Controlled Synthesis and Properties of Magnetic-Plasmonic Core-Shell Nanoparticles. *Journal of Physical Chemistry C*, **2016**, 120, 10530-10546	3.8	71
74	Pd-Catalyzed Growth of Pt Nanoparticles or Nanowires as Dense Coatings on Polymeric and Ceramic Particulate Supports. *Advanced Materials*, **2006**, 18, 3271-3274	24	70
73	Correlated Rayleigh Scattering Spectroscopy and Scanning Electron Microscopy Studies of Au-Ag Bimetallic Nanoboxes and Nanocages. *Journal of Physical Chemistry C*, **2007**, 111, 12558-12565	3.8	67
72	Synthesis of Pd/Fe3O4 Hybrid Nanocatalysts with Controllable Interface and Enhanced Catalytic Activities for CO Oxidation. *Journal of Physical Chemistry C*, **2012**, 116, 12969-12976	3.8	66
71	Self-Assembly of Semiconducting-Plasmonic Gold Nanoparticles with Enhanced Optical Property for Photoacoustic Imaging and Photothermal Therapy. *Theranostics*, **2017**, 7, 2177-2185	12.1	65
70	Synthesis of Pt-Cu nanodendrites through controlled reduction kinetics for enhanced methanol electro-oxidation. *ChemSusChem*, **2013**, 6, 1863-7	8.3	60
69	Evaluating cytotoxicity and cellular uptake from the presence of variously processed TiO2 nanostructured morphologies. *Chemical Research in Toxicology*, **2010**, 23, 871-9	4	59
68	An enzyme-sensitive probe for photoacoustic imaging and fluorescence detection of protease activity. *Nanoscale*, **2011**, 3, 950-3	7.7	59
67	Corrosion-Based Synthesis of Single-Crystal Pd Nanoboxes and Nanocages and Their Surface Plasmon Properties. *Angewandte Chemie*, **2005**, 117, 8127-8131	3.6	58
66	Vibrational response of Au-Ag nanoboxes and nanocages to ultrafast laser-induced heating. *Nano Letters*, **2007**, 7, 1059-63	11.5	48
65	Infrared studies of carbon monoxide binding to carbon monoxide dehydrogenase/acetyl-CoA synthase from Moorella thermoacetica. *Biochemistry*, **2003**, 42, 14822-30	3.2	45
64	SV119-gold nanocage conjugates: a new platform for targeting cancer cells via sigma-2 receptors. *Nanoscale*, **2012**, 4, 421-4	7.7	43
63	Side-by-side patterning of multiple alkanethiolate monolayers on gold by edge-spreading lithography. *Angewandte Chemie - International Edition*, **2005**, 44, 3596-600	16.4	41
62	Trimeric Clusters of Silver in Aqueous AgNO3 Solutions and Their Role as Nuclei in Forming Triangular Nanoplates of Silver. *Angewandte Chemie*, **2007**, 119, 5005-5009	3.6	39
61	Polydopamine Surface Coating Synergizes the Antimicrobial Activity of Silver Nanoparticles. *ACS Applied Materials & Interfaces*, **2020**, 12, 40067-40077	9.5	37
60	The effects of polydopamine coated Cu nanoparticles on the tribological properties of polydopamine/PTFE coatings. *Tribology International*, **2016**, 103, 87-94	4.9	35
59	Diamond-like carbon coatings with zirconium-containing interlayers for orthopedic implants. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 68, 51-61	4.1	33

58	Water-dispersible, multifunctional, magnetic, luminescent silica-encapsulated composite nanotubes. *Small*, **2010**, 6, 412-20	11	33
57	Rapid determination of plasmonic nanoparticle agglomeration status in blood. *Biomaterials*, **2015**, 51, 226-237	15.6	32
56	The Influence of Cu Nanoparticles on the Tribological Properties of Polydopamine/PTFE + Cu Films. *Tribology Letters*, **2015**, 59, 1	2.8	32
55	Synthesis of Hollow Gold–Silver Alloyed Nanoparticles: A "Galvanic Replacement" Experiment for Chemistry and Engineering Students. *Journal of Chemical Education*, **2015**, 92, 1056-1060	2.4	30
54	Rapid Deposition of Uniform Polydopamine Coatings on Nanoparticle Surfaces with Controllable Thickness. *Langmuir*, **2017**, 33, 6046-6053	4	29
53	An experiment-based model quantifying antimicrobial activity of silver nanoparticles on Escherichia coli. *RSC Advances*, **2017**, 7, 56173-56182	3.7	28
52	Versatility of targeted antibiotic-loaded gold nanoconstructs for the treatment of biofilm-associated bacterial infections. *International Journal of Hyperthermia*, **2018**, 34, 209-219	3.7	26
51	Synthesis of Copper–Silica Core–Shell Nanostructures with Sharp and Stable Localized Surface Plasmon Resonance. *Journal of Physical Chemistry C*, **2017**, 121, 5684-5692	3.8	25
50	Use of Au Nanoparticle-Filled PTFE Films to Produce Low-Friction and Low-Wear Surface Coatings. *Tribology Letters*, **2014**, 56, 223-230	2.8	25
49	Galvanic replacement reaction: A simple and powerful route to hollow and porous metal nanostructures. *Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems*, **2007**, 221, 1-16		25
48	Temperature-Dependent Kinetics and Reaction Mechanism of Ammonia Oxidation on Pt, Ir, and PtIr Alloy Catalysts. *Journal of the Electrochemical Society*, **2018**, 165, J3095-J3100	3.9	25
47	Comparative study of monolayers self-assembled from alkylisocyanides and alkanethiols on polycrystalline Pt substrates. *Langmuir*, **2004**, 20, 6993-7	4	22
46	Gold–copper alloyed nanorods for metal-catalyzed organic reactions: implication of surface ligands on nanoparticle-based heterogeneous catalysis. *Tetrahedron Letters*, **2015**, 56, 3368-3372	2	20
45	Silver Ions Caused Faster Diffusive Dynamics of Histone-Like Nucleoid-Structuring Proteins in Live Bacteria. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	19
44	Mask-Assisted Seeded Growth of Segmented Metallic Heteronanostructures. *Journal of Physical Chemistry C*, **2014**, 118, 28134-28142	3.8	19
43	Impact of Structure and Composition on the Dealloying of CuxAu(1−x) Bulk and Nanoscale Alloys. *Journal of Physical Chemistry C*, **2016**, 120, 2299-2308	3.8	18
42	Understanding the interactions between porphyrin-containing photosensitizers and polymer-coated nanoparticles in model biological environments. *Journal of Colloid and Interface Science*, **2016**, 461, 225-231	9.3	17
41	Nonionizing photoacoustic cystography with near-infrared absorbing gold nanostructures as optical-opaque tracers. *Nanomedicine*, **2014**, 9, 1377-88	5.6	17

40	Chemical Structure of Fe-Ni Nanoparticles for Efficient Oxygen Evolution Reaction Electrocatalysis. *ACS Omega*, **2019**, 4, 17209-17222	3.9	16
39	Gold nanocages for cancer imaging and therapy. *Methods in Molecular Biology*, **2010**, 624, 83-99	1.4	16
38	Galectin-1-based tumour-targeting for gold nanostructure-mediated photothermal therapy. *International Journal of Hyperthermia*, **2018**, 34, 19-29	3.7	14
37	Tribological performance of polydopamine + Ag nanoparticles/PTFE thin films. *Tribology International*, **2020**, 144, 106097	4.9	14
36	Nanoscale reorganizations of histone-like nucleoid structuring proteins in Escherichia coli are caused by silver nanoparticles. *Nanotechnology*, **2019**, 30, 385101	3.4	13
35	Reversible structure manipulation by tuning carrier concentration in metastable CuS. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 9832-9837	11.5	11
34	Controlling the 3-D morphology of Ni-Fe-based nanocatalysts for the oxygen evolution reaction. *Nanoscale*, **2019**, 11, 8170-8184	7.7	11
33	A new analysis method for evaluating bacterial growth with microplate readers. *PLoS ONE*, **2021**, 16, e0245205	3.7	11
32	Dendritic Core-Frame and Frame Multimetallic Rhombic Dodecahedra: A Comparison Study of Composition and Structure Effects on Electrocatalysis of Methanol Oxidation. *ChemNanoMat*, **2018**, 4, 76-87	3.5	10
31	Microampere Electric Current Causes Bacterial Membrane Damage and Two-Way Leakage in a Short Period of Time. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	9
30	The unusual visible photothermal response of free standing multilayered films based on plasmonic bimetallic nanocages. *RSC Advances*, **2015**, 5, 15719-15727	3.7	9
29	Resonance wavelength-dependent signal of absorptive particles in surface plasmon resonance-based detection. *Sensors and Actuators B: Chemical*, **2007**, 123, 606-613	8.5	9
28	Enhanced Photothermal Treatment Efficacy and Normal Tissue Protection via Vascular Targeted Gold Nanocages. *Nanotheranostics*, **2019**, 3, 145-155	5.6	7
27	Thermoresponsive nanoparticle agglomeration/aggregation in salt solutions: Dependence on graft density. *Journal of Colloid and Interface Science*, **2017**, 506, 338-345	9.3	7
26	Bright Three-Photon Luminescence from Gold/Silver Alloyed Nanostructures for Bioimaging with Negligible Photothermal Toxicity. *Angewandte Chemie*, **2010**, 122, 3563-3566	3.6	7
25	Tribological behavior of the PDA/PTFE + Cu-SiO2 nanoparticle thin coatings. *Surface and Coatings Technology*, **2021**, 409, 126852	4.4	7
24	Aqueous dispersion of plasmonic hollow metal nanoparticles. *Materials Letters*, **2014**, 117, 241-243	3.3	6
23	Noble Metal Nanoparticle Platform **2014**, 327-346		6

22	Magnetic Nanoparticle Anchored Deep Eutectic Solvents as a Catalyst for the Etherification and Amination of Naphthols. *Advanced Synthesis and Catalysis*, **2018**, 360, 4372-4380	5.6	6
21	Probing the pathway of an ultrafast structural phase transition to illuminate the transition mechanism in Cu2S. *Applied Physics Letters*, **2018**, 113, 041904	3.4	5
20	Could targeted, antibiotic-loaded gold nanoconstructs be a new magic bullet to fight infection?. *Nanomedicine*, **2016**, 11, 2379-82	5.6	4
19	CuPt and CuPtRu Nanostructures for Ammonia Oxidation Reaction. *ECS Transactions*, **2018**, 85, 177-182	1	4
18	Silver ions cause oscillation of bacterial length of Escherichia coli. *Scientific Reports*, **2019**, 9, 11745	4.9	4
17	Side-by-Side Patterning of Multiple Alkanethiolate Monolayers on Gold by Edge-Spreading Lithography. *Angewandte Chemie*, **2005**, 117, 3662-3666	3.6	4
16	Tailoring the Surface Structures of CuPt and CuPtRu 1D Nanostructures by Coupling Coreduction with Galvanic Replacement. *Particle and Particle Systems Characterization*, **2018**, 35, 1800053	3.1	3
15	Biocompatible, Injectable Anionic Hydrogels Based on Poly(Oligo Ethylene Glycol Monoacrylate-co-Acrylic Acid) for Protein Delivery. *Advanced Therapeutics*, **2019**, 2, 1900092	4.9	3
14	Plasmonic Nanostructures for Biomedical and Sensing Applications **2015**, 133-173		3
13	Fe Coordination Environment, Fe-Incorporated Ni(OH)2 Phase, and Metallic Core Are Key Structural Components to Active and Stable Nanoparticle Catalysts for the Oxygen Evolution Reaction. *ACS Catalysis*, **2022**, 12, 1992-2008	13.1	3
12	Label-Free Quartz Crystal Microbalance Biosensor Based on Aptamer-Capped Gold Nanocages Loaded with Polyamidoamine for Thrombin Detection. *ACS Applied Nano Materials*, **2021**, 4, 10047-10054	5.6	3
11	Pt Nanoparticles Surfactant-Directed Assembled into Colloidal Spheres and used as Substrates in Forming Pt Nanorods and Nanowires. *Small*, **2006**, 2, 1399-1399	11	2
10	Real-Time Imaging of Laser-Induced Nanowelding of Silver Nanoparticles in Solution. *Journal of Physical Chemistry C*, **2021**, 125, 10422-10430	3.8	2
9	PtNi Seed-Core-Frame Hierarchical Nanostructures and Their Conversion to Nanoframes for Enhanced Methanol Electro-Oxidation. *Catalysts*, **2019**, 9, 39	4	2
8	Molecule-specific darkfield and multiphoton imaging using gold nanocages **2015**,		1
7	Faster diffusive dynamics of histone-like nucleoid structuring proteins in live bacteria caused by silver ions		1
6	A Metal-on-Metal Growth Approach to MetalMetal Oxide CoreShell Nanostructures with Plasmonic Properties. *Journal of Physical Chemistry C*, **2020**, 124, 17191-17203	3.8	1
5	A Light-Sheet-Based Imaaging Spectrometer to Characterize Acridine Orange Fluorescence within Leukocytes. *Diagnostics*, **2020**, 10,	3.8	1

List of Publications

4	Photothermal Response Induced by Nanocage-Coated Artificial Extracellular Matrix Promotes Neural Stem Cell Differentiation. *Nanomaterials*, **2021**, 11,	5.4	1
3	Reversible Structure Manipulation by Tuning Electron Dose Rate on Metastable CU2S. *Microscopy and Microanalysis*, **2018**, 24, 94-95	0.5	0
2	Gold Nanocages: A Multifunctional Platform for Molecular Optical Imaging and Photothermal Treatment **2011**, 615-638		
1	Polymer-Coated Gold Nanostructures for Controlled Release Drug Delivery **2020**, 169-193		