Mostafa A El-Sayed

List of Publications by Year
in descending order

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191 papers	65,191 citations	5896 81 h-index	3323 184 g-index
192 all docs	192 docs citations	192 times ranked	52519 citing authors

#	Article	IF	Citations
1	Cancer Cell Imaging and Photothermal Therapy in the Near-Infrared Region by Using Gold Nanorods. Journal of the American Chemical Society, 2006, 128, 2115-2120.	13.7	4,950
2	Preparation and Growth Mechanism of Gold Nanorods (NRs) Using Seed-Mediated Growth Method. Chemistry of Materials, 2003, 15, 1957-1962.	6.7	4,609
3	Calculated Absorption and Scattering Properties of Gold Nanoparticles of Different Size, Shape, and Composition:Â Applications in Biological Imaging and Biomedicine. Journal of Physical Chemistry B, 2006, 110, 7238-7248.	2.6	3,896
4	Noble Metals on the Nanoscale: Optical and Photothermal Properties and Some Applications in Imaging, Sensing, Biology, and Medicine. Accounts of Chemical Research, 2008, 41, 1578-1586.	15.6	3,680
5	Spectral Properties and Relaxation Dynamics of Surface Plasmon Electronic Oscillations in Gold and Silver Nanodots and Nanorods. Journal of Physical Chemistry B, 1999, 103, 8410-8426.	2.6	3,554
6	The golden age: gold nanoparticles for biomedicine. Chemical Society Reviews, 2012, 41, 2740-2779.	38.1	2,900
7	Why gold nanoparticles are more precious than pretty gold: Noble metal surface plasmon resonance and its enhancement of the radiative and nonradiative properties of nanocrystals of different shapes. Chemical Society Reviews, 2006, 35, 209-217.	38.1	2,830
8	Some Interesting Properties of Metals Confined in Time and Nanometer Space of Different Shapes. Accounts of Chemical Research, 2001, 34, 257-264.	15.6	2,643
9	Size and Temperature Dependence of the Plasmon Absorption of Colloidal Gold Nanoparticles. Journal of Physical Chemistry B, 1999, 103, 4212-4217.	2.6	2,356
10	Shape and size dependence of radiative, non-radiative and photothermal properties of gold nanocrystals. International Reviews in Physical Chemistry, 2000, 19, 409-453.	2.3	2,023
11	Plasmonic photothermal therapy (PPTT) using gold nanoparticles. Lasers in Medical Science, 2008, 23, 217-228.	2.1	1,950
12	Gold and Silver Nanoparticles in Sensing and Imaging:â€‰ Sensitivity of Plasmon Response to Size, Shape, and Metal Composition. Journal of Physical Chemistry B, 2006, 110, 19220-19225.	2.6	1,837
13	Surface Plasmon Resonance Scattering and Absorption of anti-EGFR Antibody Conjugated Gold Nanoparticles in Cancer Diagnostics:Â Applications in Oral Cancer. Nano Letters, 2005, 5, 829-834.	9.1	1,802
14	Gold Nanorods: From Synthesis and Properties to Biological and Biomedical Applications. Advanced Materials, 2009, 21, 4880-4910.	21.0	1,666
15	Gold nanoparticles: Optical properties and implementations in cancer diagnosis and photothermal therapy. Journal of Advanced Research, 2010, 1, 13-28.	9.5	1,616
16	On the Universal Scaling Behavior of the Distance Decay of Plasmon Coupling in Metal Nanoparticle Pairs: A Plasmon Ruler Equation. Nano Letters, 2007, 7, 2080-2088.	9.1	1,415
17	Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. Plasmonics, 2007, 2, 107-118.	3.4	1,119
18	Gold nanorod assisted near-infrared plasmonic photothermal therapy (PPTT) of squamous cell carcinoma in mice. Cancer Letters, 2008, 269, 57-66.	7.2	1,044

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19	Small Is Different:â€‰ Shape-, Size-, and Composition-Dependent Properties of Some Colloidal Semiconductor Nanocrystals. Accounts of Chemical Research, 2004, 37, 326-333.	15.6	855
20	Plasmonic coupling in noble metal nanostructures. Chemical Physics Letters, 2010, 487, 153-164.	2.6	798
21	Evidence for Bilayer Assembly of Cationic Surfactants on the Surface of Gold Nanorods. Langmuir, 2001, 17, 6368-6374.	3.5	787
22	Nuclear Targeting of Gold Nanoparticles in Cancer Cells Induces DNA Damage, Causing Cytokinesis Arrest and Apoptosis. Journal of the American Chemical Society, 2010, 132, 1517-1519.	13.7	611
23	Dependence of the Enhanced Optical Scattering Efficiency Relative to That of Absorption for Gold Metal Nanorods on Aspect Ratio, Size, End-Cap Shape, and Medium Refractive Index. Journal of Physical Chemistry B, 2005, 109, 20331-20338.	2.6	570
24	Beating cancer in multiple ways using nanogold. Chemical Society Reviews, 2011, 40, 3391.	38.1	552
25	Visible to Infrared Luminescence from a 28-Atom Gold Cluster. Journal of Physical Chemistry B, 2002, 106, 3410-3415.	2.6	538
26	Kinetically Controlled Growth and Shape Formation Mechanism of Platinum Nanoparticles. Journal of Physical Chemistry B, 1998, 102, 3316-3320.	2.6	453
27	The Effect of Stabilizers on the Catalytic Activity and Stability of Pd Colloidal Nanoparticles in the Suzuki Reactions in Aqueous Solutionâ€. Journal of Physical Chemistry B, 2001, 105, 8938-8943.	2.6	444
28	Suzuki Cross-Coupling Reactions Catalyzed by Palladium Nanoparticles in Aqueous Solution. Organic Letters, 2000, 2, 2385-2388.	4.6	437
29	Surface-Enhanced Raman Scattering Studies on Aggregated Gold Nanorodsâ€. Journal of Physical Chemistry A, 2003, 107, 3372-3378.	2.5	421
30	Size Effects of PVPâ"Pd Nanoparticles on the Catalytic Suzuki Reactions in Aqueous Solution. Langmuir, 2002, 18, 4921-4925.	3.5	409
31	Enhancing the rate of electrochemical nitrogen reduction reaction for ammonia synthesis under ambient conditions using hollow gold nanocages. Nano Energy, 2018, 49, 316-323.	16.0	380
32	Electrically Tunable Plasmonic Behavior of Nanocubeâ€"Polymer Nanomaterials Induced by a Redox-Active Electrochromic Polymer. ACS Nano, 2014, 8, 6182-6192.	14.6	347
33	Picosecond Dynamics of Colloidal Gold Nanoparticles. The Journal of Physical Chemistry, 1996, 100, 8053-8056.	2.9	340
34	Plasmonic photo-thermal therapy (PPTT). Alexandria Journal of Medicine, 2011, 47, 1-9.	0.6	338
35	Peptide-Conjugated Gold Nanorods for Nuclear Targeting. Bioconjugate Chemistry, 2007, 18, 1490-1497.	3.6	329
36	The Most Effective Gold Nanorod Size for Plasmonic Photothermal Therapy: Theory and In Vitro Experiments. Journal of Physical Chemistry B, 2014, 118, 1319-1326.	2.6	315

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37	Shape Transformation and Surface Melting of Cubic and Tetrahedral Platinum Nanocrystals. Journal of Physical Chemistry B, 1998, 102, 6145-6151.	2.6	293
38	How Does a Gold Nanorod Melt?#. Journal of Physical Chemistry B, 2000, 104, 7867-7870.	2.6	291
39	Thermal Reshaping of Gold Nanorods in Micelles. Journal of Physical Chemistry B, 1998, 102, 9370-9374.	2.6	285
40	Gold nanoparticles in biological optical imaging. Nano Today, 2019, 24, 120-140.	11.9	259
41	The potential use of the enhanced nonlinear properties of gold nanospheres in photothermal cancer therapy. Lasers in Surgery and Medicine, 2007, 39, 747-753.	2.1	251
42	Gold-Nanoparticle-Assisted Plasmonic Photothermal Therapy Advances Toward Clinical Application. Journal of Physical Chemistry C, 2019, 123, 15375-15393.	3.1	245
43	Efficacy, long-term toxicity, and mechanistic studies of gold nanorods photothermal therapy of cancer in xenograft mice. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3110-E3118.	7.1	237
44	Remote Triggered Release of Doxorubicin in Tumors by Synergistic Application of Thermosensitive Liposomes and Gold Nanorods. ACS Nano, 2011, 5, 4919-4926.	14.6	221
45	Synthesis and Optical Properties of Small Au Nanorods Using a Seedless Growth Technique. Langmuir, 2012, 28, 9807-9815.	3.5	218
46	Probing the Charge Storage Mechanism of a Pseudocapacitive MnO₂ Electrode Using in Operando Raman Spectroscopy. Chemistry of Materials, 2015, 27, 6608-6619.	6.7	212
47	Photoexcited Surface Frustrated Lewis Pairs for Heterogeneous Photocatalytic CO₂ Reduction. Journal of the American Chemical Society, 2016, 138, 1206-1214.	13.7	210
48	Platinum-Coated Gold Nanorods: Efficient Reactive Oxygen Scavengers That Prevent Oxidative Damage toward Healthy, Untreated Cells during Plasmonic Photothermal Therapy. ACS Nano, 2017, 11, 579-586.	14.6	205
49	On the Use of Plasmonic Nanoparticle Pairs As a Plasmon Ruler: The Dependence of the Near-Field Dipole Plasmon Coupling on Nanoparticle Size and Shape. Journal of Physical Chemistry A, 2009, 113, 1946-1953.	2.5	201
50	Plasmonic gold nanoparticles: Optical manipulation, imaging, drug delivery and therapy. Journal of Controlled Release, 2019, 311-312, 170-189.	9.9	195
51	A Real-Time Surface Enhanced Raman Spectroscopy Study of Plasmonic Photothermal Cell Death Using Targeted Gold Nanoparticles. Journal of the American Chemical Society, 2016, 138, 1258-1264.	13.7	185
52	Effect of Nanocatalysis in Colloidal Solution on the Tetrahedral and Cubic Nanoparticle SHAPE:â€‰ Electron-Transfer Reaction Catalyzed by Platinum Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 5726-5733.	2.6	179
53	Unraveling the Nature of Anomalously Fast Energy Storage in T-Nb₂O₅. Journal of the American Chemical Society, 2017, 139, 7071-7081.	13.7	171
54	Surface Plasmon Resonance Sensitivity of Metal Nanostructures:â€‰ Physical Basis and Universal Scaling in Metal Nanoshells. Journal of Physical Chemistry C, 2007, 111, 17451-17454.	3.1	170

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55	Targeting heat shock protein 70 using gold nanorods enhances cancer cell apoptosis in low dose plasmonic photothermal therapy. Biomaterials, 2016, 102, 1-8.	11.4	159
56	Targeting cancer cell integrins using gold nanorods in photothermal therapy inhibits migration through affecting cytoskeletal proteins. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5655-E5663.	7.1	151
57	Effect of Catalytic Activity on the Metallic Nanoparticle Size Distribution:â€‰ Electron-Transfer Reaction between Fe(CN)6 and Thiosulfate Ions Catalyzed by PVPâ^'Platinum Nanoparticles. Journal of Physical Chemistry B, 2003, 107, 12416-12424.	2.6	150
58	Effect of the Dielectric Constant of the Surrounding Medium and the Substrate on the Surface Plasmon Resonance Spectrum and Sensitivity Factors of Highly Symmetric Systems: Silver Nanocubes. Journal of the American Chemical Society, 2012, 134, 6434-6442.	13.7	150
59	Hollow and Solid Metallic Nanoparticles in Sensing and in Nanocatalysis. Chemistry of Materials, 2014, 26, 44-58.	6.7	144
60	Observing Real-Time Molecular Event Dynamics of Apoptosis in Living Cancer Cells using Nuclear-Targeted Plasmonically Enhanced Raman Nanoprobes. ACS Nano, 2014, 8, 4883-4892.	14.6	138
61	Relative Enhancement of Ultrafast Emission in Gold Nanorods. Journal of Physical Chemistry B, 2003, 107, 3101-3104.	2.6	136
62	Some Aspects of Colloidal Nanoparticle Stability, Catalytic Activity, and Recycling Potential. Topics in Catalysis, 2008, 47, 15-21.	2.8	135
63	Nuclear Membrane-Targeted Gold Nanoparticles Inhibit Cancer Cell Migration and Invasion. ACS Nano, 2017, 11, 3716-3726.	14.6	135
64	Different Plasmon Sensing Behavior of Silver and Gold Nanorods. Journal of Physical Chemistry Letters, 2013, 4, 1541-1545.	4.6	133
65	Simultaneous Time-Dependent Surface-Enhanced Raman Spectroscopy, Metabolomics, and Proteomics Reveal Cancer Cell Death Mechanisms Associated with Gold Nanorod Photothermal Therapy. Journal of the American Chemical Society, 2016, 138, 15434-15442.	13.7	128
66	Electrically driven reprogrammable phase-change metasurface reaching 80% efficiency. Nature Communications, 2022, 13, 1696.	12.8	125
67	Excited-State Dynamics of a Protonated Retinal Schiff Base in Solution. The Journal of Physical Chemistry, 1996, 100, 18586-18591.	2.9	120
68	Can the Observed Changes in the Size or Shape of a Colloidal Nanocatalyst Reveal the Nanocatalysis Mechanism Type: Homogeneous or Heterogeneous?. Topics in Catalysis, 2008, 48, 60-74.	2.8	119
69	Assemblies of silver nanocubes for highly sensitive SERS chemical vapor detection. Journal of Materials Chemistry A, 2013, 1, 2777.	10.3	111
70	Gold Nanorod Photothermal Therapy Alters Cell Junctions and Actin Network in Inhibiting Cancer Cell Collective Migration. ACS Nano, 2018, 12, 9279-9290.	14.6	105
71	Electrochemical Synthesis of Ammonia from N₂ and H₂O under Ambient Conditions Using Pore-Size-Controlled Hollow Gold Nanocatalysts with Tunable Plasmonic Properties. Journal of Physical Chemistry Letters, 2018, 9, 5160-5166.	4.6	104
72	Real-Time Molecular Imaging throughout the Entire Cell Cycle by Targeted Plasmonic-Enhanced Rayleigh/Raman Spectroscopy. Nano Letters, 2012, 12, 5369-5375.	9.1	102

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73	Enhancing the Efficiency of Gold Nanoparticles Treatment of Cancer by Increasing Their Rate of Endocytosis and Cell Accumulation Using Rifampicin. Journal of the American Chemical Society, 2014, 136, 4464-4467.	13.7	101
74	Bacteriorhodopsin/TiO2 nanotube arrays hybrid system for enhanced photoelectrochemical water splitting. Energy and Environmental Science, 2011, 4, 2909.	30.8	93
75	Photoelectrochemical Water Oxidation Characteristics of Anodically Fabricated TiO₂ Nanotube Arrays: Structural and Optical Properties. Journal of Physical Chemistry C, 2010, 114, 12024-12029.	3.1	91
76	Surface-Enhanced Raman Spectroscopy for Real-Time Monitoring of Reactive Oxygen Species-Induced DNA Damage and Its Prevention by Platinum Nanoparticles. ACS Nano, 2013, 7, 7524-7533.	14.6	90
77	Probing Structural Evolution and Charge Storage Mechanism of NiO₂H_x Electrode Materials using In Operando Resonance Raman Spectroscopy. Advanced Science, 2016, 3, 1500433.	11.2	90
78	Carrier dynamics and the role of surface defects: Designing a photocatalyst for gas-phase CO ₂ reduction. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8011-E8020.	7.1	89
79	Activation Energy of the Reaction between Hexacyanoferrate(III) and Thiosulfate Ions Catalyzed by Platinum Nanoparticles. Journal of Physical Chemistry B, 2000, 104, 10956-10959.	2.6	87
80	Gold nanomaterials as key suppliers in biological and chemical sensing, catalysis, and medicine. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129435.	2.4	86
81	Operando Investigation into Dynamic Evolution of Cathodeâ€“Electrolyte Interfaces in a Li-Ion Battery. Nano Letters, 2019, 19, 2037-2043.	9.1	85
82	Dynamic Hybrid Metasurfaces. Nano Letters, 2021, 21, 1238-1245.	9.1	85
83	Variation of the Thickness and Number of Wells in the CdS/HgS/CdS Quantum Dot Quantum Well System. Journal of Physical Chemistry A, 2001, 105, 5548-5551.	2.5	83
84	Dark-field light scattering imaging of living cancer cell component from birth through division using bioconjugated gold nanoprobes. Journal of Biomedical Optics, 2010, 15, 1.	2.6	78
85	Unraveling the Biomolecular Snapshots of Mitosis in Healthy and Cancer Cells Using Plasmonically-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2014, 136, 15961-15968.	13.7	75
86	Plasmon-enhanced photo(electro)chemical nitrogen fixation under ambient conditions using visible light responsive hybrid hollow Au-Ag2O nanocages. Nano Energy, 2019, 63, 103886.	16.0	73
87	The pump power dependence of the femtosecond relaxation of CdSe nanoparticles observed in the spectral range from visible to infrared. Journal of Chemical Physics, 2002, 116, 3828-3833.	3.0	72
88	A New Nanotechnology Technique for Determining Drug Efficacy Using Targeted Plasmonically Enhanced Single Cell Imaging Spectroscopy. Journal of the American Chemical Society, 2013, 135, 4688-4691.	13.7	70
89	The Coupling between Gold or Silver Nanocubes in Their Homo-Dimers: A New Coupling Mechanism at Short Separation Distances. Nano Letters, 2015, 15, 3391-3397.	9.1	70
90	Picosecond Electronic Relaxation in CdS/HgS/CdS Quantum Dot Quantum Well Semiconductor Nanoparticles. The Journal of Physical Chemistry, 1996, 100, 6381-6384.	2.9	69

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91	Photoisomerization Quantum Yield and Apparent Energy Content of the K Intermediate in the Photocycles of Bacteriorhodopsin, Its Mutants D85N, R82Q, and D212N, and Deionized Blue Bacteriorhodopsin. The Journal of Physical Chemistry, 1996, 100, 2391-2398.	2.9	68
92	Electrically Controlled Plasmonic Behavior of Gold Nanocube@Polyaniline Nanostructures: Transparent Plasmonic Aggregates. Chemistry of Materials, 2016, 28, 2868-2881.	6.7	67
93	FTIR Study of the Adsorption of the Capping Material to Different Platinum Nanoparticle Shapes. Journal of Physical Chemistry A, 2003, 107, 8371-8375.	2.5	62
94	Molecular Mechanism of the Differential Photoelectric Response of Bacteriorhodopsin. Journal of Physical Chemistry B, 1997, 101, 3420-3423.	2.6	59
95	High-density femtosecond transient absorption spectroscopy of semiconductor nanoparticles. A tool to investigate surface quality. Pure and Applied Chemistry, 2000, 72, 165-177.	1.9	59
96	High-temperature surface enhanced Raman spectroscopy for in situ study of solid oxide fuel cell materials. Energy and Environmental Science, 2014, 7, 306-310.	30.8	58
97	Treatment of natural mammary gland tumors in canines and felines using gold nanorods-assisted plasmonic photothermal therapy to induce tumor apoptosis. International Journal of Nanomedicine, 2016, Volume 11, 4849-4863.	6.7	58
98	A Step Toward Efficient Panchromatic Multi-Chromophoric Sensitizers for Dye Sensitized Solar Cells. Chemistry of Materials, 2015, 27, 6305-6313.	6.7	57
99	Collective multipole oscillations direct the plasmonic coupling at the nanojunction interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19299-19304.	7.1	54
100	Plasmonic and chiroplasmonic nanobiosensors based on gold nanoparticles. Talanta, 2020, 212, 120782.	5.5	52
101	Elucidation of ultraviolet radiation-induced cell responses and intracellular biomolecular dynamics in mammalian cells using surface-enhanced Raman spectroscopy. Chemical Science, 2016, 7, 1133-1141.	7.4	51
102	Photothermal reshaping of prismatic Au nanoparticles in periodic monolayer arrays by femtosecond laser pulses. Journal of Applied Physics, 2005, 98, 114301.	2.5	50
103	Determining the Mechanism of Solution Metallic Nanocatalysis with Solid and Hollow Nanoparticles: Homogeneous or Heterogeneous. Journal of Physical Chemistry C, 2013, 117, 21886-21893.	3.1	50
104	Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced Electron-Transfer Rate in Dye-Titania System. Journal of Physical Chemistry C, 2007, 111, 9008-9011.	3.1	49
105	An Experimental Insight into the Structural and Electronic Characteristics of Strontiumâ€Doped Titanium Dioxide Nanotube Arrays. Advanced Functional Materials, 2014, 24, 6783-6796.	14.9	49
106	Intracellular Assembly of Nuclear-Targeted Gold Nanosphere Enables Selective Plasmonic Photothermal Therapy of Cancer by Shifting Their Absorption Wavelength toward Near-Infrared Region. Bioconjugate Chemistry, 2017, 28, 2452-2460.	3.6	49
107	Dual-Responsive Reversible Plasmonic Behavior of Coreâ€“Shell Nanostructures with pH-Sensitive and Electroactive Polymer Shells. Chemistry of Materials, 2016, 28, 7551-7563.	6.7	48
108	Biological Targeting of Plasmonic Nanoparticles Improves Cellular Imaging via the Enhanced Scattering in the Aggregates Formed. Journal of Physical Chemistry Letters, 2014, 5, 2555-2561.	4.6	44

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109	Some properties of spherical and rod-shaped semiconductor and metal nanocrystals. Pure and Applied Chemistry, 2002, 74, 1675-1692.	1.9	43
110	Tissue Distribution and Efficacy of Gold Nanorods Coupled with Laser Induced Photoplasmonic Therapy in Ehrlich Carcinoma Solid Tumor Model. PLoS ONE, 2013, 8, e76207.	2.5	43
111	Gold Nanorods as Drug Delivery Vehicles for Rifampicin Greatly Improve the Efficacy of Combating Mycobacterium tuberculosis with Good Biocompatibility with the Host Cells. Bioconjugate Chemistry, 2016, 27, 2486-2492.	3.6	43
112	Dual-Excitation Nanocellulose Plasmonic Membranes for Molecular and Cellular SERS Detection. ACS Applied Materials & Interfaces, 2018, 10, 18380-18389.	8.0	42
113	Some recent developments in photoelectrochemical water splitting using nanostructured TiO2: a short review. Theoretical Chemistry Accounts, 2012, 131, 1.	1.4	41
114	A Comparison of the Photoelectric Current Responses Resulting from the Proton Pumping Process of Bacteriorhodopsin under Pulsed and CW Laser Excitations. Journal of Physical Chemistry B, 1997, 101, 10599-10604.	2.6	37
115	Design of Hybrid Electrochromic Materials with Large Electrical Modulation of Plasmonic Resonances. ACS Applied Materials & Interfaces, 2016, 8, 13064-13075.	8.0	37
116	Are Hot Spots between Two Plasmonic Nanocubes of Silver or Gold Formed between Adjacent Corners or Adjacent Facets? A DDA Examination. Journal of Physical Chemistry Letters, 2014, 5, 2229-2234.	4.6	35
117	Nanocatalysts Can Change the Number of Electrons Involved in Oxidationâ€“Reduction Reaction with the Nanocages Being the Most Efficient. Journal of Physical Chemistry C, 2012, 116, 24171-24176.	3.1	33
118	The Role of Oxidation of Silver in Bimetallic Goldâ€“Silver Nanocages on Electrocatalytic Activity of Nitrogen Reduction Reaction. Journal of Physical Chemistry C, 2019, 123, 11422-11427.	3.1	33
119	Electrosynthesis of Ammonia Using Porous Bimetallic Pdâ€“Ag Nanocatalysts in Liquid- and Gas-Phase Systems. ACS Catalysis, 2020, 10, 10197-10206.	11.2	33
120	Hyperoxia Induces Intracellular Acidification in Neonatal Mouse Lung Fibroblasts: Real-Time Investigation Using Plasmonically Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2016, 138, 3779-3788.	13.7	32
121	Thin to Thick, Short to Long: Spectral Properties of Gold Nanorods by Theoretical Modeling. Journal of Physical Chemistry C, 2013, 117, 18653-18656.	3.1	31
122	Surface Assembly and Plasmonic Properties in Strongly Coupled Segmented Gold Nanorods. Small, 2013, 9, 2979-2990.	10.0	31
123	Enhanced Electrocatalytic Activity toward the Oxygen Reduction Reaction through Alloy Formation: Platinumâ€“Silver Alloy Nanocages. Journal of Physical Chemistry C, 2016, 120, 14643-14651.	3.1	31
124	Extinction vs Absorption: Which Is the Indicator of Plasmonic Field Strength for Silver Nanocubes?. Journal of Physical Chemistry C, 2012, 116, 23019-23026.	3.1	30
125	Enhancing Catalytic Efficiency of Hollow Palladium Nanoparticles by Photothermal Heating of Gold Nanoparticles Added to the Cavity: Palladiumâ€“Gold Nanorattles. ChemCatChem, 2014, 6, 3540-3546.	3.7	30
126	Tailoring the Plasmonic Modes of a Gratingâ€“Nanocube Assembly to Achieve Broadband Absorption in the Visible Spectrum. Advanced Functional Materials, 2014, 24, 6797-6805.	14.9	30

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127	Ambient Ammonia Electrosynthesis from Nitrogen and Water by Incorporating Palladium in Bimetallic Goldâ€“Silver Nanocages. Journal of the Electrochemical Society, 2020, 167, 054511.	2.9	30
128	Silver Nanocube Aggregates in Cylindrical Pores for Higher Refractive Index Plasmonic Sensing. Particle and Particle Systems Characterization, 2014, 31, 274-283.	2.3	29
129	The Sensitivity of the Distance Dependent Plasmonic Coupling between Two Nanocubes to their Orientation: Edge-to-Edge versus Face-to-Face. Journal of Physical Chemistry C, 2016, 120, 4564-4570.	3.1	29
130	Improving the Flow Cytometry-based Detection of the Cellular Uptake of Gold Nanoparticles. Analytical Chemistry, 2019, 91, 14261-14267.	6.5	29
131	XAV939: From a Small Inhibitor to a Potent Drug Bioconjugate When Delivered by Gold Nanoparticles. Bioconjugate Chemistry, 2014, 25, 207-215.	3.6	28
132	Substrate Effect on the Plasmonic Sensing Ability of Hollow Nanoparticles of Different Shapes. Journal of Physical Chemistry B, 2013, 117, 4468-4477.	2.6	27
133	Controlling the Catalytic Efficiency on the Surface of Hollow Gold Nanoparticles by Introducing an Inner Thin Layer of Platinum or Palladium. Journal of Physical Chemistry Letters, 2014, 5, 4088-4094.	4.6	27
134	Cytotoxic effects of cytoplasmic-targeted and nuclear-targeted gold and silver nanoparticles in HSC-3 cells â€“ A mechanistic study. Toxicology in Vitro, 2015, 29, 694-705.	2.4	26
135	Redetermination of the Quantum Yield of Photoisomerization and Energy Content in the K-Intermediate of Bacteriorhodopsin Photocycle and Its Mutants by the Photoacoustic Technique. Journal of Physical Chemistry B, 1997, 101, 6629-6633.	2.6	25
136	Multimodal plasmon coupling in low symmetry gold nanoparticle pairs detected in surface-enhanced Raman scattering. Applied Physics Letters, 2011, 98, .	3.3	25
137	Photoelectric Conversion Properties of Dye-Sensitized Solar Cells Using Dye-Dispersing Titania. Journal of Physical Chemistry C, 2012, 116, 4848-4854.	3.1	25
138	Deposition of loosely bound organic Dâ€“Aâ€“Ï€â€“Aâ€² dyes on sensitized TiO₂ film: a possible strategy to suppress charge recombination and enhance power conversion efficiency in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 11229-11234.	10.3	25
139	Effects of the Substrate Refractive Index, the Exciting Light Propagation Direction, and the Relative Cube Orientation on the Plasmonic Coupling Behavior of Two Silver Nanocubes at Different Separations. Journal of Physical Chemistry C, 2016, 120, 20896-20904.	3.1	25
140	Room temperature optical gain in CdSe nanorod solutions. Journal of Applied Physics, 2002, 92, 6799-6803.	2.5	24
141	Role of Femtosecond Pulsed Laser-Induced Atomic Redistribution in Bimetallic Auâ€“Pd Nanorods on Optoelectronic and Catalytic Properties. ACS Nano, 2021, 15, 10241-10252.	14.6	24
142	The unusual fluorescence intensity enhancement of poly(p-phenyleneethynylene) polymer separated from the silver nanocube surface by H-bonded LbL shells. Journal of Materials Chemistry, 2012, 22, 16745.	6.7	23
143	Dependence of the Threshold Energy of Femtosecond Laser Ejection of Gold Nanoprisms from Quartz Substrates on the Nanoparticle Environmentâ€. Journal of Physical Chemistry C, 2007, 111, 8934-8941.	3.1	22
144	Plasmonic Spectroscopy: The Electromagnetic Field Strength and its Distribution Determine the Sensitivity Factor of Face-to-Face Ag Nanocube Dimers in Solution and on a Substrate. Journal of Physical Chemistry C, 2015, 119, 15579-15587.	3.1	22

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145	Managing the Nitrogen Cycle via Plasmonic (Photo)Electrocatalysis: Toward Circular Economy. Accounts of Chemical Research, 2021, 54, 4294-4304.	15.6	22
146	The Effect of Different Metal Cation Binding on the Proton Pumping in Bacteriorhodopsin. Israel Journal of Chemistry, 1995, 35, 465-474.	2.3	21
147	Gold-Nanoparticle-Decorated Hybrid Mesoflowers: An Efficient Surface-Enhanced Raman Scattering Substrate for Ultra-Trace Detection of Prostate Specific Antigen. Journal of Physical Chemistry B, 2014, 118, 14085-14091.	2.6	20
148	Spectroscopy of Homo- and Heterodimers of Silver and Gold Nanocubes as a Function of Separation: A DDA Simulation. Journal of Physical Chemistry A, 2014, 118, 8338-8344.	2.5	20
149	Microfluidics for Development of Lipid Nanoparticles: Paving the Way for Nucleic Acids to the Clinic. ACS Applied Bio Materials, 2023, 6, 3566-3576.	4.6	18
150	Localized Surface Plasmon Resonance as a Tool to Study Protein Corona Formation on Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 24765-24776.	3.1	18
151	Homogeneous Line Width of the Different Vibronic Bands of Retinal Absorption in Bacteriorhodopsin by the Hole-Burning Technique. The Journal of Physical Chemistry, 1996, 100, 2762-2765.	2.9	17
152	Monitoring the dynamics of hemeoxygenase-1 activation in head and neck cancer cells in real-timeÂusing plasmonically enhanced Raman spectroscopy. Chemical Science, 2019, 10, 4876-4882.	7.4	16
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