Mostafa A El-Sayed

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/6068428/mostafa-a-el-sayed-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56,492 76 190 192 h-index g-index citations papers 61,106 8.26 8.7 192 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
190	Electrically driven reprogrammable phase-change metasurface reaching 80% efficiency <i>Nature Communications</i> , 2022 , 13, 1696	17.4	21
189	Localized Surface Plasmon Resonance as a Tool to Study Protein Corona Formation on Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 24765-24776	3.8	3
188	Managing the Nitrogen Cycle via Plasmonic (Photo)Electrocatalysis: Toward Circular Economy. <i>Accounts of Chemical Research</i> , 2021 , 54, 4294-4304	24.3	3
187	Role of Femtosecond Pulsed Laser-Induced Atomic Redistribution in Bimetallic Au-Pd Nanorods on Optoelectronic and Catalytic Properties. <i>ACS Nano</i> , 2021 , 15, 10241-10252	16.7	9
186	Dynamic Hybrid Metasurfaces. <i>Nano Letters</i> , 2021 , 21, 1238-1245	11.5	33
185	Localized Plasmonic Photothermal Therapy as a Life-saving Treatment Paradigm for Hospitalized COVID-19 Patients. <i>Plasmonics</i> , 2021 , 16, 1-5	2.4	4
184	Smart NIR-light and pH responsive doxorubicin-loaded GNRs@SBA-15-SH nanocomposite for chemo-photothermal therapy of cancer. <i>Nanophotonics</i> , 2021 , 10, 3303-3319	6.3	2
183	Microfluidics for Development of Lipid Nanoparticles: Paving the Way for Nucleic Acids to the Clinic ACS Applied Bio Materials, 2021 ,	4.1	9
182	Ambient Ammonia Electrosynthesis from Nitrogen and Water by Incorporating Palladium in Bimetallic GoldBilver Nanocages. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 054511	3.9	12
181	Observation of Photoinduced Proton Transfer between the Titania Surface and Dye Molecule. Journal of Physical Chemistry C, 2020 , 124, 4172-4178	3.8	4
180	Plasmonic and chiroplasmonic nanobiosensors based on gold nanoparticles. <i>Talanta</i> , 2020 , 212, 120782	6.2	27
179	Electrosynthesis of Ammonia Using Porous Bimetallic PdAg Nanocatalysts in Liquid- and Gas-Phase Systems. <i>ACS Catalysis</i> , 2020 , 10, 10197-10206	13.1	16
178	Gold nanomaterials as key suppliers in biological and chemical sensing, catalysis, and medicine. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2020 , 1864, 129435	4	45
177	Plasmonic gold nanoparticles: Optical manipulation, imaging, drug delivery and therapy. <i>Journal of Controlled Release</i> , 2019 , 311-312, 170-189	11.7	102
176	Enhancing Plasmonic Photonic Hybrid Cavity Modes by Coupling of Individual Plasmonic Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 24255-24262	3.8	6
175	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	4 ^{11.5}	34
174	Gold Nanorod-Assisted Photothermal Therapy Decreases Bleeding during Breast Cancer Surgery in Dogs and Cats. <i>Cancers</i> , 2019 , 11,	6.6	11

(2017-2019)

173	Gold-Nanoparticle-Assisted Plasmonic Photothermal Therapy Advances Toward Clinical Application. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 15375-15393	3.8	154
172	The Role of Oxidation of Silver in Bimetallic GoldBilver Nanocages on Electrocatalytic Activity of Nitrogen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 11422-11427	3.8	24
171	Monitoring the dynamics of hemeoxygenase-1 activation in head and neck cancer cells in real-time using plasmonically enhanced Raman spectroscopy. <i>Chemical Science</i> , 2019 , 10, 4876-4882	9.4	9
170	Operando Investigation into Dynamic Evolution of Cathode-Electrolyte Interfaces in a Li-Ion Battery. <i>Nano Letters</i> , 2019 , 19, 2037-2043	11.5	45
169	Plasmon-enhanced photo(electro)chemical nitrogen fixation under ambient conditions using visible light responsive hybrid hollow Au-Ag2O nanocages. <i>Nano Energy</i> , 2019 , 63, 103886	17.1	49
168	Improving the Flow Cytometry-based Detection of the Cellular Uptake of Gold Nanoparticles. <i>Analytical Chemistry</i> , 2019 , 91, 14261-14267	7.8	19
167	Enhanced Electrochemical Dark-Field Scattering Modulation on a Single Hybrid CoreBhell Nanostructure. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 28343-28352	3.8	7
166	Gold nanoparticles in biological optical imaging. <i>Nano Today</i> , 2019 , 24, 120-140	17.9	154
165	Single-Crystal Electrospun Plasmonic Perovskite Nanofibers. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 6846-6851	3.8	10
164	Enhancing the rate of electrochemical nitrogen reduction reaction for ammonia synthesis under ambient conditions using hollow gold nanocages. <i>Nano Energy</i> , 2018 , 49, 316-323	17.1	270
163	UV Resonance Raman Study of Apoptosis, Platinum-Based Drugs, and Human Cell Lines. <i>ChemPhysChem</i> , 2018 , 19, 1428-1431	3.2	2
162	Plasmonically Enhanced Elastic and Inelastic Light Scattering for Real-Time Study of Molecular Cell Functions 2018 , 89-115		
161	Dual-Excitation Nanocellulose Plasmonic Membranes for Molecular and Cellular SERS Detection. <i>ACS Applied Materials & Detection</i> , 10, 18380-18389	9.5	32
160	Gold Nanorod Photothermal Therapy Alters Cell Junctions and Actin Network in Inhibiting Cancer Cell Collective Migration. <i>ACS Nano</i> , 2018 , 12, 9279-9290	16.7	72
159	Electrochemical Synthesis of Ammonia from N and HO under Ambient Conditions Using Pore-Size-Controlled Hollow Gold Nanocatalysts with Tunable Plasmonic Properties. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5160-5166	6.4	78
158	Unraveling the Nature of Anomalously Fast Energy Storage in T-NbO. <i>Journal of the American Chemical Society</i> , 2017 , 139, 7071-7081	16.4	118
157	Nuclear Membrane-Targeted Gold Nanoparticles Inhibit Cancer Cell Migration and Invasion. <i>ACS Nano</i> , 2017 , 11, 3716-3726	16.7	110
156	Efficacy, long-term toxicity, and mechanistic studies of gold nanorods photothermal therapy of cancer in xenograft mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E3110-E3118	11.5	176

155	Platinum-Coated Gold Nanorods: Efficient Reactive Oxygen Scavengers That Prevent Oxidative Damage toward Healthy, Untreated Cells during Plasmonic Photothermal Therapy. <i>ACS Nano</i> , 2017 , 11, 579-586	16.7	151
154	Intracellular Assembly of Nuclear-Targeted Gold Nanosphere Enables Selective Plasmonic Photothermal Therapy of Cancer by Shifting Their Absorption Wavelength toward Near-Infrared Region. <i>Bioconjugate Chemistry</i> , 2017 , 28, 2452-2460	6.3	37
153	An Ultraviolet Resonance Raman Spectroscopic Study of Cisplatin and Transplatin Interactions with Genomic DNA. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 8975-8983	3.4	4
152	High-sensitivity molecular sensing using plasmonic nanocube chains in classical and quantum coupling regimes. <i>Nano Today</i> , 2017 , 17, 14-22	17.9	11
151	Electrochromic tuning of transparent gold nanorods with poly[(3,4-propylenedioxy)pyrrole] shells in the near-infrared region. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 12571-12584	7.1	11
150	Targeting cancer cell integrins using gold nanorods in photothermal therapy inhibits migration through affecting cytoskeletal proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E5655-E5663	11.5	121
149	Simultaneous Time-Dependent Surface-Enhanced Raman Spectroscopy, Metabolomics, and Proteomics Reveal Cancer Cell Death Mechanisms Associated with Gold Nanorod Photothermal Therapy. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15434-15442	16.4	93
148	Targeting heat shock protein 70 using gold nanorods enhances cancer cell apoptosis in low dose plasmonic photothermal therapy. <i>Biomaterials</i> , 2016 , 102, 1-8	15.6	128
147	Enhanced Electrocatalytic Activity toward the Oxygen Reduction Reaction through Alloy Formation: PlatinumBilver Alloy Nanocages. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 14643-14651	3.8	25
146	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. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 20896-20904	3.8	20
145	Photoexcited Surface Frustrated Lewis Pairs for Heterogeneous Photocatalytic CO2 Reduction. Journal of the American Chemical Society, 2016 , 138, 1206-14	16.4	154
144	The Sensitivity of the Distance Dependent Plasmonic Coupling between Two Nanocubes to their Orientation: Edge-to-Edge versus Face-to-Face. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 4564-4570	3.8	24
143	Hyperoxia Induces Intracellular Acidification in Neonatal Mouse Lung Fibroblasts: Real-Time Investigation Using Plasmonically Enhanced Raman Spectroscopy. <i>Journal of the American Chemical Society</i> , 2016 , 138, 3779-88	16.4	28
142	A Real-Time Surface Enhanced Raman Spectroscopy Study of Plasmonic Photothermal Cell Death Using Targeted Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2016 , 138, 1258-64	16.4	152
141	Elucidation of ultraviolet radiation-induced cell responses and intracellular biomolecular dynamics in mammalian cells using surface-enhanced Raman spectroscopy. <i>Chemical Science</i> , 2016 , 7, 1133-1141	9.4	38
140	Treatment of natural mammary gland tumors in canines and felines using gold nanorods-assisted plasmonic photothermal therapy to induce tumor apoptosis. <i>International Journal of Nanomedicine</i> , 2016 , 11, 4849-4863	7.3	46
139	Carrier dynamics and the role of surface defects: Designing a photocatalyst for gas-phase CO2 reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E8011-E8020	11.5	73
138	Electrically Controlled Plasmonic Behavior of Gold [email@protected] Nanostructures: Transparent Plasmonic Aggregates. <i>Chemistry of Materials</i> , 2016 , 28, 2868-2881	9.6	55

137	Design of Hybrid Electrochromic Materials with Large Electrical Modulation of Plasmonic Resonances. <i>ACS Applied Materials & Acs Acs Applied Materials & Acs Acs Acs Acs Acs Acs Acs Acc Acs Acc Acs Acc Acc</i>	9.5	30
136	Gold Nanorods as Drug Delivery Vehicles for Rifampicin Greatly Improve the Efficacy of Combating Mycobacterium tuberculosis with Good Biocompatibility with the Host Cells. <i>Bioconjugate Chemistry</i> , 2016 , 27, 2486-2492	6.3	37
135	Advances in Nanomedicine for Head and Neck Cancer 2016 , 827-844		3
134	The effect of plasmon resonance coupling in P3HT-coated silver nanodisk monolayers on their optical sensitivity. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 9813-9822	7.1	10
133	Dual-Responsive Reversible Plasmonic Behavior of CoreBhell Nanostructures with pH-Sensitive and Electroactive Polymer Shells. <i>Chemistry of Materials</i> , 2016 , 28, 7551-7563	9.6	40
132	Probing Structural Evolution and Charge Storage Mechanism of NiOH Electrode Materials using In Operando Resonance Raman Spectroscopy. <i>Advanced Science</i> , 2016 , 3, 1500433	13.6	58
131	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. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 15579-15587	3.8	22
130	The Coupling between Gold or Silver Nanocubes in Their Homo-Dimers: A New Coupling Mechanism at Short Separation Distances. <i>Nano Letters</i> , 2015 , 15, 3391-7	11.5	54
129	Probing the Charge Storage Mechanism of a Pseudocapacitive MnO2 Electrode Using in Operando Raman Spectroscopy. <i>Chemistry of Materials</i> , 2015 , 27, 6608-6619	9.6	141
128	A Step Toward Efficient Panchromatic Multi-Chromophoric Sensitizers for Dye Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 6305-6313	9.6	47
127	Cytotoxic effects of cytoplasmic-targeted and nuclear-targeted gold and silver nanoparticles in HSC-3 cellsa mechanistic study. <i>Toxicology in Vitro</i> , 2015 , 29, 694-705	3.6	20
126	Breakdown of the Dipole-Dipole Approximation at Short Distances and Hot Spot Formation between a Pair of Silver Nanocubes. <i>Materials Research Society Symposia Proceedings</i> , 2015 , 1802, 19-24		1
125	Observing real-time molecular event dynamics of apoptosis in living cancer cells using nuclear-targeted plasmonically enhanced Raman nanoprobes. <i>ACS Nano</i> , 2014 , 8, 4883-92	16.7	116
124	Enhancing the efficiency of gold nanoparticles treatment of cancer by increasing their rate of endocytosis and cell accumulation using rifampicin. <i>Journal of the American Chemical Society</i> , 2014 , 136, 4464-7	16.4	88
123	The most effective gold nanorod size for plasmonic photothermal therapy: theory and in vitro experiments. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 1319-26	3.4	262
122	XAV939: from a small inhibitor to a potent drug bioconjugate when delivered by gold nanoparticles. <i>Bioconjugate Chemistry</i> , 2014 , 25, 207-215	6.3	21
121	Determining Drug Efficacy Using Plasmonically Enhanced Imaging of the Morphological Changes of Cells upon Death. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3514-3518	6.4	4
120	Unraveling the biomolecular snapshots of mitosis in healthy and cancer cells using plasmonically-enhanced Raman spectroscopy. <i>Journal of the American Chemical Society</i> , 2014 , 136, 1596	1 <u>-</u> 84	71

119	Enhancing Catalytic Efficiency of Hollow Palladium Nanoparticles by Photothermal Heating of Gold Nanoparticles Added to the Cavity: Palladium Gold Nanorattles. <i>ChemCatChem</i> , 2014 , 6, 3540-3546	5.2	24
118	Controlling the Catalytic Efficiency on the Surface of Hollow Gold Nanoparticles by Introducing an Inner Thin Layer of Platinum or Palladium. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4088-94	6.4	25
117	Deposition of loosely bound organic DAA? dyes on sensitized TiO2 film: a possible strategy to suppress charge recombination and enhance power conversion efficiency in dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 11229-11234	13	24
116	Biological Targeting of Plasmonic Nanoparticles Improves Cellular Imaging via the Enhanced Scattering in the Aggregates Formed. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2555-2561	6.4	38
115	Are Hot Spots between Two Plasmonic Nanocubes of Silver or Gold Formed between Adjacent Corners or Adjacent Facets? A DDA Examination. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2229-34	6.4	25
114	Gold-nanoparticle-decorated hybrid mesoflowers: an efficient surface-enhanced Raman scattering substrate for ultra-trace detection of prostate specific antigen. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 14085-91	3.4	18
113	Tailoring the Plasmonic Modes of a Grating-Nanocube Assembly to Achieve Broadband Absorption in the Visible Spectrum. <i>Advanced Functional Materials</i> , 2014 , 24, 6797-6805	15.6	25
112	Spectroscopy of homo- and heterodimers of silver and gold nanocubes as a function of separation: a DDA simulation. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 8338-44	2.8	18
111	An Experimental Insight into the Structural and Electronic Characteristics of Strontium-Doped Titanium Dioxide Nanotube Arrays. <i>Advanced Functional Materials</i> , 2014 , 24, 6783-6796	15.6	44
110	Electrically tunable plasmonic behavior of nanocube-polymer nanomaterials induced by a redox-active electrochromic polymer. <i>ACS Nano</i> , 2014 , 8, 6182-92	16.7	241
109	High-temperature surface enhanced Raman spectroscopy for in situ study of solid oxide fuel cell materials. <i>Energy and Environmental Science</i> , 2014 , 7, 306-310	35.4	51
108	Concluding remarks: summary of some of our recent studies in the field of conjugating plasmonic gold nanoparticles to single cancer cells and their molecular and cellular dynamics. <i>Faraday Discussions</i> , 2014 , 175, 305-8	3.6	2
107	Nanotubes: An Experimental Insight into the Structural and Electronic Characteristics of Strontium-Doped Titanium Dioxide Nanotube Arrays (Adv. Funct. Mater. 43/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 6782-6782	15.6	1
106	StructureActivity Relationships for Tumor-Targeting Gold Nanoparticles. <i>Frontiers in Nanobiomedical Research</i> , 2014 , 519-563		1
105	Silver Nanocube Aggregates in Cylindrical Pores for Higher Refractive Index Plasmonic Sensing. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 274-283	3.1	26
104	Hollow and Solid Metallic Nanoparticles in Sensing and in Nanocatalysis. <i>Chemistry of Materials</i> , 2014 , 26, 44-58	9.6	124
103	Aptamer-Assisted Assembly of Gold Nanoframe Dimers. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 1071-1078	3.1	8
102	Surface-enhanced Raman spectroscopy for real-time monitoring of reactive oxygen species-induced DNA damage and its prevention by platinum nanoparticles. <i>ACS Nano</i> , 2013 , 7, 7524-33	16.7	81

101	Thin to Thick, Short to Long: Spectral Properties of Gold Nanorods by Theoretical Modeling. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 18653-18656	3.8	26
100	Bandgap bowing in Ta-W-O system for efficient solar energy conversion: Insights from density functional theory and X-ray diffraction. <i>Applied Physics Letters</i> , 2013 , 103, 133905	3.4	8
99	Determining the Mechanism of Solution Metallic Nanocatalysis with Solid and Hollow Nanoparticles: Homogeneous or Heterogeneous. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21886-2189	9 3 .8	45
98	Surface assembly and plasmonic properties in strongly coupled segmented gold nanorods. <i>Small</i> , 2013 , 9, 2979-90	11	28
97	A new nanotechnology technique for determining drug efficacy using targeted plasmonically enhanced single cell imaging spectroscopy. <i>Journal of the American Chemical Society</i> , 2013 , 135, 4688-9	1 ^{16.4}	62
96	Substrate effect on the plasmonic sensing ability of hollow nanoparticles of different shapes. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 4468-77	3.4	24
95	Different Plasmon Sensing Behavior of Silver and Gold Nanorods. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1541-5	6.4	109
94	Assemblies of silver nanocubes for highly sensitive SERS chemical vapor detection. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 2777	13	89
93	Electron Transfer Process in Fluorescein-Dispersing Titania Gel Films Observed by Time-Resolved Fluorescence Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10308-10314	3.8	15
92	Tissue distribution and efficacy of gold nanorods coupled with laser induced photoplasmonic therapy in ehrlich carcinoma solid tumor model. <i>PLoS ONE</i> , 2013 , 8, e76207	3.7	39
91	Nanocatalysts Can Change the Number of Electrons Involved in OxidationReduction Reaction with the Nanocages Being the Most Efficient. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24171-24176	3.8	31
90	The unusual fluorescence intensity enhancement of poly(p-phenyleneethynylene) polymer separated from the silver nanocube surface by H-bonded LbL shells. <i>Journal of Materials Chemistry</i> , 2012 , 22, 16745		22
89	Photoelectric Conversion Properties of Dye-Sensitized Solar Cells Using Dye-Dispersing Titania. Journal of Physical Chemistry C, 2012 , 116, 4848-4854	3.8	24
88	Extinction vs Absorption: Which Is the Indicator of Plasmonic Field Strength for Silver Nanocubes?. Journal of Physical Chemistry C, 2012 , 116, 23019-23026	3.8	27
87	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. <i>Journal of the American Chemical Society</i> , 2012 , 134, 6434-42	16.4	129
86	Different Methods of Increasing the Mechanical Strength of Gold Nanocages. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3527-31	6.4	15
85	Real-time molecular imaging throughout the entire cell cycle by targeted plasmonic-enhanced Rayleigh/Raman spectroscopy. <i>Nano Letters</i> , 2012 , 12, 5369-75	11.5	85
84	The golden age: gold nanoparticles for biomedicine. <i>Chemical Society Reviews</i> , 2012 , 41, 2740-79	58.5	2437

83	Synthesis and optical properties of small Au nanorods using a seedless growth technique. <i>Langmuir</i> , 2012 , 28, 9807-15	4	182
82	Some recent developments in photoelectrochemical water splitting using nanostructured TiO2: a short review. <i>Theoretical Chemistry Accounts</i> , 2012 , 131, 1	1.9	39
81	Remote triggered release of doxorubicin in tumors by synergistic application of thermosensitive liposomes and gold nanorods. <i>ACS Nano</i> , 2011 , 5, 4919-26	16.7	202
80	Plasmonic Enhancement of Nonradiative Charge Carrier Relaxation and Proposed Effects from Enhanced Radiative Electronic Processes in Semiconductor Cold Core Bhell Nanorod Arrays. Journal of Physical Chemistry C, 2011, 115, 5578-5583	3.8	14
79	Plasmonic photo-thermal therapy (PPTT)Peer review under responsibility of Alexandria University Faculty of MedicineView all notes. <i>Alexandria Journal of Medicine</i> , 2011 , 47, 1-9	0.7	265
78	Bacteriorhodopsin/TiO2 nanotube arrays hybrid system for enhanced photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , 2011 , 4, 2909	35.4	83
77	Beating cancer in multiple ways using nanogold. Chemical Society Reviews, 2011, 40, 3391-404	58.5	499
76	Multimodal plasmon coupling in low symmetry gold nanoparticle pairs detected in surface-enhanced Raman scattering. <i>Applied Physics Letters</i> , 2011 , 98, 183115	3.4	24
75	Anodically Fabricated Sr-doped TiO2 Nanotube Arrays for Photoelectrochemical Water Splitting Applications. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1352, 151		
74	Dark-field light scattering imaging of living cancer cell component from birth through division using bioconjugated gold nanoprobes. <i>Journal of Biomedical Optics</i> , 2010 , 15, 046025	3.5	74
73	Photoelectrochemical Water Oxidation Characteristics of Anodically Fabricated TiO2 Nanotube Arrays: Structural and Optical Properties. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 12024-12029	3.8	83
72	Nuclear targeting of gold nanoparticles in cancer cells induces DNA damage, causing cytokinesis arrest and apoptosis. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1517-9	16.4	544
71	Plasmonic coupling in noble metal nanostructures. Chemical Physics Letters, 2010, 487, 153-164	2.5	688
7º	Gold nanoparticles: Optical properties and implementations in cancer diagnosis and photothermal therapy. <i>Journal of Advanced Research</i> , 2010 , 1, 13-28	13	1217
69	Gold nanorods: from synthesis and properties to biological and biomedical applications. <i>Advanced Materials</i> , 2009 , 21, 4880-4910	24	1473
68	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. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 194	16 ² -53	182
67	Gold nanorod assisted near-infrared plasmonic photothermal therapy (PPTT) of squamous cell carcinoma in mice. <i>Cancer Letters</i> , 2008 , 269, 57-66	9.9	925
66	Noble metals on the nanoscale: optical and photothermal properties and some applications in imaging, sensing, biology, and medicine. <i>Accounts of Chemical Research</i> , 2008 , 41, 1578-86	24.3	3252

(2005-2008)

65	Some Aspects of Colloidal Nanoparticle Stability, Catalytic Activity, and Recycling Potential. <i>Topics in Catalysis</i> , 2008 , 47, 15-21	2.3	127
64	Can the Observed Changes in the Size or Shape of a Colloidal Nanocatalyst Reveal the Nanocatalysis Mechanism Type: Homogeneous or Heterogeneous?. <i>Topics in Catalysis</i> , 2008 , 48, 60-74	2.3	107
63	Plasmonic photothermal therapy (PPTT) using gold nanoparticles. <i>Lasers in Medical Science</i> , 2008 , 23, 217-28	3.1	1648
62	Dependence of the Threshold Energy of Femtosecond Laser Ejection of Gold Nanoprisms from Quartz Substrates on the Nanoparticle Environment <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8934-8	3941	21
61	The potential use of the enhanced nonlinear properties of gold nanospheres in photothermal cancer therapy. <i>Lasers in Surgery and Medicine</i> , 2007 , 39, 747-53	3.6	219
60	Surface Plasmon Resonance Sensitivity of Metal Nanostructures: Physical Basis and Universal Scaling in Metal Nanoshells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 17451-17454	3.8	157
59	Probing the Primary Event in the Photocycle of Photoactive Yellow Protein Using Photochemical Hole-burning Technique <i>Photochemistry and Photobiology</i> , 2007 , 72, 639-644	3.6	1
58	The Effect of Metal Cation Binding on the Protein, Lipid and Retinal Isomeric Ratio in Regenerated Bacteriorhodopsin of Purple Membrane¶. <i>Photochemistry and Photobiology</i> , 2007 , 73, 564-571	3.6	
57	The Quenching of CdSe Quantum Dots Photoluminescence by Gold Nanoparticles in Solution¶. <i>Photochemistry and Photobiology</i> , 2007 , 75, 591-597	3.6	9
	On the Universal Scaling Behavior of the Distance Decay of Plasmon Coupling in Metal Nanoparticle		
56	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088	11.5	1240
56 55		2.4	973
	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal		
55	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007 , 2, 107-118	2.4	973
55 54	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007 , 2, 107-118 Peptide-conjugated gold nanorods for nuclear targeting. <i>Bioconjugate Chemistry</i> , 2007 , 18, 1490-7 Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced	2.4	973
55 54 53	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007 , 2, 107-118 Peptide-conjugated gold nanorods for nuclear targeting. <i>Bioconjugate Chemistry</i> , 2007 , 18, 1490-7 Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced Electron-Transfer Rate in Dye-Titania System. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 9008-9011 Cancer cell imaging and photothermal therapy in the near-infrared region by using gold nanorods.	2.46.33.8	973 299 48
55545352	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007, 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007, 2, 107-118 Peptide-conjugated gold nanorods for nuclear targeting. <i>Bioconjugate Chemistry</i> , 2007, 18, 1490-7 Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced Electron-Transfer Rate in Dye-Titania System. <i>Journal of Physical Chemistry C</i> , 2007, 111, 9008-9011 Cancer cell imaging and photothermal therapy in the near-infrared region by using gold nanorods. <i>Journal of the American Chemical Society</i> , 2006, 128, 2115-20 Gold and silver nanoparticles in sensing and imaging: sensitivity of plasmon response to size, shape,	2.4 6.3 3.8	973 299 48 4444
55 54 53 52 51	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007, 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007, 2, 107-118 Peptide-conjugated gold nanorods for nuclear targeting. <i>Bioconjugate Chemistry</i> , 2007, 18, 1490-7 Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced Electron-Transfer Rate in Dye-Titania System. <i>Journal of Physical Chemistry C</i> , 2007, 111, 9008-9011 Cancer cell imaging and photothermal therapy in the near-infrared region by using gold nanorods. <i>Journal of the American Chemical Society</i> , 2006, 128, 2115-20 Gold and silver nanoparticles in sensing and imaging: sensitivity of plasmon response to size, shape, and metal composition. <i>Journal of Physical Chemistry B</i> , 2006, 110, 19220-5 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	2.4 6.3 3.8 16.4	973 299 48 4444 1583
 55 54 53 52 51 50 	Pairs: A Plasmon Ruler Equation. <i>Nano Letters</i> , 2007 , 7, 2080-2088 Review of Some Interesting Surface Plasmon Resonance-enhanced Properties of Noble Metal Nanoparticles and Their Applications to Biosystems. <i>Plasmonics</i> , 2007 , 2, 107-118 Peptide-conjugated gold nanorods for nuclear targeting. <i>Bioconjugate Chemistry</i> , 2007 , 18, 1490-7 Change in Titania Structure from Amorphousness to Crystalline Increasing Photoinduced Electron-Transfer Rate in Dye-Titania System. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 9008-9011 Cancer cell imaging and photothermal therapy in the near-infrared region by using gold nanorods. <i>Journal of the American Chemical Society</i> , 2006 , 128, 2115-20 Gold and silver nanoparticles in sensing and imaging: sensitivity of plasmon response to size, shape, and metal composition. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 19220-5 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. <i>Chemical Society Reviews</i> , 2006 , 35, 209-17 Calculated absorption and scattering properties of gold nanoparticles of different size, shape, and composition: applications in biological imaging and biomedicine. <i>Journal of Physical Chemistry B</i> ,	2.4 6.3 3.8 16.4 3.4 58.5	973 299 48 4444 1583 2539

47	Surface plasmon resonance scattering and absorption of anti-EGFR antibody conjugated gold nanoparticles in cancer diagnostics: applications in oral cancer. <i>Nano Letters</i> , 2005 , 5, 829-34	11.5	1614
46	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. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20331-8	3.4	497
45	Catalysis with Transition Metal Nanoparticles of Different Shapes. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 900, 1		3
44	The Aspect Ratio Dependence of the Fluorescence of Gold Nanorods: An Experimental and Theoretical Study. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 900, 1		
43	Effect of Nanocatalysis in Colloidal Solution on the Tetrahedral and Cubic Nanoparticle SHAPE: Electron-Transfer Reaction Catalyzed by Platinum Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 5726-5733	3.4	162
42	Small is different: shape-, size-, and composition-dependent properties of some colloidal semiconductor nanocrystals. <i>Accounts of Chemical Research</i> , 2004 , 37, 326-33	24.3	803
41	Preparation and Growth Mechanism of Gold Nanorods (NRs) Using Seed-Mediated Growth Method. <i>Chemistry of Materials</i> , 2003 , 15, 1957-1962	9.6	4068
40	Surface-Enhanced Raman Scattering Studies on Aggregated Gold Nanorods Journal of Physical Chemistry A, 2003, 107, 3372-3378	2.8	401
39	FTIR Study of the Adsorption of the Capping Material to Different Platinum Nanoparticle Shapes. Journal of Physical Chemistry A, 2003 , 107, 8371-8375	2.8	59
38	Relative Enhancement of Ultrafast Emission in Gold Nanorods. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 3101-3104	3.4	126
37	Effect of Catalytic Activity on the Metallic Nanoparticle Size Distribution: Electron-Transfer Reaction between Fe(CN)6 and Thiosulfate Ions Catalyzed by PVPP latinum Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 12416-12424	3.4	140
36	Visible to Infrared Luminescence from a 28-Atom Gold Cluster. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 3410-3415	3.4	503
35	Room temperature optical gain in CdSe nanorod solutions. <i>Journal of Applied Physics</i> , 2002 , 92, 6799-68	0:3 5	23
34	The pump power dependence of the femtosecond relaxation of CdSe nanoparticles observed in the spectral range from visible to infrared. <i>Journal of Chemical Physics</i> , 2002 , 116, 3828-3833	3.9	68
33	Some properties of spherical and rod-shaped semiconductor and metal nanocrystals. <i>Pure and Applied Chemistry</i> , 2002 , 74, 1675-1692	2.1	41
32	Refolding of Thermally Denatured Bacteriorhodopsin in Purple Membrane Journal of Physical Chemistry B, 2002 , 106, 723-729	3.4	15
31	Size Effects of PVP P d Nanoparticles on the Catalytic Suzuki Reactions in Aqueous Solution. <i>Langmuir</i> , 2002 , 18, 4921-4925	4	386
30	Some interesting properties of metals confined in time and nanometer space of different shapes. <i>Accounts of Chemical Research</i> , 2001 , 34, 257-64	24.3	2447

29	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	2.8	79
28	The Effect of Stabilizers on the Catalytic Activity and Stability of Pd Colloidal Nanoparticles in the Suzuki Reactions in Aqueous Solution <i>Journal of Physical Chemistry B</i> , 2001 , 105, 8938-8943	3.4	406
27	Direct observation of charge-transfer dynamics in a conjugated conducting polymer poly(3-octylthiophene)-fullerene composite by time-resolved infrared spectroscopy. <i>Physical Review B</i> , 2001 , 64,	3.3	6
26	Evidence for Bilayer Assembly of Cationic Surfactants on the Surface of Gold Nanorods. <i>Langmuir</i> , 2001 , 17, 6368-6374	4	724
25	High-density femtosecond transient absorption spectroscopy of semiconductor nanoparticles. A tool to investigate surface quality. <i>Pure and Applied Chemistry</i> , 2000 , 72, 165-177	2.1	57
24	Suzuki cross-coupling reactions catalyzed by palladium nanoparticles in aqueous solution. <i>Organic Letters</i> , 2000 , 2, 2385-8	6.2	409
23	Shape and size dependence of radiative, non-radiative and photothermal properties of gold nanocrystals. <i>International Reviews in Physical Chemistry</i> , 2000 , 19, 409-453	7	1790
22	How Does a Gold Nanorod Melt?#. Journal of Physical Chemistry B, 2000, 104, 7867-7870	3.4	264
21	Activation Energy of the Reaction between Hexacyanoferrate(III) and Thiosulfate Ions Catalyzed by Platinum Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 10956-10959	3.4	79
20	Size and Temperature Dependence of the Plasmon Absorption of Colloidal Gold Nanoparticles. Journal of Physical Chemistry B, 1999 , 103, 4212-4217	3.4	2085
19	Spectral Properties and Relaxation Dynamics of Surface Plasmon Electronic Oscillations in Gold and Silver Nanodots and Nanorods. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 8410-8426	3.4	3183
18	Polarity Change of the Transient Photoelectric Signals by Orientation and pH of Purple Membrane Films. <i>Molecular Crystals and Liquid Crystals</i> , 1998 , 316, 133-136		
17	Shape Transformation and Surface Melting of Cubic and Tetrahedral Platinum Nanocrystals. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 6145-6151	3.4	264
16	Kinetically Controlled Growth and Shape Formation Mechanism of Platinum Nanoparticles. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 3316-3320	3.4	420
15	Thermal Reshaping of Gold Nanorods in Micelles. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 9370-9374	3.4	259
14	Kinetically Controlled Growth And Shape Formation Mechanism Of Platinum Nanoparticles. <i>Microscopy and Microanalysis</i> , 1998 , 4, 746-747	0.5	
13	Photofragment Translational Spectroscopy of ICl at 304 nm. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 6562-6567	2.8	7
12	A Comparison of the Photoelectric Current Responses Resulting from the Proton Pumping Process of Bacteriorhodopsin under Pulsed and CW Laser Excitations. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 10599-10604	3.4	35

11	Effect of Lattice Energy Mismatch on the Relative Mass Peak Intensities of Mixed Alkali Halide Nanocrystals. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 690-693	2.8	5
10	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	3.4	22
9	Molecular Mechanism of the Differential Photoelectric Response of Bacteriorhodopsin. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 3420-3423	3.4	53
8	Size-Dependent Electron Dynamics of Gold Nanoparticles. ACS Symposium Series, 1997 , 125-140	0.4	7
7	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. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 2391-2398		61
6	Picosecond Electronic Relaxation in CdS/HgS/CdS Quantum Dot Quantum Well Semiconductor Nanoparticles. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 6381-6384		62
5	Picosecond Dynamics of Colloidal Gold Nanoparticles. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 8053-	-805 <i>6</i>	309
4	Homogeneous Line Width of the Different Vibronic Bands of Retinal Absorption in Bacteriorhodopsin by the Hole-Burning Technique. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 2762-27	65	17
3	Excited-State Dynamics of a Protonated Retinal Schiff Base in Solution. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 18586-18591		112
2	The Effect of Different Metal Cation Binding on the Proton Pumping in Bacteriorhodopsin. <i>Israel Journal of Chemistry</i> , 1995 , 35, 465-474	3.4	20
1	Observation of Excited State Proton Transfer between the Titania Surface and Dye Molecule by Time-Resolved Fluorescence Spectroscopy. <i>Journal of Physical Chemistry C</i> ,	3.8	1