Dongmao Zhang

List of Publications by Year
in descending order

58 papers	1,453 citations	361413 20 h-index	345221 36 g-index
59 all docs	59 docs citations	59 times ranked	2043 citing authors

#	Article	IF	Citations
1	Removal of Molecular Adsorbates on Gold Nanoparticles Using Sodium Borohydride in Water. Nano Letters, 2013, 13, 1226-1229.	9.1	185
2	Determination of the Binding Affinity, Packing, and Conformation of Thiolate and Thione Ligands on Gold Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 653-660.	3.1	91
3	Quantitative Comparison of Raman Activities, SERS Activities, and SERS Enhancement Factors of Organothiols: Implication to Chemical Enhancement. Journal of Physical Chemistry Letters, 2012, 3, 560-565.	4.6	68
4	Studying the Effects of Cysteine Residues on Protein Interactions with Silver Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 2910-2916.	3.1	60
5	Studying Protein and Gold Nanoparticle Interaction Using Organothiols as Molecular Probes. Journal of Physical Chemistry C, 2012, 116, 3645-3652.	3.1	57
6	Ratiometric Surface Enhanced Raman Quantification of Ligand Adsorption onto a Gold Nanoparticle. Analytical Chemistry, 2010, 82, 5910-5914.	6.5	49
7	Probing the Effects of Cysteine Residues on Protein Adsorption onto Gold Nanoparticles Using Wild-Type and Mutated GB3 Proteins. Langmuir, 2013, 29, 10990-10996.	3.5	48
8	Ultrasensitive detection of malondialdehyde with surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2010, 398, 3193-3201.	3.7	46
9	Facile displacement of citrate residues from gold nanoparticle surfaces. Journal of Colloid and Interface Science, 2018, 511, 335-343.	9.4	46
10	Quantification of Gold Nanoparticle Ultravioletâ€“Visible Extinction, Absorption, and Scattering Cross-Section Spectra and Scattering Depolarization Spectra: The Effects of Nanoparticle Geometry, Solvent Composition, Ligand Functionalization, and Nanoparticle Aggregation. Analytical Chemistry, 2018, 90, 785-793.	6.5	45
11	Organothiols Self-Assembled onto Gold: Evidence for Deprotonation of the Sulfur-Bound Hydrogen and Charge Transfer from Thiolate. Journal of Physical Chemistry C, 2013, 117, 8793-8798.	3.1	44
12	Mechanistic Study of Continuous Reactive Aromatic Organothiol Adsorption onto Silver Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 27146-27154.	3.1	43
13	Using Water Raman Intensities To Determine the Effective Excitation and Emission Path Lengths of Fluorophotometers for Correcting Fluorescence Inner Filter Effect. Analytical Chemistry, 2015, 87, 4917-4924.	6.5	40
14	Ligand Adsorption and Exchange on Pegylated Gold Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 11111-11119.	3.1	35
15	Protein adsorption drastically reduces surfaceâ€enhanced Raman signal of dye molecules. Journal of Raman Spectroscopy, 2010, 41, 952-957.	2.5	29
16	Quantification of the Depolarization and Anisotropy of Fluorophore Stokes-Shifted Fluorescence, On-Resonance Fluorescence, and Rayleigh Scattering. Analytical Chemistry, 2017, 89, 6686-6694.	6.5	27
17	Dispersion Stability, Ligand Structure and Conformation, and SERS Activities of 1-Alkanethiol Functionalized Gold and Silver Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 24925-24934.	3.1	25
18	On-Resonance Fluorescence, Resonance Rayleigh Scattering, and Ratiometric Resonance Synchronous Spectroscopy of Molecular- and Quantum Dot-Fluorophores. Analytical Chemistry, 2016, 88, 9199-9206.	6.5	25

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19	Scattering and absorption differ drastically in their inner filter effects on fluorescence, resonance synchronous, and polarized resonance synchronous spectroscopic measurements. Analyst, The, 2018, 143, 3382-3389.	3.5	25
20	Colloidal Polydopamine Beads: A Photothermally Active Support for Noble Metal Nanocatalysts. ACS Applied Materials & Interfaces, 2022, 14, 17560-17569.	8.0	23
21	Ligand Desorption and Desulfurization on Silver Nanoparticles Using Sodium Borohydride in Water. Journal of Physical Chemistry C, 2014, 118, 10509-10518.	3.1	21
22	Determination of colloidal gold nanoparticle surface areas, concentrations, and sizes through quantitative ligand adsorption. Analytical and Bioanalytical Chemistry, 2013, 405, 413-422.	3.7	20
23	A Generalized Model on the Effects of Nanoparticles on Fluorophore Fluorescence in Solution. Journal of Physical Chemistry C, 2015, 119, 7941-7948.	3.1	20
24	A Divide-and-Conquer Strategy for Quantification of Light Absorption, Scattering, and Emission Properties of Fluorescent Nanomaterials in Solutions. Analytical Chemistry, 2019, 91, 8540-8548.	6.5	20
25	Contradictory Dual Effects: Organothiols Can Induce Both Silver Nanoparticle Disintegration and Formation under Ambient Conditions. Journal of Physical Chemistry C, 2015, 119, 20975-20984.	3.1	19
26	Ratiometric Raman spectroscopy for quantification of protein oxidative damage. Analytical Biochemistry, 2009, 391, 121-126.	2.4	18
27	Desulfurization of Mercaptobenzimidazole and Thioguanine on Gold Nanoparticles Using Sodium Borohydride in Water at Room Temperature. Journal of Physical Chemistry C, 2013, 117, 13722-13729.	3.1	18
28	Simultaneous and Sequential Protein and Organothiol Interactions with Gold Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 1366-1374.	3.1	17
29	Direct Observation of Ion Pairing at the Liquid/Solid Interfaces by Surface Enhanced Raman Spectroscopy. Langmuir, 2015, 31, 8998-9005.	3.5	16
30	UVâ€“Vis Ratiometric Resonance Synchronous Spectroscopy for Determination of Nanoparticle and Molecular Optical Cross Sections. Analytical Chemistry, 2016, 88, 2891-2898.	6.5	16
31	Quantification of Material Fluorescence and Light Scattering Cross Sections Using Ratiometric Bandwidth-Varied Polarized Resonance Synchronous Spectroscopy. Analytical Chemistry, 2018, 90, 7406-7414.	6.5	16
32	Robust and Reproducible Quantification of SERS Enhancement Factors Using a Combination of Time-Resolved Raman Spectroscopy and Solvent Internal Reference Method. Journal of Physical Chemistry C, 2013, 117, 3483-3488.	3.1	15
33	Evaluation of Thiol Raman Activities and pK_a Values Using Internally Referenced Raman-Based pH Titration. Analytical Chemistry, 2016, 88, 3624-3631.	6.5	15
34	Inner Filter Effect on Surface Enhanced Raman Spectroscopic Measurement. Analytical Chemistry, 2012, 84, 8437-8441.	6.5	14
35	Determining the Liquid Light Scattering Cross Section and Depolarization Spectra Using Polarized Resonance Synchronous Spectroscopy. Analytical Chemistry, 2017, 89, 12705-12712.	6.5	14
36	Drop Coating Deposition Raman Spectroscopy of Fluorescein Isothiocyanate Labeled Protein. Applied Spectroscopy, 2010, 64, 1078-1085.	2.2	13

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37	Critical Sequence Dependence in Multicomponent Ligand Binding to Gold Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 6900-6905.	3.1	13
38	Counterion Effects on Electrolyte Interactions with Gold Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 23604-23612.	3.1	13
39	Quantification of the Photon Absorption, Scattering, and On-Resonance Emission Properties of CdSe/CdS Core/Shell Quantum Dots: Effect of Shell Geometry and Volumes. Analytical Chemistry, 2020, 92, 5346-5353.	6.5	13
40	Synthesis of C-Unsubstituted 1,2-Diazetidines and Their Ring-Opening Reactions via Selective Nâ€“N Bond Cleavage. Journal of Organic Chemistry, 2018, 83, 9497-9503.	3.2	12
41	Iodide-Induced Organothiol Desorption and Photochemical Reaction, Gold Nanoparticle (AuNP) Fusion, and SERS Signal Reduction in Organothiol-Containing AuNP Aggregates. Journal of Physical Chemistry C, 2015, 119, 4261-4267.	3.1	11
42	Optical Properties and Kinetics: New Insights to the Porphyrin Assembly and Disassembly by Polarized Resonance Synchronous Spectroscopy. Journal of Physical Chemistry B, 2018, 122, 8429-8438.	2.6	11
43	Polarized resonance synchronous spectroscopy as a powerful tool for studying the kinetics and optical properties of aggregation-induced emission. Journal of Materials Chemistry C, 2019, 7, 12086-12094.	5.5	11
44	Surface Plasmon Resonance, Formation Mechanism, and Surface Enhanced Raman Spectroscopy of Ag+-Stained Gold Nanoparticles. Frontiers in Chemistry, 2019, 7, 27.	3.6	11
45	Structures and Conformations of Alkanedithiols on Gold and Silver Nanoparticles in Water. Journal of Physical Chemistry C, 2015, 119, 18414-18421.	3.1	10
46	Linear Extrapolation of the Analyte-Specific Light Scattering and Fluorescence Depolarization in Turbid Samples. ACS Omega, 2019, 4, 4739-4747.	3.5	9
47	Wavelength-Dependent Correlations between Ultravioletâ€“Visible Intensities and Surface Enhanced Raman Spectroscopic Enhancement Factors of Aggregated Gold and Silver Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 22234-22242.	3.1	8
48	NaHS Induces Complete Nondestructive Ligand Displacement from Aggregated Gold Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 2137-2144.	3.1	8
49	Missing Links between the Structures and Optical Properties of Porphyrin Assemblies. Journal of Physical Chemistry C, 2021, 125, 22318-22327.	3.1	8
50	Reactive Ag⁺ Adsorption onto Gold. Journal of Physical Chemistry C, 2017, 121, 22487-22495.	3.1	7
51	Back to the Drawing Board: A Unifying First-Principle Model for Correlating Sample UVâ€“Vis Absorption and Fluorescence Emission. Analytical Chemistry, 2022, 94, 7123-7131.	6.5	7
52	Versatile and biomass synthesis of iron-based nanoparticles supported on carbon matrix with high iron content and tunable reactivity. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	6
53	Ion Pairing as the Main Pathway for Reducing Electrostatic Repulsion among Organothiolate Self-assembled on Gold Nanoparticles in Water. Journal of Physical Chemistry C, 2016, 120, 19878-19884.	3.1	5
54	Acid cleavable surface enhanced raman tagging for protein detection. Analyst, The, 2011, 136, 520-526.	3.5	3

#	Article	IF	Citations
55	Quantification of the Optical Properties of Perovskite Nanocrystals Using a Combination of Polarized Resonance Synchronous and Polarized Anti-Stokes, On-Resonance, and Stokes-Shifted Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 20388-20397.	3.1	3
56	Dithiosulfindene Adsorption and Reaction on Gold Nanoparticles in Water. Journal of Physical Chemistry C, 2020, 124, 686-692.	3.1	1
57	Rigid Single Carbonâ€“Carbon Bond That Does Not Rotate in Water. Journal of Physical Chemistry B, 2016, 120, 2418-2422.	2.6	0
58	Kinetic spectroscopic quantification using two-step chromogenic and fluorogenic reactions: From theoretical modeling to experimental quantification of biomarkers in practical samples. Analytica Chimica Acta, 2021, 1153, 338293.	5.4	0