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	Colloidal Polydopamine Beads: A Photothermally Active Support for Noble Metal Nanocatalysts. ACS Applied Materials & Interfaces, 2022, 14, 17560-17569.	8.0	23
2	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
3	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
4	Missing Links between the Structures and Optical Properties of Porphyrin Assemblies. Journal of Physical Chemistry C, 2021, 125, 22318-22327.	3.1	8
5	Dithiosulfindene Adsorption and Reaction on Gold Nanoparticles in Water. Journal of Physical Chemistry C, 2020, 124, 686-692.	3.1	1
6	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
7	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
8	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
9	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
10	Linear Extrapolation of the Analyte-Specific Light Scattering and Fluorescence Depolarization in Turbid Samples. ACS Omega, 2019, 4, 4739-4747.	3.5	9
11	Surface Plasmon Resonance, Formation Mechanism, and Surface Enhanced Raman Spectroscopy of Ag+-Stained Gold Nanoparticles. Frontiers in Chemistry, 2019, 7, 27.	3.6	11
12	NaHS Induces Complete Nondestructive Ligand Displacement from Aggregated Gold Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 2137-2144.	3.1	8
13	Facile displacement of citrate residues from gold nanoparticle surfaces. Journal of Colloid and Interface Science, 2018, 511, 335-343.	9.4	46
14	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
15	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
16	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
17	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
18	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

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19	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
20	Reactive Ag⁺ Adsorption onto Gold. Journal of Physical Chemistry C, 2017, 121, 22487-22495.	3.1	7
21	Determining the Liquid Light Scattering Cross Section and Depolarization Spectra Using Polarized Resonance Synchronous Spectroscopy. Analytical Chemistry, 2017, 89, 12705-12712.	6.5	14
22	Critical Sequence Dependence in Multicomponent Ligand Binding to Gold Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 6900-6905.	3.1	13
23	Counterion Effects on Electrolyte Interactions with Gold Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 23604-23612.	3.1	13
24	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
25	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
26	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
27	UVâ€“Vis Ratiometric Resonance Synchronous Spectroscopy for Determination of Nanoparticle and Molecular Optical Cross Sections. Analytical Chemistry, 2016, 88, 2891-2898.	6.5	16
28	Rigid Single Carbonâ€“Carbon Bond That Does Not Rotate in Water. Journal of Physical Chemistry B, 2016, 120, 2418-2422.	2.6	0
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	Studying the Effects of Cysteine Residues on Protein Interactions with Silver Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 2910-2916.	3.1	60
31	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
32	Structures and Conformations of Alkanedithiols on Gold and Silver Nanoparticles in Water. Journal of Physical Chemistry C, 2015, 119, 18414-18421.	3.1	10
33	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
34	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
35	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
36	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

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37	Ligand Desorption and Desulfurization on Silver Nanoparticles Using Sodium Borohydride in Water. Journal of Physical Chemistry C, 2014, 118, 10509-10518.	3.1	21
38	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
39	Ligand Adsorption and Exchange on Pegylated Gold Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 11111-11119.	3.1	35
40	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
41	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
42	Simultaneous and Sequential Protein and Organothiol Interactions with Gold Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 1366-1374.	3.1	17
43	Mechanistic Study of Continuous Reactive Aromatic Organothiol Adsorption onto Silver Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 27146-27154.	3.1	43
44	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
45	Removal of Molecular Adsorbates on Gold Nanoparticles Using Sodium Borohydride in Water. Nano Letters, 2013, 13, 1226-1229.	9.1	185
46	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
47	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
48	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
49	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
50	Inner Filter Effect on Surface Enhanced Raman Spectroscopic Measurement. Analytical Chemistry, 2012, 84, 8437-8441.	6.5	14
51	Studying Protein and Gold Nanoparticle Interaction Using Organothiols as Molecular Probes. Journal of Physical Chemistry C, 2012, 116, 3645-3652.	3.1	57
52	Acid cleavable surface enhanced raman tagging for protein detection. Analyst, The, 2011, 136, 520-526.	3.5	3
53	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
54	Ultrasensitive detection of malondialdehyde with surface-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2010, 398, 3193-3201.	3.7	46

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55	Protein adsorption drastically reduces surfaceâ€enhanced Raman signal of dye molecules. Journal of Raman Spectroscopy, 2010, 41, 952-957.	2.5	29
56	Ratiometric Surface Enhanced Raman Quantification of Ligand Adsorption onto a Gold Nanoparticle. Analytical Chemistry, 2010, 82, 5910-5914.	6.5	49
57	Drop Coating Deposition Raman Spectroscopy of Fluorescein Isothiocyanate Labeled Protein. Applied Spectroscopy, 2010, 64, 1078-1085.	2.2	13
58	Ratiometric Raman spectroscopy for quantification of protein oxidative damage. Analytical Biochemistry, 2009, 391, 121-126.	2.4	18