

Dhiraj K Sardar

List of Publications by Year in descending order

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168829

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#	ARTICLE	IF	CITATIONS
1	Selective Detection and Ultrasensitive Quantification of SARS-CoV-2 IgG Antibodies in Clinical Plasma Samples Using Epitope-Modified Nanoplasmonic Biosensing Platforms. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 26517-26527.	4.0	8
2	Multiplexed and High-Throughput Label-Free Detection of RNA/Spike Protein/IgG/IgM Biomarkers of SARS-CoV-2 Infection Utilizing Nanoplasmonic Biosensors. <i>Analytical Chemistry</i> , 2021, 93, 8754-8763.	3.2	44
3	Colloidal Synthesis of Single-Layer Quasi-Ruddlesdenâ€“Popper Phase Bismuth-Based Two-Dimensional Perovskite Nanosheets with Controllable Optoelectronic Properties. <i>Chemistry of Materials</i> , 2021, 33, 5917-5925.	3.2	6
4	Nanocurcumin-Loaded UCNPs for Cancer Theranostics: Physicochemical Properties, In Vitro Toxicity, and In Vivo Imaging Studies. <i>Nanomaterials</i> , 2021, 11, 2234.	1.9	13
5	Enhancing Nonfouling and Sensitivity of Surface-Enhanced Raman Scattering Substrates for Potent Drug Analysis in Blood Plasma via Fabrication of a Flexible Plasmonic Patch. <i>Analytical Chemistry</i> , 2021, 93, 2578-2588.	3.2	30
6	Photoswitchable Machine-Engineered Plasmonic Nanosystem with High Optical Response for Ultrasensitive Detection of microRNAs and Proteins Adaptively. <i>Analytical Chemistry</i> , 2021, 93, 13935-13944.	3.2	8
7	Covalent Surface Modification of Ti ₃ C ₂ T _x MXene with Chemically Active Polymeric Ligands Producing Highly Conductive and Ordered Microstructure Films. <i>ACS Nano</i> , 2021, 15, 19600-19612.	7.3	37
8	Reversible Tuning of the Plasmoelectric Effect in Noble Metal Nanostructures Through Manipulation of Organic Ligand Energy Levels. <i>Nano Letters</i> , 2020, 20, 192-200.	4.5	30
9	Optimization of electromagnetic hot spots in surface-enhanced Raman scattering substrates for an ultrasensitive drug assay of emergency department patientsâ€™ plasma. <i>Analyst, The</i> , 2020, 145, 7662-7672.	1.7	10
10	NaGdF ₄ :Yb,Er-Ag nanowire hybrid nanocomposite for multifunctional upconversion emission, optical imaging, MRI and CT imaging applications. <i>Mikrochimica Acta</i> , 2020, 187, 317.	2.5	26
11	Bottom-Up Fabrication of Plasmonic Nanoantenna-Based High-throughput Multiplexing Biosensors for Ultrasensitive Detection of microRNAs Directly from Cancer Patientsâ€™ Plasma. <i>Analytical Chemistry</i> , 2020, 92, 9295-9304.	3.2	22
12	A novel liquid biopsy-based approach for highly specific cancer diagnostics: mitigating false responses in assaying patient plasma-derived circulating microRNAs through combined SERS and plasmon-enhanced fluorescence analyses. <i>Analyst, The</i> , 2020, 145, 4173-4180.	1.7	29
13	Ultrathin Plasmonic Tungsten Oxide Quantum Wells with Controllable Free Carrier Densities. <i>Journal of the American Chemical Society</i> , 2020, 142, 5938-5942.	6.6	50
14	PMAO coated Na(Gd _{0.5} Lu _{0.5})F ₄ :Nd ³⁺ nanocrystals as multifunctional contrast agent with NIR optical, X-ray and magnetic imaging properties. <i>Materials Science and Engineering C</i> , 2019, 101, 283-291.	3.8	2
15	Luminomagnetic Nd ³⁺ doped fluorapatite coated Fe ₃ O ₄ nanostructures for biomedical applications. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2558-2568.	1.9	5
16	Flexible Polymer-Assisted Mesoscale Self-Assembly of Colloidal CsPbBr ₃ Perovskite Nanocrystals into Higher Order Superstructures with Strong Inter-Nanocrystal Electronic Coupling. <i>Journal of the American Chemical Society</i> , 2019, 141, 1526-1536.	6.6	54
17	Plasmoelectronic-Based Ultrasensitive Assay of Tumor Suppressor microRNAs Directly in Patient Plasma: Design of Highly Specific Early Cancer Diagnostic Technology. <i>Analytical Chemistry</i> , 2019, 91, 1894-1903.	3.2	28
18	Fabrication of a self-assembled and flexible SERS nanosensor for explosive detection at parts-per-quadrillion levels from fingerprints. <i>Analyst, The</i> , 2018, 143, 2012-2022.	1.7	89

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19	Achieving biosensing at attomolar concentrations of cardiac troponin T in human biofluids by developing a label-free nanoplasmonic analytical assay. <i>Analyst</i> , The, 2017, 142, 2442-2450.	1.7	32
20	Emission enhancement through Nd ³⁺ -Yb ³⁺ energy transfer in multifunctional NaGdF ₄ nanocrystals. <i>Applied Physics Letters</i> , 2017, 110, 223107.	1.5	17
21	Programmable Colloidal Approach to Hierarchical Structures of Methylammonium Lead Bromide Perovskite Nanocrystals with Bright Photoluminescent Properties. <i>Chemistry of Materials</i> , 2017, 29, 3526-3537.	3.2	37
22	Unraveling the Mechanism Underlying Surface Ligand Passivation of Colloidal Semiconductor Nanocrystals: A Route for Preparing Advanced Hybrid Nanomaterials. <i>Chemistry of Materials</i> , 2017, 29, 8838-8849.	3.2	18
23	Elucidating the role of surface passivating ligand structural parameters in hole wave function delocalization in semiconductor cluster molecules. <i>Nanoscale</i> , 2017, 9, 14127-14138.	2.8	11
24	Ultrafast Exciton Dynamics in Shape-Controlled Methylammonium Lead Bromide Perovskite Nanostructures: Effect of Quantum Confinement on Charge Carrier Recombination. <i>Journal of Physical Chemistry C</i> , 2017, 121, 28556-28565.	1.5	19
25	Synthesis and characterization of Na(Gd _{0.5} Lu _{0.5})F ₄ : Nd ³⁺ , a core-shell free multifunctional contrast agent. <i>Journal of Alloys and Compounds</i> , 2017, 695, 280-285.	2.8	10
26	Dual Role of Electron-Accepting Metal-Carboxylate Ligands: Reversible Expansion of Exciton Delocalization and Passivation of Nonradiative Trap-States in Molecule-like CdSe Nanocrystals. <i>Journal of the American Chemical Society</i> , 2016, 138, 12813-12825.	6.6	29
27	Pure white-light emitting ultrasmall organica€inorganic hybrid perovskite nanoclusters. <i>Nanoscale</i> , 2016, 8, 17433-17439.	2.8	41
28	Mesoscale Growth and Assembly of Bright Luminescent Organolead Halide Perovskite Quantum Wires. <i>Chemistry of Materials</i> , 2016, 28, 5043-5054.	3.2	63
29	Ultrashort, Angstrom-Scale Decay of Surface-Enhanced Raman Scattering at Hot Spots. <i>Journal of Physical Chemistry C</i> , 2016, 120, 24973-24981.	1.5	14
30	Investigating the Control by Quantum Confinement and Surface Ligand Coating of Photocatalytic Efficiency in Chalcopyrite Copper Indium Diselenide Nanocrystals. <i>Chemistry of Materials</i> , 2016, 28, 1107-1120.	3.2	29
31	Solvent-like ligand-coated ultrasmall cadmium selenide nanocrystals: strong electronic coupling in a self-organized assembly. <i>Nanoscale</i> , 2015, 7, 11667-11677.	2.8	15
32	Mechanistic Study of the Formation of Bright White Light-Emitting Ultrasmall CdSe Nanocrystals: Role of Phosphine Free Selenium Precursors. <i>Chemistry of Materials</i> , 2015, 27, 1057-1070.	3.2	41
33	Molecule-like CdSe Nanoclusters Passivated with Strongly Interacting Ligands: Energy Level Alignment and Photoinduced Ultrafast Charge Transfer Processes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2813-2821.	1.5	19
34	Label-Free Nanoplasmonic-Based Short Noncoding RNA Sensing at Attomolar Concentrations Allows for Quantitative and Highly Specific Assay of MicroRNA-10b in Biological Fluids and Circulating Exosomes. <i>ACS Nano</i> , 2015, 9, 11075-11089.	7.3	203
35	Depth-Resolved Multispectral Sub-Surface Imaging Using Multifunctional Upconversion Phosphors with Paramagnetic Properties. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 21465-21471.	4.0	6
36	Correlated Optical Spectroscopy and Electron Microscopy Studies of the Slow Ostwald-Ripening Growth of Silver Nanoparticles under Controlled Reducing Conditions. <i>Plasmonics</i> , 2014, 9, 111-120.	1.8	9

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37	Isolation of Bright Blue Light-Emitting CdSe Nanocrystals with 6.5 kDa Core in Gram Scale: High Photoluminescence Efficiency Controlled by Surface Ligand Chemistry. <i>Chemistry of Materials</i> , 2014, 26, 1278-1285.	3.2	76
38	Highly Specific Plasmonic Biosensors for Ultrasensitive MicroRNA Detection in Plasma from Pancreatic Cancer Patients. <i>Nano Letters</i> , 2014, 14, 6955-6963.	4.5	127
39	Enhancing the physicochemical and photophysical properties of small ($\approx 2.0\text{ nm}$) CdSe nanoclusters for intracellular imaging applications. <i>RSC Advances</i> , 2014, 4, 30742.	1.7	12
40	Novel pH-responsive nanoplasmonic sensor: controlling polymer structural change to modulate localized surface plasmon resonance response. <i>RSC Advances</i> , 2014, 4, 15807.	1.7	23
41	Effects of Surface-Passivating Ligands and Ultrasmall CdSe Nanocrystal Size on the Delocalization of Exciton Confinement. <i>Langmuir</i> , 2014, 30, 7851-7858.	1.6	39
42	Ultrasensitive Photoreversible Molecular Sensors of Azobenzene-Functionalized Plasmonic Nanoantennas. <i>Nano Letters</i> , 2014, 14, 532-540.	4.5	105
43	Soft ligand stabilized gold nanoparticles: Incorporation of bipyridyls and two-dimensional assembly. <i>Journal of Colloid and Interface Science</i> , 2014, 426, 107-116.	5.0	8
44	Multimodal bioimaging using a rare earth doped Gd ₂ O ₂ S:Yb/Er phosphor with upconversion luminescence and magnetic resonance properties. <i>Journal of Materials Chemistry B</i> , 2013, 1, 1561.	2.9	85
45	Temperature-Controlled Reversible Localized Surface Plasmon Resonance Response of Polymer-Functionalized Gold Nanoprisms in the Solid State. <i>Journal of Physical Chemistry C</i> , 2013, 117, 26228-26237.	1.5	38
46	Bimodal imaging using neodymium doped gadolinium fluoride nanocrystals with near-infrared to near-infrared downconversion luminescence and magnetic resonance properties. <i>Journal of Materials Chemistry B</i> , 2013, 1, 5702.	2.9	50
47	Photophysical and Redox Properties of Molecule-like CdSe Nanoclusters. <i>Langmuir</i> , 2013, 29, 6187-6193.	1.6	16
48	Rare Earth doped nanoparticles in imaging and PDT. <i>Proceedings of SPIE</i> , 2013, 8594, .	0.8	4
49	Efficient Upconverting Nanophosphors for Imaging and Photodynamic Therapy. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1471, 51.	0.1	0
50	Rare Earth Based Upconverting Materials for Solar Cell Application. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1471, 56.	0.1	0
51	Improved localized surface plasmon resonance biosensing sensitivity based on chemically-synthesized gold nanoprisms as plasmonic transducers. <i>Journal of Materials Chemistry</i> , 2012, 22, 923-931.	6.7	63
52	Designing Efficient Localized Surface Plasmon Resonance-Based Sensing Platforms: Optimization of Sensor Response by Controlling the Edge Length of Gold Nanoprisms. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20990-21000.	1.5	58
53	3D-Addressable Redox: Modifying Porous Carbon Electrodes with Ferrocenated 2 nm Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9283-9289.	1.5	11
54	Low-Temperature Synthesis of Magic-Sized CdSe Nanoclusters: Influence of Ligands on Nanocluster Growth and Photophysical Properties. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4380-4389.	1.5	71

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73	One-Step Synthesis of Phosphine-Stabilized Gold Nanoparticles Using the Mild Reducing Agent 9-BBN. <i>Langmuir</i> , 2009, 25, 13279-13283.	1.6	57
74	Asymmetrically Functionalized Gold Nanoparticles Organized in One-Dimensional Chains. <i>Nano Letters</i> , 2008, 8, 731-736.	4.5	132
75	pH-Controlled Assemblies of Polymeric Amine-Stabilized Gold Nanoparticles. <i>Macromolecules</i> , 2008, 41, 4347-4352.	2.2	67
76	Nonequilibrium population distribution in excited electronic states of Tb ³⁺ in Y ₃ Al ₅ O ₁₂ . <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	3
77	Intensity analysis and crystal-field modeling of Ho ³⁺ in K ₂ Pb ₂ Cl ₅ host. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	14
78	Versatile Solid Phase Synthesis of Gold Nanoparticle Dimers Using an Asymmetric Functionalization Approach. <i>Journal of the American Chemical Society</i> , 2007, 129, 5356-5357.	6.6	184
79	Polymer-Induced Synthesis of Stable Gold and Silver Nanoparticles and Subsequent Ligand Exchange in Water. <i>Langmuir</i> , 2007, 23, 11883-11889.	1.6	115
80	Optical properties of ocular tissues in the near infrared region. <i>Lasers in Medical Science</i> , 2007, 22, 46-52.	1.0	42
81	Ligand-field splitting of the energy levels of Nd ³⁺ (4f ³) in 2-hydroxyethyl methacrylate polymer (HEMA). <i>Polymer International</i> , 2006, 55, 1007-1012.	1.6	3
82	Spectroscopic analysis of Nd ³⁺ (4f ³) absorption intensities in a plastic host (HEMA). <i>Polymer International</i> , 2005, 54, 412-417.	1.6	5
83	Optical scattering, absorption, and polarization of healthy and neovascularized human retinal tissues. <i>Journal of Biomedical Optics</i> , 2005, 10, 051501.	1.4	28
84	Optical transitions, absorption intensities, and intermanifold emission cross sections of Pr ³⁺ (4f ²) in Ca ₅ (PO ₄) ₃ F crystal host. <i>Journal of Applied Physics</i> , 2004, 95, 5334-5339.	1.1	15
85	Optical characterization of bovine retinal tissues. <i>Journal of Biomedical Optics</i> , 2004, 9, 624.	1.4	21
86	Self-Assembled Stable Silver Nanoclusters and Nanonecklace Formation: A Poly(methylhydrosiloxane)-Mediated One-Pot Route to Organosols. <i>Macromolecules</i> , 2004, 37, 5136-5139.	2.2	49
87	Synthesis, stabilization, and applications of nanoscopic siloxane-metal particle conjugates. <i>Journal of Organometallic Chemistry</i> , 2003, 686, 24-31.	0.8	25
88	Characterization of spectroscopic and laser properties of Pr ³⁺ in Sr ₅ (PO ₄) ₃ F crystal. <i>Journal of Applied Physics</i> , 2002, 91, 911-915.	1.1	28
89	Surface-Ligand-Controlled Enhancement of Carrier Density in Plasmonic Tungsten Oxide Nanocrystals: Spectroscopic Observation of Trap-State Passivation via Multidentate Metal Phosphonate Bonding. <i>Chemistry of Materials</i> , 0, , .	3.2	8