Debasish Mandal

List of Publications by Year
in descending order

57 papers	2,226 citations	236612 25 h-index	223531 46 g-index
58 all docs	58 docs citations	58 times ranked	2589 citing authors

#	Article	IF	Citations
1	A xanthene-based novel colorimetric and fluorometric chemosensor for the detection of hydrazine and its application in the bio-imaging of live cells. New Journal of Chemistry, 2021, 45, 15869-15875.	1.4	11
2	Fabrication of self-assembled nanostructures for intracellular drug delivery from diphenylalanine analogues with rigid or flexible chemical linkers. Nanoscale Advances, 2021, 3, 6176-6190.	2.2	7
3	A Pd-catalyzed one-pot cascade consisting of Câ€“C/Câ€“O/Nâ€“N bond formation to access benzoxazine fused 1,2,3-triazoles. Organic and Biomolecular Chemistry, 2021, 19, 9936-9945.	1.5	3
4	Experimental and Computational Insights into the Waterâ€Mediated Decomposition of N â€Sulfonylhydrazones: A Catalystâ€Free Synthesis of Î³â€Keto/Nitrile Sulfones. Asian Journal of Organic Chemistry, 2020, 9, 251-258.	1.3	1
5	The role of potential energy surface in quantum mechanical tunneling: A computational perspective. Computational and Theoretical Chemistry, 2020, 1187, 112920.	1.1	1
6	Hydrolysis versus aminolysis of a potential nerve agent tabun: a computational reaction mechanism study. Theoretical Chemistry Accounts, 2020, 139, 1.	0.5	7
7	A â€œturn-onâ€•fluorescent and colorimetric chemodosimeter for selective detection of Au³⁺ions in solution and in live cellsviaAu³⁺-induced hydrolysis of a rhodamine-derived Schiff base. New Journal of Chemistry, 2020, 44, 7954-7961.	1.4	25
8	A Perylene diimide based fluorescent probe for caffeine in aqueous medium. Supramolecular Chemistry, 2019, 31, 28-35.	1.5	5
9	Reaction-based bi-signaling chemodosimeter probe for selective detection of hydrogen sulfide and cellular studies. New Journal of Chemistry, 2018, 42, 5367-5375.	1.4	19
10	A Michael additionâ€“cyclization-based switch-on fluorescent chemodosimeter for cysteine and its application in live cell imaging. New Journal of Chemistry, 2018, 42, 4951-4958.	1.4	16
11	Catalysis of Methyl Transfer Reactions by Oriented External Electric Fields: Are Goldâ€“Thiolate Linkers Innocent?. Journal of the American Chemical Society, 2018, 140, 4354-4362.	6.6	66
12	Kinetic Isotope Effect Determination Probes the Spin of the Transition State, Its Stereochemistry, and Its Ligand Sphere in Hydrogen Abstraction Reactions of Oxoiron(IV) Complexes. Accounts of Chemical Research, 2018, 51, 107-117.	7.6	75
13	Reaction-based ratiometric fluorescent probe for selective recognition of sulfide anions with a large Stokes shift through switching on ESIPT. New Journal of Chemistry, 2018, 42, 76-84.	1.4	15
14	Structure and reactivity/selectivity control by oriented-external electric fields. Chemical Society Reviews, 2018, 47, 5125-5145.	18.7	292
15	Installation of efficient quenching groups of a fluorescent probe for the specific detection of cysteine and homocysteine over glutathione in solution and imaging of living cells. Supramolecular Chemistry, 2017, 29, 59-68.	1.5	7
16	Oxoiron(IV) Tetramethylcyclam Complexes with Axial Carboxylate Ligands: Effect of Tethering the Carboxylate on Reactivity. Inorganic Chemistry, 2017, 56, 3287-3301.	1.9	24
17	Simple Bisthiocarbonohydrazone as a Sensitive, Selective, Colorimetric, and Ratiometric Fluorescent Chemosensor for Picric Acids. ACS Omega, 2017, 2, 1583-1593.	1.6	42
18	A reactive primary fluorescence switch-on sensor for Hg 2+ and the generated fluorophore as secondary recognition receptor toward Cu 2+ in aqueous acetonitrile solution. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 343, 7-16.	2.0	6

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19	A chromogenic and ratiometric fluorogenic probe for rapid detection of a nerve agent simulant DCP based on a hybrid hydroxynaphthaleneâ€“hemicyanine dye. Organic and Biomolecular Chemistry, 2017, 15, 5959-5967.	1.5	34
20	Structure and spin state of nonheme Fe^{IV}O complexes depending on temperature: predictive insights from DFT calculations and experiments. Chemical Science, 2017, 8, 5460-5467.	3.7	25
21	A benzopyryliumâ€“phenothiazine conjugate of a flavylium derivative as a fluorescent chemosensor for cyanide in aqueous media and its bioimaging. New Journal of Chemistry, 2017, 41, 12581-12588.	1.4	15
22	Privileged Role of Thiolate as the Axial Ligand in Hydrogen Atom Transfer Reactions by Oxoiron(IV) Complexes in Shaping the Potential Energy Surface and Inducing Significant H-Atom Tunneling. Journal of the American Chemical Society, 2017, 139, 18705-18713.	6.6	33
23	Benzthiazole-derived chromogenic, fluorogenic and ratiometric probes for detection of hydrazine in environmental samples and living cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 334, 1-12.	2.0	36
24	â€œTurn-onâ€•fluorescence sensing of cytosine: development of a chemosensor for quantification of cytosine in human cancer cells. RSC Advances, 2017, 7, 54008-54012.	1.7	15
25	Emergence of Function in P450-Proteins: A Combined Quantum Mechanical/Molecular Mechanical and Molecular Dynamics Study of the Reactive Species in the H₂O₂-Dependent Cytochrome P450_{SPÎ±} and Its Regio- and Enantioselective Hydroxylation of Fatty Acids. Journal of the American Chemical Society, 2016, 138, 6786-6797.	6.6	54
26	Oriented electric fields as future smart reagents in chemistry. Nature Chemistry, 2016, 8, 1091-1098.	6.6	391
27	A simple Schiff base molecular logic gate for detection of Zn2+ in water and its bio-imaging application in plant system. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 321, 99-109.	2.0	42
28	Interplay of Tunneling, Two-State Reactivity, and Bellâ€“Evansâ€“Polanyi Effects in Câ€“H Activation by Nonheme Fe(IV)O Oxidants. Journal of the American Chemical Society, 2016, 138, 2094-2097.	6.6	76
29	Reaction-based sensing of fluoride ions using desilylation method for triggering excited-state intramolecular proton transfer. Supramolecular Chemistry, 2016, 28, 693-706.	1.5	8
30	Colorimetric and ratiometric fluorescent chemodosimeter for selective sensing of fluoride and cyanide ions: tuning selectivity in proton transfer and Câ€“Si bond cleavage. RSC Advances, 2015, 5, 10716-10722.	1.7	39
31	Oxoiron(IV) Complex of the Ethylene-Bridged Dialkylcyclam Ligand Me₂EBC. Inorganic Chemistry, 2015, 54, 7828-7839.	1.9	28
32	Interplay of Experiment and Theory in Elucidating Mechanisms of Oxidation Reactions by a Nonheme Ru^{IV}O Complex. Journal of the American Chemical Society, 2015, 137, 8623-8632.	6.6	85
33	A BODIPY/pyrene-based chemodosimetric fluorescent chemosensor for selective sensing of hydrazine in the gas and aqueous solution state and its imaging in living cells. RSC Advances, 2015, 5, 58228-58236.	1.7	46
34	Determination of Spin Inversion Probability, H-Tunneling Correction, and Regioselectivity in the Two-State Reactivity of Nonheme Iron(IV)-Oxo Complexes. Journal of Physical Chemistry Letters, 2015, 6, 1472-1476.	2.1	64
35	Colorimetric and ratiometric fluorescent chemosensor for fluoride ions based on phenanthroimidazole (PI): spectroscopic, NMR and density functional studies. RSC Advances, 2015, 5, 37935-37942.	1.7	27
36	A cyclization-induced emission enhancement (CIEE)-based ratiometric fluorogenic and chromogenic probe for the facile detection of a nerve agent simulant DCP. Chemical Communications, 2015, 51, 9729-9732.	2.2	66

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37	An azodyeâ€“rhodamine-based fluorescent and colorimetric probe specific for the detection of Pd²⁺ in aqueous ethanolic solution: synthesis, XRD characterization, computational studies and imaging in live cells. Analyst, The, 2015, 140, 1229-1236.	1.7	36
38	How Does Tunneling Contribute to Counterintuitive H-Abstraction Reactivity of Nonheme Fe(IV)O Oxidants with Alkanes?. Journal of the American Chemical Society, 2015, 137, 722-733.	6.6	89
39	Pyrophosphate-selective fluorescent chemosensor based on ratiometric tripodal-Zn(II) complex: Application in logic gates and living cells. Sensors and Actuators B: Chemical, 2014, 200, 123-131.	4.0	40
40	A pyrene thiazole conjugate as a ratiometric chemosensor with high selectivity and sensitivity for tin (Sn⁴⁺) and its application in imaging live cells. RSC Advances, 2014, 4, 56605-56614.	1.7	16
41	Ratiometric sensing of fluoride and acetate anions based on a BODIPY-azaindole platform and its application to living cell imaging. Analyst, The, 2014, 139, 309-317.	1.7	68
42	Highly Sensitive and Selective Rhodamine-Based â€œOffâ€“Onâ€•Reversible Chemosensor for Tin (Sn⁴⁺) and Imaging in Living Cells. Inorganic Chemistry, 2013, 52, 10825-10834.	1.9	68
43	Interaction Between Group IIb Divalent Transition-Metal Cations and 3-Mercaptopropionic Acid: A Computational and Topological Perspective. Journal of Physical Chemistry A, 2013, 117, 1601-1613.	1.1	15
44	Carbazole phenylthiosemicarbazone-based ensemble of Hg2+ as selective fluorescence turn-on sensor toward cysteine in water. Tetrahedron Letters, 2013, 54, 2946-2951.	0.7	18
45	Kinetics and Mechanism of the Tropospheric Oxidation of Vinyl Acetate Initiated by OH Radical: A Theoretical Study. Journal of Physical Chemistry A, 2013, 117, 3739-3750.	1.1	44
46	Aminolysis of a Model Nerve Agent: A Computational Reaction Mechanism Study ofO,S-Dimethyl Methylphosphonothiolate. Journal of Physical Chemistry A, 2012, 116, 8382-8396.	1.1	18
47	Fluorescence sensing of caffeine in aqueous solution with carbazole-based probe and imaging application in live cells. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 5379-5383.	1.0	20
48	Nucleophilic Degradation of Fenitrothion Insecticide and Performance of Nucleophiles: A Computational Study. Journal of Physical Chemistry A, 2012, 116, 2536-2546.	1.1	23
49	Mechanism and kinetics for the reaction of O(3P) with DMSO: A theoretical study. Chemical Physics Letters, 2012, 551, 31-37.	1.2	3
50	Theoretical study of spectroscopy, interaction, and dissociation of linear and T-shaped isomers of RgClF (RgÂ=ÂHe, Ne, and Ar) van der Waals complexes. Structural Chemistry, 2012, 23, 681-692.	1.0	8
51	Density functional theory study of interaction, bonding and affinity of group IIb transition metal cations with nucleic acid bases. Chemical Physics, 2012, 400, 108-117.	0.9	10
52	The association reaction between C2H and 1-butyne: a computational chemical kinetics study. Physical Chemistry Chemical Physics, 2011, 13, 4583.	1.3	7
53	Pyrolysis oftert-Butyltert-Butanethiosulfinate,t-BuS(O)St-Bu: A Computational Perspective of the Decomposition Pathways. Journal of Physical Chemistry A, 2011, 115, 3068-3078.	1.1	7
54	Millimeterwave Spectral Studies of Propynal (HCCCHO) Produced by DC Glow Discharge and Ab Initio DFT Calculation. Journal of Atomic, Molecular, and Optical Physics, 2011, 2011, 1-8.	0.5	2

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55	Computational Study on the Growth of Gallium Nitride and a Possible Source of Oxygen Impurity. Journal of Physical Chemistry A, 2010, 114, 5016-5025.	1.1	10
56	Isomerization and Decomposition of a Model Nerve Agent: A Computational Analysis of the Reaction Energetics and Kinetics of Dimethyl Ethylphosphonate. Journal of Physical Chemistry A, 2010, 114, 10717-10725.	1.1	17
57	Effect of Substituent on C-H Activation Catalysed by a nonheme Fe(IV)O Complex: A Computational Investigation of Reactivity and Hydrogen Tunneling. Dalton Transactions, 0, , .	1.6	1