Shyamalava Mazumdar

List of Publications by Year
in descending order

112	3,469	218381	149479
papers	citations	26 h-index	56 g-index

119	119	119	4147
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	J- and H-Aggregates of Porphyrinâ^'Surfactant Complexes:â€‰ Time-Resolved Fluorescence and Other Spectroscopic Studies. Journal of Physical Chemistry B, 1998, 102, 1528-1538.	1.2	753
2	Electrospray Ionization Mass Spectrometry: A Technique to Access the Information beyond the Molecular Weight of the Analyte. International Journal of Analytical Chemistry, 2012, 2012, 1-40.	0.4	377
3	Structural and Conformational Stability of Horseradish Peroxidase:â€‰ Effect of Temperature and pH. Biochemistry, 2000, 39, 263-270.	1.2	288
4	Fluorescence Dynamics of Noncovalently Linked Porphyrin Dimers, and Aggregates. The Journal of Physical Chemistry, 1995, 99, 17192-17197.	2.9	216
5	Dynamics of Porphyrin Molecules in Micelles. Picosecond Time-Resolved Fluorescence Anisotropy Studies. The Journal of Physical Chemistry, 1995, 99, 10708-10715.	2.9	89
6	Characterization of a partially unfolded structure of cytochrome c induced by sodium dodecyl sulphate and the kinetics of its refolding. FEBS Journal, 1998, 254, 662-670.	0.2	84
7	Direct electrochemistry of heme proteins: effect of electrode surface modification by neutral surfactants. Bioelectrochemistry, 2001, 53, 17-24.	2.4	82
8	J- and H-Aggregates of Porphyrins with Surfactants: Fluorescence, Stopped Flow and Electron Microscopy Studies. Journal of Porphyrins and Phthalocyanines, 1998, 02, 369-376.	0.4	69
9	Stabilization of Partially Folded States of Cytochrome C in Aqueous Surfactant:Â Effects of Ionic and Hydrophobic Interactionsâ€. Biochemistry, 2003, 42, 14606-14613.	1.2	68
10	Spectroscopic and Mechanistic Studies of Type-1 and Type-2 Copper Sites in Pseudomonas aeruginosa Azurin As Obtained by Addition of External Ligands to Mutant His46Gly. Biochemistry, 1996, 35, 1397-1407.	1.2	60
11	The role of surface O-vacancies in the photocatalytic oxidation of Methylene Blue by Zn-doped TiO 2 : A Mechanistic approach. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 345, 36-53.	2.0	55
12	Six-coordinated high-spin models for ferric hemoproteins: NMR and ESR study of the diaquo(protoporphyrinato IX)iron(III) cation and aquohydroxo(protoporphyrinato IX)iron(III) intercalated in aqueous detergent micelles. Inorganic Chemistry, 1988, 27, 2541-2543.	1.9	51
13	The introduction of a negative charge into the hydrophobic patch of Pseudomonas aeruginosa azurin affects the electron self-exchange rate and the electrochemistry. FEBS Journal, 1994, 222, 583-588.	0.2	47
14	pH-Induced Conformational Perturbation in Horseradish Peroxidase. Picosecond Tryptophan Fluorescence Studies on Native and Cyanide-Modified Enzymes. FEBS Journal, 1995, 227, 823-828.	0.2	45
15	Reaction of hydrogen peroxide and peroxidase activity in carboxymethylated cytochrome c: spectroscopic and kinetic studies. BBA - Proteins and Proteomics, 2002, 1596, 63-75.	2.1	39
16	Direct correlation of the crystal structure of proteins with the maximum positive and negative charge states of gaseous protein ions produced by electrospray ionization. Journal of the American Society for Mass Spectrometry, 2005, 16, 1409-1421.	1.2	38
17	Formation of doubly charged Co2+ions: a combined experimental and theoretical study. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, 2815-2826.	0.6	36
18	Excited states of XH2+(X=C, N, O, S) ions: a combined experimental and theoretical study. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, 2571-2584.	0.6	34

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19	Proton and carbon-13 NMR studies on the structure of micelles encapsulating hemes in aqueous sodium dodecyl sulfate solutions. The Journal of Physical Chemistry, 1990, 94, 5947-5953.	2.9	34
20	Interaction of sodium dodecyl sulfate with human native and cross-linked hemoglobins: a transient kinetic study. Biophysical Chemistry, 2002, 98, 267-273.	1.5	34
21	Evidence of Molecular Fragmentation inside the Charged Droplets Produced by Electrospray Process. Journal of the American Society for Mass Spectrometry, 2011, 22, 1707-17.	1.2	32
22	Protein encapsulation into mesoporous silica hosts. Microporous and Mesoporous Materials, 2008, 109, 535-541.	2.2	30
23	Modification of the heme active site to increase the peroxidase activity of thermophilic cytochrome P450: A rational approach. Journal of Inorganic Biochemistry, 2010, 104, 1185-1194.	1.5	30
24	Proton NMR and optical spectra and magnetic properties of four-coordinated intermediate-spin, five-coordinated high-spin, and six-coordinated low-spin iron(II) hemes encapsulated in aqueous detergent micelles: model for hemoproteins. Inorganic Chemistry, 1989, 28, 3243-3248.	1.9	28
25	Stability and characterization of iron(III) and iron(II) heme peptides encapsulated in aqueous detergent micelles: proton NMR and UV-visible spectroscopic studies. Inorganic Chemistry, 1991, 30, 700-705.	1.9	28
26	Conformational Substates of Apoprotein of Horseradish Peroxidase in Aqueous Solution: A Fluorescence Dynamics Study. The Journal of Physical Chemistry, 1995, 99, 13283-13290.	2.9	28
27	Direct electrochemistry of dinuclear CuA fragment from cytochrome c oxidase of Thermus thermophilus at surfactant modified glassy carbon electrode. Electrochimica Acta, 2010, 55, 4174-4179.	2.6	28
28	Binding of cyanide and thiocyanate to manganese reconstituted myoglobin and formation of peroxide compound: optical spectral, multinuclear NMR, and kinetic studies. Inorganic Chemistry, 1993, 32, 5362-5367.	1.9	25
29	Binding of camphor toPseudomonas putidacytochrome P450cam: steady-state and picosecond time-resolved fluorescence studies. FEBS Letters, 2000, 477, 157-160.	1.3	23
30	Effect of Polar Solvents on the Optical Properties of Water-Dispersible Thiol-Capped Cobalt Nanoparticles. Langmuir, 2008, 24, 3439-3445.	1.6	22
31	Thermodynamic basis of the thermostability of CYP175A1 from Thermus thermophilus. International Journal of Biological Macromolecules, 2010, 46, 412-418.	3.6	22
32	Role of Threonine 101 on the Stability of the Heme Active Site of Cytochrome P450cam:Â Multiwavelength Circular Dichroism Studiesâ€. Biochemistry, 2006, 45, 12715-12722.	1.2	20
33	Roles of two surface residues near the access channel in the substrate recognition by cytochrome P450cam. Biophysical Chemistry, 2008, 135, 1-6.	1.5	20
34	Effects of zinc substitution on the electron superconductorNd1.85Ce0.15CuO4â˜Ĩ. Physical Review B, 1990, 41, 4797-4800.	1.1	18
35	Tuning the substrate specificity by engineering the active site of cytochrome P450cam: A rational approach. Dalton Transactions, 2010, 39, 3115.	1.6	18
36	Conjugation of cytochrome c with hydrogen titanate nanotubes: novel conformational state with implications for apoptosis. Nanotechnology, 2011, 22, 415705.	1.3	18

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37	NMR studies on interaction of lauryl maltoside with cytochrome c oxidase: a model for surfactant interaction with the membrane protein. Journal of Inorganic Biochemistry, 2002, 91, 116-124.	1.5	17
38	Role of substrate on the conformational stability of the heme active site of cytochrome P450cam: effect of temperature and low concentrations of denaturants. Journal of Biological Inorganic Chemistry, 2004, 9, 477-488.	1.1	17
39	Nonâ€covalent dimers of the lysine containing protonated peptide ions in gaseous state: electrospray ionization mass spectrometric study. Journal of Mass Spectrometry, 2010, 45, 1212-1219.	0.7	17
40	Valence Bond Theory of Organic Charge-Transfer Salts. Molecular Crystals and Liquid Crystals, 1979, 52, 93-102.	0.9	16
41	Effect of redox potential of the heme on the peroxidase activity of cytochrome b562. Biophysical Chemistry, 2003, 105, 263-268.	1.5	16
42	Thermostability of Proteins: Role of Metal Binding and pH on the Stability of the Dinuclear CuA Site of Thermus thermophilus. Biophysical Journal, 2007, 93, 2845-2851.	0.2	16
43	Reversible inactivation of cytochrome P450 by alkaline earth metal ions: Auxiliary metal ion induced conformation change and formation of inactive P420 species in CYP101. Journal of Inorganic Biochemistry, 2008, 102, 1312-1321.	1.5	16
44	Engineering of Thermus thermophilus Cytochrome c₅₅₂: Thermally Tolerant Artificial Peroxidase*. ChemBioChem, 2008, 9, 2954-2957.	1.3	16
45	Thermodynamic Effects of the Alteration of the Axial Ligand on the Unfolding of Thermostable Cytochrome c. Biochemistry, 2013, 52, 1373-1384.	1.2	16
46	On the quantal identification of low-lying electronic states of CO2+. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, L385-L389.	0.6	15
47	Steady-State and Picosecond-Time-Resolved Fluorenscence Studies on the Recombinant Heme Domain of Bacillus megaterium Cytochrome P-450. FEBS Journal, 1997, 244, 361-370.	0.2	15
48	Sequence Specific Association of Tryptic Peptides with Multiwalled Carbon Nanotubes: Effect of Localization of Hydrophobic Residues. Biomacromolecules, 2012, 13, 1410-1419.	2.6	15
49	How are S2+Â· ions formed in electron collisions with linear Sï£¾Cï£¾S?. Rapid Communications in Mass Spectrometry, 1989, 3, 24-26.	0.7	14
50	Conformational change due to reduction of cytochrome-c oxidase in lauryl maltoside: picosecond time-resolved tryptophan fluorescence studies on the native and heat modified enzyme. BBA - Proteins and Proteomics, 1994, 1209, 227-237.	2.1	14
51	Direct electrochemical oxidation of horseradish peroxidase: cyclic voltammetric and spectroelectrochemical studies. New Journal of Chemistry, 1999, 23, 137-139.	1.4	14
52	Oxygenation of Monoenoic Fatty Acids by CYP175A1, an Orphan Cytochrome P450 from Thermus thermophilus HB27. Biochemistry, 2012, 51, 7880-7890.	1.2	14
53	Micelle-induced release of haemâ€“NO from nitric oxide complex of myoglobin. Journal of the Chemical Society Chemical Communications, 1993, .	2.0	13
54	Effect of Adriamycin on the boundary lipid structure of cytochrome c oxidase: pico-second time-resolved fluorescence depolarization studies. Biophysical Chemistry, 2000, 86, 15-28.	1.5	13

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55	pH-Induced Conformational Transition in the Soluble CuA Domain of Paracoccus denitrificans Cytochrome Oxidase. Biochemistry, 2001, 40, 6180-6189.	1.2	13
56	Effects of salts on the charge-state distribution and the structural basis of the most-intense charge-state of the gaseous protein ions produced by electrospray ionization. International Journal of Mass Spectrometry, 2010, 289, 84-91.	0.7	13
57	Time-resolved study of tryptophan fluorescence in vesicle reconstituted cytochrome oxidase. FEBS Letters, 1993, 336, 211-214.	1.3	11
58	Covalent linkage of CYP101 with the electrode enhances the electrocatalytic activity of the enzyme: Vectorial electron transport from the electrode. Inorganica Chimica Acta, 2010, 363, 2804-2811.	1.2	11
59	The CS2 dication. International Journal of Mass Spectrometry and Ion Processes, 1988, 86, 351-355.	1.9	10
60	Aggregation in five-coordinate high-spin natural hemins: determination of solution structure by proton NMR. The Journal of Physical Chemistry, 1990, 94, 561-566.	2.9	10
61	Redox-linked conformational changes in bovine heart cytochromec oxidase: Picosecond time-resolved fluorescence studies of cyanide complex. Biopolymers, 2000, 57, 316-322.	1.2	10
62	Steady-State and Time-Resolved Fluorescence Studies on Wild Type and Mutant Chromatium vinosum High Potential Iron Proteins: Holo- and Apo-Forms. Biophysical Journal, 2001, 81, 2320-2330.	0.2	10
63	Structure and Redox Properties of the Haem Centre in the C357M Mutant of Cytochrome P450cam. ChemBioChem, 2005, 6, 1204-1211.	1.3	10
64	Effect of alcohols on binding of camphor to cytochrome P450cam: Spectroscopic and stopped flow transient kinetic studies. Archives of Biochemistry and Biophysics, 2006, 455, 154-162.	1.4	10
65	Conformational Dynamics Coupled to Protonation Equilibrium at the Cu_A Site of Thermus thermophilus:â€‰ Insights into the Origin of Thermostability. Biochemistry, 2008, 47, 1309-1318.	1.2	10
66	Biochemical and Molecular Dynamic Simulation Analysis of a Weak Coiled Coil Association between Kinesin-II Stalks. PLoS ONE, 2012, 7, e45981.	1.1	10
67	Notes. Electronic spectral study of the aqua ? hydroxo equilibrium of model iron(III) haems encapsulated in aqueous detergent micelles. Journal of the Chemical Society Dalton Transactions, 1989, , 1003.	1.1	9
68	Artificial metalloenzymes based on protein assembly. Coordination Chemistry Reviews, 2022, 469, 214593.	9.5	9
69	Electronic structure of synthetic iron(III) porphyrins in pyridine and pyridinewater solutions: A proton magnetic resonance study. Inorganica Chimica Acta, 1988, 148, 17-20.	1.2	8
70	Succinylation of cytochrome c investigated by electrospray ionization mass spectrometry: Reactive lysine residues. International Journal of Mass Spectrometry, 2009, 281, 55-62.	0.7	8
71	Ultrafast dynamics of hemin aggregates. Physical Chemistry Chemical Physics, 2017, 19, 26862-26869.	1.3	8
72	Controlled Uptake of an Iridium Complex inside Engineered apoâ€Ferritin Nanocages: Study of Structure and Catalysis**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	8

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73	Biomimetic chemistry of hemes inside aqueous micelles. , 1993, , 115-145.		7
74	Role of the Surface-Exposed Leucine 155 in the Metal Ion Binding Loop of the CuA Domain of Cytochrome c Oxidase from Thermus thermophilus on the Function and Stability of the Protein. Biochemistry, 2012, 51, 2443-2452.	1.2	7
75	Unveiling the urease like intrinsic catalytic activities of two dinuclear nickel complexes towards the in situ syntheses of aminocyanopyridines. Dalton Transactions, 2021, 50, 4848-4858.	1.6	7
76	Notes. Proton nuclear magnetic resonance and optical spectra of six-co-ordinated high-spin (S= 2) bis(tetrahydrofuran)(3,7,12,17-tetramethyl-8,13-divinylporphyrin-2,18-dipropionato)iron(II) encapsulated in aqueous detergent micelles. Journal of the Chemical Society Dalton Transactions, 1990, , 2633.	1.1	6
77	Low-spin iron(III) porphyrins encapsulated in aqueous detergent micelles: proton- and nitrogen-15 nuclear magnetic resonance studies. Journal of the Chemical Society Dalton Transactions, 1990, , 1057.	1.1	6
78	Octaethylporphyrinate haem complexes encapsulated inside aqueous detergent micelles: a spectroscopic study. Journal of the Chemical Society Dalton Transactions, 1991, , 2091.	1.1	6
79	Mechanism of Copper Incorporation in Subunit II of Cytochrome c Oxidase from Thermus thermophilus: Identification of Intermediate Species. Biochemistry, 2013, 52, 4620-4635.	1.2	6
80	Kinesin associated protein, DmKAP, binding harnesses the C-terminal ends of the Drosophila kinesin-2 stalk heterodimer. Biochemical and Biophysical Research Communications, 2020, 522, 506-511.	1.0	6
81	Ion-ion mutual neutralization of N2+ with Fâ^' and other fluorine-containing negative ions. Chemical Physics Letters, 1995, 237, 448-455.	1.2	5
82	Structural Design of the Active Site for Covalent Attachment of the Heme to the Protein Matrix: Studies on a Thermostable Cytochrome P450. Biochemistry, 2011, 50, 1042-1052.	1.2	5
83	Role of substituents on the reactivity and product selectivity in reactions of naphthalene derivatives catalyzed by the orphan thermostable cytochrome P450, CYP175A1. Bioorganic Chemistry, 2015, 62, 94-105.	2.0	5
84	Mono-nuclear copper complexes mimicking the intermediates for the binuclear copper center of the subunit II of cytochrome oxidase: a peptide based approach. Dalton Transactions, 2016, 45, 17624-17632.	1.6	5
85	Substitution of iron with cobalt in the prosthetic group of bacterial cytochrome P450: Effects on the stability and structure of the protein. Inorganica Chimica Acta, 2019, 487, 398-404.	1.2	5
86	Direct Observation of Release of Cytochrome c from Lipid-Encapsulated Protein by Peroxide and Superoxide: A Possible Mechanism for Drug-Induced Apoptosis. Biochemical and Biophysical Research Communications, 2001, 286, 311-314.	1.0	4
87	Selective Deletion of the Internal Lysine Residue from the Peptide Sequence by Collisional Activation. Journal of the American Society for Mass Spectrometry, 2012, 23, 1967-1980.	1.2	4
88	A molecular Fe-complex as a catalyst probe for in-gel visual detection of proteins via signal amplification. Chemical Communications, 2015, 51, 15257-15260.	2.2	4
89	Identification of a copper ion recognition peptide sequence in the subunit II of cytochrome c oxidase: a combined theoretical and experimental study. Journal of Biological Inorganic Chemistry, 2021, 26, 411-425.	1.1	4
90	Covalent conjugation of single-walled carbon nanotube with CYP101 mutant for direct electrocatalysis. Analytical Biochemistry, 2021, 626, 114204.	1.1	4

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91	Heme CD as a probe for monitoring local structural changes in hemeproteins: Alkaline transition in hemeproteins. Journal of Chemical Sciences, 1995, 107, 497-503.	0.7	4
92	An NMR and circular dichroism study of the interaction of thiocyanate with human and cross-linked hemoglobin: identification of Lys-Î±-99 as a possible dissociation linked binding site. Biophysical Chemistry, 2003, 106, 233-240.	1.5	3
93	pHâ€Induced Conformational Perturbation in Horseradish Peroxidase. FEBS Journal, 1995, 227, 823-828.	0.2	3
94	The structural dynamics of the kinesin-2 stalk heterodimer and its biological relevance. Biochemical and Biophysical Research Communications, 2019, 518, 171-177.	1.0	3
95	Experimental predictions for the normal state of electron-doped high-temperature superconductors. Physica C: Superconductivity and Its Applications, 1989, 161, 423-430.	0.6	2
96	Adenosine triphosphate synthesis using an electrochemically-driven proton pump. Journal of the Chemical Society Chemical Communications, 1994, , 807.	2.0	2
97	Regioselective Oxygenation of Polyunsaturated Fatty Acids by the Thermostable P450 from Thermus thermophilus HB27. Current Biotechnology, 2015, 4, 345-356.	0.2	2
98	Unfolding pathway of cytochromec oxidase induced by ionic surfactants: Circular dichroism and picosecond time-resolved fluorescence studies. Journal of Chemical Sciences, 1998, 110, 479-490.	0.7	2
99	Dielectric relaxation study of glycine and valine in water mixture using picosecond time domain reflectometry. Indian Journal of Biochemistry and Biophysics, 1997, 34, 385-90.	0.2	2
100	Proton nuclear magnetic resonance studies on haemin chloride in pyridineâ€“water solution. Journal of the Chemical Society Dalton Transactions, 1988, , 2797-2802.	1.1	1
101	A simple formalism on dynamics of proteins on potential energy landscapes. Protein Science, 2004, 13, 487-493.	3.1	1
102	Inhibition of bacterial oxidases by formamide and analogs. Biological Chemistry, 2008, 389, 599-607.	1.2	1
103	The protein inhibitor of nNOS (PIN/DLC1/LC8) binding does not inhibit the NADPH-dependent heme reduction in nNOS, a key step in NO synthesis. Biochemical and Biophysical Research Communications, 2016, 472, 189-193.	1.0	1
104	Transition metal complexes as promoters of direct electron transfer from gold electrodes to cytochrome c. Journal of Chemical Sciences, 2021, 133, 1.	0.7	1
105	Time-resolved fluorescence study of the single tryptophan in thiocyanate and azide derivatives of horseradish peroxidase: Implication for apH-induced conformational change in the heme cavity. Journal of Chemical Sciences, 1995, 107, 505-518.	0.7	1
106	Spectroscopic and electrochemical studies of the pH-Induced transition in the CuA centre from Thermus thermophilus. Inorganica Chimica Acta, 2022, 533, 120749.	1.2	1
107	Controlled Uptake of an Iridium Complex inside Engineered apoâ€Ferritin Nanocages: Study of Structure and Catalysis**. Angewandte Chemie, 0, , .	1.6	1
108	INTERACTION OF SURFACTANTS WITH BIOMOLECULES AND MIMICS**To Professor Samaresh Mitra on the occasion of his 60th birthday.. , 2001, , 73-128.		0

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109	Chapter 10. Oxidation of Unnatural Substrates by Engineered Cytochrome P450cam. , 0, , 330-365.		0
110	Miceile-induced release of heme-NO from nitric oxide complex of myogiobin. Journal of Chemical Sciences, 1994, 106, 763-763.	0.7	0
111	Picosecond fluorescence decay of tryptophan in bovine cytochrome-c oxidase. Journal of Chemical Sciences, 1994, 106, 766-766.	0.7	0
112	Protein-surfactant interaction: Selective unfolding in hemeproteins. Journal of Chemical Sciences, 1996, 108, 313-313.	0.7	0