Karim Fahmy

List of Publications by Year
in descending order

71 papers	2,677 citations	218677 26 h-index	189892 50 g-index
73 all docs	73 docs citations	73 times ranked	2564 citing authors

#	Article	IF	Citations
1	Salting-Out of DNA Origami Nanostructures by Ammonium Sulfate. International Journal of Molecular Sciences, 2022, 23, 2817.	4.1	8
2	Anion-specific structure and stability of guanidinium-bound DNA origami. Computational and Structural Biotechnology Journal, 2022, 20, 2611-2623.	4.1	6
3	Simple Growthâ€“Metabolism Relations Are Revealed by Conserved Patterns of Heat Flow from Cultured Microorganisms. Microorganisms, 2022, 10, 1397.	3.6	3
4	Two Be or Not Two Be: The Nuclear Autoantigen La/SS-B Is Able to Form Dimers and Oligomers in a Redox Dependent Manner. International Journal of Molecular Sciences, 2021, 22, 3377.	4.1	5
5	DNA-Mediated Stack Formation of Nanodiscs. Molecules, 2021, 26, 1647.	3.8	2
6	C. elegans possess a general program to enter cryptobiosis that allows dauer larvae to survive different kinds of abiotic stress. Scientific Reports, 2020, 10, 13466.	3.3	15
7	Body size-dependent energy storage causes Kleiberâ€™s law scaling of the metabolic rate in planarians. ELife, 2019, 8, .	6.0	57
8	Calcium binding to a disordered domain of a type III-secreted protein from a coral pathogen promotes secondary structure formation and catalytic activity. Scientific Reports, 2019, 9, 7115.	3.3	7
9	Layer-by-Layer Assembly of Heparin and Peptide-Polyethylene Glycol Conjugates to Form Hybrid Nanothin Films of Biomatrices. ACS Applied Materials & Interfaces, 2018, 10, 14264-14270.	8.0	8
10	Fourier Transform-Infrared Spectroscopy for Biophysical Applications: Technical Aspects. , 2018, , 1-10.		0
11	DNA-encircled lipid bilayers. Nanoscale, 2018, 10, 18463-18467.	5.6	35
12	Uranium(VI) Complexes with a Calix[4]areneâ€Based 8â€Hydroxyquinoline Ligand: Thermodynamic and Structural Characterization Based on Calorimetry, Spectroscopy, and Liquidâ€“Liquid Extraction. ChemistryOpen, 2018, 7, 467-474.	1.9	6
13	Manipulation Under Anesthesia Thaws Frozen Shoulder. Journal of Osteopathic Medicine, 2018, 118, 485-486.	0.8	4
14	Analysis of self-assembly of S-layer protein slp-B53 from Lysinibacillus sphaericus. European Biophysics Journal, 2017, 46, 77-89.	2.2	19
15	Dipolar Relaxation Dynamics at the Active Site of an ATPase Regulated by Membrane Lateral Pressure. Angewandte Chemie, 2017, 129, 1289-1292.	2.0	3
16	Dipolar Relaxation Dynamics at the Active Site of an ATPase Regulated by Membrane Lateral Pressure. Angewandte Chemie - International Edition, 2017, 56, 1269-1272.	13.8	15
17	Calorimetrically Determined U(VI) Toxicity in Brassica napus Correlates with Oxidoreductase Activity and U(VI) Speciation. Environmental Science & Technology, 2017, 51, 10843-10849.	10.0	16
18	The Molecular Switching Mechanism at the Conserved D(E)RY Motif in Class-A GPCRs. Biophysical Journal, 2016, 111, 79-89.	0.5	19

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19	Anisotropic metal growth on phospholipid nanodiscs via lipid bilayer expansion. Scientific Reports, 2016, 6, 26718.	3.3	7
20	Membrane Lateral Pressure Controls Hydration and Water Mobility at the Copper-Binding Site of the P1B-type Copper ATPase CopA from Legionella Pneumophila. Biophysical Journal, 2016, 110, 574a.	0.5	0
21	Mechanism of Attenuation of Uranyl Toxicity by Glutathione in Lactococcus lactis. Applied and Environmental Microbiology, 2016, 82, 3563-3571.	3.1	15
22	Rational Structure-Based Rescaffolding Approach to De Novo Design of Interleukin 10 (IL-10) Receptor-1 Mimetics. PLoS ONE, 2016, 11, e0154046.	2.5	2
23	A Single-Strand Annealing Protein Clamps DNA to Detect and Secure Homology. PLoS Biology, 2015, 13, e1002213.	5.6	22
24	Filament formation by metabolic enzymes is a specific adaptation to an advanced state of cellular starvation. ELife, 2014, 3, .	6.0	188
25	The Role of Phospholipid Headgroup Composition and Trehalose in the Desiccation Tolerance of Caenorhabditis elegans. Langmuir, 2014, 30, 12897-12906.	3.5	19
26	Peptide-Based Approach to Study Cytosolic Domain Interactions in a Bacterial Copper-Transporting ATPase. Biophysical Journal, 2014, 106, 583a.	0.5	0
27	Paramagnetic Decoration of DNA Origami Nanostructures by Eu³⁺ Coordination. Langmuir, 2014, 30, 8152-8159.	3.5	28
28	Hydration and Temperature-Induced Phospholipid Phase Transitions and their Influence on Desiccation Tolerance of the Nematode Caenorhabditis Elegans. Biophysical Journal, 2014, 106, 702a.	0.5	0
29	A Single-Strand Annealing Protein Clamps DNA to Detect Homology. Biophysical Journal, 2014, 106, 693a.	0.5	0
30	Formic acid interaction with the uranyl(vi) ion: structural and photochemical characterization. Dalton Transactions, 2013, 42, 13584.	3.3	28
31	How worms survive desiccation. Worm, 2012, 1, 61-65.	1.0	17
32	3D Profile-Based Approach to Proteome-Wide Discovery of Novel Human Chemokines. PLoS ONE, 2012, 7, e36151.	2.5	6
33	The Role of Water H-Bond Imbalances in B-DNA Substate Transitions and Peptide Recognition Revealed by Time-Resolved FTIR Spectroscopy. Journal of the American Chemical Society, 2011, 133, 5834-5842.	13.7	40
34	Eu3+-Mediated Polymerization of Benzenetetracarboxylic Acid Studied by Spectroscopy, Temperature-Dependent Calorimetry, and Density Functional Theory. Inorganic Chemistry, 2011, 50, 5451-5459.	4.0	16
35	Trehalose Renders the Dauer Larva of Caenorhabditis elegans Resistant to Extreme Desiccation. Current Biology, 2011, 21, 1331-1336.	3.9	149
36	Photoluminescence of Uranium(VI): Quenching Mechanism and Role of Uranium(V). Chemistry - A European Journal, 2010, 16, 8029-8033.	3.3	33

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37	S-Layer protein fromLysinibacillus sphaericusJG-A12 as matrix for Au^{III}sorption and Au-nanoparticle formation. Spectroscopy, 2010, 24, 177-181.	0.8	18
38	Heterologous expression of the surface-layer-like protein SllB induces the formation of long filaments of Escherichia coli consisting of protein-stabilized outer membrane. Microbiology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.8	9
39	Aqueous coordination chemistry and photochemistry of uranyl(vi) oxalate revisited: a density functional theory study. Dalton Transactions, 2010, 39, 10953.	3.3	25
40	Lipid Protein Interactions Couple Protonation to Conformation in a Conserved Cytosolic Domain of G Protein-coupled Receptors. Journal of Biological Chemistry, 2009, 284, 28801-28809.	3.4	19
41	Cross-Correlation of Fluorescence-Quenching and Infrared Absorption in the Study of Protein Ligand Binding Sites. Biophysical Journal, 2009, 96, 384a.	0.5	0
42	Secondary Structure and Compliance of a Predicted Flexible Domain in Kinesin-1 Necessary for Cooperation of Motors. Biophysical Journal, 2008, 95, 5216-5227.	0.5	22
43	Linkage Between the Intramembrane H-bond Network Around Aspartic Acid 83 and the Cytosolic Environment of Helix 8 in Photoactivated Rhodopsin. Journal of Molecular Biology, 2007, 366, 1129-1141.	4.2	40
44	Synthesis and Biological Evaluation of a New Type of 99mTechnetium-Labeled Fatty Acid for Myocardial Metabolism Imaging. Bioconjugate Chemistry, 2007, 18, 216-230.	3.6	39
45	Flavonoids Affect Actin Functions in Cytoplasm and Nucleus. Biophysical Journal, 2007, 93, 2767-2780.	0.5	56
46	Secondary Structure and Pd(II) Coordination in S-Layer Proteins from Bacillus sphaericus Studied by Infrared and X-Ray Absorption Spectroscopy. Biophysical Journal, 2006, 91, 996-1007.	0.5	75
47	Metal binding by bacteria from uranium mining waste piles and its technological applications. Biotechnology Advances, 2006, 24, 58-68.	11.7	171
48	Structure and pH sensitivity of the transmembrane segment 3 of rhodopsin. Biopolymers, 2006, 82, 329-333.	2.4	2
49	Conserved High Affinity Ligand Binding and Membrane Association in the Native and Refolded Extracellular Domain of the Human Glycine Receptor Î±1-Subunit. Journal of Biological Chemistry, 2004, 279, 1627-1636.	3.4	27
50	Properties and Planned Use of the Intense THz Radiation from ELBE at Dresden-Rossendorf. Journal of Biological Physics, 2003, 29, 303-307.	1.5	3
51	Suramin Affects Coupling of Rhodopsin to Transducin. Biophysical Journal, 2002, 82, 793-802.	0.5	17
52	Receptor-dependent G-protein activation in lipidic cubic phase. Biopolymers, 2002, 67, 167-177.	2.4	7
53	Ftir- and Fluorescence-Spectroscopic Analyses of Receptor G-Protein Coupling in Photoreception. Current Organic Chemistry, 2002, 6, 1259-1284.	1.6	1
54	[13] Structural determinants of active state conformation of rhodopsin: Molecular biophysics approaches. Methods in Enzymology, 2000, 315, 178-196.	1.0	18

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55	Transducin-Dependent Protonation of Glutamic Acid 134 in Rhodopsinâ€. Biochemistry, 2000, 39, 10607-10612.	2.5	73
56	Biomolecular interactions studied by FT-IR-ATR spectroscopy. , 1999, , 41-42.		0
57	Binding of Transducin and Transducin-Derived Peptides to Rhodopsin Studied by Attenuated Total Reflectionâ€“Fourier Transform Infrared Difference Spectroscopy. Biophysical Journal, 1998, 75, 1306-1318.	0.5	62
58	Spectroscopic Evidence for Altered Chromophoreâ^'Protein Interactions in Low-Temperature Photoproducts of the Visual Pigment Responsible for Congenital Night Blindnessâ€. Biochemistry, 1996, 35, 15065-15073.	2.5	25
59	Characterization of the Mutant Visual Pigment Responsible for Congenital Night Blindness:Â A Biochemical and Fourier-Transform Infrared Spectroscopy Studyâ€. Biochemistry, 1996, 35, 7536-7545.	2.5	53
60	Properties and Photoactivity of Rhodopsin Mutants. Israel Journal of Chemistry, 1995, 35, 325-337.	2.3	29
61	Photoactivated state of rhodopsin and how it can form. Biophysical Chemistry, 1995, 56, 171-181.	2.8	59
62	Identification of Glutamic Acid 113 as the Schiff Base Proton Acceptor in the Metarhodopsin II Photointermediate of Rhodopsin. Biochemistry, 1994, 33, 10878-10882.	2.5	156
63	A Mutant Rhodopsin Photoproduct with a Protonated Schiff Base Displays an Active-State Conformation: A Fourier-Transform Infrared Spectroscopy Study. Biochemistry, 1994, 33, 13700-13705.	2.5	47
64	Characterization of Rhodopsin-Transducin Interaction: A Mutant Rhodopsin Photoproduct with a Protonated Schiff Base Activates Transducin. Biochemistry, 1994, 33, 9753-9761.	2.5	61
65	Regulation of the rhodopsin-transducin interaction by a highly conserved carboxylic acid group. Biochemistry, 1993, 32, 7229-7236.	2.5	240
66	Light-dependent transducin activation by an ultraviolet-absorbing rhodopsin mutant. Biochemistry, 1993, 32, 9165-9171.	2.5	62
67	Protonation states of membrane-embedded carboxylic acid groups in rhodopsin and metarhodopsin II: a Fourier-transform infrared spectroscopy study of site-directed mutants.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 10206-10210.	7.1	260
68	IDENTIFICATION OF THE PROTON ACCEPTOR OF SCHIFF BASE DEPROTONATION IN BACTERIORHODOPSIN: A FOURIER-TRANSFORM-INFRARED STUDY OF THE MUTANT ASP85 â†' GLU IN ITS NATURAL LIPID ENVIRONMENT. Photochemistry and Photobiology, 1992, 56, 1073-1083.	2.5	62
69	Structural investigation of bacteriorhodopsin and some of its photoproducts by polarized Fourier transform infrared spectroscopic methods-difference spectroscopy and photoselection. Biophysical Journal, 1991, 60, 989-1001.	0.5	37
70	THE PHOTOREACTION OF THE DEIONIZED FORM OF THE PURPLE MEMBRANE INVESTIGATED BY FTIR DIFFERENCE SPECTROSCOPY. Photochemistry and Photobiology, 1990, 51, 459-464.	2.5	12
71	Photoisomerization in bacteriorhodopsin studied by FTIR, linear dichroism and photoselection experiments combined with quantum chemical theoretical analysis. Journal of Molecular Structure, 1989, 214, 257-288.	3.6	92