

# James N Sturgis

## List of Publications by Year in descending order

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97

papers

5,169

citations

81900

39

h-index

91884

69

g-index

99

all docs

99

docs citations

99

times ranked

4752

citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental evidence for long-distance electrodynamic intermolecular forces. <i>Science Advances</i> , 2022, 8, eabl5855.	10.3	19
2	High-speed atomic force microscopy highlights new molecular mechanism of daptomycin action. <i>Nature Communications</i> , 2020, 11, 6312.	12.8	26
3	Comparison of the Energy-Transfer Rates in Structural and Spectral Variants of the B800–850 Complex from Purple Bacteria. <i>Journal of Physical Chemistry B</i> , 2020, 124, 1460-1469.	2.6	11
4	The lipid environment of <i>Escherichia coli</i> Aquaporin Z. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2019, 1861, 431-440.	2.6	33
5	Modifying styrene-maleic acid co-polymer for studying lipid nanodiscs. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 777-783.	2.6	34
6	Out-of-Equilibrium Collective Oscillation as Phonon Condensation in a Model Protein. <i>Physical Review X</i> , 2018, 8, .	8.9	26
7	Modifying Styrene-maleic Acid Co-polymer for Studying Lipid Nanodiscs by Direct Fluorescent Labeling. <i>Bio-protocol</i> , 2018, 8, e2969.	0.4	1
8	Making Monomeric Aquaporin Z by Disrupting the Hydrophobic Tetramer Interface. <i>ACS Omega</i> , 2017, 2, 3017-3027.	3.5	17
9	Lipid perturbation by membrane proteins and the lipophobic effect. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2017, 1859, 126-134.	2.6	15
10	Membrane Protein Solubilization and Composition of Protein Detergent Complexes. <i>Methods in Molecular Biology</i> , 2016, 1432, 243-260.	0.9	8
11	Destabilizing Aquaporin Z Assembly: Effects on Structure, Function and Dynamics. <i>Biophysical Journal</i> , 2015, 108, 499a-500a.	0.5	0
12	Transmembrane Recognition of the Semaphorin Co-Receptors Neuropilin 1 and Plexin A1: Coarse-Grained Simulations. <i>PLoS ONE</i> , 2014, 9, e97779.	2.5	24
13	Evidence for New Homotypic and Heterotypic Interactions between Transmembrane Helices of Proteins Involved in Receptor Tyrosine Kinase and Neuropilin Signaling. <i>Journal of Molecular Biology</i> , 2014, 426, 4099-4111.	4.2	33
14	Ultrafast excited state processes in <i>Roseobacter denitrificans</i> antennae: comparison of isolated complexes and native membranes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26059-26066.	2.8	3
15	The architecture of <i>Rhodobacter sphaeroides</i> chromatophores. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 1263-1270.	1.0	36
16	Molecular Mechanisms of Tau Binding to Microtubule and its Role in Microtubule Dynamics in Live Cells. <i>Journal of Cell Science</i> , 2013, 126, 2810-9.	2.0	43
17	Lateral organization of biological membranes. <i>European Biophysics Journal</i> , 2013, 42, 843-850.	2.2	13
18	Shotgun Genome Sequence of the Large Purple Photosynthetic Bacterium <i>Rhodospirillum photometricum</i> DSM122. <i>Journal of Bacteriology</i> , 2012, 194, 2380-2380.	2.2	7

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19	Draft Genome Sequence of the Purple Photosynthetic Bacterium <i>Phaeospirillum molischianum</i> DSM120, a Particularly Versatile Bacterium. <i>Journal of Bacteriology</i> , 2012, 194, 3559-3560.	2.2	8
20	Characterization of the motion of membrane proteins using high-speed atomic force microscopy. <i>Nature Nanotechnology</i> , 2012, 7, 525-529.	31.5	184
21	Molecular Origins and Consequences of High-800 LH2 in <i>Roseobacter denitrificans</i> . <i>Biochemistry</i> , 2011, 50, 6723-6729.	2.5	6
22	Peptide-Dominated Vesicles: Bacterial Internal Membrane Compartments as Model Systems for Prebiotic Evolution. <i>Journal of the American Chemical Society</i> , 2011, 133, 167-181.		1
23	Native architecture of the photosynthetic membrane from <i>Rhodobacter veldkampii</i> . <i>Journal of Structural Biology</i> , 2011, 173, 138-145.	2.8	38
24	The effects of protein crowding in bacterial photosynthetic membranes on the flow of quinone redox species between the photochemical reaction center and the ubiquinol-cytochrome c <sub>2</sub> oxidoreductase. <i>Metallomics</i> , 2011, 3, 765.	2.4	20
25	Antagonistic regulation of <i>dgkA</i> and <i>plsB</i> genes of phospholipid synthesis by multiple stress responses in <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , 2011, 80, 1260-1275.	2.5	39
26	Structure of a protein-detergent complex: the balance between detergent cohesion and binding. <i>European Biophysics Journal</i> , 2011, 40, 1143-1155.	2.2	9
27	Forces guiding assembly of light-harvesting complex 2 in native membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 9455-9459.	7.1	51
28	Antenna mixing in photosynthetic membranes from <i>Phaeospirillum molischianum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 5357-5362.	7.1	31
29	Single-spanning transmembrane domains in cell growth and cell-cell interactions. <i>Cell Adhesion and Migration</i> , 2010, 4, 313-324.	2.7	78
30	Membrane Protein Solubilization. <i>Methods in Molecular Biology</i> , 2010, 601, 205-217.	0.9	47
31	Dissecting membrane protein architecture: An annotation of structural complexity. <i>Biopolymers</i> , 2009, 91, 815-829.	2.4	15
32	Atomic force microscopy of the bacterial photosynthetic apparatus: plain pictures of an elaborate machinery. <i>Photosynthesis Research</i> , 2009, 102, 197-211.	2.9	73
33	Tagging of <i>Escherichia coli</i> proteins with new cassettes allowing <i>in vivo</i> systematic fluorescent and luminescent detection, and purification from physiological expression levels. <i>Proteomics</i> , 2009, 9, 5389-5393.	2.2	3
34	High-resolution architecture of the outer membrane of the Gram-negative bacteria <i>Roseobacter denitrificans</i> . <i>Molecular Microbiology</i> , 2009, 74, 1211-1222.	2.5	68
35	Lid Opening and Unfolding in Human Pancreatic Lipase at Low pH Revealed by Site-Directed Spin Labeling EPR and FTIR Spectroscopy. <i>Biochemistry</i> , 2009, 48, 630-638.	2.5	36
36	Quinone Pathways in Entire Photosynthetic Chromatophores of <i>Rhodospirillum photometricum</i> . <i>Journal of Molecular Biology</i> , 2009, 393, 27-35.	4.2	30

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37	Structural Information, Resolution, and Noise in High-Resolution Atomic Force Microscopy Topographs. <i>Biophysical Journal</i> , 2009, 96, 3822-3831.	0.5	51
38	Energy Transfer in Light-Adapted Photosynthetic Membranes: From Active to Saturated Photosynthesis. <i>Biophysical Journal</i> , 2009, 97, 2464-2473.	0.5	54
39	Atomic Force Microscopy Studies of Native Photosynthetic Membranes. <i>Biochemistry</i> , 2009, 48, 3679-3698.	2.5	88
40	Organization and Assembly of Light-Harvesting Complexes in the Purple Bacterial Membrane. <i>Advances in Photosynthesis and Respiration</i> , 2009, , 253-273.	1.0	12
41	Atomic force microscopy reveals multiple patterns of antenna organization in purple bacteria: implications for energy transduction mechanisms and membrane modeling. <i>Photosynthesis Research</i> , 2008, 95, 269-278.	2.9	37
42	The TolQ-TolR proteins energize TolA and share homologies with the flagellar motor proteins â€˜MotA-MotB. <i>Molecular Microbiology</i> , 2008, 42, 795-807.	2.5	177
43	Organisation and function of the <i>Phaeospirillum molischianum</i> photosynthetic apparatus. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 1552-1559.	1.0	19
44	From high-resolution AFM topographs to atomic models of supramolecular assemblies. <i>Journal of Structural Biology</i> , 2007, 159, 268-276.	2.8	70
45	Supramolecular Assembly of VDAC in Native Mitochondrial Outer Membranes. <i>Journal of Molecular Biology</i> , 2007, 369, 413-418.	4.2	133
46	Rows of ATP Synthase Dimers in Native Mitochondrial Inner Membranes. <i>Biophysical Journal</i> , 2007, 93, 2870-2876.	0.5	85
47	A Dimerization Hierarchy in the Transmembrane Domains of the HER Receptor Family. <i>Biochemistry</i> , 2007, 46, 2010-2019.	2.5	67
48	Dynamics and Diffusion in Photosynthetic Membranes from <i>Rhodospirillum Photometricum</i> . <i>Biophysical Journal</i> , 2006, 91, 3707-3717.	0.5	38
49	Confined diffusion in tubular structures analyzed by fluorescence correlation spectroscopy on a mirror. <i>Applied Optics</i> , 2006, 45, 4497.	2.1	9
50	The Photosynthetic Apparatus of <i>Rhodopseudomonas palustris</i> : Structures and Organization. <i>Journal of Molecular Biology</i> , 2006, 358, 83-96.	4.2	130
51	Ptuba: a tool for the visualization of helix surfaces in proteins. <i>Journal of Molecular Graphics and Modelling</i> , 2005, 23, 305-315.	2.4	9
52	Chromatic Adaptation of Photosynthetic Membranes. <i>Science</i> , 2005, 309, 484-487.	12.6	269
53	Architecture of the native photosynthetic apparatus of <i>Phaeospirillum molischianum</i> . <i>Journal of Structural Biology</i> , 2005, 152, 221-228.	2.8	78
54	Watching the photosynthetic apparatus in native membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 11293-11297.	7.1	169

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55	Two Distinct crt Gene Clusters for Two Different Functional Classes of Carotenoid in <i>Bradyrhizobium</i> . <i>Journal of Biological Chemistry</i> , 2004, 279, 15076-15083.	3.4	43
56	Regulatory circuits and communication in Gram-negative bacteria. <i>Nature Reviews Microbiology</i> , 2004, 2, 581-592.	28.6	204
57	Variable LH2 stoichiometry and core clustering in native membranes of <i>Rhodospirillum photometricum</i> . <i>EMBO Journal</i> , 2004, 23, 4127-4133.	7.8	140
58	Hydrophobic Pockets at the Membrane Interface: An Original Mechanism for Membrane Protein Interactions. <i>Biochemistry</i> , 2004, 43, 1276-1282.	2.5	15
59	Dimerization of the quorum sensing regulator RhlR: development of a method using EGFP fluorescence anisotropy. <i>Molecular Microbiology</i> , 2003, 48, 187-198.	2.5	63
60	Interactions of the quorum sensing regulator QscR: interaction with itself and the other regulators of <i>Pseudomonas aeruginosa</i> LasR and RhlR. <i>Molecular Microbiology</i> , 2003, 48, 199-210.	2.5	170
61	Type II Protein Secretion in <i>Pseudomonas aeruginosa</i> : the Pseudopilus Is a Multifibrillar and Adhesive Structure. <i>Journal of Bacteriology</i> , 2003, 185, 2749-2758.	2.2	144
62	Effect of Detergents on the Association of the Glycophorin A Transmembrane Helix. <i>Biophysical Journal</i> , 2003, 85, 3097-3105.	0.5	123
63	Membrane Protein Stability: High Pressure Effects on the Structure and Chromophore-Binding Properties of the Light-Harvesting Complex LH2. <i>Biochemistry</i> , 2003, 42, 13019-13026.	2.5	36
64	Discovery of a Tat HIV-1 Inhibitor through Computer-Aided Drug Design. <i>Spectroscopy</i> , 2003, 17, 639-645.	0.8	8
65	Two $\beta^2$ -rich structural domains in GABA receptor $\beta\pm 1$ subunit with different physical properties: Evidence for multidomain nature of the receptor. <i>Protein Science</i> , 2002, 11, 2052-2058.	7.6	3
66	Isolation, Size Estimates, and Spectral Heterogeneity of an Oligomeric Series of Light-Harvesting 1 Complexes from <i>Rhodobacter sphaeroides</i> . <i>Biochemistry</i> , 2002, 41, 8698-8707.	2.5	44
67	<i>Escherichia coli</i> ykfE ORFan Gene Encodes a Potent Inhibitor of C-type Lysozyme. <i>Journal of Biological Chemistry</i> , 2001, 276, 18437-18441.	3.4	105
68	Revisiting the Specificity of <i>Mamestra brassicae</i> and <i>Antherea polyphemus</i> Pheromone-binding Proteins with a Fluorescence Binding Assay. <i>Journal of Biological Chemistry</i> , 2001, 276, 20078-20084.	3.4	217
69	Reevaluation of the Electrophoretic Migration Behavior of Soluble Globular Proteins in the Native and Detergent-Denatured States in Polyacrylamide Gels. <i>Analytical Biochemistry</i> , 2000, 284, 143-152.	2.4	37
70	Proton motive force drives the interaction of the inner membrane TolA and outer membrane Pal proteins in <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , 2000, 38, 904-915.	2.5	139
71	$^{1}\text{H}$ - $^{13}\text{C}$ nuclear magnetic resonance assignment and structural characterization of HIV-1 Tat protein. <i>Comptes Rendus De L'Académie Des Sciences Série 3, Sciences De La Vie</i> , 2000, 323, 883-894.	0.8	63
72	Exchanging Cofactors in the Core Antennae from Purple Bacteria: Structure and Properties of Zn $^{2+}$ Bacteriopheophytin-Containing LH1. <i>Biochemistry</i> , 2000, 39, 1091-1099.	2.5	21

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73	Conformation of Bacteriochlorophyll Molecules in Photosynthetic Proteins from Purple Bacteria. <i>Biochemistry</i> , 1999, 38, 11115-11121.	2.5	43
74	Detergents modulate dimerization, but not helicity, of the glycophorin A transmembrane domain 1 1Edited by G. von Heijne. <i>Journal of Molecular Biology</i> , 1999, 293, 639-651.	4.2	175
75	Heterologous expression of genes encoding bacterial light-harvesting complex II in Rhodobacter capsulatus and Rhodovulum sulfidophilum. <i>Microbiological Research</i> , 1998, 153, 189-204.	5.3	10
76	Non-bonding molecular factors influencing the stretching wavenumbers of the conjugated carbonyl groups of bacteriochlorophylla. <i>Journal of Raman Spectroscopy</i> , 1998, 29, 977-981.	2.5	30
77	The Effect of Pressure on the BacteriochlorophyllaBinding Sites of the Core Antenna Complex fromRhodospirillum rubrum. <i>Biochemistry</i> , 1998, 37, 14875-14880.	2.5	27
78	Hydrogen Bonding and Circular Dichroism of Bacteriochlorophylls in the Rhodobacter capsulatus Light-Harvesting 2 Complex Altered by Combinatorial Mutagenesis. <i>Biochemistry</i> , 1998, 37, 10006-10015.	2.5	12
79	Transmembrane Helix Stability: The Effect of Helix-Helix Interactions Studied by Fourier Transform Infrared Spectroscopy. <i>Biophysical Journal</i> , 1998, 74, 988-994.	0.5	23
80	Altered Bacteriochlorophyll Associations in Combinatorial Mutants of the Rhodobacter Capsulatus Light Harvesting 2 Complex. , 1998, , 73-76.		0
81	Pigment Binding-Site and Electronic Properties in Light-Harvesting Proteins of Purple Bacteria. <i>Journal of Physical Chemistry B</i> , 1997, 101, 7227-7231.	2.6	69
82	Functions of Conserved Tryptophan Residues of the Core Light-Harvesting Complex of Rhodobacter sphaeroides. <i>Biochemistry</i> , 1997, 36, 2772-2778.	2.5	94
83	Membrane-Associateddc-type Cytochromes from the Green Sulfur BacteriumChlorobium limicolaformathiosulfatophilum:Â Purification and Characterization of CytochromeC553â€. <i>Biochemistry</i> , 1997, 36, 1927-1932.	2.5	16
84	Conformational flexibility and polymerization of vesicular stomatitis virus matrix protein. <i>Journal of Molecular Biology</i> , 1997, 274, 816-825.	4.2	33
85	Resonance Raman spectroscopy of metal-substituted bacteriochlorophylls: characterization of Raman bands sensitive to bacteriochlorin conformation. <i>Journal of Raman Spectroscopy</i> , 1997, 28, 599-604.	2.5	38
86	The effect of different levels of the B800-850 light-harvesting complex on intracytoplasmic membrane development in Rhodobacter sphaeroides. <i>Archives of Microbiology</i> , 1996, 165, 235-242.	2.2	34
87	The effects of the detergent LDAO on the carotenoid metabolism and growth of Rhodovulum sulfidophilum. <i>Microbiological Research</i> , 1996, 151, 421-426.	5.3	2
88	The role of chromophore coupling in tuning the spectral properties of peripheral light-harvesting protein of purple bacteria. <i>Photosynthesis Research</i> , 1996, 50, 5-10.	2.9	44
89	Structure and Properties of the Bacteriochlorophyll Binding Site in Peripheral Light-Harvesting Complexes of Purple Bacteria. <i>Biochemistry</i> , 1995, 34, 517-523.	2.5	76
90	Biochemical and Spectroscopic Characterization of the B800-850 Light-Harvesting Complex from Rhodobacter sulfidophilus and Its B800-830 Spectral Form. <i>Biochemistry</i> , 1995, 34, 10519-10524.	2.5	24

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91	Thermodynamics of Membrane Polypeptide Oligomerization in Light-harvesting Complexes and Associated Structural Changes. <i>Journal of Molecular Biology</i> , 1994, 238, 445-454.	4.2	82
92	Acid denaturation of the B875 light-harvesting complex in membranes of Rhodobacter sphaeroides. <i>Photosynthesis Research</i> , 1990, 23, 241-248.	2.9	7
93	Assembly of Intracytoplasmic Membranes in Rhodobacter Sphaeroides Mutants Lacking Light-Harvesting and Reaction Center Complexes. , 1990, , 219-226.		2
94	Role of B800-850 Light-Harvesting Pigment-Protein Complex in the Morphogenesis of Rhodobacter sphaeroides Membranes. , 1990, , 1017-1020.		2
95	SPECTRA AND EXTINCTION COEFFICIENTS OF NEAR-INFRARED ABSORPTION BANDS IN MEMBRANES OF Rhodobacter sphaeroides MUTANTS LACKING LIGHT-HARVESTING AND REACTION CENTER COMPLEXES. <i>Photochemistry and Photobiology</i> , 1988, 48, 243-247.	2.5	43
96	Oligomerization states and associations of light-harvesting pigment-protein complexes of Rhodobacter sphaeroides as analyzed by lithium dodecyl sulfate-polyacrylamide gel electrophoresis. <i>Biochemistry</i> , 1988, 27, 3459-3467.	2.5	126
97	Making dimers of oligomeric membrane proteins using copper-free click chemistry. <i>F1000Research</i> , 0, 5, 1061.	1.6	0