Kenneth J Rothschild

List of Publications by Year
in descending order

141 papers	7,566 citations	46918 47 h-index	58464 82 g-index
144 all docs	144 docs citations	144 times ranked	3176 citing authors

#	Article	IF	Citations
1	Vibrational spectroscopy of bacteriorhodopsin mutants: light-driven proton transport involves protonation changes of aspartic acid residues 85, 96, and 212. Biochemistry, 1988, 27, 8516-8520.	1.2	545
2	FTIR difference spectroscopy of bacteriorhodopsin: Toward a molecular model. Journal of Bioenergetics and Biomembranes, 1992, 24, 147-167.	1.0	291
3	Fourier Transform Infrared Techniques for Probing Membrane Protein Structure. Annual Review of Biophysics and Biophysical Chemistry, 1988, 17, 541-570.	12.2	252
4	Polarized infrared spectroscopy of oriented purple membrane. Biophysical Journal, 1979, 25, 473-487.	0.2	245
5	Spontaneous, pH-Dependent Membrane Insertion of a Transbilayer Î±-Helixâ€. Biochemistry, 1997, 36, 15177-15192.	1.2	234
6	Protein dynamics in the bacteriorhodopsin photocycle: submillisecond Fourier transform infrared spectra of the L, M, and N photointermediates.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 2388-2392.	3.3	184
7	A Biophysical Study of Integral Membrane Protein Foldingâ€. Biochemistry, 1997, 36, 15156-15176.	1.2	170
8	Stabilization of the membrane protein bacteriorhodopsin to 140 Â°C in two-dimensional films. Nature, 1993, 366, 48-50.	13.7	159
9	Conformational changes of bacteriorhodopsin detected by Fourier transform infrared difference spectroscopy. Biochemical and Biophysical Research Communications, 1981, 103, 483-489.	1.0	157
10	Surface-induced lamellar orientation of multilayer membrane arrays. Theoretical analysis and a new method with application to purple membrane fragments. Biophysical Journal, 1980, 31, 65-96.	0.2	151
11	Millisecond Fourier-transform infrared difference spectra of bacteriorhodopsin's M412 photoproduct.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 5221-5225.	3.3	136
12	Infrared evidence that the Schiff base of bacteriorhodopsin is protonated: bR570 and K intermediates.. Proceedings of the National Academy of Sciences of the United States of America, 1982, 79, 4045-4049.	3.3	134
13	Evidence for a tyrosine protonation change during the primary phototransition of bacteriorhodopsin at low temperature.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 347-351.	3.3	129
14	Structural Model of the Phospholamban Ion Channel Complex in Phospholipid Membranes. Journal of Molecular Biology, 1995, 248, 824-834.	2.0	122
15	Cell-free Co-expression of Functional Membrane Proteins and Apolipoprotein, Forming Soluble Nanolipoprotein Particles. Molecular and Cellular Proteomics, 2008, 7, 2246-2253.	2.5	109
16	Detection of a water molecule in the active-site of bacteriorhodopsin: hydrogen bonding changes during the primary photoreaction. Biochemistry, 1994, 33, 12757-12762.	1.2	107
17	Anomalous amide I infrared absorption of purple membrane. Science, 1979, 204, 311-312.	6.0	106
18	Vibrational spectroscopy of bacteriorhodopsin mutants: I. Tyrosine-185 protonates and deprotonantes during the photocycle. Proteins: Structure, Function and Bioinformatics, 1988, 3, 219-229.	1.5	106

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19	Tyrosine and carboxyl protonation changes in the bacteriorhodopsin photocycle. 1. M412 and L550 intermediates. Biochemistry, 1987, 26, 6696-6707.	1.2	103
20	Orientation of the bacteriorhodopsin chromophore probed by polarized Fourier transform infrared difference spectroscopy. Biochemistry, 1986, 25, 7793-7798.	1.2	102
21	Polarized Fourier transform infrared spectroscopy of bacteriorhodopsin. Transmembrane alpha helices are resistant to hydrogen/deuterium exchange. Biophysical Journal, 1990, 58, 1539-1546.	0.2	99
22	A Spectroscopic Study of Rhodopsin Alpha-Helix Orientation. Biophysical Journal, 1980, 31, 53-64.	0.2	90
23	Fourier transform infrared difference spectroscopy of rhodopsin mutants: Light activation of rhodopsin causes hydrogen-bonding change in residue aspartic acid-83 during meta II formation. Biochemistry, 1993, 32, 10277-10282.	1.2	90
24	Fourier transform infrared evidence for Schiff base alteration in the first step of the bacteriorhodopsin photocycle. Biochemistry, 1984, 23, 6103-6109.	1.2	87
25	Site-Directed Isotope Labeling and ATR-FTIR Difference Spectroscopy of Bacteriorhodopsin: The Peptide Carbonyl Group of Tyr 185 Is Structurally Active During the bR .fwdarw. N Transition. Biochemistry, 1995, 34, 2-6.	1.2	85
26	TIME-RESOLVED FOURIER TRANSFORM INFRARED SPECTROSCOPY OF THE BACTERIORHODOPSIN MUTANT TYR-185â†'E: ASP-96 REPROTONATES DURING O FORMATION; ASP-85 AND ASP-212 DEPROTONATE DURING O DECAY. Photochemistry and Photobiology, 1992, 56, 1085-1095.	1.3	83
27	Fourier transform infrared spectroscopy and site-directed isotope labeling as a probe of local secondary structure in the transmembrane domain of phospholamban. Biophysical Journal, 1996, 70, 1728-1736.	0.2	82
28	Nanometer molecular lithography. Applied Physics Letters, 1986, 48, 676-678.	1.5	81
29	Substitution of membrane-embedded aspartic acids in bacteriorhodopsin causes specific changes in different steps of the photochemical cycle. Biochemistry, 1989, 28, 10035-10042.	1.2	81
30	PHOTOEXCITATION OF RHODOPSIN: CONFORMATION CHANGES IN THE CHROMOPHORE, PROTEIN AND ASSOCIATED LIPIDS AS DETERMINED BY FTIR DIFFERENCE SPECTROSCOPY. Photochemistry and Photobiology, 1988, 48, 497-504.	1.3	72
31	Fourier transform infrared difference spectroscopy of the nicotinic acetylcholine receptor: evidence for specific protein structural changes upon desensitization. Biochemistry, 1993, 32, 5448-5454.	1.2	72
32	His-75 in Proteorhodopsin, a Novel Component in Light-driven Proton Translocation by Primary Pumps. Journal of Biological Chemistry, 2009, 284, 2836-2843.	1.6	71
33	Opsin structure probed by raman spectroscopy of photoreceptor membranes. Science, 1976, 191, 1176-1178.	6.0	69
34	Site-directed isotope labelling and FTIR spectroscopy of bacteriorhodopsin. Nature Structural Biology, 1994, 1, 512-517.	9.7	68
35	Antiâ€kelchâ€like 12 and antiâ€hexokinase 1: novel autoantibodies in primary biliary cirrhosis. Liver International, 2015, 35, 642-651.	1.9	66
36	Incorporation of the nicotinic acetylcholine receptor into planar multilamellar films: characterization by fluorescence and Fourier transform infrared difference spectroscopy. Biophysical Journal, 1992, 61, 983-992.	0.2	64

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37	Ultrasensitive Fluorescence-Based Detection of Nascent Proteins in Gels. Analytical Biochemistry, 2000, 279, 218-225.	1.1	63
38	Fourier transform infrared evidence for a predominantly alpha-helical structure of the membrane bound channel forming COOH-terminal peptide of colicin E1. Biophysical Journal, 1991, 59, 516-522.	0.2	62
39	Fourier transform infrared study of the halorhodopsin chloride pump. Biochemistry, 1988, 27, 2420-2424.	1.2	61
40	Conformational Dynamics of Amyloid Î²-Protein Assembly Probed Using Intrinsic Fluorescenceâ€. Biochemistry, 2005, 44, 13365-13376.	1.2	60
41	Evidence for rhodopsin refolding during the decay of Meta II. Biophysical Journal, 1987, 51, 345-350.	0.2	59
42	Structural Changes in the Photoactive Site of Proteorhodopsin during the Primary Photoreactionâ€. Biochemistry, 2004, 43, 9075-9083.	1.2	59
43	PRIMARY PHOTOCHEMISTRY OF BACTERIORHODOPSIN: COMPARISON OF FOURIER TRANSFORM INFRARED DIFFERENCE SPECTRA WITH RESONANCE RAMAN SPECTRA. Photochemistry and Photobiology, 1984, 40, 675-679.	1.3	56
44	Photocleavable biotin phosphoramidite for 5'-end-labeling, affinity purification and phosphorylation of synthetic oligonucleotides. Nucleic Acids Research, 1996, 24, 361-366.	6.5	56
45	Highly Multiplexed Immunohistochemical MALDI-MS Imaging of Biomarkers in Tissues. Journal of the American Society for Mass Spectrometry, 2021, 32, 977-988.	1.2	54
46	A high-throughput nonisotopic protein truncation test. Nature Biotechnology, 2003, 21, 194-197.	9.4	53
47	Vibrational spectroscopy of bacteriorhodopsin mutants: chromophore isomerization perturbs trytophan-86. Biochemistry, 1989, 28, 7052-7059.	1.2	52
48	Conformational changes in bacteriorhodopsin studied by infrared attenuated total reflection. Biophysical Journal, 1987, 52, 629-635.	0.2	49
49	Nonequilibrium linear behavior of biological systems. Existence of enzyme-mediated multidimensional inflection points. Biophysical Journal, 1980, 30, 209-230.	0.2	47
50	X-ray diffraction and electron microscope study of phase separation in rod outer segment photoreceptor membrane multilayers. Biophysical Journal, 1982, 39, 241-251.	0.2	47
51	The Schiff Base Counterion of Bacteriorhodopsin is Protonated in Sensory Rhodopsin I: Spectroscopic and Functional Characterization of the Mutants D76N and D76A. Biochemistry, 1994, 33, 5600-5606.	1.2	47
52	Photoactivation of rhodopsin involves alterations in cysteine side chains: detection of an S-H band in the Meta I->Meta II FTIR difference spectrum. Biophysical Journal, 1994, 66, 2085-2091.	0.2	46
53	Asp76 Is the Schiff Base Counterion and Proton Acceptor in the Proton-Translocating Form of Sensory Rhodopsin Iâ€. Biochemistry, 1996, 35, 6690-6696.	1.2	46
54	Cell-free N-terminal protein labeling using initiator suppressor tRNA. Analytical Biochemistry, 2004, 326, 25-32.	1.1	45

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55	Effect of carboxyl mutations on functional properties of bovine rhodopsin. Biophysical Chemistry, 1995, 56, 79-87.	1.5	44
56	Fourier transform infrared spectroscopic evidence for the existence of two conformations of the bacteriorhodopsin primary photoproduct at low temperature. Biochimica Et Biophysica Acta - Bioenergetics, 1985, 808, 140-148.	0.5	43
57	Conformational Changes Detected in a Sensory Rhodopsin II-Transducer Complex. Journal of Biological Chemistry, 2003, 278, 36556-36562.	1.6	43
58	Biomolecular/solidâ€state nanoheterostructures. Applied Physics Letters, 1990, 56, 692-694.	1.5	42
59	Photoactivation of Rhodopsin Causes an Increased Hydrogen-Deuterium Exchange of Buried Peptide Groups. Biophysical Journal, 1998, 74, 192-198.	0.2	42
60	Conformational Changes in the Photocycle of Anabaena Sensory Rhodopsin. Journal of Biological Chemistry, 2006, 281, 15208-15214.	1.6	42
61	FTIR evidence for tryptophan perturbations during the bacteriorhodopsin photocycle. Journal of the American Chemical Society, 1988, 110, 7223-7224.	6.6	41
62	Vibrational spectroscopy of bacteriorhodopsin mutants: evidence for the interaction of proline-186 with the retinylidene chromophore. Biochemistry, 1990, 29, 5954-5960.	1.2	41
63	Fourier transform Raman spectroscopy of the bacteriorhodopsin mutant Tyr-185 .fwdarw. Phe: Formation of a stable O-like species during light adaptation and detection of its transient N-like photoproduct. Biochemistry, 1993, 32, 2272-2281.	1.2	41
64	Probing conformational changes in the nicotinic acetylcholine receptor by Fourier transform infrared difference spectroscopy. Biophysical Journal, 1992, 62, 64-66.	0.2	40
65	Tyrosine Structural Changes Detected during the Photoactivation of Rhodopsin. Journal of Biological Chemistry, 1998, 273, 23735-23739.	1.6	40
66	Static and time-resolved absorption spectroscopy of the bacteriorhodopsin mutant Tyr-185 .fwdarw. Phe: Evidence for an equilibrium between bR570 and an O-like species. Biochemistry, 1993, 32, 2263-2271.	1.2	39
67	Raman Spectroscopy Reveals Direct Chromophore Interactions in the Leu/Gln105 Spectral Tuning Switch of Proteorhodopsins. Journal of Physical Chemistry B, 2008, 112, 11770-11776.	1.2	39
68	Quantitative analysis of resonance Raman spectra of purple membrane from Halobacterium halobium: L550 intermediate. Biochemistry, 1983, 22, 3460-3466.	1.2	38
69	Cell-free synthesis, functional refolding, and spectroscopic characterization of bacteriorhodopsin, an integral membrane protein. Biochemistry, 1993, 32, 13777-13781.	1.2	38
70	FTIR Analysis of the SII540Intermediate of Sensory Rhodopsin II:Â Asp73 Is the Schiff Base Proton Acceptorâ€. Biochemistry, 2000, 39, 2823-2830.	1.2	38
71	Tyrosine and carboxyl protonation changes in the bacteriorhodopsin photocycle. 2. Tyrosines-26 and -64. Biochemistry, 1987, 26, 6708-6717.	1.2	37
72	Photocleavable peptide-DNA conjugates: synthesis and applications to DNA analysis using MALDI-MS. Nucleic Acids Research, 1999, 27, 4626-4631.	6.5	36

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73	Photoactivation Perturbs the Membrane-embedded Contacts between Sensory Rhodopsin II and Its Transducer. Journal of Biological Chemistry, 2005, 280, 28365-28369.	1.6	36
74	Near-IR Resonance Raman Spectroscopy of Archaerhodopsin 3: Effects of Transmembrane Potential. Journal of Physical Chemistry B, 2012, 116, 14592-14601.	1.2	36
75	Raman spectroscopy of uncomplexed valinomycin. 2. Nonpolar and polar solution. Journal of the American Chemical Society, 1977, 99, 2032-2039.	6.6	35
76	Conformational changes in sensory rhodopsin I: similarities and differences with bacteriorhodopsin, halorhodopsin, and rhodopsin. Biochemistry, 1991, 30, 5395-5400.	1.2	35
77	Raman spectroscopic study of the valinomycin-KSCN complex. Journal of Molecular Biology, 1974, 89, 205-222.	2.0	34
78	A Fourier Transform Infrared Study of Neurospora Rhodopsin: Similarities with Archaeal RhodopsinsÂ¶â€. Photochemistry and Photobiology, 2002, 76, 341.	1.3	34
79	FTIR difference spectroscopy of the bacteriorhodopsin mutant Tyr-185 .fwdarw. Phe: Detection of a stable O-like species and characterization of its photocycle at low temperature. Biochemistry, 1993, 32, 2282-2290.	1.2	33
80	INFRARED STUDIES OF BACTERIORHODOPSIN. Photochemistry and Photobiology, 1988, 47, 883-887.	1.3	30
81	tRNA-mediated protein engineering. Current Opinion in Biotechnology, 1999, 10, 64-70.	3.3	30
82	Resonance Raman Study of an Anion Channelrhodopsin: Effects of Mutations near the Retinylidene Schiff Base. Biochemistry, 2016, 55, 2371-2380.	1.2	30
83	Protonation State of Glu142 Differs in the Green- and Blue-Absorbing Variants of Proteorhodopsin. Biochemistry, 2008, 47, 3447-3453.	1.2	29
84	Substitution of amino acids in helix F of bacteriorhodopsin: effects on the photochemical cycle. Biochemistry, 1989, 28, 10028-10034.	1.2	28
85	Subpicosecond Protein Backbone Changes Detected during the Green-Absorbing Proteorhodopsin Primary Photoreaction. Journal of Physical Chemistry B, 2007, 111, 11824-11831.	1.2	28
86	Retinal Chromophore Structure and Schiff Base Interactions in Red-Shifted Channelrhodopsin-1 from <i>Chlamydomonas augustae</i>. Biochemistry, 2014, 53, 3961-3970.	1.2	28
87	Incorporation of photoreceptor membrane into a multilamellar film. Biophysical Journal, 1980, 31, 45-52.	0.2	26
88	Ultrasensitive Measurements of Microbial Rhodopsin Photocycles Using Photochromic FRET. Photochemistry and Photobiology, 2012, 88, 90-97.	1.3	26
89	N-terminal labeling of proteins using initiator tRNA. Methods, 2005, 36, 252-260.	1.9	25
90	Conformational Changes in the Core Structure of Bacteriorhodopsin. Biochemistry, 1998, 37, 10279-10285.	1.2	24

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91	Photocleavable aminotag phosphoramidites for 5'-termini DNA/RNA labeling. Nucleic Acids Research, 1998, 26, 3572-3576.	6.5	22
92	Raman spectroscopy of uncomplexed valinomycin. I. The solid state. Journal of the American Chemical Society, 1977, 99, 2024-2032.	6.6	21
93	Site-directed isotope labeling and FTIR spectroscopy: assignment of tyrosine bands in the bR â†' M difference spectrum of bacteriorhodopsin. Biophysical Chemistry, 1995, 56, 63-70.	1.5	21
94	[8] Photocleavable affinity tags for isolation and detection of biomolecules. Methods in Enzymology, 1998, 291, 135-154.	0.4	20
95	Probing Intramolecular Orientations in Rhodopsin and Metarhodopsin II by Polarized Infrared Difference Spectroscopyâ€. Biochemistry, 1999, 38, 13200-13209.	1.2	20
96	Proton Transfers in a Channelrhodopsin-1 Studied by Fourier Transform Infrared (FTIR) Difference Spectroscopy and Site-directed Mutagenesis. Journal of Biological Chemistry, 2015, 290, 12719-12730.	1.6	20
97	The early development and application of FTIR difference spectroscopy to membrane proteins: A personal perspective. Biomedical Spectroscopy and Imaging, 2016, 5, 231-267.	1.2	20
98	Models of Ionic Transport in Biological Membranes: Raman Spectroscopy as a Probe of Valinomycin, Gramicidin Aâ€², and Rhodopsin Conformations. American Journal of Clinical Pathology, 1975, 63, 695-713.	0.4	19
99	Bacteriorhodopsin's M412and BR605protein conformations are similar Significance for proton transport. FEBS Letters, 1987, 223, 289-293.	1.3	19
100	Methionine Changes in Bacteriorhodopsin Detected by FTIR and Cell-Free Selenomethionine Substitution. Biophysical Journal, 2003, 84, 960-966.	0.2	19
101	Threonine-89 Participates in the Active Site of Bacteriorhodopsin:â€‰ Evidence for a Role in Color Regulation and Schiff Base Proton Transfer. Biochemistry, 1997, 36, 7490-7497.	1.2	18
102	Site-Directed Isotope Labeling and FT-IR Spectroscopy: The Tyr 185/Pro 186 Peptide Bond of Bacteriorhodopsin Is Perturbed during the Primary Photoreaction. Journal of the American Chemical Society, 1995, 117, 11614-11615.	6.6	17
103	Photochemical Control of the Infectivity of Adenoviral Vectors Using a Novel Photocleavable Biotinylation Reagent. Chemistry and Biology, 2002, 9, 567-573.	6.2	17
104	An ELISA-based high throughput protein truncation test for inherited breast cancer. Breast Cancer Research, 2010, 12, R78.	2.2	17
105	Comparison of the Structural Changes Occurring during the Primary Phototransition of Two Different Channelrhodopsins from <i>Chlamydomonas</i> Algae. Biochemistry, 2015, 54, 377-388.	1.2	17
106	Conformational changes in the archaerhodopsin-3 proton pump: detection of conserved strongly hydrogen bonded water networks. Journal of Biological Physics, 2012, 38, 153-168.	0.7	16
107	Multiplexed VeraCode bead-based serological immunoassay for colorectal cancer. Journal of Immunological Methods, 2013, 400-401, 58-69.	0.6	15
108	Similarity of bacteriorhodopsin structural changes triggered by chromophore removal and light-driven proton transport. FEBS Letters, 1997, 407, 285-288.	1.3	13

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109	Different Structural Changes Occur in Blue- and Green-Proteorhodopsins during the Primary Photoreaction. Biochemistry, 2008, 47, 11490-11498.	1.2	13
110	Structural Changes in an Anion Channelrhodopsin: Formation of the K and L Intermediates at 80 K. Biochemistry, 2017, 56, 2197-2208.	1.2	13
111	Redshifted and Nearâ€infrared Active Analog Pigments Based upon Archaerhodopsinâ€3. Photochemistry and Photobiology, 2019, 95, 959-968.	1.3	13
112	[25] Fourier transform infrared studies of an active proton transport pump. Methods in Enzymology, 1986, 127, 343-353.	0.4	12
113	Matrix-assisted laser desorption/ionization mass spectrometry of DNA using photocleavable biotin. New Biotechnology, 1999, 16, 127-133.	2.7	11
114	Proteome-wide drug screening using mass spectrometric imaging of bead-arrays. Scientific Reports, 2016, 6, 26125.	1.6	11
115	Raman spectroscopy of a near infrared absorbing proteorhodopsin: Similarities to the bacteriorhodopsin O photointermediate. PLoS ONE, 2018, 13, e0209506.	1.1	11
116	The crystal structure of bromide-bound GtACR1 reveals a pre-activated state in the transmembrane anion tunnel. ELife, 2021, 10, .	2.8	11
117	Protein Conformational Changes during the Bacteriorhodopsin Photocycle. Journal of Biological Chemistry, 1995, 270, 29746-29751.	1.6	10
118	Photocleavage-based affinity purification and printing of cell-free expressed proteins: Application to proteome microarrays. Analytical Biochemistry, 2008, 383, 103-115.	1.1	10
119	Correlated matrixâ€assisted laser desorption/ionization mass spectrometry and fluorescent imaging of photocleavable peptideâ€coded random beadâ€arrays. Rapid Communications in Mass Spectrometry, 2014, 28, 49-62.	0.7	10
120	Electronic Preresonance Stimulated Raman Scattering Imaging of Red-Shifted Proteorhodopsins: Toward Quantitation of the Membrane Potential. Journal of Physical Chemistry Letters, 2019, 10, 4374-4381.	2.1	9
121	Detection of threonine structural changes upon formation of the M-intermediate of bacteriorhodopsin: evidence for assignment to Thr-89. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1365, 363-372.	0.5	8
122	Resolution extension by image summing in serial femtosecond crystallography of two-dimensional membrane-protein crystals. IUCrJ, 2018, 5, 103-117.	1.0	8
123	Asp 46 can substitute for Asp 96 as the Schiff base proton donor in bacteriorhodopsin. Biochemistry, 1995, 34, 15599-15606.	1.2	6
124	Active Water in Proteinâ˘'Protein Communication within the Membrane: The Case of SRIIâ˘'HtrII Signal Relay. Biochemistry, 2009, 48, 811-813.	1.2	6
125	Analog Retinal Redshifts Visible Absorption of QuasAr Transmembrane Voltage Sensors into Nearâ€infrared. Photochemistry and Photobiology, 2020, 96, 55-66.	1.3	6
126	Optical Switching Between Longâ€lived States of Opsin Transmembrane Voltage Sensors. Photochemistry and Photobiology, 2021, 97, 1001-1015.	1.3	5

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127	[76] Kinetic resonance raman spectroscopy of purple membrane using rotating sample. Methods in Enzymology, 1982, 88, 643-648.	0.4	4
128	A Fourier Transform Infrared Study of Neurospora Rhodopsin: Similarities with Archaeal RhodopsinsÂ¶â€. Photochemistry and Photobiology, 2002, 76, 341-349.	1.3	4
129	Circular dichroism of oriented photoreceptor membrane film. Biochemical and Biophysical Research Communications, 1980, 94, 618-624.	1.0	3
130	Photoactivation of Rhodopsin: Interplay between Protein and Chromophore. Novartis Foundation Symposium, 1999, 224, 102-123.	1.2	3
131	Composite Biomolecular/Solid State Nanostructures. Materials Research Society Symposia Proceedings, 1989, 174, 151.	0.1	2
132	<title>FTIR spectroscopy, site-directed mutagenesis, and isotope labeling: a new approach for studying membrane proteins</title>. , 1992, 1575, 109.		2
133	Site-directed isotope labeling of membrane proteins: A new tool for spectroscopists. Techniques in Protein Chemistry, 1996, 7, 151-159.	0.3	2
134	Cell-Free Protein Synthesis Systems: Biotechnological Applications. Biotechnology and Genetic Engineering Reviews, 2006, 22, 151-170.	2.4	2
135	Pre-resonance stimulated Raman scattering spectroscopy and imaging of membrane potential using near-infrared rhodopsins. , 2019, , .		2
136	Water molecules are active during the primary photoreaction of bacteriorhodopsin. , 1994, 2089, 118.		1
137	Photocleavage-based affinity purification of biomarkers from serum: Application to multiplex allergy testing. PLoS ONE, 2018, 13, e0191987.	1.1	1
138	Ftir Spectroscopy: The Detection Of Individual Chemical Groups In Complex Biomolecules. Proceedings of SPIE, 1989, 1057, 44.	0.8	0
139	Expression and Spectroscopic Characterization of Melanopsin and Squid Rhodopsin. Biophysical Journal, 2011, 100, 420a.	0.2	0
140	Building Photonic Proteins. , 2003, , .		0
141	THE MOLECULAR ORGANIZATION AND FUNCTION OF BIOLOGICAL MEMBRANES: A POSSIBLE MICROSCOPIC PICTURE OF IONIC PERMEATION. , 1972, , 49-79.		0