# Kenneth J Rothschild

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | 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 |
| 2 | The crystal structure of bromide-bound GtACR1 reveals a pre-activated state in the transmembrane anion tunnel. ELife, 2021, 10, . | 2.8 | 11 |
| 3 | Optical Switching Between Longâ€lived States of Opsin Transmembrane Voltage Sensors. Photochemistry and Photobiology, 2021, 97, 1001-1015. | 1.3 | 5 |
| 4 | Analog Retinal Redshifts Visible Absorption of QuasAr Transmembrane Voltage Sensors into Nearâ€infrared. Photochemistry and Photobiology, 2020, 96, 55-66. | 1.3 | 6 |
| 5 | 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 |
| 6 | Redshifted and Nearâ€infrared Active Analog Pigments Based upon Archaerhodopsinâ€3. Photochemistry and Photobiology, 2019, 95, 959-968. | 1.3 | 13 |
| 7 | Pre-resonance stimulated Raman scattering spectroscopy and imaging of membrane potential using near-infrared rhodopsins. , 2019, , . | | 2 |
| 8 | Raman spectroscopy of a near infrared absorbing proteorhodopsin: Similarities to the bacteriorhodopsin O photointermediate. PLoS ONE, 2018, 13, e0209506. | 1.1 | 11 |
| 9 | Resolution extension by image summing in serial femtosecond crystallography of two-dimensional membrane-protein crystals. IUCrJ, 2018, 5, 103-117. | 1.0 | 8 |
| 10 | Photocleavage-based affinity purification of biomarkers from serum: Application to multiplex allergy testing. PLoS ONE, 2018, 13, e0191987. | 1.1 | 1 |
| 11 | Structural Changes in an Anion Channelrhodopsin: Formation of the K and L Intermediates at 80 K. Biochemistry, 2017, 56, 2197-2208. | 1.2 | 13 |
| 12 | Proteome-wide drug screening using mass spectrometric imaging of bead-arrays. Scientific Reports, 2016, 6, 26125. | 1.6 | 11 |
| 13 | Resonance Raman Study of an Anion Channelrhodopsin: Effects of Mutations near the Retinylidene Schiff Base. Biochemistry, 2016, 55, 2371-2380. | 1.2 | 30 |
| 14 | 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 |
| 15 | 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 |
| 16 | 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 |
| 17 | Antiâ€kelchâ€like 12 and antiâ€hexokinase 1: novel autoantibodies in primary biliary cirrhosis. Liver International, 2015, 35, 642-651. | 1.9 | 66 |
| 18 | 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 |

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| 19 | 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 |
| 20 | Multiplexed VeraCode bead-based serological immunoassay for colorectal cancer. Journal of Immunological Methods, 2013, 400-401, 58-69. | 0.6 | 15 |
| 21 | Ultrasensitive Measurements of Microbial Rhodopsin Photocycles Using Photochromic FRET. Photochemistry and Photobiology, 2012, 88, 90-97. | 1.3 | 26 |
| 22 | Near-IR Resonance Raman Spectroscopy of Archaerhodopsin 3: Effects of Transmembrane Potential. Journal of Physical Chemistry B, 2012, 116, 14592-14601. | 1.2 | 36 |
| 23 | 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 |
| 24 | Expression and Spectroscopic Characterization of Melanopsin and Squid Rhodopsin. Biophysical Journal, 2011, 100, 420a. | 0.2 | 0 |
| 25 | An ELISA-based high throughput protein truncation test for inherited breast cancer. Breast Cancer Research, 2010, 12, R78. | 2.2 | 17 |
| 26 | 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 |
| 27 | Active Water in Proteinâˆ'Protein Communication within the Membrane: The Case of SRIIâˆ'HtrII Signal Relay. Biochemistry, 2009, 48, 811-813. | 1.2 | 6 |
| 28 | Photocleavage-based affinity purification and printing of cell-free expressed proteins: Application to proteome microarrays. Analytical Biochemistry, 2008, 383, 103-115. | 1.1 | 10 |
| 29 | Different Structural Changes Occur in Blue- and Green-Proteorhodopsins during the Primary Photoreaction. Biochemistry, 2008, 47, 11490-11498. | 1.2 | 13 |
| 30 | 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 |
| 31 | Protonation State of Glu142 Differs in the Green- and Blue-Absorbing Variants of Proteorhodopsin. Biochemistry, 2008, 47, 3447-3453. | 1.2 | 29 |
| 32 | 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 |
| 33 | Subpicosecond Protein Backbone Changes Detected during the Green-Absorbing Proteorhodopsin Primary Photoreaction. Journal of Physical Chemistry B, 2007, 111, 11824-11831. | 1.2 | 28 |
| 34 | Cell-Free Protein Synthesis Systems: Biotechnological Applications. Biotechnology and Genetic Engineering Reviews, 2006, 22, 151-170. | 2.4 | 2 |
| 35 | Conformational Changes in the Photocycle of Anabaena Sensory Rhodopsin. Journal of Biological Chemistry, 2006, 281, 15208-15214. | 1.6 | 42 |
| 36 | Photoactivation Perturbs the Membrane-embedded Contacts between Sensory Rhodopsin II and Its Transducer. Journal of Biological Chemistry, 2005, 280, 28365-28369. | 1.6 | 36 |

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| 37 | Conformational Dynamics of Amyloid Î²-Protein Assembly Probed Using Intrinsic Fluorescenceâ€. Biochemistry, 2005, 44, 13365-13376. | 1.2 | 60 |
| 38 | N-terminal labeling of proteins using initiator tRNA. Methods, 2005, 36, 252-260. | 1.9 | 25 |
| 39 | Cell-free N-terminal protein labeling using initiator suppressor tRNA. Analytical Biochemistry, 2004, 326, 25-32. | 1.1 | 45 |
| 40 | Structural Changes in the Photoactive Site of Proteorhodopsin during the Primary Photoreactionâ€. Biochemistry, 2004, 43, 9075-9083. | 1.2 | 59 |
| 41 | A high-throughput nonisotopic protein truncation test. Nature Biotechnology, 2003, 21, 194-197. | 9.4 | 53 |
| 42 | Methionine Changes in Bacteriorhodopsin Detected by FTIR and Cell-Free Selenomethionine Substitution. Biophysical Journal, 2003, 84, 960-966. | 0.2 | 19 |
| 43 | Conformational Changes Detected in a Sensory Rhodopsin II-Transducer Complex. Journal of Biological Chemistry, 2003, 278, 36556-36562. | 1.6 | 43 |
| 44 | Building Photonic Proteins. , 2003, , . | | 0 |
| 45 | A Fourier Transform Infrared Study of Neurospora Rhodopsin: Similarities with Archaeal RhodopsinsÂ¶â€. Photochemistry and Photobiology, 2002, 76, 341. | 1.3 | 34 |
| 46 | Photochemical Control of the Infectivity of Adenoviral Vectors Using a Novel Photocleavable Biotinylation Reagent. Chemistry and Biology, 2002, 9, 567-573. | 6.2 | 17 |
| 47 | A Fourier Transform Infrared Study of Neurospora Rhodopsin: Similarities with Archaeal RhodopsinsÂ¶â€. Photochemistry and Photobiology, 2002, 76, 341-349. | 1.3 | 4 |
| 48 | Ultrasensitive Fluorescence-Based Detection of Nascent Proteins in Gels. Analytical Biochemistry, 2000, 279, 218-225. | 1.1 | 63 |
| 49 | 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 |
| 50 | Photocleavable peptide-DNA conjugates: synthesis and applications to DNA analysis using MALDI-MS. Nucleic Acids Research, 1999, 27, 4626-4631. | 6.5 | 36 |
| 51 | Matrix-assisted laser desorption/ionization mass spectrometry of DNA using photocleavable biotin. New Biotechnology, 1999, 16, 127-133. | 2.7 | 11 |
| 52 | tRNA-mediated protein engineering. Current Opinion in Biotechnology, 1999, 10, 64-70. | 3.3 | 30 |
| 53 | Probing Intramolecular Orientations in Rhodopsin and Metarhodopsin II by Polarized Infrared Difference Spectroscopyâ€. Biochemistry, 1999, 38, 13200-13209. | 1.2 | 20 |
| 54 | Photoactivation of Rhodopsin: Interplay between Protein and Chromophore. Novartis Foundation Symposium, 1999, 224, 102-123. | 1.2 | 3 |

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| 55 | 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 |
| 56 | Conformational Changes in the Core Structure of Bacteriorhodopsin. Biochemistry, 1998, 37, 10279-10285. | 1.2 | 24 |
| 57 | Photoactivation of Rhodopsin Causes an Increased Hydrogen-Deuterium Exchange of Buried Peptide Groups. Biophysical Journal, 1998, 74, 192-198. | 0.2 | 42 |
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| 59 | [8] Photocleavable affinity tags for isolation and detection of biomolecules. Methods in Enzymology, 1998, 291, 135-154. | 0.4 | 20 |
| 60 | Tyrosine Structural Changes Detected during the Photoactivation of Rhodopsin. Journal of Biological Chemistry, 1998, 273, 23735-23739. | 1.6 | 40 |
| 61 | 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 |
| 62 | A Biophysical Study of Integral Membrane Protein Foldingâ€. Biochemistry, 1997, 36, 15156-15176. | 1.2 | 170 |
| 63 | Spontaneous, pH-Dependent Membrane Insertion of a Transbilayer Î±-Helixâ€. Biochemistry, 1997, 36, 15177-15192. | 1.2 | 234 |
| 64 | Similarity of bacteriorhodopsin structural changes triggered by chromophore removal and light-driven proton transport. FEBS Letters, 1997, 407, 285-288. | 1.3 | 13 |
| 65 | 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 |
| 66 | 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 |
| 67 | Site-directed isotope labeling of membrane proteins: A new tool for spectroscopists. Techniques in Protein Chemistry, 1996, 7, 151-159. | 0.3 | 2 |
| 68 | Photocleavable biotin phosphoramidite for 5'-end-labeling, affinity purification and phosphorylation of synthetic oligonucleotides. Nucleic Acids Research, 1996, 24, 361-366. | 6.5 | 56 |
| 69 | 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 |
| 70 | Effect of carboxyl mutations on functional properties of bovine rhodopsin. Biophysical Chemistry, 1995, 56, 79-87. | 1.5 | 44 |
| 71 | Protein Conformational Changes during the Bacteriorhodopsin Photocycle. Journal of Biological Chemistry, 1995, 270, 29746-29751. | 1.6 | 10 |
| 72 | 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 |

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| 73 | 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 |
| 74 | Asp 46 can substitute for Asp 96 as the Schiff base proton donor in bacteriorhodopsin. Biochemistry, 1995, 34, 15599-15606. | 1.2 | 6 |
| 75 | Structural Model of the Phospholamban Ion Channel Complex in Phospholipid Membranes. Journal of Molecular Biology, 1995, 248, 824-834. | 2.0 | 122 |
| 76 | Site-directed isotope labelling and FTIR spectroscopy of bacteriorhodopsin. Nature Structural Biology, 1994, 1, 512-517. | 9.7 | 68 |
| 77 | 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 |
| 78 | 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 |
| 79 | 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 |
| 80 | Water molecules are active during the primary photoreaction of bacteriorhodopsin. , 1994, 2089, 118. | | 1 |
| 81 | Stabilization of the membrane protein bacteriorhodopsin to 140 Â°C in two-dimensional films. Nature, 1993, 366, 48-50. | 13.7 | 159 |
| 82 | Cell-free synthesis, functional refolding, and spectroscopic characterization of bacteriorhodopsin, an integral membrane protein. Biochemistry, 1993, 32, 13777-13781. | 1.2 | 38 |
| 83 | 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 |
| 84 | 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 |
| 85 | 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 |
| 86 | 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 |
| 87 | 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 |
| 88 | <title>FTIR spectroscopy, site-directed mutagenesis, and isotope labeling: a new approach for studying membrane proteins</title>. , 1992, 1575, 109. | | 2 |
| 89 | 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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| 91 | FTIR difference spectroscopy of bacteriorhodopsin: Toward a molecular model. Journal of Bioenergetics and Biomembranes, 1992, 24, 147-167. | 1.0 | 291 |
| 92 | 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 |
| 93 | Conformational changes in sensory rhodopsin I: similarities and differences with bacteriorhodopsin, halorhodopsin, and rhodopsin. Biochemistry, 1991, 30, 5395-5400. | 1.2 | 35 |
| 94 | 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 |
| 95 | 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 |
| 96 | Biomolecular/solidâ€state nanoheterostructures. Applied Physics Letters, 1990, 56, 692-694. | 1.5 | 42 |
| 97 | Vibrational spectroscopy of bacteriorhodopsin mutants: evidence for the interaction of proline-186 with the retinylidene chromophore. Biochemistry, 1990, 29, 5954-5960. | 1.2 | 41 |
| 98 | 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 |
| 99 | 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 |
| 100 | Substitution of amino acids in helix F of bacteriorhodopsin: effects on the photochemical cycle. Biochemistry, 1989, 28, 10028-10034. | 1.2 | 28 |
| 101 | Vibrational spectroscopy of bacteriorhodopsin mutants: chromophore isomerization perturbs trytophan-86. Biochemistry, 1989, 28, 7052-7059. | 1.2 | 52 |
| 102 | Ftir Spectroscopy: The Detection Of Individual Chemical Groups In Complex Biomolecules. Proceedings of SPIE, 1989, 1057, 44. | 0.8 | 0 |
| 103 | Composite Biomolecular/Solid State Nanostructures. Materials Research Society Symposia Proceedings, 1989, 174, 151. | 0.1 | 2 |
| 104 | INFRARED STUDIES OF BACTERIORHODOPSIN. Photochemistry and Photobiology, 1988, 47, 883-887. | 1.3 | 30 |
| 105 | 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 |
| 106 | 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 |
| 107 | Fourier transform infrared study of the halorhodopsin chloride pump. Biochemistry, 1988, 27, 2420-2424. | 1.2 | 61 |
| 108 | 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 |

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| 109 | FTIR evidence for tryptophan perturbations during the bacteriorhodopsin photocycle. Journal of the American Chemical Society, 1988, 110, 7223-7224. | 6.6 | 41 |
| 110 | Fourier Transform Infrared Techniques for Probing Membrane Protein Structure. Annual Review of Biophysics and Biophysical Chemistry, 1988, 17, 541-570. | 12.2 | 252 |
| 111 | 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 |
| 112 | Bacteriorhodopsin's M412and BR605protein conformations are similar Significance for proton transport. FEBS Letters, 1987, 223, 289-293. | 1.3 | 19 |
| 113 | Conformational changes in bacteriorhodopsin studied by infrared attenuated total reflection. Biophysical Journal, 1987, 52, 629-635. | 0.2 | 49 |
| 114 | Evidence for rhodopsin refolding during the decay of Meta II. Biophysical Journal, 1987, 51, 345-350. | 0.2 | 59 |
| 115 | Tyrosine and carboxyl protonation changes in the bacteriorhodopsin photocycle. 2. Tyrosines-26 and -64. Biochemistry, 1987, 26, 6708-6717. | 1.2 | 37 |
| 116 | Tyrosine and carboxyl protonation changes in the bacteriorhodopsin photocycle. 1. M412 and L550 intermediates. Biochemistry, 1987, 26, 6696-6707. | 1.2 | 103 |
| 117 | Orientation of the bacteriorhodopsin chromophore probed by polarized Fourier transform infrared difference spectroscopy. Biochemistry, 1986, 25, 7793-7798. | 1.2 | 102 |
| 118 | Nanometer molecular lithography. Applied Physics Letters, 1986, 48, 676-678. | 1.5 | 81 |
| 119 | [25] Fourier transform infrared studies of an active proton transport pump. Methods in Enzymology, 1986, 127, 343-353. | 0.4 | 12 |
| 120 | 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 |
| 121 | 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 |
| 122 | <b>PRIMARY PHOTOCHEMISTRY OF BACTERIORHODOPSIN: COMPARISON OF FOURIER TRANSFORM INFRARED DIFFERENCE SPECTRA WITH RESONANCE RAMAN SPECTRA</b>. Photochemistry and Photobiology, 1984, 40, 675-679. | 1.3 | 56 |
| 123 | Fourier transform infrared evidence for Schiff base alteration in the first step of the bacteriorhodopsin photocycle. Biochemistry, 1984, 23, 6103-6109. | 1.2 | 87 |
| 124 | Quantitative analysis of resonance Raman spectra of purple membrane from Halobacterium halobium: L550 intermediate. Biochemistry, 1983, 22, 3460-3466. | 1.2 | 38 |
| 125 | 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 |
| 126 | [76] Kinetic resonance raman spectroscopy of purple membrane using rotating sample. Methods in Enzymology, 1982, 88, 643-648. | 0.4 | 4 |

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| 127 | 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 |
| 128 | Conformational changes of bacteriorhodopsin detected by Fourier transform infrared difference spectroscopy. Biochemical and Biophysical Research Communications, 1981, 103, 483-489. | 1.0 | 157 |
| 129 | Incorporation of photoreceptor membrane into a multilamellar film. Biophysical Journal, 1980, 31, 45-52. | 0.2 | 26 |
| 130 | A Spectroscopic Study of Rhodopsin Alpha-Helix Orientation. Biophysical Journal, 1980, 31, 53-64. | 0.2 | 90 |
| 131 | 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 |
| 132 | Nonequilibrium linear behavior of biological systems. Existence of enzyme-mediated multidimensional inflection points. Biophysical Journal, 1980, 30, 209-230. | 0.2 | 47 |
| 133 | Circular dichroism of oriented photoreceptor membrane film. Biochemical and Biophysical Research Communications, 1980, 94, 618-624. | 1.0 | 3 |
| 134 | Anomalous amide I infrared absorption of purple membrane. Science, 1979, 204, 311-312. | 6.0 | 106 |
| 135 | Polarized infrared spectroscopy of oriented purple membrane. Biophysical Journal, 1979, 25, 473-487. | 0.2 | 245 |
| 136 | Raman spectroscopy of uncomplexed valinomycin. 2. Nonpolar and polar solution. Journal of the American Chemical Society, 1977, 99, 2032-2039. | 6.6 | 35 |
| 137 | Raman spectroscopy of uncomplexed valinomycin. I. The solid state. Journal of the American Chemical Society, 1977, 99, 2024-2032. | 6.6 | 21 |
| 138 | Opsin structure probed by raman spectroscopy of photoreceptor membranes. Science, 1976, 191, 1176-1178. | 6.0 | 69 |
| 139 | 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 |
| 140 | Raman spectroscopic study of the valinomycin-KSCN complex. Journal of Molecular Biology, 1974, 89, 205-222. | 2.0 | 34 |
| 141 | THE MOLECULAR ORGANIZATION AND FUNCTION OF BIOLOGICAL MEMBRANES: A POSSIBLE MICROSCOPIC PICTURE OF IONIC PERMEATION. , 1972, , 49-79. | | 0 |