Steven G Boxer

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Modulating the Influenza A Virus–Target Membrane Fusion Interface With Synthetic DNA–Lipid Receptors. Langmuir, 2022, , .	1.6	4
2	Energetic Basis and Design of Enzyme Function Demonstrated Using GFP, an Excited-State Enzyme. Journal of the American Chemical Society, 2022, 144, 3968-3978.	6.6	9
3	Nitrile Infrared Intensities Characterize Electric Fields and Hydrogen Bonding in Protic, Aprotic, and Protein Environments. Journal of the American Chemical Society, 2022, 144, 7562-7567.	6.6	30
4	A two-directional vibrational probe reveals different electric field orientations in solution and an enzyme active site. Nature Chemistry, 2022, 14, 891-897.	6.6	33
5	Recombination between ¹³ C and ² H to Form Acetylide (¹³ C ₂ ² H ^{â€"}) Probes Nanoscale Interactions in Lipid Bilayers via Dynamic Secondary Ion Mass Spectrometry: Cholesterol and GM ₁ Clustering. Analytical Chemistry 2022 94 9750-9757	3.2	3
6	Testing the Limitations of MD-Based Local Electric Fields Using the Vibrational Stark Effect in Solution: Penicillin G as a Test Case. Journal of Physical Chemistry B, 2021, 125, 4415-4427.	1.2	8
7	Enantioselective Total Synthesis of the Archaeal Lipid Parallel GDGTâ€0 (Isocaldarchaeol)**. Angewandte Chemie, 2021, 133, 17632-17637.	1.6	2
8	Enantioselective Total Synthesis of the Archaeal Lipid Parallel GDGTâ€0 (Isocaldarchaeol)**. Angewandte Chemie - International Edition, 2021, 60, 17491-17496.	7.2	6
9	Single-virus content-mixing assay reveals cholesterol-enhanced influenza membrane fusion efficiency. Biophysical Journal, 2021, 120, 4832-4841.	0.2	20
10	The Interplay of Electrostatics and Chemical Positioning in the Evolution of Antibiotic Resistance in TEM β-Lactamases. ACS Central Science, 2021, 7, 1996-2008.	5.3	19
11	Photosynthetic reaction center variants made via genetic code expansion show Tyr at M210 tunes the initial electron transfer mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	6
12	Electrostatic control of photoisomerization pathways in proteins. Science, 2020, 367, 76-79.	6.0	78
13	Unusual Spectroscopic and Electric Field Sensitivity of Chromophores with Short Hydrogen Bonds: GFP and PYP as Model Systems. Journal of Physical Chemistry B, 2020, 124, 9513-9525.	1.2	11
14	Halogenation-Dependent Effects of the Chlorosulfolipids of <i>Ochromonas danica</i> on Lipid Bilayers. ACS Chemical Biology, 2020, 15, 2986-2995.	1.6	3
15	Target Membrane Cholesterol Modulates Single Influenza Virus Membrane Fusion Efficiency butÀNotÂRate. Biophysical Journal, 2020, 118, 2426-2433.	0.2	35
16	A Preorganized Electric Field Leads to Minimal Geometrical Reorientation in the Catalytic Reaction of Ketosteroid Isomerase. Journal of the American Chemical Society, 2020, 142, 9993-9998.	6.6	45
17	Mechanism of Color and Photoacidity Tuning for the Protonated Green Fluorescent Protein Chromophore. Journal of the American Chemical Society, 2020, 142, 11032-11041.	6.6	20
18	Membrane-tethered mucin-like polypeptides sterically inhibit binding and slow fusion kinetics of influenza A virus. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12643-12650.	3.3	60

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19	Biosynthetic Incorporation of Site-Specific Isotopes in β-Lactam Antibiotics Enables Biophysical Studies. ACS Chemical Biology, 2020, 15, 1148-1153.	1.6	7
20	Structural and spectroscopic characterization of photoactive yellow protein and photoswitchable fluorescent protein constructs containing heavy atoms. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112738.	2.0	2
21	Detecting and Controlling Dye Effects in Single-Virus Fusion Experiments. Biophysical Journal, 2019, 117, 445-452.	0.2	26
22	Unified Model for Photophysical and Electro-Optical Properties of Green Fluorescent Proteins. Journal of the American Chemical Society, 2019, 141, 15250-15265.	6.6	55
23	Structural Evidence of Photoisomerization Pathways in Fluorescent Proteins. Journal of the American Chemical Society, 2019, 141, 15504-15508.	6.6	54
24	Local and Global Electric Field Asymmetry in Photosynthetic Reaction Centers. Journal of Physical Chemistry B, 2019, 123, 1527-1536.	1.2	21
25	Perturbation of Short Hydrogen Bonds in Photoactive Yellow Protein via Noncanonical Amino Acid Incorporation. Journal of Physical Chemistry B, 2019, 123, 4844-4849.	1.2	12
26	Detecting and Controlling Dye and Illumination Effects in Single-Virus Fusion Experiments. Biophysical Journal, 2019, 116, 181a.	0.2	0
27	Split Green Fluorescent Proteins: Scope, Limitations, and Outlook. Annual Review of Biophysics, 2019, 48, 19-44.	4.5	131
28	Structural Insight into the Photochemistry of Split Green Fluorescent Proteins: A Unique Role for a His-Tag. Journal of the American Chemical Society, 2018, 140, 375-381.	6.6	18
29	pH Dependence of Zika Membrane Fusion Kinetics Reveals an Off-Pathway State. ACS Central Science, 2018, 4, 1503-1510.	5.3	43
30	Genetic Code Expansion in <i>Rhodobacter sphaeroides</i> to Incorporate Noncanonical Amino Acids into Photosynthetic Reaction Centers. ACS Synthetic Biology, 2018, 7, 1618-1628.	1.9	7
31	Ladderane phospholipids form a densely packed membrane with normal hydrazine and anomalously low proton/hydroxide permeability. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9098-9103.	3.3	58
32	ELECTRIC FIELDS AND ENZYME CATALYSIS. , 2018, , .		0
33	Solvent-Independent Anharmonicity for Carbonyl Oscillators. Journal of Physical Chemistry B, 2017, 121, 2331-2338.	1.2	36
34	Mechanism and bottlenecks in strand photodissociation of split green fluorescent proteins (GFPs). Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2146-E2155.	3.3	15
35	Influenza Binding Avidity Governed by Sterol-Dependent Ganglioside Dynamics. Biophysical Journal, 2017, 112, 75a.	0.2	0
36	Single-Virus Observation of pH-Triggered Zika Fusion in the Absence of a Cellular Receptor. Biophysical Journal, 2017, 112, 80a.	0.2	0

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37	Nanometer-Scale Lipid Clusters in Model Membranes Revealed by Atomic Recombination in Nanosims. Biophysical Journal, 2017, 112, 175a.	0.2	Ο
38	Electric Fields and Enzyme Catalysis. Annual Review of Biochemistry, 2017, 86, 387-415.	5.0	298
39	Comment on "Transient Conformational Changes of Sensory Rhodopsin II Investigated by Vibrational Stark Effect Probesâ€: Journal of Physical Chemistry B, 2017, 121, 7395-7396.	1.2	1
40	Vesicle Fusion Mediated by Solanesol-Anchored DNA. Biophysical Journal, 2017, 113, 1260-1268.	0.2	26
41	Atomic Recombination in Dynamic Secondary Ion Mass Spectrometry Probes Distance in Lipid Assemblies: A Nanometer Chemical Ruler. Journal of the American Chemical Society, 2016, 138, 16737-16744.	6.6	16
42	Atomic Recombination in Nanosims as a Method to Measure Nanometer-Scale Intermolecular Distances in Lipid Bilayers. Biophysical Journal, 2016, 110, 17a.	0.2	0
43	Disentangling Viral Membrane Fusion from Receptor Binding by using Synthetic DNA-Lipid Conjugates to Tether Influenza Virus to Model Lipid Membranes. Biophysical Journal, 2016, 110, 251a.	0.2	Ο
44	A Split GFP Barrel with an Internal Cavity that Binds the Chromophore. Biophysical Journal, 2016, 110, 540a.	0.2	0
45	Dissecting Proton Delocalization and the Electrostatic Contribution to Catalysis in an Enzyme's Hydrogen Bond Network with Unnatural Amino Acids. Biophysical Journal, 2016, 110, 546a-547a.	0.2	1
46	Vibrational Stark Effects for Diverse Carbonyl Probes Applied to the Re-Interpretation of IR and Raman Data in Terms of Electric Fields at Enzyme Active Sites. Biophysical Journal, 2016, 110, 547a.	0.2	0
47	Structural Insight into Split Green Fluorescent Protein. Biophysical Journal, 2016, 110, 380a.	0.2	0
48	Control of Influenza Virus Binding by Target Membrane Composition. Biophysical Journal, 2016, 110, 248a-249a.	0.2	0
49	A Reversibly Photodissociable Split GFP. Biophysical Journal, 2016, 110, 540a.	0.2	Ο
50	A Critical Test of the Electrostatic Contribution to Catalysis with Noncanonical Amino Acids in Ketosteroid Isomerase. Journal of the American Chemical Society, 2016, 138, 11890-11895.	6.6	94
51	Vibrational Stark Effects of Carbonyl Probes Applied to Reinterpret IR and Raman Data for Enzyme Inhibitors in Terms of Electric Fields at the Active Site. Journal of Physical Chemistry B, 2016, 120, 9672-9684.	1.2	67
52	Chemical Synthesis and Self-Assembly of a Ladderane Phospholipid. Journal of the American Chemical Society, 2016, 138, 15845-15848.	6.6	78
53	Dynamic Reorganization and Correlation among Lipid Raft Components. Journal of the American Chemical Society, 2016, 138, 9996-10001.	6.6	54
54	Disentangling Viral Membrane Fusion from Receptor Binding Using Synthetic DNA-Lipid Conjugates. Biophysical Journal, 2016, 111, 123-131.	0.2	42

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55	Combining Fluorescence Microscopy on Freestanding Lipid Bilayers with Electrical Measurements. Biophysical Journal, 2016, 110, 370a-371a.	0.2	0
56	Correlated Motion and Complex Formation of Lipid-Raft Components Analyzed by High-Resolution Secondary Ion Mass Spectrometry. Biophysical Journal, 2015, 108, 404a.	0.2	0
57	Dissecting Proton Delocalization in an Enzyme's Hydrogen Bond Network with Unnatural Amino Acids. Biochemistry, 2015, 54, 7110-7119.	1.2	18
58	Short Hydrogen Bonds and Proton Delocalization in Green Fluorescent Protein (GFP). ACS Central Science, 2015, 1, 148-156.	5.3	59
59	Measuring Electric Fields and Noncovalent Interactions Using the Vibrational Stark Effect. Accounts of Chemical Research, 2015, 48, 998-1006.	7.6	387
60	Response to Comments on "Extreme electric fields power catalysis in the active site of ketosteroid isomerase― Science, 2015, 349, 936-936.	6.0	10
61	Quantum delocalization of protons in the hydrogen-bond network of an enzyme active site. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18454-18459.	3.3	115
62	Extreme electric fields power catalysis in the active site of ketosteroid isomerase. Science, 2014, 346, 1510-1514.	6.0	392
63	A conserved water-mediated hydrogen bond network defines bosutinib's kinase selectivity. Nature Chemical Biology, 2014, 10, 127-132.	3.9	134
64	Ground-State Proton Transfer Kinetics in Green Fluorescent Protein. Biochemistry, 2014, 53, 5947-5957.	1.2	51
65	Protein-Chromophore Interactions in Green Fluorescent Protein (GFP) Studied by Split Protein Reconstitution. Biophysical Journal, 2014, 106, 654a.	0.2	0
66	Electric Field Induced Co-Localization of Membrane Components in Supported Lipid Bilayers Detected by Secondary Ion Mass Spectrometry. Biophysical Journal, 2014, 106, 40a-41a.	0.2	0
67	Electric Field Asymmetry in the Photosynthetic Reaction Center?. Biophysical Journal, 2014, 106, 588a.	0.2	0
68	A Conserved Water-Mediated Hydrogen Bond Network Underlies Selectivity of the Kinase Inhibitor Bosutinib. Biophysical Journal, 2014, 106, 647a.	0.2	1
69	Be Careful When Choosing Your Dye Label: Commercial, Water-Soluble Fluorophores Often Interact with Lipid Bilayers. Biophysical Journal, 2014, 106, 702a.	0.2	0
70	GFP Variants with Alternative Strands: Protease Sensor Design and their Thermodynamic Analysis. Biophysical Journal, 2014, 106, 674a.	0.2	0
71	Calculations of the Electric Field in Solutions and Proteins with Polarizable Force Fields. Biophysical Journal, 2014, 106, 403a.	0.2	0
72	Putative Hydrogen Bond to Tyrosine M208 in Photosynthetic Reaction Centers from <i>Rhodobacter capsulatus</i> Significantly Slows Primary Charge Separation. Journal of Physical Chemistry B, 2014, 118, 6721-6732.	1.2	13

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73	Quantum Delocalization of Protons in the Ketosteroid Isomerase Active Site. Biophysical Journal, 2014, 106, 589a.	0.2	0
74	Choose Your Label Wisely: Water-Soluble Fluorophores Often Interact with Lipid Bilayers. PLoS ONE, 2014, 9, e87649.	1.1	249
75	Measuring Electrostatic Fields in Both Hydrogen-Bonding and Non-Hydrogen-Bonding Environments Using Carbonyl Vibrational Probes. Journal of the American Chemical Society, 2013, 135, 11181-11192.	6.6	176
76	GFP Variants with Alternative β-Strands and Their Application as Light-driven Protease Sensors: A Tale of Two Tails. Journal of the American Chemical Society, 2013, 135, 10226-10229.	6.6	21
77	Individual Vesicle Fusion Events Mediated by Lipid-Anchored DNA. Biophysical Journal, 2013, 105, 409-419.	0.2	67
78	Calculations of the Electric Fields in Liquid Solutions. Journal of Physical Chemistry B, 2013, 117, 16236-16248.	1.2	83
79	Formation and analysis of topographical domains between lipid membranes tethered by DNA hybrids of different lengths. Faraday Discussions, 2013, 161, 333-345.	1.6	31
80	DNA-Based Patterning of Tethered Membrane Patches. Biophysical Journal, 2013, 104, 33a.	0.2	0
81	Colocalization of the Ganglioside GM1 and Cholesterol Detected by Secondary Ion Mass Spectrometry. Journal of the American Chemical Society, 2013, 135, 5620-5630.	6.6	69
82	Thermodynamic framework for identifying free energy inventories of enzyme catalytic cycles. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12271-12276.	3.3	13
83	Quantitative dissection of hydrogen bond-mediated proton transfer in the ketosteroid isomerase active site. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2552-61.	3.3	36
84	Quantitative, directional measurement of electric field heterogeneity in the active site of ketosteroid isomerase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E299-308.	3.3	87
85	Application of Split-GFP System in Biophysical Research and in Cell Biology. Biophysical Journal, 2012, 102, 257a.	0.2	0
86	Direct Measurements of Electric Fields in Weak Hydrogen Bonds. Biophysical Journal, 2012, 102, 269a.	0.2	1
87	Kinome-Wide Spectroscopic Study of Drug Binding Site Electrostatics. Biophysical Journal, 2012, 102, 410a-411a.	0.2	Ο
88	Evaluation of the Energetics of the Concerted Acid–Base Mechanism in Enzymatic Catalysis: The Case of Ketosteroid Isomerase. Journal of Physical Chemistry B, 2012, 116, 690-697.	1.2	13
89	Experimental Quantification of Electrostatics in X–H···Ĩ€ Hydrogen Bonds. Journal of the American Chemical Society, 2012, 134, 18986-18997.	6.6	115
90	Solvent-Induced Infrared Frequency Shifts in Aromatic Nitriles Are Quantitatively Described by the Vibrational Stark Effect. Journal of Physical Chemistry B, 2012, 116, 10470-10476.	1.2	99

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91	Site-Specific Measurement of Water Dynamics in the Substrate Pocket of Ketosteroid Isomerase Using Time-Resolved Vibrational Spectroscopy. Journal of Physical Chemistry B, 2012, 116, 11414-11421.	1.2	22
92	Photochemistry of a Bacterial Photosynthetic Reaction Center Missing the Initial Bacteriochlorophyll Electron Acceptor. Journal of Physical Chemistry B, 2012, 116, 9971-9982.	1.2	17
93	A Solvatochromic Model Calibrates Nitriles' Vibrational Frequencies to Electrostatic Fields. Journal of the American Chemical Society, 2012, 134, 10373-10376.	6.6	107
94	Incorporation of a Potassium Channel into a Suspended Lipid Bilayer Platform. Biophysical Journal, 2012, 102, 95a-96a.	0.2	0
95	Ground-State Proton Transfer in Green Fluorescent Protein Measured by NMR. Biophysical Journal, 2012, 102, 576a.	0.2	0
96	Electrostatic Fields near the Active Site of Human Aldose Reductase: 2. New Inhibitors and Complications Caused by Hydrogen Bonds. Biochemistry, 2011, 50, 8311-8322.	1.2	31
97	Stability of DNA-Tethered Lipid Membranes with Mobile Tethers. Langmuir, 2011, 27, 5492-5497.	1.6	25
98	Phosphate Vibrations Probe Local Electric Fields and Hydration in Biomolecules. Journal of the American Chemical Society, 2011, 133, 13236-13239.	6.6	40
99	Light-Activated Reassembly of Split Green Fluorescent Protein. Journal of the American Chemical Society, 2011, 133, 4046-4052.	6.6	33
100	Vesicle Fusion Observed by Content Transfer across a Tethered Lipid Bilayer. Biophysical Journal, 2011, 101, L37-L39.	0.2	55
101	Thermodynamics, Kinetics, and Photochemistry of β-Strand Association and Dissociation in a Split-GFP System. Journal of the American Chemical Society, 2011, 133, 18078-18081.	6.6	38
102	Direct Measurements of Electric Fields in Weak OH··ÄE Hydrogen Bonds. Journal of the American Chemical Society, 2011, 133, 17414-17419.	6.6	99
103	Direct measurement of the protein response to an electrostatic perturbation that mimics the catalytic cycle in ketosteroid isomerase. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16612-16617.	3.3	45
104	Covalent Tethering of Lipid Vesicles to a Supported Lipid Bilayer by a DNA-Templated Click Reaction. Biophysical Journal, 2010, 98, 673a-674a.	0.2	0
105	Membrane Interactions Mediated by DNA Hybridization. Biophysical Journal, 2010, 98, 618a.	0.2	0
106	DNA-Mediated Fusion between Individual Tethered Vesicles. Biophysical Journal, 2010, 98, 673a.	0.2	0
107	Fabrication of a Membrane Interferometer Containing Electrodes. Biophysical Journal, 2010, 98, 271a.	0.2	0
108	The Phosphorus-Oxygen Bond As An Intrinsic Vibrational Probe of Electric Field in Biological Systems. Biophysical Journal, 2010, 98, 45a.	0.2	0

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109	The Phase Behavior of Supported Lipid Bilayer Mixtures and Cell Membranes Imaged By Secondary Ion Mass Spectrometry. Biophysical Journal, 2010, 98, 75a.	0.2	0
110	Novel Photosynthetic Reaction Center Chromophore Configuration. Biophysical Journal, 2010, 98, 173a.	0.2	0
111	Decomposition of Vibrational Shifts of Nitriles into Electrostatic and Hydrogen-Bonding Effects. Journal of the American Chemical Society, 2010, 132, 12811-12813.	6.6	136
112	Nitrile Bonds as Infrared Probes of Electrostatics in Ribonuclease S. Journal of Physical Chemistry B, 2010, 114, 13536-13544.	1.2	90
113	Effects of linker sequences on vesicle fusion mediated by lipid-anchored DNA oligonucleotides. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 979-984.	3.3	260
114	Trapping the P ⁺ B _L ^{â^'} Initial Intermediate State of Charge Separation in Photosynthetic Reaction Centers from <i>Rhodobacter capsulatus</i> . Biochemistry, 2009, 48, 2571-2573.	1.2	17
115	Stark Realities. Journal of Physical Chemistry B, 2009, 113, 2972-2983.	1.2	262
116	DNA-tethered membranes formed by giant vesicle rupture. Journal of Structural Biology, 2009, 168, 190-199.	1.3	74
117	Synthetic Control of Green Fluorescent Protein. Journal of the American Chemical Society, 2009, 131, 15988-15989.	6.6	43
118	Advances in Imaging Secondary Ion Mass Spectrometry for Biological Samples. Annual Review of Biophysics, 2009, 38, 53-74.	4.5	281
119	Lipid-anchored DNA mediates vesicle fusion as observed by lipid and content mixing. Biointerphases, 2008, 3, FA17-FA21.	0.6	138
120	Electrostatic Fields Near the Active Site of Human Aldose Reductase: 1. New Inhibitors and Vibrational Stark Effect Measurements. Biochemistry, 2008, 47, 1588-1598.	1.2	92
121	Charge Transfer in Photoacids Observed by Stark Spectroscopy. Journal of Physical Chemistry A, 2008, 112, 10244-10249.	1.1	37
122	Temperature Dependence of Electron Transfer to the M-Side Bacteriopheophytin in <i>Rhodobacter capsulatus</i> Reaction Centers. Journal of Physical Chemistry B, 2008, 112, 5487-5499.	1.2	29
123	Deconstructing Green Fluorescent Protein. Journal of the American Chemical Society, 2008, 130, 9664-9665.	6.6	49
124	Stark spectroscopy of mixed-valence systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 33-45.	1.6	16
125	Kinetics of DNA-mediated docking reactions between vesicles tethered to supported lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18913-18918.	3.3	83
126	Dynamic Stokes shift in green fluorescent protein variants. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20189-20194.	3.3	111

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127	Ultrafast Excited-State Dynamics in the Green Fluorescent Protein Variant S65T/H148D. 2. Unusual Photophysical Properties. Biochemistry, 2007, 46, 12014-12025.	1.2	70
128	Vibrational Stark Effect Probes for Nucleic Acids. Journal of Physical Chemistry B, 2007, 111, 11611-11613.	1.2	57
129	Frictional Drag and Electrical Manipulation of Recombinant Proteins in Polymer-Supported Membranes. Langmuir, 2007, 23, 5638-5644.	1.6	36
130	Anomalous Negative Fluorescence Anisotropy in Yellow Fluorescent Protein (YFP 10C):  Quantitative Analysis of FRET in YFP Dimers. Biochemistry, 2007, 46, 14403-14417.	1.2	40
131	Measurement of Solvation Responses at Multiple Sites in a Globular Protein. Journal of Physical Chemistry B, 2007, 111, 8269-8276.	1.2	102
132	Ultrafast Excited-State Dynamics in the Green Fluorescent Protein Variant S65T/H148D. 1. Mutagenesis and Structural Studies [,] . Biochemistry, 2007, 46, 12005-12013.	1.2	76
133	Electric Fields at the Active Site of an Enzyme: Direct Comparison of Experiment with Theory. Science, 2006, 313, 200-204.	6.0	296
134	Site-Specific Conversion of Cysteine Thiols into Thiocyanate Creates an IR Probe for Electric Fields in Proteins. Journal of the American Chemical Society, 2006, 128, 13356-13357.	6.6	187
135	High Yield of M-Side Electron Transfer in Mutants ofRhodobacter capsulatusReaction Centers Lacking the L-Side Bacteriopheophytinâ€. Biochemistry, 2006, 45, 3845-3851.	1.2	54
136	Charge Delocalization in the Special-Pair Radical Cation of Mutant Reaction Centers ofRhodobactersphaeroidesfrom Stark Spectra and Nonadiabatic Spectral Simulations. Journal of Physical Chemistry B, 2006, 110, 18688-18702.	1.2	40
137	Controlling Two-Dimensional Tethered Vesicle Motion Using an Electric Field:Â Interplay of Electrophoresis and Electro-Osmosis. Langmuir, 2006, 22, 2384-2391.	1.6	64
138	Quantitative analysis of supported membrane composition using the NanoSIMS. Applied Surface Science, 2006, 252, 6950-6956.	3.1	33
139	Antibody evolution constrains conformational heterogeneity by tailoring protein dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13722-13727.	3.3	118
140	General Method for Modification of Liposomes for Encoded Assembly on Supported Bilayers. Journal of the American Chemical Society, 2005, 127, 1356-1357.	6.6	146
141	Protonation, Photobleaching, and Photoactivation of Yellow Fluorescent Protein (YFP 10C):  A Unifying Mechanism. Biochemistry, 2005, 44, 5510-5524.	1.2	113
142	Probing the Structure of Supported Membranes and Tethered Oligonucleotides by Fluorescence Interference Contrast Microscopy. Langmuir, 2005, 21, 4976-4983.	1.6	69
143	Supported Membrane Composition Analysis by Secondary Ion Mass Spectrometry with High Lateral Resolution. Biophysical Journal, 2005, 88, 2965-2975.	0.2	49
144	Variable Incidence Angle Fluorescence Interference Contrast Microscopy for Z-Imaging Single Objects. Biophysical Journal, 2005, 89, 2759-2769.	0.2	33

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145	Green Fluorescent Protein Variants as Ratiometric Dual Emission pH Sensors. 3. Temperature Dependence of Proton Transferâ€. Biochemistry, 2005, 44, 8701-8711.	1.2	33
146	A Theory of Intervalence Band Stark Effects. Journal of Physical Chemistry A, 2004, 108, 1764-1778.	1.1	36
147	Patterned Supported Lipid Bilayers and Monolayers on Poly(dimethylsiloxane). Langmuir, 2004, 20, 11092-11099.	1.6	87
148	Probing Excited-State Electron Transfer by Resonance Stark Spectroscopy:Â 4. Mutations near BLin Photosynthetic Reaction Centers Perturb Multiple Factors that Affect →. Journal of Physical Chemistry B, 2004, 108, 13523-13535.	1.2	16
149	Probing Excited-State Electron Transfer by Resonance Stark Spectroscopy:Â 3. Theoretical Foundations and Practical Applications. Journal of Physical Chemistry B, 2004, 108, 13513-13522.	1.2	11
150	Vesicle Adsorption and Lipid Bilayer Formation on Glass Studied by Atomic Force Microscopy. Langmuir, 2004, 20, 11600-11606.	1.6	188
151	Excited-state energy transfer pathways in photosynthetic reaction centers: 5. Oxidized and triplet excited special pairs as energy acceptors. Chemical Physics, 2003, 294, 359-369.	0.9	9
152	Arrays of Mobile Tethered Vesicles on Supported Lipid Bilayers. Journal of the American Chemical Society, 2003, 125, 3696-3697.	6.6	225
153	Energetics of Primary Charge Separation in Bacterial Photosynthetic Reaction Center Mutants:Â Triplet Decay in Large Magnetic Fieldsâ€. Journal of Physical Chemistry A, 2003, 107, 3341-3350.	1.1	13
154	Vibrational Stark Effects Calibrate the Sensitivity of Vibrational Probes for Electric Fields in Proteinsâ€. Biochemistry, 2003, 42, 12050-12055.	1.2	228
155	Intervalence Band Stark Effect of the Special Pair Radical Cation in Bacterial Photosynthetic Reaction Centers. Journal of Physical Chemistry B, 2003, 107, 11230-11239.	1.2	23
156	Spatially Selective Manipulation of Supported Lipid Bilayers by Laminar Flow:Â Steps Toward Biomembrane Microfluidicsâ€. Langmuir, 2003, 19, 1624-1631.	1.6	67
157	Vibrational Stark Effects of Nitriles II. Physical Origins of Stark Effects from Experiment and Perturbation Models. Journal of Physical Chemistry A, 2002, 106, 469-477.	1.1	142
158	Micropattern Formation in Supported Lipid Membranes. Accounts of Chemical Research, 2002, 35, 149-157.	7.6	341
159	Green Fluorescent Protein Variants as Ratiometric Dual Emission pH Sensors. 1. Structural Characterization and Preliminary Applicationâ€. Biochemistry, 2002, 41, 15477-15488.	1.2	237
160	Green Fluorescent Protein Variants as Ratiometric Dual Emission pH Sensors. 2. Excited-State Dynamicsâ€. Biochemistry, 2002, 41, 15489-15494.	1.2	86
161	Origins of the Sensitivity of Molecular Vibrations to Electric Fields:Â Carbonyl and Nitrosyl Stretches in Model Compounds and Proteins. Journal of Physical Chemistry B, 2002, 106, 5800-5806.	1.2	133
162	Proximal ligand motions in H93G myoglobin. FEBS Journal, 2002, 269, 4879-4886.	0.2	16

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163	Analysis of Noise for Rapid-Scan and Step-Scan Methods of FT-IR Difference Spectroscopy. Applied Spectroscopy, 2001, 55, 1161-1165.	1.2	10
164	Polymer-Supported Lipid Bilayers on Benzophenone-Modified Substrates. Biomacromolecules, 2001, 2, 70-79.	2.6	101
165	FTIR and Resonance Raman Studies of Nitric Oxide Binding to H93G Cavity Mutants of Myoglobinâ€. Biochemistry, 2001, 40, 15047-15056.	1.2	35
166	19F NMR of Trifluoroacetyl-Labeled Cysteine Mutants of Myoglobin:  Structural Probes of Nitric Oxide Bound to the H93G Cavity Mutant. Biochemistry, 2001, 40, 8588-8596.	1.2	14
167	Electrophoresis of DNA Adsorbed to a Cationic Supported Bilayer. Langmuir, 2001, 17, 7396-7401.	1.6	39
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