Wolfgang GÃ¤rtner

List of Publications by Year
in descending order

218 papers	7,459 citations	61984 43 h-index	82547 72 g-index
228 all docs	228 docs citations	228 times ranked	4588 citing authors

#	Article	IF	Citations
1	Light Modulation of Cellular cAMP by a Small Bacterial Photoactivated Adenylyl Cyclase, bPAC, of the Soil Bacterium Beggiatoa. Journal of Biological Chemistry, 2011, 286, 1181-1188.	3.4	337
2	Reporter proteins for in vivo fluorescence without oxygen. Nature Biotechnology, 2007, 25, 443-445.	17.5	336
3	A prokaryotic phytochrome. Nature, 1997, 386, 663-663.	27.8	325
4	First Evidence for Phototropin-Related Blue-Light Receptors in Prokaryotes. Biophysical Journal, 2002, 82, 2627-2634.	0.5	256
5	Characterization of recombinant phytochrome from the cyanobacterium Synechocystis. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 11792-11797.	7.1	177
6	The Evolution of Flavin-Binding Photoreceptors: An Ancient Chromophore Serving Trendy Blue-Light Sensors. Annual Review of Plant Biology, 2012, 63, 49-72.	18.7	166
7	Two ground state isoforms and a chromophore <i> D </i> -ring photoflip triggering extensive intramolecular changes in a canonical phytochrome. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3842-3847.	7.1	161
8	Cloning and Expression of Secretagogin, a Novel Neuroendocrine- and Pancreatic Islet of Langerhans-specific Ca2+-binding Protein. Journal of Biological Chemistry, 2000, 275, 24740-24751.	3.4	150
9	Old Chromophores, New Photoactivation Paradigms, Trendy Applications: Flavins in Blue Lightâ€Sensing Photoreceptors^{â€}. Photochemistry and Photobiology, 2011, 87, 491-510.	2.5	129
10	Bacterial bilin- and flavin-binding photoreceptors. Photochemical and Photobiological Sciences, 2008, 7, 1168-1178.	2.9	109
11	Distribution and Phylogeny of Light-Oxygen-Voltage-Blue-Light-Signaling Proteins in the Three Kingdoms of Life. Journal of Bacteriology, 2009, 191, 7234-7242.	2.2	95
12	Listening to the blue: the time-resolved thermodynamics of the bacterial blue-light receptor YtvA and its isolated LOV domain. Photochemical and Photobiological Sciences, 2003, 2, 759-766.	2.9	94
13	Modulation of the Photocycle of a LOV Domain Photoreceptor by the Hydrogen-Bonding Network. Journal of the American Chemical Society, 2011, 133, 5346-5356.	13.7	91
14	INVERTEBRATE VISUAL PIGMENTS. Photochemistry and Photobiology, 1995, 62, 1-16.	2.5	88
15	FTIR Studies of Phytochrome Photoreactions Reveal the CO Bands of the Chromophore:Â Consequences for Its Protonation States, Conformation, and Protein Interactionâ€. Biochemistry, 2001, 40, 14952-14959.	2.5	87
16	Light-induced chromophore activity and signal transduction in phytochromes observed by ¹³ C and ¹⁵ N magic-angle spinning NMR. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15229-15234.	7.1	85
17	Raman Spectroscopic and Light-Induced Kinetic Characterization of a Recombinant Phytochrome of the Cyanobacterium Synechocystis. Biochemistry, 1997, 36, 13389-13395.	2.5	81
18	Signaling States of Rhodopsin. Journal of Biological Chemistry, 2000, 275, 19713-19718.	3.4	73

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19	The terminal phycobilisome emitter, L _{CM} : A light-harvesting pigment with a phytochrome chromophore. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15880-15885.	7.1	69
20	Photoconversion Mechanism of the Second GAF Domain of Cyanobacteriochrome AnPixJ and the Cofactor Structure of Its Green-Absorbing State. Biochemistry, 2013, 52, 4871-4880.	2.5	68
21	Femtosecond Kinetics of Photoconversion of the Higher Plant Photoreceptor Phytochrome Carrying Native and Modified Chromophores. Biophysical Journal, 2008, 94, 4370-4382.	0.5	67
22	Chromophore Structure of Cyanobacterial Phytochrome Cph1 in the Pr State: Reconciling Structural and Spectroscopic Data by QM/MM Calculations. Biophysical Journal, 2009, 96, 4153-4163.	0.5	66
23	In Vivo Mutational Analysis of YtvA from Bacillus subtilis. Journal of Biological Chemistry, 2009, 284, 24958-24964.	3.4	64
24	Extremophilic Acinetobacter Strains from High-Altitude Lakes in Argentinean Puna: Remarkable UV-B Resistance and Efficient DNA Damage Repair. Origins of Life and Evolution of Biospheres, 2012, 42, 201-221.	1.9	62
25	A LOV-domain-mediated blue-light-activated adenylate (adenylyl) cyclase from the cyanobacterium <i>Microcoleus chthonoplastes</i> PCC 7420. Biochemical Journal, 2013, 455, 359-365.	3.7	61
26	Photophysical Properties of Structurally and Electronically Modified Flavin Derivatives Determined by Spectroscopy and Theoretical Calculations. Journal of Physical Chemistry A, 2009, 113, 9365-9375.	2.5	60
27	Functional variations among LOV domains as revealed by FT-IR difference spectroscopy. Photochemical and Photobiological Sciences, 2004, 3, 575-579.	2.9	59
28	Structural elements regulating the photochromicity in a cyanobacteriochrome. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2432-2440.	7.1	59
29	Structure of the Biliverdin Cofactor in the Pfr State of Bathy and Prototypical Phytochromes. Journal of Biological Chemistry, 2013, 288, 16800-16814.	3.4	58
30	Forged Under the Sun: Life and Art of Extremophiles from Andean Lakes. Photochemistry and Photobiology, 2016, 92, 14-28.	2.5	58
31	Recombinant Type A and B Phytochromes from Potato. Transient Absorption Spectroscopy. Biochemistry, 1997, 36, 103-111.	2.5	57
32	Conformational analysis of the blue-light sensing protein YtvA reveals a competitive interface for LOVâ€"LOV dimerization and interdomain interactions. Photochemical and Photobiological Sciences, 2007, 6, 41-49.	2.9	57
33	Combined Mutagenesis and Kinetics Characterization of the Bilinâ€Binding GAF Domain of the Protein Slr1393 from the Cyanobacterium <i>Synechocystis</i> PCC6803. ChemBioChem, 2014, 15, 1190-1199.	2.6	57
34	Mutual Exchange of Kinetic Properties by Extended Mutagenesis in Two Short LOV Domain Proteins from <i>Pseudomonas putida</i>. Biochemistry, 2009, 48, 10321-10333.	2.5	55
35	Phytochrome as Molecular Machine: Revealing Chromophore Action during the Pfr â†’ Pr Photoconversion by Magic-Angle Spinning NMR Spectroscopy. Journal of the American Chemical Society, 2010, 132, 4431-4437.	13.7	55
36	Two independent, light-sensing two-component systems in a filamentous cyanobacterium. FEBS Journal, 2002, 269, 2662-2671.	0.2	54

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37	A Blue Light Inducible Two-Component Signal Transduction System in the Plant Pathogen Pseudomonas syringae pv. tomato. Biophysical Journal, 2008, 94, 897-905.	0.5	53
38	The Complexity of the Pr to Pfr Phototransformation Kinetics Is an Intrinsic Property of Native Phytochrome. Photochemistry and Photobiology, 1998, 68, 754.	2.5	53
39	Solving Blue Light Riddles: New Lessons from Flavinâ€binding <scp>LOV</scp> Photoreceptors. Photochemistry and Photobiology, 2017, 93, 141-158.	2.5	52
40	15N MAS NMR Studies of Cph1 Phytochrome:Â Chromophore Dynamics and Intramolecular Signal Transduction. Journal of Physical Chemistry B, 2006, 110, 20580-20585.	2.6	51
41	Secretagogin Is a Novel Marker for Neuroendocrine Differentiation. Neuroendocrinology, 2005, 82, 121-138.	2.5	50
42	Initial characterization of a blue-light sensing, phototropin-related protein from Pseudomonas putida: a paradigm for an extended LOV construct. Physical Chemistry Chemical Physics, 2005, 7, 2804.	2.8	48
43	The Effective Conjugation Length Is Responsible for the Red/Green Spectral Tuning in the Cyanobacteriochrome Slr1393g3. Angewandte Chemie - International Edition, 2019, 58, 1934-1938.	13.8	47
44	Distance-tree analysis, distribution and co-presence of bilin- and flavin-binding prokaryotic photoreceptors for visible light. Photochemical and Photobiological Sciences, 2013, 12, 1144-1157.	2.9	46
45	Phosphorylation of proteins in the light-dependent signalling pathway of a filamentous cyanobacterium. FEBS Journal, 2001, 268, 3383-3389.	0.2	45
46	A Blue Lightâ€inducible Phosphodiesterase Activity in the Cyanobacterium <i>Synechococcus elongatus</i>. Photochemistry and Photobiology, 2010, 86, 606-611.	2.5	44
47	A Red/Green Cyanobacteriochrome Sustains Its Color Despite a Change in the Bilin Chromophoreâ€™s Protonation State. Biochemistry, 2015, 54, 5839-5848.	2.5	44
48	Synthesis and characterization of de novo designed peptides modelling the binding sites of [4Feâ€“4S] clusters in photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 995-1008.	1.0	42
49	Detailed insight into the ultrafast photoconversion of the cyanobacteriochrome Slr1393 from Synechocystis sp.. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 1335-1344.	1.0	42
50	Largeâ€scale Generation of Affinityâ€purified Recombinant Phytochrome Chromopeptide. Photochemistry and Photobiology, 1997, 66, 710-715.	2.5	41
51	The Photoreactions of Recombinant Phytochrome from the Cyanobacterium Synechocystis: A Low-Temperature UVâ€“Vis and FT-IR Spectroscopic Study. Photochemistry and Photobiology, 2000, 71, 655.	2.5	41
52	The antibiotics roseoflavin and 8-demethyl-8-amino-riboflavin from Streptomyces davawensis are metabolized by human flavokinase and human FAD synthetase. Biochemical Pharmacology, 2011, 82, 1853-1859.	4.4	40
53	Influence of Expression System on Chromophore Binding and Preservation of Spectral Properties in Recombinant Phytochrome A. FEBS Journal, 1996, 236, 978-983.	0.2	38
54	Time-Resolved Absorption and Photothermal Measurements with Recombinant Sensory Rhodopsin II from Natronobacterium pharaonis. Biophysical Journal, 1999, 77, 3277-3286.	0.5	38

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55	Structure of the Chromophore Binding Pocket in the Pr State of Plant Phytochrome phyA. Journal of Physical Chemistry B, 2011, 115, 1220-1231.	2.6	38
56	Chromophore-protein interaction controls the complexity of the phytochrome photocycle. Journal of Photochemistry and Photobiology B: Biology, 1996, 34, 73-77.	3.8	37
57	Interdomain signalling in the blue-light sensing and GTP-binding protein YtvA: A mutagenesis study uncovering the importance of specific protein sites. Photochemical and Photobiological Sciences, 2010, 9, 47-56.	2.9	37
58	Structures and enzymatic mechanisms of phycobiliprotein lyases CpcE/F and PecE/F. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13170-13175.	7.1	37
59	Chromophore Incorporation, Pr to Pfr Kinetics, and Pfr Thermal Reversion of Recombinant N-Terminal Fragments of Phytochrome A and B Chromoproteins. Biochemistry, 1998, 37, 9983-9990.	2.5	36
60	Novel blue lightâ€sensitive proteins from a metagenomic approach. Environmental Microbiology, 2009, 11, 2388-2399.	3.8	36
61	Expression of phytochrome apoprotein from Avena sativa in Escherichia coli and formation of photoactive chromoproteins by assembly with phycocyanobilin. FEBS Journal, 1994, 223, 69-77.	0.2	35
62	Chromophore selectivity in bacterial phytochromes. FEBS Journal, 2004, 271, 1117-1126.	0.2	35
63	The Switch that Does Not Flip: The Blue-Light Receptor YtvA from Bacillus subtilis Adopts an Elongated Dimer Conformation Independent of the Activation State as Revealed by a Combined AUC and SAXS Study. Journal of Molecular Biology, 2010, 403, 78-87.	4.2	35
64	A photochromic bacterial photoreceptor with potential for super-resolution microscopy. Photochemical and Photobiological Sciences, 2013, 12, 231-235.	2.9	35
65	Conversion of energy in halobacteria: ATP synthesis and phototaxis. Archives of Microbiology, 1996, 166, 1-11.	2.2	34
66	The Chromophore Structures of the Pr States in Plant and Bacterial Phytochromes. Biophysical Journal, 2007, 93, 2410-2417.	0.5	34
67	Mutational Effects on Protein Structural Changes and Interdomain Interactions in the Blue-light Sensing LOV Protein YtvA. Photochemistry and Photobiology, 2005, 81, 1145.	2.5	33
68	Functional and Biochemical Analysis of the N-terminal Domain of Phytochrome A. Journal of Biological Chemistry, 2006, 281, 34421-34429.	3.4	33
69	Electronâˆ’Electron Double Resonance-Detected NMR to Measure Metal Hyperfine Interactions:â€‰⁶¹Ni in the Niâˆ’B State of the [NiFe] Hydrogenase of<i>Desulfovibrio vulgaris</i>Miyazaki F. Journal of the American Chemical Society, 2008, 130, 2402-2403.	13.7	33
70	Photochromic conversion in a red/green cyanobacteriochrome from Synechocystis PCC6803: quantum yields in solution and photoswitching dynamics in living E. coli cells. Photochemical and Photobiological Sciences, 2015, 14, 229-237.	2.9	33
71	First characterisation of a CPD-class I photolyase from a UV-resistant extremophile isolated from High-Altitude Andean Lakes. Photochemical and Photobiological Sciences, 2014, 13, 739-751.	2.9	32
72	Color Tuning in Red/Green Cyanobacteriochrome AnPixJ: Photoisomerization at C15 Causes an Excited-State Destabilization. Journal of Physical Chemistry B, 2015, 119, 9688-9695.	2.6	32

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73	3D Structures of Plant Phytochrome A as Pr and Pfr From Solid-State NMR: Implications for Molecular Function. Frontiers in Plant Science, 2018, 9, 498.	3.6	32
74	The influence of the 13-methyl group of the retinal on the photoreaction of rhodopsin revealed by FTIR difference spectroscopy. European Biophysics Journal, 1990, 18, 295.	2.2	31
75	A Novel Chromophore Selectively Modifies the Spectral Properties of One of the Two Stable States of the Plant Photoreceptor Phytochrome. Angewandte Chemie - International Edition, 1998, 37, 1843-1846.	13.8	31
76	Reversed picosecond charge displacement from the photoproduct K of bacteriorhodopsin demonstrated photoelectrically. Chemical Physics Letters, 1989, 158, 515-518.	2.6	30
77	Effect of chromophore exchange on the resonance Raman spectra of recombinant phytochromes. FEBS Letters, 1997, 414, 23-26.	2.8	30
78	Time-Resolved Absorption and Photothermal Measurements with Sensory Rhodopsin I from Halobacterium salinarum. Biophysical Journal, 1999, 76, 2183-2191.	0.5	30
79	Aspartate 75 Mutation in Sensory Rhodopsin II from Natronobacterium pharaonis Does Not Influence the Production of the K-Like Intermediate, but Strongly Affects Its Relaxation Pathway. Biophysical Journal, 2000, 78, 2581-2589.	0.5	30
80	Homologous expression of a bacterial phytochrome. FEBS Journal, 2007, 274, 2088-2098.	4.7	30
81	FTIR Study of the Photoinduced Processes of Plant Phytochrome Phya using Isotope-Labeled Bilins and Density Functional Theory Calculations. Biophysical Journal, 2008, 95, 1256-1267.	0.5	30
82	Solid-State NMR Spectroscopic Study of Chromophoreâ€"Protein Interactions in the Pr Ground State of Plant Phytochrome A. Molecular Plant, 2012, 5, 698-715.	8.3	30
83	The amino acids surrounding the flavin 7a-methyl group determine the UVA spectral features of a LOV protein. Biological Chemistry, 2013, 394, 1517-1528.	2.5	30
84	On the photoisomerisation of 13-desmethyl-retinal. Tetrahedron Letters, 1980, 21, 347-350.	1.4	29
85	[Fe4S4]- and [Fe3S4]-cluster formation in synthetic peptides. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 1414-1422.	1.0	29
86	Hydrogen Bonding Affects the [NiFe] Active Site of Desulfovibrio vulgaris Miyazaki F Hydrogenase:â€‰ A Hyperfine Sublevel Correlation Spectroscopy and Density Functional Theory Study. Journal of Physical Chemistry B, 2006, 110, 8142-8150.	2.6	28
87	Blue news: NTP binding properties of the blue-light sensitive YtvA protein fromBacillus subtilis. FEBS Letters, 2006, 580, 3818-3822.	2.8	28
88	The interplay between chromophore and protein determines the extended excited state dynamics in a single-domain phytochrome. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16356-16362.	7.1	28
89	Steric Hindrance between Chromophore Substituents as the Driving Force of Rhodopsin Photoisomerization: 10-Methyl-13-Demethyl Retinal Containing Rhodopsin. Photochemistry and Photobiology, 1997, 65, 181-186.	2.5	27
90	Photophysics of Structurally Modified Flavin Derivatives in the Blueâ€Light Photoreceptor YtvA: A Combined Experimental and Theoretical Study. ChemBioChem, 2013, 14, 1648-1661.	2.6	27

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91	The primary structure of mantid opsin. Gene, 1994, 143, 227-231.	2.2	26
92	<scp>LOV</scp>â€domain photoreceptor, encoded in a genomic island, attenuates the virulence of <i><scp>P</scp>seudomonas syringae</i> in lightâ€exposed <scp>A</scp>rabidopsis leaves. Plant Journal, 2013, 76, 322-331.	5.7	26
93	Conformational heterogeneity of the Pfr chromophore in plant and cyanobacterial phytochromes. Frontiers in Molecular Biosciences, 2015, 2, 37.	3.5	26
94	A light life together: photosensing in the plant microbiota. Photochemical and Photobiological Sciences, 2021, 20, 451-473.	2.9	26
95	Phytochromes With Noncovalently Bound Chromophores: The Ability of Apophytochromes to Direct Tetrapyrrole PhotoisomerizationÂ¶â€. Photochemistry and Photobiology, 2002, 75, 554.	2.5	26
96	Refinement of the Geometry of the Retinal Binding Pocket in Dark-Adapted Bacteriorhodopsin by Heteronuclear Solid-State NMR Distance Measurements. Biochemistry, 2000, 39, 10066-10071.	2.5	24
97	Metagenomeâ€based Screening Reveals Worldwide Distribution of LOVâ€Domain Proteins. Photochemistry and Photobiology, 2012, 88, 107-118.	2.5	24
98	Photolyases and Cryptochromes in <scp>UV</scp>â€resistant Bacteria from Highâ€altitude Andean Lakes. Photochemistry and Photobiology, 2019, 95, 315-330.	2.5	24
99	Substituents at the C13 Position of Retinal and Their Influence on the Function of Bacteriorhodopsin. Biophysical Journal, 1985, 47, 349-355.	0.5	23
100	Differential effects of mutations in the chromophore pocket of recombinant phytochrome on chromoprotein assembly and Pr-to-Pfr photoconversion. FEBS Journal, 1999, 266, 201-208.	0.2	23
101	The Role of the Chromophore in the Biological Photoreceptor Phytochrome: An Approach Using Chemically Synthesized Tetrapyrroles. Accounts of Chemical Research, 2010, 43, 485-495.	15.6	23
102	Chromophore Exchange in the Blue Lightâ€Sensitive Photoreceptor YtvA from <i>Bacillus subtilis</i>. ChemBioChem, 2011, 12, 641-646.	2.6	23
103	From Plant Infectivity to Growth Patterns: The Role of Blue-Light Sensing in the Prokaryotic World. Plants, 2014, 3, 70-94.	3.5	23
104	Time-resolved Thermodynamic Changes Photoinduced in 5,12-trans-locked Bacteriorhodopsin. Evidence that Retinal Isomerization is Required for Protein ActivationÂ¶. Photochemistry and Photobiology, 2000, 72, 590.	2.5	22
105	Crystal Structures of Two Cyanobacterial Response Regulators in Apo- and Phosphorylated Form Reveal a Novel Dimerization Motif of Phytochrome-Associated Response Regulators. Biophysical Journal, 2004, 87, 476-487.	0.5	22
106	New Open-Chain Tetrapyrroles as Chromophores in the Plant Photoreceptor Phytochrome. Journal of the American Chemical Society, 2008, 130, 11303-11311.	13.7	22
107	The Evolution and Functional Role of Flavinâ€based Prokaryotic Photoreceptors. Photochemistry and Photobiology, 2015, 91, 1021-1031.	2.5	22
108	The Red Edge: Bilin-Binding Photoreceptors as Optogenetic Tools and Fluorescence Reporters. Chemical Reviews, 2021, 121, 14906-14956.	47.7	22

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109	Primary Structure of Locust Opsins: a Speculative Model Which May Account for Ultraviolet Wavelength Light Detection. Vision Research, 1997, 37, 495-503.	1.4	21
110	Shedding (blue) light on algal gene expression. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7-8.	7.1	21
111	On the Collective Nature of Phytochrome Photoactivation. Biochemistry, 2011, 50, 10987-10989.	2.5	21
112	Sterically Fixed Retinal-Analogue Prevents Proton-Pumping Activity in Bacteriorhodopsin. Angewandte Chemie International Edition in English, 1984, 23, 81-82.	4.4	20
113	Merocyanines as Extremely Bathochromically Absorbing Chromophores in the Halobacterial Membrane Protein Bacteriorhodopsin. Angewandte Chemie International Edition in English, 1997, 36, 1630-1633.	4.4	20
114	Recombinant Phytochrome of the Moss Ceratodon purpureus: Heterologous Expression and Kinetic Analysis of Prâ†’ PfrConversion. Photochemistry and Photobiology, 1998, 68, 857-863.	2.5	20
115	The Chromophore Induces a Correct Folding of the Polypeptide Chain of Bacteriorhodopsin. Biochemistry, 1998, 37, 8227-8232.	2.5	20
116	Volume and Enthalpy Changes upon Photoexcitation of Bovine Rhodopsin Derived from Optoacoustic Studies by Using an Equilibrium between Bathorhodopsin and Blueâ€Shifted Intermediate. Israel Journal of Chemistry, 1998, 38, 231-236.	2.3	20
117	Analysis of the Topology of the Chromophore Binding Pocket of Phytochromes by Variation of the Chromophore Substitution Pattern. Angewandte Chemie - International Edition, 2001, 40, 1048-1050.	13.8	20
118	NTP-binding properties of the blue-light receptor YtvA and effects of the E105L mutation. European Biophysics Journal, 2007, 36, 831-839.	2.2	20
119	Modelling Lowâ€Potential [Fe₄S₄] Clusters in Proteins. Chemistry and Biodiversity, 2008, 5, 1571-1587.	2.1	20
120	Visualizing the relevance of bacterial blueâ€• and redâ€light receptors during plantâ€"pathogen interaction. Environmental Microbiology Reports, 2015, 7, 795-802.	2.4	20
121	Effects of noncovalently bound quinones on the ground and triplet states of zinc chlorins in solution and bound to de novo synthesized peptides. Physical Chemistry Chemical Physics, 2006, 8, 5444-5453.	2.8	19
122	Rhodopsin and 9-Demethyl-retinal Analog. Journal of Biological Chemistry, 2008, 283, 4967-4974.	3.4	19
123	Spectroscopic and Theoretical Study on Electronically Modified Chromophores in LOV Domains: 8â€Bromoâ€• and 8â€Trifluoromethylâ€Substituted Flavins. ChemBioChem, 2013, 14, 645-654.	2.6	19
124	The Dark Recovery Rate in the Photocycle of the Bacterial Photoreceptor YtvA Is Affected by the Cellular Environment and by Hydration. PLoS ONE, 2014, 9, e107489.	2.5	19
125	Phototransformation of the Red Light Sensor Cyanobacterial Phytochrome 2 from Synechocystis Species Depends on Its Tongue Motifs. Journal of Biological Chemistry, 2014, 289, 25590-25600.	3.4	19
126	Functional Green-Tuned Proteorhodopsin from Modern Stromatolites. PLoS ONE, 2016, 11, e0154962.	2.5	19

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127	The Light Shall Show the Wayâ€"Or: The Conformational Changes of the Retinal Chromophore in Rhodopsin upon Light Activation. Angewandte Chemie - International Edition, 2001, 40, 2977-2981.	13.8	18
128	Spectroscopic and Electrochemical Characterization of the [NiFeSe] Hydrogenase from <i>Desulfovibrio vulgaris</i> Miyazaki F: Reversible Redox Behavior and Interactions between Electron Transfer Centers. ChemBioChem, 2013, 14, 1714-1719.	2.6	18
129	A cyanobacterial light activated adenylyl cyclase partially restores development of a Dictyostelium discoideum, adenylyl cyclase a null mutant. Journal of Biotechnology, 2014, 191, 246-249.	3.8	18
130	Dynamics and efficiency of photoswitching in biliverdin-binding phytochromesâ€. Photochemical and Photobiological Sciences, 2019, 18, 2484-2496.	2.9	18
131	Model Studies of Phytochrome Photochromism: Protein-Mediated Photoisomerization of a Linear Tetrapyrrole in the Absence of Covalent Bonding. Angewandte Chemie - International Edition, 2000, 39, 3269-3271.	13.8	17
132	Heterologous Expression and Characterization of Recombinant Phytochrome from the Green Alga Mougeotia scalarisÂ¶. Photochemistry and Photobiology, 2002, 76, 457.	2.5	17
133	Long-Term in vitro Growth of Human Insulin-Secreting Insulinoma Cells. Neuroendocrinology, 2006, 83, 123-130.	2.5	17
134	Synthesis and Electrochemical Properties of Structurally Modified Flavin Compounds. European Journal of Organic Chemistry, 2008, 2008, 5401-5406.	2.4	17
135	Raman spectroscopic analysis of isomers of biliverdin dimethyl ester. Journal of Pharmaceutical and Biomedical Analysis, 1997, 15, 1319-1324.	2.8	16
136	Tryptophan Fluorescence in the Bacillus subtilis Phototropin-related Protein YtvA as a Marker of Interdomain InteractionÂ¶. Photochemistry and Photobiology, 2004, 80, 150.	2.5	16
137	Elevated blood markers 1 year before manifestation of malignant glioma. Neuro-Oncology, 2010, 12, 1004-1008.	1.2	16
138	Complex formation between heme oxygenase and phytochrome during biosynthesis in Pseudomonas syringae pv. tomato. Photochemical and Photobiological Sciences, 2012, 11, 1026-1031.	2.9	16
139	Role of the Triplet State in Retinal Photoisomerization As Studied by Laser-Induced Optoacoustic Spectroscopyâ€. Journal of Physical Chemistry B, 1997, 101, 7620-7627.	2.6	15
140	Brain natriuretic peptide correlates with the extent of atrial fibrillation-associated silent brain lesions. Clinical Biochemistry, 2008, 41, 1434-1439.	1.9	15
141	The Photoreactions of Recombinant Phytochrome CphA from the Cyanobacterium <i>Calothrix</i> PCC7601: A Lowâ€Temperature UVâ€"Vis and FTIR Study. Photochemistry and Photobiology, 2009, 85, 239-249.	2.5	15
142	Far-red acclimating cyanobacterium as versatile source for bright fluorescent biomarkers. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 1649-1656.	4.1	15
143	Influence of a steric hindrance in the chromophore of rhodopsin on the quantum yield of the primary photochemistry. Journal of Photochemistry and Photobiology B: Biology, 1996, 33, 83-86.	3.8	14
144	Regioselective Deuteration and Resonance Raman Spectroscopic Characterization of Biliverdin and Phycocyanobilin. Chemistry - A European Journal, 1997, 3, 363-367.	3.3	14

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145	Nickel Iron Hydrogenases. , 2007, , 279-322.		14
146	Role of the Protein Cavity in Phytochrome Chromoprotein Assembly and Doubleâ€bond Isomerization: A Comparison with Model Compounds. Photochemistry and Photobiology, 2010, 86, 856-861.	2.5	14
147	Orange fluorescent proteins constructed from cyanobacteriochromes chromophorylated with phycoerythrobilin. Photochemical and Photobiological Sciences, 2014, 13, 757-763.	2.9	14
148	Redox-dependent Ligand Switching in a Sensory Heme-binding GAF Domain of the Cyanobacterium Nostoc sp. PCC7120. Journal of Biological Chemistry, 2015, 290, 19067-19080.	3.4	14
149	MAS NMR on a Red/Far-Red Photochromic Cyanobacteriochrome All2699 from Nostoc. International Journal of Molecular Sciences, 2019, 20, 3656.	4.1	14
150	The Complexity of the P_r to P_{fr} Phototransformation Kinetics Is an Intrinsic Property of Native Phytochrome*. Photochemistry and Photobiology, 1998, 68, 754-761.	2.5	13
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