Vladislav V Verkhusha

List of Publications by Citations

189 papers	12,946 citations	62 h-index	110 g-index
215 ext. papers	14,975 ext. citations	11.2 avg, IF	6.64 L-index

#	Paper	IF	Citations
189	Engineering of a monomeric green-to-red photoactivatable fluorescent protein induced by blue light. *Nature Biotechnology*, **2006**, 24, 461-5	44.5	573
188	Molecular mechanism of histone H3K4me3 recognition by plant homeodomain of ING2. *Nature*, **2006**, 442, 100-3	50.4	536
187	Bright and stable near-infrared fluorescent protein for in vivo imaging. *Nature Biotechnology*, **2011**, 29, 757-61	44.5	526
186	Photoactivatable mCherry for high-resolution two-color fluorescence microscopy. *Nature Methods*, **2009**, 6, 153-9	21.6	468
185	Innovation: Photoactivatable fluorescent proteins. *Nature Reviews Molecular Cell Biology*, **2005**, 6, 885-91	48.7	411
184	Far-red fluorescent tags for protein imaging in living tissues. *Biochemical Journal*, **2009**, 418, 567-74	3.8	401
183	Near-infrared fluorescent proteins for multicolor in vivo imaging. *Nature Methods*, **2013**, 10, 751-4	21.6	376
182	Intravital imaging of metastatic behavior through a mammary imaging window. *Nature Methods*, **2008**, 5, 1019-21	21.6	320
181	Photoswitchable cyan fluorescent protein for protein tracking. *Nature Biotechnology*, **2004**, 22, 1435-9	44.5	309
180	The molecular properties and applications of Anthozoa fluorescent proteins and chromoproteins. *Nature Biotechnology*, **2004**, 22, 289-96	44.5	278
179	Conversion of red fluorescent protein into a bright blue probe. *Chemistry and Biology*, **2008**, 15, 1116-24		208
178	An enhanced monomeric blue fluorescent protein with the high chemical stability of the chromophore. *PLoS ONE*, **2011**, 6, e28674	3.7	180
177	An orange fluorescent protein with a large Stokes shift for single-excitation multicolor FCCS and FRET imaging. *Journal of the American Chemical Society*, **2012**, 134, 7913-23	16.4	177
176	Phenotypic heterogeneity of disseminated tumour cells is preset by primary tumour hypoxic microenvironments. *Nature Cell Biology*, **2017**, 19, 120-132	23.4	175
175	Three-chromophore FRET microscopy to analyze multiprotein interactions in living cells. *Nature Methods*, **2004**, 1, 209-17	21.6	169
174	Bright monomeric near-infrared fluorescent proteins as tags and biosensors for multiscale imaging. *Nature Communications*, **2016**, 7, 12405	17.4	167
173	Multiscale photoacoustic tomography using reversibly switchable bacterial phytochrome as a near-infrared photochromic probe. *Nature Methods*, **2016**, 13, 67-73	21.6	165

172	Bright monomeric photoactivatable red fluorescent protein for two-color super-resolution sptPALM of live cells. *Journal of the American Chemical Society*, **2010**, 132, 6481-91	16.4	160
171	Near-Infrared Fluorescent Proteins, Biosensors, and Optogenetic Tools Engineered from Phytochromes. *Chemical Reviews*, **2017**, 117, 6423-6446	68.1	159
170	Photocontrollable fluorescent proteins for superresolution imaging. *Annual Review of Biophysics*, **2014**, 43, 303-29	21.1	157
169	Green fluorescent proteins are light-induced electron donors. *Nature Chemical Biology*, **2009**, 5, 459-61	11.7	156
168	Imaging biological structures with fluorescence photoactivation localization microscopy. *Nature Protocols*, **2009**, 4, 291-308	18.8	148
167	Deep-tissue photoacoustic tomography of a genetically encoded near-infrared fluorescent probe. *Angewandte Chemie - International Edition*, **2012**, 51, 1448-51	16.4	143
166	A bacterial phytochrome-based optogenetic system controllable with near-infrared light. *Nature Methods*, **2016**, 13, 591-7	21.6	142
165	Chromophore transformations in red fluorescent proteins. *Chemical Reviews*, **2012**, 112, 4308-27	68.1	136
164	Far-red fluorescent protein excitable with red lasers for flow cytometry and superresolution STED nanoscopy. *Biophysical Journal*, **2010**, 99, L13-5	2.9	134
163	Natural photoreceptors as a source of fluorescent proteins, biosensors, and optogenetic tools. *Annual Review of Biochemistry*, **2015**, 84, 519-50	29.1	131
162	A palette of fluorescent proteins optimized for diverse cellular environments. *Nature Communications*, **2015**, 6, 7670	17.4	130
161	Monomeric red fluorescent proteins with a large Stokes shift. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 5369-74	11.5	128
160	Monomeric fluorescent timers that change color from blue to red report on cellular trafficking. *Nature Chemical Biology*, **2009**, 5, 118-26	11.7	126
159	A photoconvertible fluorescent reporter to track chaperone-mediated autophagy. *Nature Communications*, **2011**, 2, 386	17.4	123
158	Fluorescent proteins as biomarkers and biosensors: throwing color lights on molecular and cellular processes. *Current Protein and Peptide Science*, **2008**, 9, 338-69	2.8	117
157	Red fluorescent proteins: advanced imaging applications and future design. *Angewandte Chemie - International Edition*, **2012**, 51, 10724-38	16.4	116
156	Modern fluorescent proteins and imaging technologies to study gene expression, nuclear localization, and dynamics. *Current Opinion in Cell Biology*, **2011**, 23, 310-7	9	116
155	Engineering of bacterial phytochromes for near-infrared imaging, sensing, and light-control in mammals. *Chemical Society Reviews*, **2013**, 42, 3441-52	58.5	114

154	A photoswitchable orange-to-far-red fluorescent protein, PSmOrange. *Nature Methods*, **2011**, 8, 771-7	21.6	113
153	Red fluorescent protein with reversibly photoswitchable absorbance for photochromic FRET. *Chemistry and Biology*, **2010**, 17, 745-55		113
152	Superresolution imaging of multiple fluorescent proteins with highly overlapping emission spectra in living cells. *Biophysical Journal*, **2011**, 101, 1522-8	2.9	109
151	Modern fluorescent proteins: from chromophore formation to novel intracellular applications. *BioTechniques*, **2011**, 51, 313-4, 316, 318 passim	2.5	105
150	Conversion of the monomeric red fluorescent protein into a photoactivatable probe. *Chemistry and Biology*, **2005**, 12, 279-85		104
149	Structural basis for phototoxicity of the genetically encoded photosensitizer KillerRed. *Journal of Biological Chemistry*, **2009**, 284, 32028-39	5.4	102
148	Nanoscale imaging of molecular positions and anisotropies. *Nature Methods*, **2008**, 5, 1027-30	21.6	101
147	Histone H3K4me3 binding is required for the DNA repair and apoptotic activities of ING1 tumor suppressor. *Journal of Molecular Biology*, **2008**, 380, 303-12	6.5	96
146	Near-infrared optogenetic pair for protein regulation and spectral multiplexing. *Nature Chemical Biology*, **2017**, 13, 633-639	11.7	95
145	An enhanced mutant of red fluorescent protein DsRed for double labeling and developmental timer of neural fiber bundle formation. *Journal of Biological Chemistry*, **2001**, 276, 29621-4	5.4	95
144	Actin dynamics in lamellipodia of migrating border cells in the Drosophila ovary revealed by a GFP-actin fusion protein. *FEBS Letters*, **1999**, 445, 395-401	3.8	93
143	Setup and use of a two-laser multiphoton microscope for multichannel intravital fluorescence imaging. *Nature Protocols*, **2011**, 6, 1500-20	18.8	91
142	Common pathway for the red chromophore formation in fluorescent proteins and chromoproteins. *Chemistry and Biology*, **2004**, 11, 845-54		91
141	High stability of Discosoma DsRed as compared to Aequorea EGFP. *Biochemistry*, **2003**, 42, 7879-84	3.2	89
140	Near-infrared fluorescent proteins engineered from bacterial phytochromes. *Current Opinion in Chemical Biology*, **2015**, 27, 52-63	9.7	85
139	A crystallographic study of bright far-red fluorescent protein mKate reveals pH-induced cis-trans isomerization of the chromophore. *Journal of Biological Chemistry*, **2008**, 283, 28980-7	5.4	84
138	Far-red light photoactivatable near-infrared fluorescent proteins engineered from a bacterial phytochrome. *Nature Communications*, **2013**, 4, 2153	17.4	80
137	Structural characterization of acylimine-containing blue and red chromophores in mTagBFP and TagRFP fluorescent proteins. *Chemistry and Biology*, **2010**, 17, 333-41		80

136	Targeting of the FYVE domain to endosomal membranes is regulated by a histidine switch. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 13052-7	11.5	80
135	Engineering ESPT pathways based on structural analysis of LSSmKate red fluorescent proteins with large Stokes shift. *Journal of the American Chemical Society*, **2010**, 132, 10762-70	16.4	77
134	Multicontrast photoacoustic in vivo imaging using near-infrared fluorescent proteins. *Scientific Reports*, **2014**, 4, 3939	4.9	76
133	A near-infrared BiFC reporter for in vivo imaging of protein-protein interactions. *Chemistry and Biology*, **2013**, 20, 1078-86		76
132	Extended Stokes shift in fluorescent proteins: chromophore-protein interactions in a near-infrared TagRFP675 variant. *Scientific Reports*, **2013**, 3, 1847	4.9	76
131	Far-red fluorescent tag for protein labelling. *Biochemical Journal*, **2002**, 368, 17-21	3.8	75
130	Comparative studies on the structure and stability of fluorescent proteins EGFP, zFP506, mRFP1, "dimer2", and DsRed1. *Biochemistry*, **2004**, 43, 14913-23	3.2	73
129	Smallest near-infrared fluorescent protein evolved from cyanobacteriochrome as versatile tag for spectral multiplexing. *Nature Communications*, **2019**, 10, 279	17.4	70
128	Photoactivation mechanism of PAmCherry based on crystal structures of the protein in the dark and fluorescent states. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 21097-102	11.5	70
127	Direct multiplex imaging and optogenetics of Rho GTPases enabled by near-infrared FRET. *Nature Chemical Biology*, **2018**, 14, 591-600	11.7	62
126	Flow cytometry of fluorescent proteins. *Methods*, **2012**, 57, 318-30	4.6	61
125	Directed molecular evolution to design advanced red fluorescent proteins. *Nature Methods*, **2011**, 8, 1019-26	21.6	60
124	The first mutant of the Aequorea victoria green fluorescent protein that forms a red chromophore. *Biochemistry*, **2008**, 47, 4666-73	3.2	58
123	Beta-barrel scaffold of fluorescent proteins: folding, stability and role in chromophore formation. *International Review of Cell and Molecular Biology*, **2013**, 302, 221-78	6	57
122	Small near-infrared photochromic protein for photoacoustic multi-contrast imaging and detection of protein interactions in vivo. *Nature Communications*, **2018**, 9, 2734	17.4	55
121	Red fluorescent proteins: chromophore formation and cellular applications. *Current Opinion in Structural Biology*, **2012**, 22, 679-88	8.1	55
120	Near-infrared bioluminescent proteins for two-color multimodal imaging. *Scientific Reports*, **2016**, 6, 36588	4.9	53
119	Guide to red fluorescent proteins and biosensors for flow cytometry. *Methods in Cell Biology*, **2011**, 102, 431-61	1.8	50

118	A set of monomeric near-infrared fluorescent proteins for multicolor imaging across scales. *Nature Communications*, **2020**, 11, 239	17.4	48
117	Denaturation and partial renaturation of a tightly tetramerized DsRed protein under mildly acidic conditions. *FEBS Letters*, **2000**, 487, 203-8	3.8	48
116	Synergy of photoacoustic and fluorescence flow cytometry of circulating cells with negative and positive contrasts. *Journal of Biophotonics*, **2013**, 6, 425-34	3.1	47
115	Advances in engineering of fluorescent proteins and photoactivatable proteins with red emission. *Current Opinion in Chemical Biology*, **2010**, 14, 23-9	9.7	47
114	Chromophore chemistry of fluorescent proteins controlled by light. *Current Opinion in Chemical Biology*, **2014**, 20, 60-8	9.7	45
113	In vivo tomographic imaging of deep-seated cancer using fluorescence lifetime contrast. *Cancer Research*, **2015**, 75, 1236-43	10.1	45
112	Membrane insertion of the FYVE domain is modulated by pH. *Proteins: Structure, Function and Bioinformatics*, **2009**, 76, 852-60	4.2	45
111	Fluorescent Biosensors for Neurotransmission and Neuromodulation: Engineering and Applications. *Frontiers in Cellular Neuroscience*, **2019**, 13, 474	6.1	44
110	Understanding blue-to-red conversion in monomeric fluorescent timers and hydrolytic degradation of their chromophores. *Journal of the American Chemical Society*, **2010**, 132, 2243-53	16.4	44
109	Solid state yellow and orange lasers for flow cytometry. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2008**, 73, 570-7	4.6	44
108	Near-Infrared Fluorescent Proteins: Multiplexing and Optogenetics across Scales. *Trends in Biotechnology*, **2018**, 36, 1230-1243	15.1	42
107	Molecular mechanism of membrane targeting by the GRP1 PH domain. *Journal of Lipid Research*, **2008**, 49, 1807-15	6.3	42
106	A near-infrared genetically encoded calcium indicator for in vivo imaging. *Nature Biotechnology*, **2021**, 39, 368-377	44.5	41
105	Fast reversibly photoswitching red fluorescent proteins for live-cell RESOLFT nanoscopy. *Nature Methods*, **2018**, 15, 601-604	21.6	40
104	Molecular Basis of Spectral Diversity in Near-Infrared Phytochrome-Based Fluorescent Proteins. *Chemistry and Biology*, **2015**, 22, 1540-1551		39
103	The place of inactivated actin and its kinetic predecessor in actin folding-unfolding. *Biochemistry*, **2002**, 41, 13127-32	3.2	39
102	Optogenetically controlled protein kinases for regulation of cellular signaling. *Chemical Society Reviews*, **2018**, 47, 2454-2484	58.5	38
101	Glioblastoma cellular cross-talk converges on NF-B to attenuate EGFR inhibitor sensitivity. *Genes and Development*, **2017**, 31, 1212-1227	12.6	38

100	pH-dependent binding of the Epsin ENTH domain and the AP180 ANTH domain to PI(4,5)P2-containing bilayers. *Journal of Molecular Biology*, **2007**, 373, 412-23	6.5	38
99	How to Increase Brightness of Near-Infrared Fluorescent Proteins in Mammalian Cells. *Cell Chemical Biology*, **2017**, 24, 758-766.e3	8.2	37
98	Neurotrophin receptor tyrosine kinases regulated with near-infrared light. *Nature Communications*, **2019**, 10, 1129	17.4	37
97	Designing brighter near-infrared fluorescent proteins: insights from structural and biochemical studies. *Chemical Science*, **2017**, 8, 4546-4557	9.4	36
96	Insight into the common mechanism of the chromophore formation in the red fluorescent proteins: the elusive blue intermediate revealed. *Journal of the American Chemical Society*, **2012**, 134, 2807-14	16.4	36
95	In vivo photoswitchable flow cytometry for direct tracking of single circulating tumor cells. *Chemistry and Biology*, **2014**, 21, 792-801		35
94	New lasers for flow cytometry: filling the gaps. *Nature Methods*, **2007**, 4, 678-9	21.6	35
93	Minimal domain of bacterial phytochrome required for chromophore binding and fluorescence. *Scientific Reports*, **2015**, 5, 18348	4.9	34
92	Kinetics of actin unfolding induced by guanidine hydrochloride. *Biochemistry*, **2002**, 41, 1014-9	3.2	33
91	A structural basis for reversible photoswitching of absorbance spectra in red fluorescent protein rsTagRFP. *Journal of Molecular Biology*, **2012**, 417, 144-51	6.5	31
90	Quad-mode functional and molecular photoacoustic microscopy. *Scientific Reports*, **2018**, 8, 11123	4.9	30
89	Akt inhibitor MK2206 prevents influenza pH1N1 virus infection in vitro. *Antimicrobial Agents and Chemotherapy*, **2014**, 58, 3689-96	5.9	30
88	A FRET-facilitated photoswitching using an orange fluorescent protein with the fast photoconversion kinetics. *Journal of the American Chemical Society*, **2012**, 134, 14789-99	16.4	30
87	Near-Infrared Fluorescent Proteins Engineered from Bacterial Phytochromes in Neuroimaging. *Biophysical Journal*, **2017**, 113, 2299-2309	2.9	29
86	Bacterial Phytochromes, Cyanobacteriochromes and Allophycocyanins as a Source of Near-Infrared Fluorescent Probes. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	29
85	Allosteric effects of chromophore interaction with dimeric near-infrared fluorescent proteins engineered from bacterial phytochromes. *Scientific Reports*, **2016**, 6, 18750	4.9	28
84	Near-infrared light-controlled systems for gene transcription regulation, protein targeting and spectral multiplexing. *Nature Protocols*, **2018**, 13, 1121-1136	18.8	27
83	Hetero-oligomeric tagging diminishes non-specific aggregation of target proteins fused with Anthozoa fluorescent proteins. *Biochemical Journal*, **2003**, 371, 109-14	3.8	27

82	Kinetic analysis of maturation and denaturation of DsRed, a coral-derived red fluorescent protein. *Biochemistry (Moscow)*, **2001**, 66, 1342-51	2.9	26
81	Optogenetic regulation of endogenous proteins. *Nature Communications*, **2020**, 11, 605	17.4	26
80	Crystallographic study of red fluorescent protein eqFP578 and its far-red variant Katushka reveals opposite pH-induced isomerization of chromophore. *Protein Science*, **2011**, 20, 1265-74	6.3	25
79	Coordinated histone modifications and chromatin reorganization in a single cell revealed by FRET biosensors. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E11681-E11690	11.5	25
78	Hybrid proteins with organophosphorus hydrolase activity and fluorescence of deGFP4 protein. *Moscow University Chemistry Bulletin*, **2011**, 66, 92-98	0.5	24
77	Refined crystal structures of red and green fluorescent proteins from the button polyp Zoanthus. *Acta Crystallographica Section D: Biological Crystallography*, **2007**, 63, 1082-93		24
76	Structural evidence for a dehydrated intermediate in green fluorescent protein chromophore biosynthesis. *Journal of Biological Chemistry*, **2010**, 285, 15978-84	5.4	23
75	Photoacoustic and photothermal cytometry using photoswitchable proteins and nanoparticles with ultrasharp resonances. *Journal of Biophotonics*, **2015**, 8, 81-93	3.1	22
74	Supercontinuum white light lasers for flow cytometry. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2009**, 75, 450-9	4.6	20
73	Rotational order-disorder structure of fluorescent protein FP480. *Acta Crystallographica Section D: Biological Crystallography*, **2009**, 65, 906-12		20
72	Effect of high pressure and reversed micelles on the fluorescent proteins. *Biochimica Et Biophysica Acta - General Subjects*, **2003**, 1622, 192-5	4	19
71	Ultrafast excited-state dynamics and fluorescence deactivation of near-infrared fluorescent proteins engineered from bacteriophytochromes. *Scientific Reports*, **2015**, 5, 12840	4.9	18
70	A knot in the protein structure - probing the near-infrared fluorescent protein iRFP designed from a bacterial phytochrome. *FEBS Journal*, **2014**, 281, 2284-98	5.7	17
69	Cysteineless non-glycosylated monomeric blue fluorescent protein, secBFP2, for studies in the eukaryotic secretory pathway. *Biochemical and Biophysical Research Communications*, **2013**, 430, 1114-9	3.4	17
68	Structural basis for bathochromic shift of fluorescence in far-red fluorescent proteins eqFP650 and eqFP670. *Acta Crystallographica Section D: Biological Crystallography*, **2012**, 68, 1088-97		17
67	Red fluorescent proteins and their properties. *Russian Chemical Reviews*, **2010**, 79, 243-258	6.8	17
66	Obatoclax kills anaplastic thyroid cancer cells by inducing lysosome neutralization and necrosis. *Oncotarget*, **2016**, 7, 34453-71	3.3	17
65	Near-Infrared Light-Controlled Gene Expression and Protein Targeting in Neurons and Non-neuronal Cells. *ChemBioChem*, **2018**, 19, 1334-1340	3.8	16

64	Bright blue-shifted fluorescent proteins with Cys in the GAF domain engineered from bacterial phytochromes: fluorescence mechanisms and excited-state dynamics. *Scientific Reports*, **2016**, 6, 37362	4.9	16
63	Near-Infrared Fluorescent Proteins and Their Applications. *Biochemistry (Moscow)*, **2019**, 84, S32-S50	2.9	15
62	Photoswitchable red fluorescent protein with a large Stokes shift. *Chemistry and Biology*, **2014**, 21, 1402-1414		15
61	Multiparametric flow cytometry using near-infrared fluorescent proteins engineered from bacterial phytochromes. *PLoS ONE*, **2015**, 10, e0122342	3.7	15
60	Orange fluorescent proteins: structural studies of LSSmOrange, PSmOrange and PSmOrange2. *PLoS ONE*, **2014**, 9, e99136	3.7	15
59	Yellow fluorescent protein phiYFPv (Phialidium): structure and structure-based mutagenesis. *Acta Crystallographica Section D: Biological Crystallography*, **2013**, 69, 1005-12		15
58	Structure of a red fluorescent protein from Zoanthus, zRFP574, reveals a novel chromophore. *Acta Crystallographica Section D: Biological Crystallography*, **2006**, 62, 527-32		15
57	Distinct effects of guanidine thiocyanate on the structure of superfolder GFP. *PLoS ONE*, **2012**, 7, e48809	3.7	14
56	Focusing light inside live tissue using reversibly switchable bacterial phytochrome as a genetically encoded photochromic guide star. *Science Advances*, **2019**, 5, eaay1211	14.3	14
55	Structure of the red fluorescent protein from a lancelet (Branchiostoma lanceolatum): a novel GYG chromophore covalently bound to a nearby tyrosine. *Acta Crystallographica Section D: Biological Crystallography*, **2013**, 69, 1850-60		13
54	Understanding the role of Arg96 in structure and stability of green fluorescent protein. *Proteins: Structure, Function and Bioinformatics*, **2008**, 73, 539-51	4.2	13
53	Sensitivity of superfolder GFP to ionic agents. *PLoS ONE*, **2014**, 9, e110750	3.7	13
52	Single-component near-infrared optogenetic systems for gene transcription regulation. *Nature Communications*, **2021**, 12, 3859	17.4	13
51	New insight in protein-ligand interactions. 2. Stability and properties of two mutant forms of the D-galactose/D-glucose-binding protein from E. coli. *Journal of Physical Chemistry B*, **2011**, 115, 9022-32	3.4	12
50	Stabilization of structure in near-infrared fluorescent proteins by binding of biliverdin chromophore. *Journal of Molecular Structure*, **2017**, 1140, 22-31	3.4	11
49	Cell-based and in vivo spectral analysis of fluorescent proteins for multiphoton microscopy. *Journal of Biomedical Optics*, **2012**, 17, 96001	3.5	11
48	Septin 9 isoforms promote tumorigenesis in mammary epithelial cells by increasing migration and ECM degradation through metalloproteinase secretion at focal adhesions. *Oncogene*, **2019**, 38, 5839-5859	9.2	10
47	Deep-Tissue Photoacoustic Tomography of a Genetically Encoded Near-Infrared Fluorescent Probe. *Angewandte Chemie*, **2012**, 124, 1477-1480	3.6	9

46	Expression of recombinant GFP-actin fusion protein in the methylotrophic yeast Pichia pastoris. *FEMS Yeast Research*, **2003**, 3, 105-11	3.1	9
45	Screening and Cellular Characterization of Genetically Encoded Voltage Indicators Based on Near-Infrared Fluorescent Proteins. *ACS Chemical Neuroscience*, **2020**, 11, 3523-3531	5.7	9
44	moxDendra2: an inert photoswitchable protein for oxidizing environments. *Chemical Communications*, **2017**, 53, 2106-2109	5.8	8
43	Structure of the green fluorescent protein NowGFP with an anionic tryptophan-based chromophore. *Acta Crystallographica Section D: Biological Crystallography*, **2015**, 71, 1699-707		8
42	Crystal structure of the fluorescent protein from Dendronephthya sp. in both green and photoconverted red forms. *Acta Crystallographica Section D: Structural Biology*, **2016**, 72, 922-32	5.5	8
41	Interaction of Biliverdin Chromophore with Near-Infrared Fluorescent Protein BphP1-FP Engineered from Bacterial Phytochrome. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	8
40	Reversibly switchable fluorescence microscopy with enhanced resolution and image contrast. *Journal of Biomedical Optics*, **2014**, 19, 086018	3.5	8
39	Coagulation of Particles in Shear Flow: Applications to Biological Cells. *Journal of Colloid and Interface Science*, **1993**, 160, 405-418	9.3	8
38	Chromophore binding to two cysteines increases quantum yield of near-infrared fluorescent proteins. *Scientific Reports*, **2019**, 9, 1866	4.9	8
37	Bacterial Phytochrome as a Scaffold for Engineering of Receptor Tyrosine Kinases Controlled with Near-Infrared Light. *Journal of Molecular Biology*, **2020**, 432, 3749-3760	6.5	8
36	moxMaple3: a Photoswitchable Fluorescent Protein for PALM and Protein Highlighting in Oxidizing Cellular Environments. *Scientific Reports*, **2018**, 8, 14738	4.9	8
35	Introducing inducible fluorescent split cholesterol oxidase to mammalian cells. *Journal of Biological Chemistry*, **2017**, 292, 8811-8822	5.4	7
34	Multiscale Photoacoustic Tomography of a Genetically Encoded Near-Infrared FRET Biosensor. *Advanced Science*, **2021**, 8, e2102474	13.6	7
33	Light control of RTK activity: from technology development to translational research. *Chemical Science*, **2020**, 11, 10019-10034	9.4	6
32	Two independent routes of post-translational chemistry in fluorescent protein FusionRed. *International Journal of Biological Macromolecules*, **2020**, 155, 551-559	7.9	5
31	Microfluidic System for In-Flow Reversible Photoswitching of Near-Infrared Fluorescent Proteins. *Analytical Chemistry*, **2016**, 88, 11821-11829	7.8	5
30	Determination of two-photon photoactivation rates of fluorescent proteins. *Physical Chemistry Chemical Physics*, **2013**, 15, 14868-72	3.6	5
29	Structure-Based Rational Design of Two Enhanced Bacterial Lipocalin Tags for Protein-PAINT Super-resolution Microscopy. *ACS Chemical Biology*, **2020**, 15, 2456-2465	4.9	5

28	A guide to the optogenetic regulation of endogenous molecules. *Nature Methods*, **2021**, 18, 1027-1037	21.6	5
27	Fluorescence from Multiple Chromophore Hydrogen-Bonding States in the Far-Red Protein TagRFP675. *Journal of Physical Chemistry Letters*, **2016**, 7, 3046-51	6.4	4
26	Denaturation of proteins with beta-barrel topology induced by guanidine hydrochloride. *Spectroscopy*, **2010**, 24, 367-373		4
25	Rot fluoreszierende Proteine: spezielle Anwendungen in der Bildgebung und Perspektiven. *Angewandte Chemie*, **2012**, 124, 10882-10897	3.6	3
24	Disaggregation of Particles with Biospecific Interactions in Shear Flow. *Journal of Colloid and Interface Science*, **1997**, 188, 251-256	9.3	3
23	The rotational order-disorder structure of the reversibly photoswitchable red fluorescent protein rsTagRFP. *Acta Crystallographica Section D: Biological Crystallography*, **2014**, 70, 31-9		3
22	Developing a time-resolved flow cytometer for fluorescence lifetime measurements of near-infrared fluorescent proteins **2016**,		3
21	Bright near-infrared genetically encoded voltage indicator for all-optical electrophysiology		3
20	Toward photoswitchable electronic pre-resonance stimulated Raman probes. *Journal of Chemical Physics*, **2021**, 154, 135102	3.9	3
19	Protein-Ligand Interactions of the D-Galactose/D-Glucose-Binding Protein as a Potential Sensing Probe of Glucose Biosensors. *Spectroscopy*, **2012**, 27, 373-379		2
18	Abstract 3000: Hypoxic primary tumor stress microenvironments prime DTCs in lungs for dormancy **2015**,		2
17	Real-time observation of tetrapyrrole binding to an engineered bacterial phytochrome. *Communications Chemistry*, **2021**, 4,	6.3	2
16	A novel violet fluorescent protein contains a unique oxidized tyrosine as the simplest chromophore ever reported in fluorescent proteins.. *Protein Science*, **2021**,	6.3	1
15	Optogenetic approaches in biotechnology and biomaterials.. *Trends in Biotechnology*, **2022**,	15.1	1
14	In vivo photoacoustic multi-contrast imaging and detection of protein interactions using a small near-infrared photochromic protein **2019**,		1
13	Reversibly switchable photoacoustic tomography using a genetically encoded near-infrared phytochrome **2016**,		1
12	Synergy of photoacoustic and fluorescence flow cytometry of circulating cells with negative and positive contrasts **2013**, 6, 425		1
11	Optogenetic manipulation and photoacoustic imaging using a near-infrared transgenic mouse model.. *Nature Communications*, **2022**, 13, 2813	17.4	1

10	Transgenic mice encoding modern imaging probes: Properties and applications. *Cell Reports*, **2022**, 39, 110845	10.6	1
9	Technologies for large-scale mapping of functional neural circuits active during a user-defined time window. *Progress in Neurobiology*, **2022**, 216, 102290	10.9	1
8	Structural Perturbation of Superfolder GFP in the Presence of Guanidine Thiocyanate. *Spectroscopy*, **2012**, 27, 381-386		0
7	Structural and Functional Characterization of a Biliverdin-Binding Near-Infrared Fluorescent Protein From the Serpin Superfamily. *Journal of Molecular Biology*, **2021**, 434, 167359	6.5	0
6	Engineering of Bacterial Phytochromes for in vivo Imaging. *Biophysical Journal*, **2015**, 108, 7a	2.9	
5	Expression of recombinant GFP-actin fusion protein in the methylotrophic yeast Pichia pastoris. *FEMS Yeast Research*, **2003**, 3, 105-111	3.1	
4	Membrane docking by PI-binding domains. *FASEB Journal*, **2007**, 21, A603	0.9	
3	Structures and function of PHD fingers of ING tumor suppressors. *FASEB Journal*, **2007**, 21, A283	0.9	
2	Membrane penetration of the FYVE domain is modulated by pH. *FASEB Journal*, **2009**, 23, 873.2	0.9	
1	Amino acid residue at the 165th position tunes EYFP chromophore maturation. A structure-based design. *Computational and Structural Biotechnology Journal*, **2021**, 19, 2950-2959	6.8	