Daria M Shcherbakova

List of Publications by Year
in descending order

37 papers	2,976 citations	257101 24 h-index	301761 39 g-index
39 all docs	39 docs citations	39 times ranked	3995 citing authors

#	Article	IF	Citations
1	Near-infrared fluorescent proteins for multicolor in vivo imaging. Nature Methods, 2013, 10, 751-754.	9.0	475
2	Bright monomeric near-infrared fluorescent proteins as tags and biosensors for multiscale imaging. Nature Communications, 2016, 7, 12405.	5.8	249
3	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, 7913-7923.	6.6	215
4	Multiscale photoacoustic tomography using reversibly switchable bacterial phytochrome as a near-infrared photochromic probe. Nature Methods, 2016, 13, 67-73.	9.0	206
5	Natural Photoreceptors as a Source of Fluorescent Proteins, Biosensors, and Optogenetic Tools. Annual Review of Biochemistry, 2015, 84, 519-550.	5.0	161
6	Red Fluorescent Proteins: Advanced Imaging Applications and Future Design. Angewandte Chemie - International Edition, 2012, 51, 10724-10738.	7.2	145
7	Modern fluorescent proteins: from chromophore formation to novel intracellular applications. BioTechniques, 2011, 51, 313-327.	0.8	137
8	A set of monomeric near-infrared fluorescent proteins for multicolor imaging across scales. Nature Communications, 2020, 11, 239.	5.8	109
9	Near-infrared fluorescent proteins engineered from bacterial phytochromes. Current Opinion in Chemical Biology, 2015, 27, 52-63.	2.8	107
10	Direct multiplex imaging and optogenetics of Rho GTPases enabled by near-infrared FRET. Nature Chemical Biology, 2018, 14, 591-600.	3.9	107
11	Smallest near-infrared fluorescent protein evolved from cyanobacteriochrome as versatile tag for spectral multiplexing. Nature Communications, 2019, 10, 279.	5.8	105
12	A near-infrared genetically encoded calcium indicator for in vivo imaging. Nature Biotechnology, 2021, 39, 368-377.	9.4	88
13	Multicontrast photoacoustic in vivo imaging using near-infrared fluorescent proteins. Scientific Reports, 2014, 4, 3939.	1.6	86
14	Fluorescent Biosensors for Neurotransmission and Neuromodulation: Engineering and Applications. Frontiers in Cellular Neuroscience, 2019, 13, 474.	1.8	79
15	Small near-infrared photochromic protein for photoacoustic multi-contrast imaging and detection of protein interactions in vivo. Nature Communications, 2018, 9, 2734.	5.8	77
16	Near-Infrared Fluorescent Proteins: Multiplexing and Optogenetics across Scales. Trends in Biotechnology, 2018, 36, 1230-1243.	4.9	76
17	In Vivo Tomographic Imaging of Deep-Seated Cancer Using Fluorescence Lifetime Contrast. Cancer Research, 2015, 75, 1236-1243.	0.4	58
18	Chromophore chemistry of fluorescent proteins controlled by light. Current Opinion in Chemical Biology, 2014, 20, 60-68.	2.8	57

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19	Minimal domain of bacterial phytochrome required for chromophore binding and fluorescence. Scientific Reports, 2016, 5, 18348.	1.6	50
20	Designing brighter near-infrared fluorescent proteins: insights from structural and biochemical studies. Chemical Science, 2017, 8, 4546-4557.	3.7	49
21	Molecular Basis of Spectral Diversity in Near-Infrared Phytochrome-Based Fluorescent Proteins. Chemistry and Biology, 2015, 22, 1540-1551.	6.2	47
22	Quad-mode functional and molecular photoacoustic microscopy. Scientific Reports, 2018, 8, 11123.	1.6	38
23	Allosteric effects of chromophore interaction with dimeric near-infrared fluorescent proteins engineered from bacterial phytochromes. Scientific Reports, 2016, 6, 18750.	1.6	35
24	Single-component near-infrared optogenetic systems for gene transcription regulation. Nature Communications, 2021, 12, 3859.	5.8	30
25	Orange Fluorescent Proteins: Structural Studies of LSSmOrange, PSmOrange and PSmOrange2. PLoS ONE, 2014, 9, e99136.	1.1	24
26	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.	1.6	20
27	Toward photoswitchable electronic pre-resonance stimulated Raman probes. Journal of Chemical Physics, 2021, 154, 135102.	1.2	20
28	Multiparametric Flow Cytometry Using Near-Infrared Fluorescent Proteins Engineered from Bacterial Phytochromes. PLoS ONE, 2015, 10, e0122342.	1.1	19
29	A guide to the optogenetic regulation of endogenous molecules. Nature Methods, 2021, 18, 1027-1037.	9.0	17
30	Near-infrared and far-red genetically encoded indicators of neuronal activity. Journal of Neuroscience Methods, 2021, 362, 109314.	1.3	17
31	Chromophore binding to two cysteines increases quantum yield of near-infrared fluorescent proteins. Scientific Reports, 2019, 9, 1866.	1.6	15
32	Screening and Cellular Characterization of Genetically Encoded Voltage Indicators Based on Near-Infrared Fluorescent Proteins. ACS Chemical Neuroscience, 2020, 11, 3523-3531.	1.7	15
33	Multiscale Photoacoustic Tomography of a Genetically Encoded Nearâ€Infrared FRET Biosensor. Advanced Science, 2021, 8, e2102474.	5.6	12
34	Technologies for large-scale mapping of functional neural circuits active during a user-defined time window. Progress in Neurobiology, 2022, 216, 102290.	2.8	9
35	Reversibly switchable fluorescence microscopy with enhanced resolution and image contrast. Journal of Biomedical Optics, 2014, 19, 086018.	1.4	8
36	Real-time observation of tetrapyrrole binding to an engineered bacterial phytochrome. Communications Chemistry, 2021, 4, .	2.0	5

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37	Multiplex Imaging of Rho GTPase Activities in Living Cells. Methods in Molecular Biology, 2021, 2350, 43-68.	0.4	5