Joachim Goedhart

List of Publications by Year
in descending order

88 papers	6,930 citations	81900 39 h-index	71685 76 g-index
120 all docs	120 docs citations	120 times ranked	9799 citing authors

#	Article	IF	Citations
1	Structure-guided evolution of cyan fluorescent proteins towards a quantum yield of 93%. Nature Communications, 2012, 3, 751.	12.8	626
2	Bright monomeric red fluorescent protein with an extended fluorescence lifetime. Nature Methods, 2007, 4, 555-557.	19.0	582
3	PlotsOfDataâ€"A web app for visualizing data together with their summaries. PLoS Biology, 2019, 17, e3000202.	5.6	443
4	Cyan and Yellow Super Fluorescent Proteins with Improved Brightness, Protein Folding, and FRET FÃ¶rster Radius,. Biochemistry, 2006, 45, 6570-6580.	2.5	441
5	VolcaNoseR is a web app for creating, exploring, labeling and sharing volcano plots. Scientific Reports, 2020, 10, 20560.	3.3	301
6	Bright cyan fluorescent protein variants identified by fluorescence lifetime screening. Nature Methods, 2010, 7, 137-139.	19.0	258
7	Fourth-Generation Epac-Based FRET Sensors for cAMP Feature Exceptional Brightness, Photostability and Dynamic Range: Characterization of Dedicated Sensors for FLIM, for Ratiometry and with High Affinity. PLoS ONE, 2015, 10, e0122513.	2.5	230
8	Phospholipase D Activation Correlates with Microtubule Reorganization in Living Plant Cells[W]. Plant Cell, 2003, 15, 2666-2679.	6.6	225
9	Imaging phosphatidylinositol 4â€phosphate dynamics in living plant cells. Plant Journal, 2009, 57, 356-372.	5.7	189
10	A mTurquoise-Based cAMP Sensor for Both FLIM and Ratiometric Read-Out Has Improved Dynamic Range. PLoS ONE, 2011, 6, e19170.	2.5	172
11	Improved Green and Blue Fluorescent Proteins for Expression in Bacteria and Mammalian Cellsâ€,â€¡. Biochemistry, 2007, 46, 3775-3783.	2.5	132
12	In vivo FRETâ€"FLIM reveals cell-type-specific protein interactions in Arabidopsis roots. Nature, 2017, 548, 97-102.	27.8	128
13	The DNAJB6 and DNAJB8 Protein Chaperones Prevent Intracellular Aggregation of Polyglutamine Peptides. Journal of Biological Chemistry, 2013, 288, 17225-17237.	3.4	122
14	Stochastic and reversible assembly of a multiprotein DNA repair complex ensures accurate target site recognition and efficient repair. Journal of Cell Biology, 2010, 189, 445-463.	5.2	114
15	Plant G protein heterotrimers require dual lipidation motifs of GÎ± and GÎ³ and do not dissociate upon activation. Journal of Cell Science, 2006, 119, 5087-5097.	2.0	113
16	F-actin-rich contractile endothelial pores prevent vascular leakage during leukocyte diapedesis through local RhoA signalling. Nature Communications, 2016, 7, 10493.	12.8	113
17	High-Resolution mRNA and Secretome Atlas of Human Enteroendocrine Cells. Cell, 2020, 181, 1291-1306.e19.	28.9	110
18	Uniform cAMP Stimulation of Dictyostelium Cells Induces Localized Patches of Signal Transduction and Pseudopodia. Molecular Biology of the Cell, 2003, 14, 5019-5027.	2.1	98

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19	SuperPlotsOfDataâ€"a web app for the transparent display and quantitative comparison of continuous data from different conditions. Molecular Biology of the Cell, 2021, 32, 470-474.	2.1	97
20	Sensitization of Dictyostelium chemotaxis by phosphoinositide-3-kinase-mediated self-organizing signalling patches. Journal of Cell Science, 2004, 117, 2925-2935.	2.0	95
21	Dynamic in vivo interaction of DDB2 E3 ubiquitin ligase with UV-damaged DNA is independent of damage-recognition protein XPC. Journal of Cell Science, 2007, 120, 2706-2716.	2.0	95
22	Practical and reliable FRET/FLIM pair of fluorescent proteins. BMC Biotechnology, 2009, 9, 24.	3.3	93
23	The cooperative action of CSB, CSA, and UVSSA target TFIIH to DNA damage-stalled RNA polymerase II. Nature Communications, 2020, 11, 2104.	12.8	91
24	PKCÎ³ mutations in spinocerebellar ataxia type 14 affect C1 domain accessibility and kinase activity leading to aberrant MAPK signaling. Journal of Cell Science, 2008, 121, 2339-2349.	2.0	87
25	Real-time visualization of heterotrimeric G protein Gq activation in living cells. BMC Biology, 2011, 9, 32.	3.8	83
26	A local VE-cadherin/Trio-based signaling complex stabilizes endothelial junctions through Rac1. Journal of Cell Science, 2015, 128, 3041-54.	2.0	82
27	Plasma membrane restricted RhoGEF activity is sufficient for RhoA-mediated actin polymerization. Scientific Reports, 2015, 5, 14693.	3.3	81
28	Sensitive Detection of p65 Homodimers Using Red-Shifted and Fluorescent Protein-Based FRET Couples. PLoS ONE, 2007, 2, e1011.	2.5	80
29	Characterization of a spectrally diverse set of fluorescent proteins as FRET acceptors for mTurquoise2. Scientific Reports, 2017, 7, 11999.	3.3	77
30	In vivo characterisation of fluorescent proteins in budding yeast. Scientific Reports, 2019, 9, 2234.	3.3	71
31	Structure of a fluorescent protein from<i>Aequorea victoria</i>bearing the obligate-monomer mutation A206K. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 878-882.	0.7	63
32	In vivofluorescence correlation microscopy (FCM) reveals accumulation and immobilization of Nod factors in root hair cell walls. Plant Journal, 2000, 21, 109-119.	5.7	61
33	Quantitative Co-Expression of Proteins at the Single Cell Level â€" Application to a Multimeric FRET Sensor. PLoS ONE, 2011, 6, e27321.	2.5	59
34	The balance between GÎ±_i-Cdc42/Rac and GÎ±₁₂/₁₃-RhoA pathways determines endothelial barrier regulation by sphingosine-1-phosphate. Molecular Biology of the Cell, 2017, 28, 3371-3382.	2.1	57
35	PlotTwist: A web app for plotting and annotating continuous data. PLoS Biology, 2020, 18, e3000581.	5.6	53
36	<scp>SCARECROW</scp>â€<scp>LIKE</scp>23 and <scp>SCARECROW</scp> jointly specify endodermal cell fate but distinctly control <scp>SHORT</scp>â€<scp>ROOT</scp> movement. Plant Journal, 2015, 84, 773-784.	5.7	52

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37	Spatiotemporal analysis of RhoA/B/C activation in primary human endothelial cells. Scientific Reports, 2016, 6, 25502.	3.3	51
38	A New Generation of FRET Sensors for Robust Measurement of GÎ±i1, GÎ±i2 and GÎ±i3 Activation Kinetics in Single Cells. PLoS ONE, 2016, 11, e0146789.	2.5	50
39	Quantitative Lifetime Unmixing of Multiexponentially Decaying Fluorophores Using Single-Frequency Fluorescence Lifetime Imaging Microscopy. Biophysical Journal, 2008, 95, 378-389.	0.5	48
40	siFLIM: single-image frequency-domain FLIM provides fast and photon-efficient lifetime data. Nature Methods, 2016, 13, 501-504.	19.0	48
41	Multiparameter Imaging for the Analysis of Intracellular Signaling. ChemBioChem, 2005, 6, 1323-1330.	2.6	46
42	Sensing Extracellular Calcium â€" An Insight into the Structure and Function of the Calcium-Sensing Receptor (CaSR). Advances in Experimental Medicine and Biology, 2020, 1131, 1031-1063.	1.6	40
43	Effect of fixation procedures on the fluorescence lifetimes of <i>Aequorea victoria</i> derived fluorescent proteins. Journal of Microscopy, 2014, 256, 166-176.	1.8	35
44	Tetraspanin microdomains control localized protein kinase C signaling in B cells. Science Signaling, 2017, 10, .	3.6	35
45	In Vivo Imaging of Diacylglycerol at the Cytoplasmic Leaflet of Plant Membranes. Plant and Cell Physiology, 2017, 58, 1196-1207.	3.1	33
46	Superfolder mTurquoise2^{ox} optimized for the bacterial periplasm allows high efficiency <i>in vivo</i> FRET of cell division antibiotic targets. Molecular Microbiology, 2019, 111, 1025-1038.	2.5	33
47	A turquoise fluorescence lifetime-based biosensor for quantitative imaging of intracellular calcium. Nature Communications, 2021, 12, 7159.	12.8	33
48	Development of FRET biosensors for mammalian and plant systems. Protoplasma, 2014, 251, 333-347.	2.1	31
49	Nod Factors Integrate Spontaneously in Biomembranes and Transfer Rapidly between Membranes and to Root Hairs, but Transbilayer Flip-Flop Does Not Occurâ€. Biochemistry, 1999, 38, 10898-10907.	2.5	30
50	Visualizing endogenous Rho activity with an improved localization-based, genetically encoded biosensor. Journal of Cell Science, 2021, 134, .	2.0	30
51	A Perspective on Studying G-Proteinâ€"Coupled Receptor Signaling with Resonance Energy Transfer Biosensors in Living Organisms. Molecular Pharmacology, 2015, 88, 589-595.	2.3	28
52	PLCÎ² isoforms differ in their subcellular location and their CT-domain dependent interaction with GÎ±q. Cellular Signalling, 2013, 25, 255-263.	3.6	27
53	Photolysis of Caged Phosphatidic Acid Induces Flagellar Excision in Chlamydomonas. Biochemistry, 2004, 43, 4263-4271.	2.5	25
54	Quantitative Single-Cell Analysis of Signaling Pathways Activated Immediately Downstream of Histamine Receptor Subtypes. Molecular Pharmacology, 2016, 90, 162-176.	2.3	23

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55	Optimizing FRET-FLIM Labeling Conditions to Detect Nuclear Protein Interactions at Native Expression Levels in Living Arabidopsis Roots. Frontiers in Plant Science, 2018, 9, 639.	3.6	21
56	Endothelial junctional membrane protrusions serve as hotspots for neutrophil transmigration. ELife, 2021, 10, .	6.0	20
57	Identical Accumulation and Immobilization of Sulfated and Nonsulfated Nod Factors in Host and Nonhost Root Hair Cell Walls. Molecular Plant-Microbe Interactions, 2003, 16, 884-892.	2.6	19
58	Kinetics of recruitment and allosteric activation of ARHGEF25 isoforms by the heterotrimeric G-protein GÎ±q. Scientific Reports, 2016, 6, 36825.	3.3	19
59	Regulation of PLCÎ²1a membrane anchoring by its substrate phosphatidylinositol (4,5)-bisphosphate. Journal of Cell Science, 2008, 121, 3770-3777.	2.0	18
60	A FRET-based biosensor for measuring GÎ±13 activation in single cells. PLoS ONE, 2018, 13, e0193705.	2.5	18
61	Imaging Lipids in Living Cells. Cold Spring Harbor Protocols, 2010, 2010, pdb.top83.	0.3	17
62	Identification of guanine nucleotide exchange factors that increase Cdc42 activity in primary human endothelial cells. Small GTPases, 2021, 12, 226-240.	1.6	17
63	Signaling efficiency of GÎ±q through its effectors p63RhoGEF and GEFT depends on their subcellular location. Scientific Reports, 2013, 3, 2284.	3.3	14
64	Chapter 5 Visible fluorescent proteins for FRET. Laboratory Techniques in Biochemistry and Molecular Biology / Edited By T S Work [and] E Work, 2009, 33, 171-223.	0.2	13
65	Forward genetic screens identify a role for the mitochondrial HER2 in E-2-hexenal responsiveness. Plant Molecular Biology, 2017, 95, 399-409.	3.9	12
66	Physical biology of GPCR signalling dynamics inferred from fluorescence spectroscopy and imaging. Current Opinion in Structural Biology, 2019, 55, 204-211.	5.7	12
67	A yeast FRET biosensor enlightens cAMP signaling. Molecular Biology of the Cell, 2021, 32, 1229-1240.	2.1	12
68	BA-plotteR â€“ A web tool for generating Bland-Altman plots and constructing limits of agreement. Research in Veterinary Science, 2021, 137, 281-286.	1.9	12
69	Single-cell imaging of ERK and Akt activation dynamics and heterogeneity induced by G-protein-coupled receptors. Journal of Cell Science, 2022, 135, .	2.0	12
70	Analysis of oligonucleotide annealing by electrophoresis in agarose gels using sodium borate conductive medium. Analytical Biochemistry, 2005, 343, 186-187.	2.4	11
71	Optimization of Fluorescent Proteins. Methods in Molecular Biology, 2014, 1076, 371-417.	0.9	11
72	<scp>SCA</scp>14 mutation V138E leads to partly unfolded <scp>PKC</scp>Î³ associated with an exposed Câ€terminus, altered kinetics, phosphorylation and enhanced insolubilization. Journal of Neurochemistry, 2014, 128, 741-751.	3.9	8

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73	Fluorescence resonance energy transfer imaging of PKC signalling in living cells using genetically encoded fluorescent probes. Journal of the Royal Society Interface, 2009, 6, .	3.4	7
74	Domain analysis of the Nematostella vectensis SNAIL ortholog reveals unique nucleolar localization that depends on the zinc-finger domains. Scientific Reports, 2015, 5, 12147.	3.3	6
75	Molecular perturbation strategies to examine spatiotemporal features of Rho GEF and Rho GTPase activity in living cells. Small GTPases, 2019, 10, 178-186.	1.6	6
76	Endothelial Focal Adhesions Are Functional Obstacles for Leukocytes During Basolateral Crawling. Frontiers in Immunology, 2021, 12, 667213.	4.8	6
77	The C-terminus of the oncoprotein TGAT is necessary for plasma membrane association and efficient RhoA-mediated signaling. BMC Cell Biology, 2018, 19, 6.	3.0	5
78	The anti-apoptotic activity associated with phosphatidylinositol transfer protein Î± activates the MAPK and Akt/PKB pathway. Biochimica Et Biophysica Acta - Molecular Cell Research, 2008, 1783, 1700-1706.	4.1	4
79	Transfection of Cells with DNA Encoding a Visible Fluorescent Protein-Tagged Lipid-Binding Domain. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5457.	0.3	4
80	HI-NESS: a family of genetically encoded DNA labels based on a bacterial nucleoid-associated protein. Nucleic Acids Research, 2022, 50, e10-e10.	14.5	4
81	Dispense with redundant P values. Nature, 2018, 554, 31-31.	27.8	4
82	Visualizing and Quantifying Data from Time-Lapse Imaging Experiments. Methods in Molecular Biology, 2022, 2440, 329-348.	0.9	3
83	Not So Dry After All: DRY Mutants of the AT1_A Receptor and H1 Receptor Can Induce G-Protein-Dependent Signaling. ACS Omega, 2020, 5, 2648-2659.	3.5	2
84	Imaging of Genetically Encoded FRET-Based Biosensors to Detect GPCR Activity. Methods in Molecular Biology, 2021, 2268, 159-178.	0.9	1
85	Rapid Colorimetric Quantification of Lipo-chitooligosaccharides from Mesorhizobium loti and Sinorhizobium meliloti. Molecular Plant-Microbe Interactions, 2002, 15, 859-865.	2.6	0
86	Engineering of Optimized Fluorescent Proteins: An Overview from a Cyan and FRET Perspective. Series in Cellular and Clinical Imaging, 2015, , 3-32.	0.2	0
87	A local VE-cadherin and Trio-based signaling complex stabilizes endothelial junctions through Rac1. Development (Cambridge), 2015, 142, e1.2-e1.2.	2.5	0
88	PlotXpress, a webtool for normalization and visualization of reporter expression data. F1000Research, 2021, 10, 1125.	1.6	0