Ulrich Rothbauer

List of Publications by Year
in descending order

98	8,019	76326 40	54911 84
papers	citations	h-index	g-index

123	123	123	12899
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Protein-binding assays in biological liquids using microscale thermophoresis. Nature Communications, 2010, 1, 100.	12.8	907
2	A Versatile Nanotrap for Biochemical and Functional Studies with Fluorescent Fusion Proteins. Molecular and Cellular Proteomics, 2008, 7, 282-289.	3.8	616
3	Targeting and tracing antigens in live cells with fluorescent nanobodies. Nature Methods, 2006, 3, 887-889.	19.0	613
4	Modulation of protein properties in living cells using nanobodies. Nature Structural and Molecular Biology, 2010, 17, 133-138.	8.2	494
5	SARS-CoV-2-derived peptides define heterologous and COVID-19-induced T cell recognition. Nature Immunology, 2021, 22, 74-85.	14.5	490
6	Camelid immunoglobulins and nanobody technology. Veterinary Immunology and Immunopathology, 2009, 128, 178-183.	1.2	424
7	Identifying specific protein interaction partners using quantitative mass spectrometry and bead proteomes. Journal of Cell Biology, 2008, 183, 223-239.	5.2	404
8	Dynamics of Dnmt1 interaction with the replication machinery and its role in postreplicative maintenance of DNA methylation. Nucleic Acids Research, 2007, 35, 4301-4312.	14.5	200
9	DNMT1 but not its interaction with the replication machinery is required for maintenance of DNA methylation in human cells. Journal of Cell Biology, 2007, 176, 565-571.	5.2	171
10	Np95 interacts with de novo DNA methyltransferases, Dnmt3a and Dnmt3b, and mediates epigenetic silencing of the viral CMV promoter in embryonic stem cells. EMBO Reports, 2009, 10, 1259-1264.	4.5	167
11	The role of the TIM8-13 complex in the import of Tim23 into mitochondria. EMBO Journal, 2000, 19, 6392-6400.	7.8	139
12	A peptide tag-specific nanobody enables high-quality labeling for dSTORM imaging. Nature Communications, 2018, 9, 930.	12.8	139
13	MeCP2 interacts with HP1 and modulates its heterochromatin association during myogenic differentiation. Nucleic Acids Research, 2007, 35, 5402-5408.	14.5	137
14	Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. Nature Communications, 2021, 12, 3109.	12.8	118
15	Peptides in headlock â€“ a novel high-affinity and versatile peptide-binding nanobody for proteomics and microscopy. Scientific Reports, 2016, 6, 19211.	3.3	111
16	Functional and Mutational Characterization of Human MIA40 Acting During Import into the Mitochondrial Intermembrane Space. Journal of Molecular Biology, 2005, 353, 517-528.	4.2	102
17	CpG-Methylation Regulates a Class of Epstein-Barr Virus Promoters. PLoS Pathogens, 2010, 6, e1001114.	4.7	96
18	Role of the Deafness Dystonia Peptide 1 (DDP1) in Import of Human Tim23 into the Inner Membrane of Mitochondria. Journal of Biological Chemistry, 2001, 276, 37327-37334.	3.4	89

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19	Differential recruitment of DNA Ligase I and III to DNA repair sites. Nucleic Acids Research, 2006, 34, 3523-3532.	14.5	88
20	Under the Microscope: Single-Domain Antibodies for Live-Cell Imaging and Super-Resolution Microscopy. Frontiers in Immunology, 2017, 8, 1030.	4.8	84
21	A Fluorescent Two-hybrid Assay for Direct Visualization of Protein Interactions in Living Cells. Molecular and Cellular Proteomics, 2008, 7, 2279-2287.	3.8	81
22	Live imaging of endogenous protein dynamics in zebrafish using chromobodies. Development (Cambridge), 2015, 142, 1879-1884.	2.5	79
23	The mitochondrial TIM22 preprotein translocase is highly conserved throughout the eukaryotic kingdom. FEBS Letters, 1999, 464, 41-47.	2.8	75
24	The C66W Mutation in the Deafness Dystonia Peptide 1 (DDP1) Affects the Formation of Functional DDP1Â·TIM13 Complexes in the Mitochondrial Intermembrane Space. Journal of Biological Chemistry, 2002, 277, 23287-23293.	3.4	75
25	c-Jun/c-Fos heterodimers regulate cellular genes via a newly identified class of methylated DNA sequence motifs. Nucleic Acids Research, 2014, 42, 3059-3072.	14.5	73
26	The Nucleoporin <scp>Nup</scp>358/<scp>Ran</scp>BP2 Promotes Nuclear Import in a Cargoâ€•and Transport Receptorâ€Specific Manner. Traffic, 2012, 13, 218-233.	2.7	71
27	Monitoring Interactions and Dynamics of Endogenous Beta-catenin With Intracellular Nanobodies in Living Cells*. Molecular and Cellular Proteomics, 2015, 14, 707-723.	3.8	71
28	Exploring beyond clinical routine SARS-CoV-2 serology using MultiCoV-Ab to evaluate endemic coronavirus cross-reactivity. Nature Communications, 2021, 12, 1152.	12.8	71
29	Recent progress in generating intracellular functional antibody fragments to target and trace cellular components in living cells. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 1933-1942.	2.3	70
30	Real-time analysis of epithelial-mesenchymal transition using fluorescent single-domain antibodies. Scientific Reports, 2015, 5, 13402.	3.3	70
31	Top-Down de Novo Protein Sequencing of a 13.6 kDa Camelid Single Heavy Chain Antibody by Matrix-Assisted Laser Desorption Ionization-Time-of-Flight/Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2010, 82, 3283-3292.	6.5	67
32	Magnetosome Expression of Functional Camelid Antibody Fragments (Nanobodies) in Magnetospirillum gryphiswaldense. Applied and Environmental Microbiology, 2011, 77, 6165-6171.	3.1	63
33	Magnetic Bead-Based Immunoassay Allows Rapid, Inexpensive, and Quantitative Detection of Human SARS-CoV-2 Antibodies. ACS Sensors, 2021, 6, 703-708.	7.8	61
34	Robust and durable serological response following pediatric SARS-CoV-2 infection. Nature Communications, 2022, 13, 128.	12.8	54
35	Cellular and humoral immunogenicity of a SARS-CoV-2 mRNA vaccine in patients on haemodialysis. EBioMedicine, 2021, 70, 103524.	6.1	53
36	Protein mislocalization in plant cells using a GFPâ€binding chromobody. Plant Journal, 2009, 60, 744-754.	5.7	51

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37	Processing and Editing of Overlapping tRNAs in Human Mitochondria. Journal of Biological Chemistry, 1998, 273, 31977-31984.	3.4	46
38	A bacterial-two-hybrid selection system for one-step isolation of intracellularly functional Nanobodies. Archives of Biochemistry and Biophysics, 2012, 526, 114-123.	3.0	46
39	Engineering antibodies and proteins for molecular in vivo imaging. Current Opinion in Biotechnology, 2011, 22, 882-887.	6.6	44
40	A Nexus Consisting of Beta-Catenin and Stat3 Attenuates BRAF Inhibitor Efficacy and Mediates Acquired Resistance to Vemurafenib. EBioMedicine, 2016, 8, 132-149.	6.1	44
41	Organization and Function of the Small Tim Complexes Acting along the Import Pathway of Metabolite Carriers into Mammalian Mitochondria. Journal of Biological Chemistry, 2004, 279, 13540-13546.	3.4	43
42	Tetra-Substituted Pyridinylimidazoles As Dual Inhibitors of p38Î± Mitogen-Activated Protein Kinase and c-Jun N-Terminal Kinase 3 for Potential Treatment of Neurodegenerative Diseases. Journal of Medicinal Chemistry, 2015, 58, 443-456.	6.4	43
43	NeutrobodyPlexâ€"monitoring SARSâ€CoVâ€2 neutralizing immune responses using nanobodies. EMBO Reports, 2021, 22, e52325.	4.5	43
44	Direct and Dynamic Detection of HIV-1 in Living Cells. PLoS ONE, 2012, 7, e50026.	2.5	42
45	Cascaded Photoinduced Drug Delivery to Cells from Multifunctional Coreâ€"Shell Mesoporous Silica. Advanced Healthcare Materials, 2012, 1, 316-320.	7.6	41
46	Dimerization of DNA methyltransferase 1 is mediated by its regulatory domain. Journal of Cellular Biochemistry, 2009, 106, 521-528.	2.6	40
47	The Fluorescent Two-Hybrid Assay to Screen for Proteinâ€"Protein Interaction Inhibitors in Live Cells. Journal of Biomolecular Screening, 2014, 19, 516-525.	2.6	35
48	Akt1 and Akt3 but not Akt2 through interaction with DNA-PKcs stimulate proliferation and post-irradiation cell survival of K-RAS-mutated cancer cells. Cell Death Discovery, 2017, 3, 17072.	4.7	35
49	A New Nanobody-Based Biosensor to Study Endogenous PARP1 In Vitro and in Live Human Cells. PLoS ONE, 2016, 11, e0151041.	2.5	34
50	Evidence for increased SARS-CoV-2 susceptibility and COVID-19 severity related to pre-existing immunity to seasonal coronaviruses. Cell Reports, 2021, 37, 110169.	6.4	34
51	A versatile assay for RNA-binding proteins in living cells. Rna, 2014, 20, 721-731.	3.5	33
52	Chromobodies to Quantify Changes of Endogenous Protein Concentration in Living Cells. Molecular and Cellular Proteomics, 2018, 17, 2518-2533.	3.8	28
53	Novel antibody derivatives for proteome and high-content analysis. Analytical and Bioanalytical Chemistry, 2010, 397, 3203-3208.	3.7	27
54	Case Study on Live Cell Apoptosis-Assay Using Lamin-Chromobody Cell-Lines for High-Content Analysis. Methods in Molecular Biology, 2012, 911, 569-575.	0.9	27

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55	Visualizing Epithelialâ€“Mesenchymal Transition Using the Chromobody Technology. Cancer Research, 2016, 76, 5592-5596.	0.9	27
56	Four-color single-molecule imaging with engineered tags resolves the molecular architecture of signaling complexes in the plasma membrane. Cell Reports Methods, 2022, 2, 100165.	2.9	27
57	The Fluorescent Two-Hybrid (F2H) Assay for Direct Analysis of Proteinâ€“Protein Interactions in Living Cells. Methods in Molecular Biology, 2012, 812, 275-282.	0.9	26
58	A novel epitope tagging system to visualize and monitor antigens in live cells with chromobodies. Scientific Reports, 2020, 10, 14267.	3.3	26
59	Role of BCL9L in transforming growth factor-Î² (TGF-Î²)-induced epithelial-to-mesenchymal-transition (EMT) and metastasis of pancreatic cancer. Oncotarget, 2016, 7, 73725-73738.	1.8	25
60	An Intracellular Nanotrap Redirects Proteins and Organelles in Live Bacteria. MBio, 2015, 6, .	4.1	24
61	Nanobodies Right in the Middle: Intrabodies as Toolbox to Visualize and Modulate Antigens in the Living Cell. Biomolecules, 2020, 10, 1701.	4.0	24
62	A Strategy to Optimize the Generation of Stable Chromobody Cell Lines for Visualization and Quantification of Endogenous Proteins in Living Cells. Antibodies, 2019, 8, 10.	2.5	20
63	Generation of an alpacaâ€derived nanobody recognizing Î³â€H2AX. FEBS Open Bio, 2015, 5, 779-788.	2.3	19
64	Nanobodies â€“ Little helpers unravelling intracellular signaling. Free Radical Biology and Medicine, 2021, 176, 46-61.	2.9	19
65	The interaction between anti-PF4 antibodies and anticoagulants in vaccine-induced thrombotic thrombocytopenia. Blood, 2022, 139, 3430-3438.	1.4	19
66	A Multiplexed High-Content Screening Approach Using the Chromobody Technology to Identify Cell Cycle Modulators in Living Cells. Journal of Biomolecular Screening, 2016, 21, 965-977.	2.6	18
67	Biparatopic nanobodies protect mice from lethal challenge with SARSâ€CoVâ€2 variants of concern. EMBO Reports, 2022, 23, e53865.	4.5	18
68	Diminishing Immune Responses against Variants of Concern in Dialysis Patients 4 Months after SARS-CoV-2 mRNA Vaccination. Emerging Infectious Diseases, 2022, 28, 743-750.	4.3	18
69	Single-Domain Antibodies for Targeting, Detection, and In Vivo Imaging of Human CD4+ Cells. Frontiers in Immunology, 2021, 12, 799910.	4.8	18
70	Regulation of DNA methyltransferase 1. Advances in Enzyme Regulation, 2006, 46, 224-234.	2.6	17
71	Decisive role of water and protein dynamics in residence time of p38Î± MAP kinase inhibitors. Nature Communications, 2022, 13, 569.	12.8	17
72	COVID-19 patient serum less potently inhibits ACE2-RBD binding for various SARS-CoV-2 RBD mutants. Scientific Reports, 2022, 12, 7168.	3.3	15

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73	Generation and Characterization of a Rat Monoclonal Antibody Specific for PCNA. Hybridoma, 2008, 27, 91-98.	0.4	14
74	Targeting of the prostacyclin specific IP1 receptor in lungs with molecular conjugates comprising prostaglandin I2 analogues. Biomaterials, 2010, 31, 2903-2911.	11.4	14
75	Coordinate regulation of Cyp2e1 by Î²-catenin- and hepatocyte nuclear factor 1Î±-dependent signaling. Toxicology, 2016, 350-352, 40-48.	4.2	14
76	Blocking Y-Box Binding Protein-1 through Simultaneous Targeting of PI3K and MAPK in Triple Negative Breast Cancers. Cancers, 2020, 12, 2795.	3.7	14
77	Improved targeting of human CD4+ T cells by nanobody-modified AAV2 gene therapy vectors. PLoS ONE, 2021, 16, e0261269.	2.5	14
78	Fluorescent Protein Specific Nanotraps to Study Proteinâ€“Protein Interactions and Histone-Tail Peptide Binding. , 2012, 911, 475-483.		12
79	Systematic Investigation of Polyurethane Biomaterial Surface Roughness on Human Immune Responses in vitro. BioMed Research International, 2020, 2020, 1-15.	1.9	11
80	HDX-MS for Epitope Characterization of a Therapeutic ANTIBODY Candidate on the Calcium-Binding Protein Annexin-A1. Antibodies, 2021, 10, 11.	2.5	11
81	Comparative Magnitude and Persistence of Humoral SARS-CoV-2 Vaccination Responses in the Adult Population in Germany. Frontiers in Immunology, 2022, 13, 828053.	4.8	11
82	Antibody Binding and Angiotensin-Converting Enzyme 2 Binding Inhibition Is Significantly Reduced for Both the BA.1 and BA.2 Omicron Variants. Clinical Infectious Diseases, 2023, 76, e240-e249.	5.8	11
83	Okadaic acid activates Wnt/Î²-catenin-signaling in human HepaRG cells. Archives of Toxicology, 2019, 93, 1927-1939.	4.2	10
84	From Enzyme to Whole Blood: Sequential Screening Procedure for Identification and Evaluation of p38 MAPK Inhibitors. Methods in Molecular Biology, 2016, 1360, 123-148.	0.9	10
85	Parallelizable Microfluidic Platform to Model and Assess In Vitro Cellular Barriers: Technology and Application to Study the Interaction of 3D Tumor Spheroids with Cellular Barriers. Biosensors, 2021, 11, 314.	4.7	9
86	Speed up to find the right ones: rapid discovery of functional nanobodies. Nature Structural and Molecular Biology, 2018, 25, 199-201.	8.2	7
87	Multiplexed Serum Antibody Screening Platform Using Virus Extracts from Endemic Coronaviridae and SARS-CoV-2. ACS Infectious Diseases, 2021, 7, 1596-1606.	3.8	7
88	A p38 Substrate-Specific MK2-EGFP Translocation Assay for Identification and Validation of New p38 Inhibitors in Living Cells: A Comprising Alternative for Acquisition of Cellular p38 Inhibition Data. PLoS ONE, 2014, 9, e95641.	2.5	7
89	Towards multiplexed proteinâ€“protein interaction analysis using protein tag-specific nanobodies. Journal of Proteomics, 2015, 127, 289-299.	2.4	6
90	Wnt signaling is boosted during intestinal regeneration by a CD44-positive feedback loop. Cell Death and Disease, 2022, 13, 168.	6.3	6

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91	A purification platform for antibodies and derived fragments using a de novo designed affinity adsorbent. Separation and Purification Technology, 2021, 265, 118476.	7.9	5
92	A Nanobody-Based Toolset to Monitor and Modify the Mitochondrial GTPase Miro1. Frontiers in Molecular Biosciences, 2022, 9, 835302.	3.5	5
93	A Novel PNGase Rc for Improved Protein N-Deglycosylation in Bioanalytics and Hydrogenâ€“Deuterium Exchange Coupled With Mass Spectrometry Epitope Mapping under Challenging Conditions. Analytical Chemistry, 2022, 94, 9863-9871.	6.5	5
94	Generation and characterization of the human induced pluripotent stem cell line NMIi010-A from peripheral blood mononuclear cells of a healthy 49â€“year old male individual. Stem Cell Research, 2021, 54, 102427.	0.7	2
95	Tris(hydroxymethyl)aminomethane Compatibility with N-Hydroxysuccinimide Ester Chemistry: Biotinylation of Peptides and Proteins in TRIS Buffer. Bioconjugate Chemistry, 2021, 32, 1960-1965.	3.6	1
96	Abstract 2754: Antibody-based tools forin vitroand live cell analysis of endogenous PARP1, an essential human DNA repair enzyme. , 2016, , .		0
97	Abstract 3054: Tracing EMT with fluorescent biosensors (chromobodies) in living cancer cells. , 2017, , .		0
98	Peptide-Tag Specific Nanobodies for Studying Proteins in Live Cells. Methods in Molecular Biology, 2022, 2446, 555-579.	0.9	0