Tobias P Dick

List of Publications by Year
in descending order

67 papers	8,094 citations	94433 37 h-index	114465 63 g-index
67 all docs	67 docs citations	67 times ranked	9176 citing authors

#	Article	IF	Citations
1	Real-time imaging of the intracellular glutathione redox potential. Nature Methods, 2008, 5, 553-559.	19.0	762
2	Exit from dormancy provokes DNA-damage-induced attrition in haematopoietic stem cells. Nature, 2015, 520, 549-552.	27.8	498
3	Peroxiredoxin-2 and STAT3 form a redox relay for H2O2 signaling. Nature Chemical Biology, 2015, 11, 64-70.	8.0	497
4	Fluorescent Protein-Based Redox Probes. Antioxidants and Redox Signaling, 2010, 13, 621-650.	5.4	462
5	Polysulfides Link H₂S to Protein Thiol Oxidation. Antioxidants and Redox Signaling, 2013, 19, 1749-1765.	5.4	410
6	Proximity-based Protein Thiol Oxidation by H2O2-scavenging Peroxidases. Journal of Biological Chemistry, 2009, 284, 31532-31540.	3.4	376
7	Guidelines for measuring reactive oxygen species and oxidative damage in cells and in vivo. Nature Metabolism, 2022, 4, 651-662.	11.9	356
8	Vitamin A-Retinoic Acid Signaling Regulates Hematopoietic Stem Cell Dormancy. Cell, 2017, 169, 807-823.e19.	28.9	339
9	InÂVivo Mapping of Hydrogen Peroxide and Oxidized Glutathione Reveals Chemical and Regional Specificity of Redox Homeostasis. Cell Metabolism, 2011, 14, 819-829.	16.2	298
10	N-Acetyl Cysteine Functions as a Fast-Acting Antioxidant by Triggering Intracellular H2S and Sulfane Sulfur Production. Cell Chemical Biology, 2018, 25, 447-459.e4.	5.2	270
11	A novel persulfide detection method reveals protein persulfide- and polysulfide-reducing functions of thioredoxin and glutathione systems. Science Advances, 2016, 2, e1500968.	10.3	250
12	Multiple glutathione disulfide removal pathways mediate cytosolic redox homeostasis. Nature Chemical Biology, 2013, 9, 119-125.	8.0	247
13	Dissecting Redox Biology Using Fluorescent Protein Sensors. Antioxidants and Redox Signaling, 2016, 24, 680-712.	5.4	247
14	Measuring EGSH and H2O2 with roGFP2-based redox probes. Free Radical Biology and Medicine, 2011, 51, 1943-1951.	2.9	232
15	Real-time monitoring of basal H2O2 levels with peroxiredoxin-based probes. Nature Chemical Biology, 2016, 12, 437-443.	8.0	187
16	A proton relay enhances H2O2 sensitivity of GAPDH to facilitate metabolic adaptation. Nature Chemical Biology, 2015, 11, 156-163.	8.0	184
17	A role for 2-Cys peroxiredoxins in facilitating cytosolic protein thiol oxidation. Nature Chemical Biology, 2018, 14, 148-155.	8.0	159
18	Glutathione redox potential in the mitochondrial intermembrane space is linked to the cytosol and impacts the Mia40 redox state. EMBO Journal, 2012, 31, 3169-3182.	7.8	154

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19	The mechanism of action of N-acetylcysteine (NAC): The emerging role of H2S and sulfane sulfur species. , 2021, 228, 107916.		154
20	The Conundrum of Hydrogen Peroxide Signaling and the Emerging Role of Peroxiredoxins as Redox Relay Hubs. Antioxidants and Redox Signaling, 2018, 28, 558-573.	5.4	145
21	Multiparametric optical analysis of mitochondrial redox signals during neuronal physiology and pathology in vivo. Nature Medicine, 2014, 20, 555-560.	30.7	143
22	Selective redox regulation of cytokine receptor signaling by extracellular thioredoxin-1. EMBO Journal, 2007, 26, 3086-3097.	7.8	132
23	Endoplasmic reticulum: Reduced and oxidized glutathione revisited. Journal of Cell Science, 2013, 126, 1604-17.	2.0	131
24	The â€˜mitoflashâ€™ probe cpYFP does not respond to superoxide. Nature, 2014, 514, E12-E14.	27.8	109
25	Exposing cells to H2O2: A quantitative comparison between continuous low-dose and one-time high-dose treatments. Free Radical Biology and Medicine, 2013, 60, 325-335.	2.9	91
26	Reactivation of oxidized PTP1B and PTEN by thioredoxinÂ1. FEBS Journal, 2014, 281, 3545-3558.	4.7	90
27	Mitochondrial â€˜flashesâ€™: a radical concept repHined. Trends in Cell Biology, 2012, 22, 503-508.	7.9	74
28	Sustained Submicromolar H2O2 Levels Induce Hepcidin via Signal Transducer and Activator of Transcription 3 (STAT3). Journal of Biological Chemistry, 2012, 287, 37472-37482.	3.4	67
29	Mouse redox histology using genetically encoded probes. Science Signaling, 2016, 9, rs1.	3.6	62
30	Imaging dynamic redox processes with genetically encoded probes. Journal of Molecular and Cellular Cardiology, 2014, 73, 43-49.	1.9	59
31	Cysteine perthiosulfenic acid (Cys-SSOH): A novel intermediate in thiol-based redox signaling?. Redox Biology, 2018, 14, 379-385.	9.0	56
32	3-Mercaptopyruvate sulfurtransferase: an enzyme at the crossroads of sulfane sulfur trafficking. Biological Chemistry, 2021, 402, 223-237.	2.5	50
33	Incidence and physiological relevance of protein thiol switches. Biological Chemistry, 2015, 396, 389-399.	2.5	48
34	Molecular basis for the distinct functions of redox-active and FeS-transfering glutaredoxins. Nature Communications, 2020, 11, 3445.	12.8	47
35	The yeast CLC protein counteracts vesicular acidification during iron starvation. Journal of Cell Science, 2010, 123, 2342-2350.	2.0	44
36	Metabolic Remodeling in Times of Stress: Who Shoots Faster than His Shadow?. Molecular Cell, 2015, 59, 519-521.	9.7	44

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37	Inaccurately Assembled Cytochrome<i>c</i>Oxidase Can Lead to Oxidative Stress-Induced Growth Arrest. Antioxidants and Redox Signaling, 2013, 18, 1597-1612.	5.4	43
38	Oxidation inhibits autophagy protein deconjugation from phagosomes to sustain MHC class II restricted antigen presentation. Nature Communications, 2021, 12, 1508.	12.8	43
39	Systematic in vitro assessment of responses of roGFP2-based probes to physiologically relevant oxidant species. Free Radical Biology and Medicine, 2017, 106, 329-338.	2.9	42
40	Real-time monitoring of peroxiredoxin oligomerization dynamics in living cells. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16313-16323.	7.1	36
41	Redox-sensitive GFP fusions for monitoring the catalytic mechanism and inactivation of peroxiredoxins in living cells. Redox Biology, 2018, 14, 549-556.	9.0	35
42	Pex35 is a regulator of peroxisome abundance. Journal of Cell Science, 2017, 130, 791-804.	2.0	34
43	Redox Biology on the rise. Biological Chemistry, 2012, 393, 999-1004.	2.5	33
44	A role for peroxiredoxins in H2O2- and MEKK-dependent activation of the p38 signaling pathway. Redox Biology, 2020, 28, 101340.	9.0	32
45	The yeast oligopeptide transporter Opt2 is localized to peroxisomes and affects glutathione redox homeostasis. FEMS Yeast Research, 2014, 14, n/a-n/a.	2.3	29
46	A role for annexin A2 in scaffolding the peroxiredoxin 2â€“STAT3 redox relay complex. Nature Communications, 2020, 11, 4512.	12.8	29
47	Oxidative stress as candidate therapeutic target to overcome microenvironmental protection of CLL. Leukemia, 2020, 34, 115-127.	7.2	23
48	Mitochondrial redox and pH signaling occurs in axonal and synaptic organelle clusters. Scientific Reports, 2016, 6, 23251.	3.3	22
49	In Vivo Imaging of H2O2 Production in Drosophila. Methods in Enzymology, 2013, 526, 61-82.	1.0	21
50	Glucose Acutely Reduces Cytosolic and Mitochondrial H₂O₂in Rat Pancreatic Beta Cells. Antioxidants and Redox Signaling, 2019, 30, 297-313.	5.4	21
51	Monitoring Intracellular Redox Changes in Ozone-Exposed Airway Epithelial Cells. Environmental Health Perspectives, 2013, 121, 312-317.	6.0	19
52	A tryparedoxin-coupled biosensor reveals a mitochondrial trypanothione metabolism in trypanosomes. ELife, 2020, 9, .	6.0	18
53	A comparison of Prx- and OxyR-based H2O2 probes expressed in S.Âcerevisiae. Journal of Biological Chemistry, 2021, 297, 100866.	3.4	16
54	Autoimmune neuroinflammation triggers mitochondrial oxidation in oligodendrocytes. Glia, 2022, 70, 2045-2061.	4.9	16

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55	Identification of Redox-Active Cell-Surface Proteins by Mechanism-Based Kinetic Trapping. Science's STKE: Signal Transduction Knowledge Environment, 2007, 2007, pl8.	3.9	15
56	In situ kinetic trapping reveals a fingerprint of reversible protein thiol oxidation in the mitochondrial matrix. Free Radical Biology and Medicine, 2011, 50, 1234-1241.	2.9	15
57	Utilizing Natural and Engineered Peroxiredoxins As Intracellular Peroxide Reporters. Molecules and Cells, 2016, 39, 46-52.	2.6	15
58	Redox sensitivity of the MyD88 immune signaling adapter. Free Radical Biology and Medicine, 2016, 101, 93-101.	2.9	15
59	Real-Time Assays for Monitoring the Influence of Sulfide and Sulfane Sulfur Species on Protein Thiol Redox States. Methods in Enzymology, 2015, 555, 57-77.	1.0	12
60	Commonly Used Alkylating Agents Limit Persulfide Detection by Converting Protein Persulfides into Thioethers. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
61	Highlight: Dynamics of Thiol-Based Redox Switches. Biological Chemistry, 2015, 396, 385-387.	2.5	7
62	Fluorescent Imaging of Redox Species in Multicellular Organisms. , 2013, , 119-155.		6
63	Monitoring yeast mitochondria with peroxiredoxin-based redox probes: the influence of oxygen and glucose availability. Interface Focus, 2017, 7, 20160143.	3.0	6
64	Comment on â€œEvidence that the ProPerDP method is inadequate for protein persulfidation detection due to lack of specificityâ€. Science Advances, 2021, 7, .	10.3	3
65	Thiol peroxidase-based redox relays. , 2022, , 307-320.		2
66	Dynamics of thiol-based redox switches: redox at its peak!. Biological Chemistry, 2021, 402, 221-222.	2.5	1
67	Commonly Used Alkylating Agents Limit Persulfide Detection by Converting Protein Persulfides into Thioethers. Angewandte Chemie, 0, , .	2.0	1