

Tobias C Walther

List of Publications by Year in descending order

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Version: 2024-02-01

82
papers

12,723
citations

50276

46
h-index

69250

77
g-index

108
all docs

108
docs citations

108
times ranked

13548
citing authors

#	ARTICLE	IF	CITATIONS
1	Lipid Droplets and Cellular Lipid Metabolism. Annual Review of Biochemistry, 2012, 81, 687-714.	11.1	1,264
2	Lipid Droplets Finally Get a Little R-E-S-P-E-C-T. Cell, 2009, 139, 855-860.	28.9	823
3	The biophysics and cell biology of lipid droplets. Nature Reviews Molecular Cell Biology, 2013, 14, 775-786.	37.0	759
4	Functional genomic screen reveals genes involved in lipid-droplet formation and utilization. Nature, 2008, 453, 657-661.	27.8	626
5	Triacylglycerol Synthesis Enzymes Mediate Lipid Droplet Growth by Relocalizing from the ER to Lipid Droplets. Developmental Cell, 2013, 24, 384-399.	7.0	623
6	Lipid Droplet Biogenesis. Annual Review of Cell and Developmental Biology, 2017, 33, 491-510.	9.4	520
7	Lipid droplets and liver disease: from basic biology to clinical implications. Nature Reviews Gastroenterology and Hepatology, 2017, 14, 343-355.	17.8	427
8	Phosphatidylcholine Synthesis for Lipid Droplet Expansion Is Mediated by Localized Activation of CTP:Phosphocholine Cytidylyltransferase. Cell Metabolism, 2011, 14, 504-515.	16.2	408
9	Balancing the fat: lipid droplets and human disease. EMBO Molecular Medicine, 2013, 5, 973-983.	6.9	367
10	Lipid droplet biogenesis. Current Opinion in Cell Biology, 2014, 29, 39-45.	5.4	347
11	The Endoplasmic Reticulum Enzyme DGAT2 Is Found in Mitochondria-associated Membranes and Has a Mitochondrial Targeting Signal That Promotes Its Association with Mitochondria. Journal of Biological Chemistry, 2009, 284, 5352-5361.	3.4	317
12	Eisosomes mark static sites of endocytosis. Nature, 2006, 439, 998-1003.	27.8	304
13	Plasma membrane stress induces relocalization of Slm proteins and activation of TORC2 to promote sphingolipid synthesis. Nature Cell Biology, 2012, 14, 542-547.	10.3	303
14	Seipin is required for converting nascent to mature lipid droplets. ELife, 2016, 5, .	6.0	292
15	A Role for Phosphatidic Acid in the Formation of "Supersized" Lipid Droplets. PLoS Genetics, 2011, 7, e1002201.	3.5	290
16	Global Proteome Turnover Analyses of the Yeasts S. Cerevisiae and S. Pombe. Cell Reports, 2014, 9, 1959-1965.	6.4	247
17	Targeting Fat: Mechanisms of Protein Localization to Lipid Droplets. Trends in Cell Biology, 2016, 26, 535-546.	7.9	242
18	Triglyceride Synthesis by DGAT1 Protects Adipocytes from Lipid-Induced ER Stress during Lipolysis. Cell Metabolism, 2017, 26, 407-418.e3.	16.2	241

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19	Arf1/COPI machinery acts directly on lipid droplets and enables their connection to the ER for protein targeting. <i>ELife</i> , 2014, 3, e01607.	6.0	240
20	The Problem of Establishing Relationships between Hepatic Steatosis and Hepatic Insulin Resistance. <i>Cell Metabolism</i> , 2012, 15, 570-573.	16.2	182
21	TORC2 Plasma Membrane Localization Is Essential for Cell Viability and Restricted to a Distinct Domain. <i>Molecular Biology of the Cell</i> , 2009, 20, 1565-1575.	2.1	176
22	Mechanism and Determinants of Amphipathic Helix-Containing Protein Targeting to Lipid Droplets. <i>Developmental Cell</i> , 2018, 44, 73-86.e4.	7.0	175
23	Lipidomic Analysis of α -Synuclein Neurotoxicity Identifies Stearoyl CoA Desaturase as a Target for Parkinson Treatment. <i>Molecular Cell</i> , 2019, 73, 1001-1014.e8.	9.7	173
24	Probing the Global Cellular Responses to Lipotoxicity Caused by Saturated Fatty Acids. <i>Molecular Cell</i> , 2019, 74, 32-44.e8.	9.7	170
25	LDAF1 and Seipin Form a Lipid Droplet Assembly Complex. <i>Developmental Cell</i> , 2019, 51, 551-563.e7.	7.0	152
26	Cryo-electron microscopy structure of the lipid droplet formation protein seipin. <i>Journal of Cell Biology</i> , 2018, 217, 4080-4091.	5.2	147
27	COPI buds 60-nm lipid droplets from reconstituted water-phospholipid-triacylglyceride interfaces, suggesting a tension clamp function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13244-13249.	7.1	146
28	Protein Correlation Profiles Identify Lipid Droplet Proteins with High Confidence. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 1115-1126.	3.8	138
29	Global analysis of the yeast osmotic stress response by quantitative proteomics. <i>Molecular BioSystems</i> , 2009, 5, 1337.	2.9	128
30	Protein Crowding Is a Determinant of Lipid Droplet Protein Composition. <i>Developmental Cell</i> , 2015, 34, 351-363.	7.0	128
31	DGAT1 mutation is linked to a congenital diarrheal disorder. <i>Journal of Clinical Investigation</i> , 2012, 122, 4680-4684.	8.2	127
32	Mutations disrupting the Kennedy phosphatidylcholine pathway in humans with congenital lipodystrophy and fatty liver disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8901-8906.	7.1	125
33	Pkh-kinases control eisosome assembly and organization. <i>EMBO Journal</i> , 2007, 26, 4946-4955.	7.8	117
34	The triglyceride synthesis enzymes DGAT1 and DGAT2 have distinct and overlapping functions in adipocytes. <i>Journal of Lipid Research</i> , 2019, 60, 1112-1120.	4.2	106
35	Neurotoxic microglia promote TDP-43 proteinopathy in progranulin deficiency. <i>Nature</i> , 2020, 588, 459-465.	27.8	98
36	A plasma-membrane E-MAP reveals links of the eisosome with sphingolipid metabolism and endosomal trafficking. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 901-908.	8.2	93

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37	High confidence proteomic analysis of yeast LDs identifies additional droplet proteins and reveals connections to dolichol synthesis and sterol acetylation. <i>Journal of Lipid Research</i> , 2014, 55, 1465-1477.	4.2	92
38	The leukodystrophy protein FAM126A (hyccin) regulates PtdIns(4)P synthesis at the plasma membrane. <i>Nature Cell Biology</i> , 2016, 18, 132-138.	10.3	91
39	Deciphering the Role of Lipid Droplets in Cardiovascular Disease. <i>Circulation</i> , 2018, 138, 305-315.	1.6	89
40	The GARP complex is required for cellular sphingolipid homeostasis. <i>ELife</i> , 2015, 4, .	6.0	88
41	An open-access volume electron microscopy atlas of whole cells and tissues. <i>Nature</i> , 2021, 599, 147-151.	27.8	80
42	Partitioning of MLX-Family Transcription Factors to Lipid Droplets Regulates Metabolic Gene Expression. <i>Molecular Cell</i> , 2020, 77, 1251-1264.e9.	9.7	78
43	Hepatocyte Deletion of Triglyceride Synthesis Enzyme Acyl CoA: Diacylglycerol Acyltransferase 2 Reduces Steatosis Without Increasing Inflammation or Fibrosis in Mice. <i>Hepatology</i> , 2019, 70, 1972-1985.	7.3	75
44	Structure and catalytic mechanism of a human triacylglycerol-synthesis enzyme. <i>Nature</i> , 2020, 581, 323-328.	27.8	75
45	The unfolded protein response and endoplasmic reticulum protein targeting machineries converge on the stress sensor IRE1. <i>ELife</i> , 2018, 7, .	6.0	71
46	Native SILAC: Metabolic Labeling of Proteins in Prototroph Microorganisms Based on Lysine Synthesis Regulation. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 1995-2005.	3.8	62
47	Lipid Droplets in Brown Adipose Tissue Are Dispensable for Cold-Induced Thermogenesis. <i>Cell Reports</i> , 2020, 33, 108348.	6.4	53
48	The proteome and transcriptome of the infectious metacyclic form of <i>Trypanosoma brucei</i> define quiescent cells primed for mammalian invasion. <i>Molecular Microbiology</i> , 2017, 106, 74-92.	2.5	53
49	Genome wide analysis of 3' UTR sequence elements and proteins regulating mRNA stability during maternal-to-zygotic transition in zebrafish. <i>Genome Research</i> , 2019, 29, 1100-1114.	5.5	49
50	Murine knockin model for progranulin-deficient frontotemporal dementia with nonsense-mediated mRNA decay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E2849-E2858.	7.1	47
51	Identification and characterization of a novel DGAT1 missense mutation associated with congenital diarrhea. <i>Journal of Lipid Research</i> , 2017, 58, 1230-1237.	4.2	44
52	Determinants of Endoplasmic Reticulum-to-Lipid Droplet Protein Targeting. <i>Developmental Cell</i> , 2020, 54, 471-487.e7.	7.0	42
53	A role for eisosomes in maintenance of plasma membrane phosphoinositide levels. <i>Molecular Biology of the Cell</i> , 2014, 25, 2797-2806.	2.1	41
54	Functional Contribution of the Spastic Paraplegia-Related Triglyceride Hydrolase DDHD2 to the Formation and Content of Lipid Droplets. <i>Biochemistry</i> , 2018, 57, 827-838.	2.5	41

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55	The Erv41–Erv46 complex serves as a retrograde receptor to retrieve escaped ER proteins. <i>Journal of Cell Biology</i> , 2015, 208, 197-209.	5.2	40
56	The CYTOLD and ERTOLD pathways for lipid droplet–protein targeting. <i>Trends in Biochemical Sciences</i> , 2022, 47, 39-51.	7.5	40
57	FIT2 is an acyl–coenzyme A diphosphatase crucial for endoplasmic reticulum homeostasis. <i>Journal of Cell Biology</i> , 2020, 219, .	5.2	37
58	Rab18 is not necessary for lipid droplet biogenesis or turnover in human mammary carcinoma cells. <i>Molecular Biology of the Cell</i> , 2018, 29, 2045-2054.	2.1	34
59	Inhibition of sphingolipid synthesis improves outcomes and survival in GARP mutant <i>wobbler</i> mice, a model of motor neuron degeneration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10565-10574.	7.1	33
60	Seipin forms a flexible cage at lipid droplet formation sites. <i>Nature Structural and Molecular Biology</i> , 2022, 29, 194-202.	8.2	33
61	Lipid droplets go nuclear. <i>Journal of Cell Biology</i> , 2016, 212, 7-8.	5.2	28
62	Rom2-dependent Phosphorylation of Elo2 Controls the Abundance of Very Long-chain Fatty Acids. <i>Journal of Biological Chemistry</i> , 2015, 290, 4238-4247.	3.4	26
63	Secreted Progranulin Is a Homodimer and Is Not a Component of High Density Lipoproteins (HDL). <i>Journal of Biological Chemistry</i> , 2013, 288, 8627-8635.	3.4	24
64	The Lipid Droplet Knowledge Portal: A resource for systematic analyses of lipid droplet biology. <i>Developmental Cell</i> , 2022, 57, 387-397.e4.	7.0	22
65	Seipin transmembrane segments critically function in triglyceride nucleation and lipid droplet budding from the membrane. <i>ELife</i> , 2022, 11, .	6.0	22
66	Progranulin in the hematopoietic compartment protects mice from atherosclerosis. <i>Atherosclerosis</i> , 2018, 277, 145-154.	0.8	20
67	A Systematic Protein Turnover Map for Decoding Protein Degradation. <i>Cell Reports</i> , 2020, 33, 108378.	6.4	20
68	Proteomic and phosphoproteomic analyses of yeast reveal the global cellular response to sphingolipid depletion. <i>Proteomics</i> , 2016, 16, 2759-2763.	2.2	17
69	Mice lacking lipid droplet-associated hydrolase, a gene linked to human prostate cancer, have normal cholesterol ester metabolism. <i>Journal of Lipid Research</i> , 2017, 58, 226-235.	4.2	16
70	Global Analyses of Selective Insulin Resistance in Hepatocytes Caused by Palmitate Lipotoxicity. <i>Molecular and Cellular Proteomics</i> , 2018, 17, 836-849.	3.8	15
71	Combined immunodeficiency due to a mutation in the β 1 subunit of the coat protein I complex. <i>Journal of Clinical Investigation</i> , 2021, 131, .	8.2	15
72	Key Factors Governing Initial Stages of Lipid Droplet Formation. <i>Journal of Physical Chemistry B</i> , 2022, 126, 453-462.	2.6	15

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73	Stromal cell-derived factor 2 is critical for Hsp90-dependent eNOS activation. <i>Science Signaling</i> , 2015, 8, ra81.	3.6	14
74	Conditional targeting of phosphatidylserine decarboxylase to lipid droplets. <i>Biology Open</i> , 2021, 10, .	1.2	10
75	Restoration of Light Sheet Multi-View Data with the Huygens Fusion and Deconvolution Wizard. <i>Microscopy Today</i> , 2018, 26, 12-19.	0.3	6
76	Un-phased: Lipid Droplets Modulate the Bioavailability of Antibiotics. <i>Developmental Cell</i> , 2019, 50, 530-532.	7.0	3
77	Lowe syndrome-linked endocytic adaptors direct membrane cycling kinetics with OCRL in <i>Dictyostelium discoideum</i> . <i>Molecular Biology of the Cell</i> , 2019, 30, 2268-2282.	2.1	2
78	O1a ^{01a02} : A NOVEL MURINE KNOCK-IN MODEL FOR PROGRANULIN-DEFICIENT FRONTOTEMPORAL DEMENTIA WITH NONSENSE-MEDIATED MRNA DECAAY. <i>Alzheimer's and Dementia</i> , 2018, 14, P212.	0.8	0
79	The power of two: lessons from a scientific partnership. <i>Journal of Clinical Investigation</i> , 2021, 131, .	8.2	0
80	The Cell Biology of Neutral Lipid Synthesis and Storage. <i>FASEB Journal</i> , 2012, 26, .	0.5	0
81	Cell Biology of Neutral Lipid Storage. <i>FASEB Journal</i> , 2013, 27, 333.1.	0.5	0
82	A Novel Murine Knock-In Model for Progranulin-Deficient Frontotemporal Dementia with Nonsense-mediated mRNA Decay. <i>FASEB Journal</i> , 2018, 32, 807.8.	0.5	0