

Richard A Rachubinski

List of Publications by Year in descending order

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98
papers

5,677
citations

53660

45
h-index

82410

72
g-index

116
all docs

116
docs citations

116
times ranked

3570
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular cloning and expression of the major protein kinase C substrate of platelets. <i>Nature</i> , 1988, 333, 470-473.	13.7	250
2	How proteins penetrate peroxisomes. <i>Cell</i> , 1995, 83, 525-528.	13.5	200
3	Transcriptome profiling to identify genes involved in peroxisome assembly and function. <i>Journal of Cell Biology</i> , 2002, 158, 259-271.	2.3	175
4	The life cycle of the peroxisome. <i>Nature Reviews Molecular Cell Biology</i> , 2001, 2, 357-368.	16.1	173
5	Mutants of the Yeast <i>Yarrowia lipolytica</i> Defective in Protein Exit from the Endoplasmic Reticulum Are Also Defective in Peroxisome Biogenesis. <i>Molecular and Cellular Biology</i> , 1998, 18, 2789-2803.	1.1	159
6	Pex3p Initiates the Formation of a Preperoxisomal Compartment from a Subdomain of the Endoplasmic Reticulum in <i>Saccharomyces cerevisiae</i> *. <i>Journal of Biological Chemistry</i> , 2005, 280, 34933-34939.	1.6	149
7	Fusion of Small Peroxisomal Vesicles in Vitro Reconstructs an Early Step in the in Vivo Multistep Peroxisome Assembly Pathway of <i>Yarrowia lipolytica</i> . <i>Journal of Cell Biology</i> , 2000, 148, 29-44.	2.3	140
8	Genome-wide SWAp-Tag yeast libraries for proteome exploration. <i>Nature Methods</i> , 2018, 15, 617-622.	9.0	134
9	Acyl-CoA oxidase is imported as a heteropentameric, cofactor-containing complex into peroxisomes of <i>Yarrowia lipolytica</i> . <i>Journal of Cell Biology</i> , 2002, 156, 481-494.	2.3	124
10	The Peroxisomal Membrane Protein Inp2p Is the Peroxisome-Specific Receptor for the Myosin V Motor Myo2p of <i>Saccharomyces cerevisiae</i> . <i>Developmental Cell</i> , 2006, 10, 587-600.	3.1	124
11	Enlarged Peroxisomes Are Present in Oleic Acid-grown <i>Yarrowia lipolytica</i> Overexpressing the PEX16 Gene Encoding an Intraperoxisomal Peripheral Membrane Peroxin. <i>Journal of Cell Biology</i> , 1997, 137, 1265-1278.	2.3	123
12	A New Definition for the Consensus Sequence of the Peroxisome Targeting Signal Type 2. <i>Journal of Molecular Biology</i> , 2004, 341, 119-134.	2.0	123
13	Pex20p of the Yeast <i>Yarrowia lipolytica</i> Is Required for the Oligomerization of Thiolase in the Cytosol and for Its Targeting to the Peroxisome. <i>Journal of Cell Biology</i> , 1998, 142, 403-420.	2.3	122
14	Peroxisome-Mediated Metabolism Is Required for Immune Response to Microbial Infection. <i>Immunity</i> , 2017, 47, 93-106.e7.	6.6	114
15	The Pex16p Homolog SSE1 and Storage Organelle Formation in <i>Arabidopsis</i> Seeds. <i>Science</i> , 1999, 284, 328-330.	6.0	110
16	Pex30p, Pex31p, and Pex32p Form a Family of Peroxisomal Integral Membrane Proteins Regulating Peroxisome Size and Number in <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2004, 15, 665-677.	0.9	109
17	Maintaining Peroxisome Populations: A Story of Division and Inheritance. <i>Annual Review of Cell and Developmental Biology</i> , 2007, 23, 321-344.	4.0	107
18	Peroxisomal Membrane Fusion Requires Two Aaa Family Atpases, Pex1p and Pex6p. <i>Journal of Cell Biology</i> , 2000, 150, 881-886.	2.3	104

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19	An ER-peroxisome tether exerts peroxisome population control in yeast. <i>EMBO Journal</i> , 2013, 32, 2439-2453.	3.5	103
20	The endoplasmic reticulum plays an essential role in peroxisome biogenesis. <i>Trends in Biochemical Sciences</i> , 1998, 23, 231-233.	3.7	100
21	Inp1p is a peroxisomal membrane protein required for peroxisome inheritance in <i>Saccharomyces cerevisiae</i> . <i>Journal of Cell Biology</i> , 2005, 169, 765-775.	2.3	99
22	Extreme genome diversity in the hyper-prevalent parasitic eukaryote <i>Blastocystis</i> . <i>PLoS Biology</i> , 2017, 15, e2003769.	2.6	99
23	Pex11-related Proteins in Peroxisome Dynamics: A Role for the Novel Peroxin Pex27p in Controlling Peroxisome Size and Number in <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2003, 14, 4089-4102.	0.9	97
24	The Orphan Nuclear Hormone Receptor LXR β Interacts with the Peroxisome Proliferator-activated Receptor and Inhibits Peroxisome Proliferator Signaling. <i>Journal of Biological Chemistry</i> , 1996, 271, 9189-9192.	1.6	95
25	Rapid identification and characterization of peroxisomal assembly mutants in <i>Yarrowia lipolytica</i> . <i>Yeast</i> , 1993, 9, 507-517.	0.8	84
26	YHR150w and YDR479c encode peroxisomal integral membrane proteins involved in the regulation of peroxisome number, size, and distribution in <i>Saccharomyces cerevisiae</i> . <i>Journal of Cell Biology</i> , 2003, 161, 321-332.	2.3	83
27	Dynamic Changes in the Subcellular Distribution of Gpd1p in Response to Cell Stress. <i>Journal of Biological Chemistry</i> , 2010, 285, 6739-6749.	1.6	78
28	Molecular mechanisms of organelle inheritance: lessons from peroxisomes in yeast. <i>Nature Reviews Molecular Cell Biology</i> , 2010, 11, 644-654.	16.1	76
29	Myosin-driven peroxisome partitioning in <i>S. cerevisiae</i> . <i>Journal of Cell Biology</i> , 2009, 186, 541-554.	2.3	73
30	Flavivirus Infection Impairs Peroxisome Biogenesis and Early Antiviral Signaling. <i>Journal of Virology</i> , 2015, 89, 12349-12361.	1.5	73
31	Dysferlin Domain-containing Proteins, Pex30p and Pex31p, Localized to Two Compartments, Control the Number and Size of Oleate-induced Peroxisomes in <i>Pichia pastoris</i> . <i>Molecular Biology of the Cell</i> , 2008, 19, 885-898.	0.9	72
32	Endoplasmic Reticulum-Associated Secretory Proteins Sec20p, Sec39p, and Dsl1p Are Involved in Peroxisome Biogenesis. <i>Eukaryotic Cell</i> , 2009, 8, 830-843.	3.4	68
33	Receptor-interacting protein 140 interacts with and inhibits transactivation by, peroxisome proliferator-activated receptor β and liver-X-receptor β . <i>Molecular and Cellular Endocrinology</i> , 1998, 146, 69-76.	1.6	67
34	Phosphorylation-dependent Activation of Peroxisome Proliferator Protein PEX11 Controls Peroxisome Abundance. <i>Journal of Biological Chemistry</i> , 2010, 285, 6670-6680.	1.6	64
35	Molecular analysis of pleckstrin: The major protein kinase c substrate of platelets. <i>Journal of Cellular Biochemistry</i> , 1989, 40, 133-145.	1.2	62
36	Peroxisome division in the yeast <i>Yarrowia lipolytica</i> is regulated by a signal from inside the peroxisome. <i>Journal of Cell Biology</i> , 2003, 162, 1255-1266.	2.3	61

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37	Cloning and sequence determination of cDNA encoding a second rat liver peroxisomal 3-ketoacyl-CoA thiolase. <i>Gene</i> , 1990, 91, 193-199.	1.0	60
38	Orchestrating organelle inheritance in <i>Saccharomyces cerevisiae</i> . <i>Current Opinion in Microbiology</i> , 2007, 10, 528-538.	2.3	57
39	Genome-wide analysis of signaling networks regulating fatty acid-induced gene expression and organelle biogenesis. <i>Journal of Cell Biology</i> , 2008, 181, 281-292.	2.3	55
40	The peroxin Pex34p functions with the Pex11 family of peroxisomal divisional proteins to regulate the peroxisome population in yeast. <i>Molecular Biology of the Cell</i> , 2011, 22, 1727-1738.	0.9	55
41	A <i>Drosophila</i> model for the Zellweger spectrum of peroxisome biogenesis disorders. <i>DMM Disease Models and Mechanisms</i> , 2011, 4, 659-672.	1.2	54
42	ESCRT-III is required for scissioning new peroxisomes from the endoplasmic reticulum. <i>Journal of Cell Biology</i> , 2018, 217, 2087-2102.	2.3	53
43	RNA interference of peroxisome-related genes in <i>C. elegans</i> : a new model for human peroxisomal disorders. <i>Physiological Genomics</i> , 2002, 10, 79-91.	1.0	49
44	Peroxisome Biogenesis Occurs in an Unsynchronized Manner in Close Association with the Endoplasmic Reticulum in Temperature-sensitive <i>Yarrowia lipolytica</i> Pex3p Mutants. <i>Molecular Biology of the Cell</i> , 2003, 14, 939-957.	0.9	48
45	Peroxisins Pex30 and Pex29 Dynamically Associate with Reticulons to Regulate Peroxisome Biogenesis from the Endoplasmic Reticulum. <i>Journal of Biological Chemistry</i> , 2016, 291, 15408-15427.	1.6	48
46	The Peroxisome Proliferator Response Element of the Gene Encoding the Peroxisomal β -Oxidation Enzyme Enoyl-CoA Hydratase/3-Hydroxyacyl-CoA Dehydrogenase Is a Target for Constitutive Androstane Receptor β /9-cis-Retinoic Acid Receptor-mediated Transactivation. <i>Journal of Biological Chemistry</i> , 2000, 275, 4345-4350.	1.6	47
47	<i>Yarrowia lipolytica</i> Cells Mutant for the Peroxisomal Peroxin Pex19p Contain Structures Resembling Wild-Type Peroxisomes. <i>Molecular Biology of the Cell</i> , 2001, 12, 3353-3364.	0.9	45
48	The <i>Yarrowia lipolytica</i> Gene PAY5 Encodes a Peroxisomal Integral Membrane Protein Homologous to the Mammalian Peroxisome Assembly Factor PAF-1. <i>Journal of Biological Chemistry</i> , 1996, 271, 20300-20306.	1.6	44
49	Expression and functional profiling reveal distinct gene classes involved in fatty acid metabolism. <i>Molecular Systems Biology</i> , 2006, 2, 2006.0009.	3.2	44
50	Antibodies directed against a yeast carboxyl-terminal peroxisomal targeting signal specifically recognize peroxisomal proteins from various yeasts. <i>Yeast</i> , 1992, 8, 721-734.	0.8	42
51	Mutants of the <i>Yarrowia lipolytica</i> PEX23 Gene Encoding an Integral Peroxisomal Membrane Peroxin Mislocalize Matrix Proteins and Accumulate Vesicles Containing Peroxisomal Matrix and Membrane Proteins. <i>Molecular Biology of the Cell</i> , 2000, 11, 141-152.	0.9	42
52	Pex3 peroxisome biogenesis proteins function in peroxisome inheritance as class V myosin receptors. <i>Journal of Cell Biology</i> , 2009, 187, 233-246.	2.3	42
53	The short heterodimer partner receptor differentially modulates peroxisome proliferator-activated receptor β -mediated transcription from the peroxisome proliferator-response elements of the genes encoding the peroxisomal β -oxidation enzymes acyl-CoA oxidase and hydratase-dehydrogenase. <i>Molecular and Cellular Endocrinology</i> , 2001, 176, 49-56.	1.6	39
54	How peroxisomes partition between cells. A story of yeast, mammals and filamentous fungi. <i>Current Opinion in Cell Biology</i> , 2016, 41, 73-80.	2.6	39

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55	The primary structure of a peroxisomal fatty acyl-CoA oxidase from the yeast <i>Candida tropicalis</i> pK233. <i>Gene</i> , 1987, 51, 119-128.	1.0	37
56	Sharing the cell's bounty – organelle inheritance in yeast. <i>Journal of Cell Science</i> , 2015, 128, 621-30.	1.2	37
57	<i>Yarrowia lipolytica</i> Cells Mutant for the PEX24 Gene Encoding a Peroxisomal Membrane Peroxin Mislocalize Peroxisomal Proteins and Accumulate Membrane Structures Containing Both Peroxisomal Matrix and Membrane Proteins. <i>Molecular Biology of the Cell</i> , 2002, 13, 2681-2691.	0.9	36
58	Mutations in the PAY5 Gene of the Yeast <i>Yarrowia lipolytica</i> Cause the Accumulation of Multiple Subpopulations of Peroxisomes. <i>Journal of Biological Chemistry</i> , 1996, 271, 20307-20314.	1.6	34
59	Peroxisome Biogenesis in the Yeast <i>Yarrowia lipolytica</i> . <i>Cell Biochemistry and Biophysics</i> , 2000, 32, 21-26.	0.9	34
60	A Role for the Peroxin Pex8p in Pex20p-dependent Thiolase Import into Peroxisomes of the Yeast <i>Yarrowia lipolytica</i> . <i>Journal of Biological Chemistry</i> , 2001, 276, 1618-1625.	1.6	34
61	Transport and Retention Mechanisms Govern Lipid Droplet Inheritance in <i>Saccharomyces cerevisiae</i> . <i>Traffic</i> , 2015, 16, 298-309.	1.3	34
62	Signaling dynamics and peroxisomes. <i>Current Opinion in Cell Biology</i> , 2015, 35, 131-136.	2.6	30
63	Orphan Nuclear Hormone Receptor RevErb1 \pm Modulates Expression from the Promoter of the Hydratase-dehydrogenase Gene by Inhibiting Peroxisome Proliferator-activated Receptor 1 \pm -Dependent Transactivation. <i>Journal of Biological Chemistry</i> , 1999, 274, 22895-22900.	1.6	28
64	Peroxisome Biogenesis: Something Old, Something New, Something Borrowed. <i>Physiology</i> , 2010, 25, 347-356.	1.6	28
65	Evolutionary mechanisms for establishing eukaryotic cellular complexity. <i>Trends in Cell Biology</i> , 2014, 24, 435-442.	3.6	26
66	Peroxisomes exhibit compromised structure and matrix protein content in SARS-CoV-2-infected cells. <i>Molecular Biology of the Cell</i> , 2021, 32, 1273-1282.	0.9	26
67	Chapter 5 Spatiotemporal Dynamics of the ER-derived Peroxisomal Endomembrane System. <i>International Review of Cell and Molecular Biology</i> , 2008, 272, 191-244.	1.6	25
68	Dysfunctional peroxisomes compromise gut structure and host defense by increased cell death and Tor-dependent autophagy. <i>Molecular Biology of the Cell</i> , 2018, 29, 2766-2783.	0.9	25
69	YIBM1 encodes a 14-3-3 protein that promotes filamentous growth in the dimorphic yeast <i>Yarrowia lipolytica</i> . The GenBank accession numbers for the YIBM1 and YIBM2 sequences reported in this study are AY090661 and AY090662, respectively. <i>Microbiology (United Kingdom)</i> , 2002, 148, 3725-3735.	0.7	25
70	Sharing the wealth: Peroxisome inheritance in budding yeast. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2006, 1763, 1669-1677.	1.9	24
71	Genome-Wide Analysis of Effectors of Peroxisome Biogenesis. <i>PLoS ONE</i> , 2010, 5, e11953.	1.1	24
72	A Systematic Cell-based Analysis of Localization of Predicted <i>Drosophila</i> Peroxisomal Proteins. <i>Traffic</i> , 2016, 17, 536-553.	1.3	24

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73	Subtype- and response element-dependent differences in transactivation by peroxisome proliferator-activated receptors α and β . <i>Molecular and Cellular Endocrinology</i> , 1998, 141, 153-162.	1.6	22
74	Peroxisomal Peripheral Membrane Protein Ylnp1p Is Required for Peroxisome Inheritance and Influences the Dimorphic Transition in the Yeast <i>Yarrowia lipolytica</i> . <i>Eukaryotic Cell</i> , 2007, 6, 1528-1537.	3.4	19
75	Cross-talk between Orphan Nuclear Hormone Receptor RZR α and Peroxisome Proliferator-activated Receptor α in Regulation of the Peroxisomal Hydratase-Dehydrogenase Gene. <i>Journal of Biological Chemistry</i> , 1998, 273, 31442-31448.	1.6	18
76	Peroxisome prognostications: Exploring the birth, life, and death of an organelle. <i>Journal of Cell Biology</i> , 2020, 219, .	2.3	18
77	Peroxisome biogenesis in yeast. <i>Molecular Microbiology</i> , 1992, 6, 3455-3460.	1.2	16
78	An ancestral role in peroxisome assembly is retained by the divisional peroxin Pex11 in the yeast <i>Yarrowia lipolytica</i> . <i>Journal of Cell Science</i> , 2015, 128, 1327-1340.	1.2	16
79	The peroxisome: an up-and-coming organelle in immunometabolism. <i>Trends in Cell Biology</i> , 2023, 33, 70-86.	3.6	16
80	Doing the math. <i>Communicative and Integrative Biology</i> , 2013, 6, e26901.	0.6	15
81	Motors, Anchors, and Connectors: Orchestrators of Organelle Inheritance. <i>Annual Review of Cell and Developmental Biology</i> , 2015, 31, 55-81.	4.0	14
82	Distinct Roles for Peroxisomal Targeting Signal Receptors Pex5 and Pex7 in <i>Drosophila</i> . <i>Genetics</i> , 2019, 211, 141-149.	1.2	13
83	The early-acting glycosome biogenic protein Pex3 is essential for trypanosome viability. <i>Life Science Alliance</i> , 2019, 2, e201900421.	1.3	13
84	Interplay of the Peroxisome Proliferator-activated Receptor and the Thyroid Hormone Receptor-signaling Pathways in Regulating Peroxisome Proliferator-responsive Genes. <i>Annals of the New York Academy of Sciences</i> , 1996, 804, 214-230.	1.8	12
85	Dynein light chain interaction with the peroxisomal import docking complex modulates peroxisome biogenesis in yeast. <i>Journal of Cell Science</i> , 2013, 126, 4698-706.	1.2	12
86	Emergent Complexity in Myosin V-Based Organelle Inheritance. <i>Molecular Biology and Evolution</i> , 2012, 29, 975-984.	3.5	11
87	Pex20p functions as the receptor for non α -PTS1/non α -PTS2 acyl-CoA oxidase import into peroxisomes of the yeast <i>Yarrowia lipolytica</i> . <i>Traffic</i> , 2019, 20, 504-515.	1.3	11
88	Modulation of the cell membrane lipid milieu by peroxisomal β -oxidation induces Rho1 signaling to trigger inflammatory responses. <i>Cell Reports</i> , 2022, 38, 110433.	2.9	11
89	Site-directed mutagenesis of alanine-382 of human antithrombin III. <i>FEBS Letters</i> , 1991, 280, 254-258.	1.3	9
90	Origin and spatiotemporal dynamics of the peroxisomal endomembrane system. <i>Frontiers in Physiology</i> , 2014, 5, 493.	1.3	9

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91	A Small Molecule Inhibitor of Pex3â€Pex19 Interaction Disrupts Glycosome Biogenesis and Causes Lethality in Trypanosoma brucei. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 703603.	1.8	8
92	Sharing with your children: Mechanisms of peroxisome inheritance. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 1014-1018.	1.9	7
93	Determinants of the assembly, integrity and maintenance of the endoplasmic reticulumâ€peroxisome tether. <i>Traffic</i> , 2019, 20, 213-225.	1.3	7
94	Involvement of SNARE protein Ykt6 in glycosome biogenesis in Trypanosoma brucei. <i>Molecular and Biochemical Parasitology</i> , 2017, 218, 28-37.	0.5	5
95	Reconstitution of human peroxisomal Î²-oxidation in yeast. <i>FEMS Yeast Research</i> , 2018, 18, .	1.1	3
96	The Nitric Oxide Donor, S-Nitrosoglutathione, Rescues Peroxisome Number and Activity Defects in PEX1G843D Mild Zellweger Syndrome Fibroblasts. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 714710.	1.8	3
97	Signaling during Organelle Division and Inheritance. , 2010, , 2555-2561.		0
98	Rnq2, A Novel Prion of Saccharomyces cerevisiae. <i>FASEB Journal</i> , 2008, 22, 249-249.	0.2	0