Richard J Youle

List of Publications by Year
in descending order

135 papers	61,778 citations	3874 91 h-index	14779 131 g-index
170 all docs	170 docs citations	170 times ranked	55232 citing authors

#	Article	IF	Citations
1	The BCL-2 protein family: opposing activities that mediate cell death. Nature Reviews Molecular Cell Biology, 2008, 9, 47-59.	16.1	3,898
2	Parkin is recruited selectively to impaired mitochondria and promotes their autophagy. Journal of Cell Biology, 2008, 183, 795-803.	2.3	3,315
3	Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy, 2012, 8, 445-544.	4.3	3,122
4	Mitochondrial Fission, Fusion, and Stress. Science, 2012, 337, 1062-1065.	6.0	2,645
5	Mechanisms of mitophagy. Nature Reviews Molecular Cell Biology, 2011, 12, 9-14.	16.1	2,638
6	PINK1 Is Selectively Stabilized on Impaired Mitochondria to Activate Parkin. PLoS Biology, 2010, 8, e1000298.	2.6	2,299
7	The ubiquitin kinase PINK1 recruits autophagy receptors to induce mitophagy. Nature, 2015, 524, 309-314.	13.7	1,969
8	Movement of Bax from the Cytosol to Mitochondria during Apoptosis. Journal of Cell Biology, 1997, 139, 1281-1292.	2.3	1,667
9	The Roles of PINK1, Parkin, and Mitochondrial Fidelity in Parkinsonâ€™s Disease. Neuron, 2015, 85, 257-273.	3.8	1,632
10	The Role of Dynamin-Related Protein 1, a Mediator of Mitochondrial Fission, in Apoptosis. Developmental Cell, 2001, 1, 515-525.	3.1	1,564
11	The Role of Mitochondria in Apoptosis. Annual Review of Genetics, 2009, 43, 95-118.	3.2	1,503
12	Mitophagy and Quality Control Mechanisms inÂMitochondrial Maintenance. Current Biology, 2018, 28, R170-R185.	1.8	1,262
13	Mitochondria in Apoptosis: Bcl-2 Family Members and Mitochondrial Dynamics. Developmental Cell, 2011, 21, 92-101.	3.1	1,198
14	Proteasome and p97 mediate mitophagy and degradation of mitofusins induced by Parkin. Journal of Cell Biology, 2010, 191, 1367-1380.	2.3	1,161
15	Mitochondrial dynamics and apoptosis. Genes and Development, 2008, 22, 1577-1590.	2.7	1,080
16	Mitochondrial membrane potential regulates PINK1 import and proteolytic destabilization by PARL. Journal of Cell Biology, 2010, 191, 933-942.	2.3	1,078
17	The Mitochondrial Basis of Aging. Molecular Cell, 2016, 61, 654-666.	4.5	1,011
18	Structure of Bax. Cell, 2000, 103, 645-654.	13.5	1,008

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19	PINK1 phosphorylates ubiquitin to activate Parkin E3 ubiquitin ligase activity. Journal of Cell Biology, 2014, 205, 143-153.	2.3	1,004
20	Roles of the Mammalian Mitochondrial Fission and Fusion Mediators Fis1, Drp1, and Opa1 in Apoptosis. Molecular Biology of the Cell, 2004, 15, 5001-5011.	0.9	920
21	Mff is an essential factor for mitochondrial recruitment of Drp1 during mitochondrial fission in mammalian cells. Journal of Cell Biology, 2010, 191, 1141-1158.	2.3	919
22	Parkin and PINK1 mitigate STING-induced inflammation. Nature, 2018, 561, 258-262.	13.7	905
23	Spatial and temporal association of Bax with mitochondrial fission sites, Drp1, and Mfn2 during apoptosis. Journal of Cell Biology, 2002, 159, 931-938.	2.3	743
24	Mitochondrial fission in apoptosis. Nature Reviews Molecular Cell Biology, 2005, 6, 657-663.	16.1	681
25	Conformation of the Bax C-terminus regulates subcellular location and cell death. EMBO Journal, 1999, 18, 2330-2341.	3.5	667
26	p62/SQSTM1 is required for Parkin-induced mitochondrial clustering but not mitophagy; VDAC1 is dispensable for both. Autophagy, 2010, 6, 1090-1106.	4.3	663
27	SLP-2 is required for stress-induced mitochondrial hyperfusion. EMBO Journal, 2009, 28, 1589-1600.	3.5	639
28	Nitric oxide-induced mitochondrial fission is regulated by dynamin-related GTPases in neurons. EMBO Journal, 2006, 25, 3900-3911.	3.5	603
29	Role of Bax and Bak in mitochondrial morphogenesis. Nature, 2006, 443, 658-662.	13.7	579
30	Phosphorylation of OPTN by TBK1 enhances its binding to Ub chains and promotes selective autophagy of damaged mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4039-4044.	3.3	554
31	Nonionic Detergents Induce Dimerization among Members of the Bcl-2 Family. Journal of Biological Chemistry, 1997, 272, 13829-13834.	1.6	541
32	Role of PINK1 Binding to the TOM Complex and Alternate Intracellular Membranes in Recruitment and Activation of the E3 Ligase Parkin. Developmental Cell, 2012, 22, 320-333.	3.1	523
33	Tumor regression with regional distribution of the targeted toxin TF-CRM107 in patients with malignant brain tumors. Nature Medicine, 1997, 3, 1362-1368.	15.2	517
34	Bcl-xL Retrotranslocates Bax from the Mitochondria into the Cytosol. Cell, 2011, 145, 104-116.	13.5	512
35	PINK1 is degraded through the N-end rule pathway. Autophagy, 2013, 9, 1758-1769.	4.3	507
36	JNK-Mediated BIM Phosphorylation Potentiates BAX-Dependent Apoptosis. Neuron, 2003, 38, 899-914.	3.8	479

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37	Bax in Murine Thymus Is a Soluble Monomeric Protein That Displays Differential Detergent-induced Conformations. Journal of Biological Chemistry, 1998, 273, 10777-10783.	1.6	465
38	PINK1- and Parkin-mediated mitophagy at a glance. Journal of Cell Science, 2012, 125, 795-799.	1.2	465
39	Drp-1-Dependent Division of the Mitochondrial Network Blocks Intraorganellar Ca2+ Waves and Protects against Ca2+-Mediated Apoptosis. Molecular Cell, 2004, 16, 59-68.	4.5	440
40	The mitochondrial E3 ubiquitin ligase MARCH5 is required for Drp1 dependent mitochondrial division. Journal of Cell Biology, 2007, 178, 71-84.	2.3	420
41	Bax and Bak Coalesce into Novel Mitochondria-Associated Clusters during Apoptosis. Journal of Cell Biology, 2001, 153, 1265-1276.	2.3	418
42	Quantitation of mitochondrial dynamics by photolabeling of individual organelles shows that mitochondrial fusion is blocked during the Bax activation phase of apoptosis. Journal of Cell Biology, 2004, 164, 493-499.	2.3	393
43	Mitochondrial release of AIF and EndoG requires caspase activation downstream of Bax/Bak-mediated permeabilization. EMBO Journal, 2003, 22, 4385-4399.	3.5	383
44	Mitochondrial fission facilitates the selective mitophagy of protein aggregates. Journal of Cell Biology, 2017, 216, 3231-3247.	2.3	377
45	p38 Map Kinase Mediates Bax Translocation in Nitric Oxideâ€“Induced Apoptosis in Neurons. Journal of Cell Biology, 2000, 150, 335-348.	2.3	372
46	Mitofusin-1 protein is a generally expressed mediator of mitochondrial fusion in mammalian cells. Journal of Cell Science, 2003, 116, 2763-2774.	1.2	369
47	Anti-apoptotic MCL-1 localizes to the mitochondrial matrix and couples mitochondrial fusionÂto respiration. Nature Cell Biology, 2012, 14, 575-583.	4.6	347
48	In situ labeling of granule cells for apoptosis-associated DNA fragmentation reveals different mechanisms of cell loss in developing cerebellum. Neuron, 1993, 11, 621-632.	3.8	338
49	The accumulation of misfolded proteins in the mitochondrial matrix is sensed by PINK1 to induce PARK2/Parkin-mediated mitophagy of polarized mitochondria. Autophagy, 2013, 9, 1750-1757.	4.3	335
50	Targeting Mitochondrial Dysfunction: Role for PINK1 and Parkin in Mitochondrial Quality Control. Antioxidants and Redox Signaling, 2011, 14, 1929-1938.	2.5	330
51	Mitochondrial Function, Biology, and Role in Disease. Circulation Research, 2016, 118, 1960-1991.	2.0	330
52	Spatiotemporal Control of ULK1 Activation by NDP52 and TBK1 during Selective Autophagy. Molecular Cell, 2019, 74, 347-362.e6.	4.5	314
53	High-content genome-wide RNAi screens identify regulators of parkin upstream of mitophagy. Nature, 2013, 504, 291-295.	13.7	301
54	Parkin overexpression selects against a deleterious mtDNA mutation in heteroplasmic cybrid cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11835-11840.	3.3	286

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55	OPA1 mutations associated with dominant optic atrophy impair oxidative phosphorylation and mitochondrial fusion. Brain, 2008, 131, 352-367.	3.7	285
56	Endogenous Parkin Preserves Dopaminergic Substantia Nigral Neurons following Mitochondrial DNA Mutagenic Stress. Neuron, 2015, 87, 371-381.	3.8	277
57	Mitochondrial Quality Control Mediated by PINK1 and Parkin: Links to Parkinsonism. Cold Spring Harbor Perspectives in Biology, 2012, 4, a011338-a011338.	2.3	273
58	Self and Nonself: How Autophagy Targets Mitochondria and Bacteria. Cell Host and Microbe, 2014, 15, 403-411.	5.1	259
59	A Study of the Interferon Antiviral Mechanism: Apoptosis Activation by the 2â€“5A System. Journal of Experimental Medicine, 1997, 186, 967-972.	4.2	256
60	Mitochondrial Fission and Fusion Mediators, hFis1 and OPA1, Modulate Cellular Senescence. Journal of Biological Chemistry, 2007, 282, 22977-22983.	1.6	245
61	How do Bax and Bak lead to permeabilization of the outer mitochondrial membrane?. Current Opinion in Cell Biology, 2006, 18, 685-689.	2.6	244
62	Mitochondrial Rab GAPs govern autophagosome biogenesis during mitophagy. ELife, 2014, 3, e01612.	2.8	242
63	The permeability transition pore signals apoptosis by directing Bax translocation and multimerization. FASEB Journal, 2002, 16, 607-609.	0.2	241
64	MiT/TFE transcription factors are activated during mitophagy downstream of Parkin and Atg5. Journal of Cell Biology, 2015, 210, 435-450.	2.3	238
65	Endophilin B1 is required for the maintenance of mitochondrial morphology. Journal of Cell Biology, 2004, 166, 1027-1039.	2.3	226
66	PINK1 import regulation; a fine system to convey mitochondrial stress to the cytosol. BMC Biology, 2018, 16, 2.	1.7	226
67	Apoptosis and DNA degradation induced by 1-methyl-4-phenylpyridinium in neurons. Biochemical and Biophysical Research Communications, 1991, 181, 1442-1448.	1.0	216
68	Regulating mitochondrial outer membrane proteins by ubiquitination and proteasomal degradation. Current Opinion in Cell Biology, 2011, 23, 476-482.	2.6	214
69	Hsp90-Cdc37 Chaperone Complex Regulates Ulk1- and Atg13-Mediated Mitophagy. Molecular Cell, 2011, 43, 572-585.	4.5	211
70	Parkin-induced mitophagy in the pathogenesis of Parkinson disease. Autophagy, 2009, 5, 706-708.	4.3	209
71	Mitochondrial fission and fusion. Essays in Biochemistry, 2010, 47, 85-98.	2.1	209
72	PINK1 drives Parkin self-association and HECT-like E3 activity upstream of mitochondrial binding. Journal of Cell Biology, 2013, 200, 163-172.	2.3	209

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73	A Chemical Inhibitor of DRP1 Uncouples Mitochondrial Fission and Apoptosis. Molecular Cell, 2008, 29, 409-410.	4.5	204
74	Role of the N Terminus in RNase A Homologues: Differences in Catalytic Activity, Ribonuclease Inhibitor Interaction and Cytotoxicity. Journal of Molecular Biology, 1996, 257, 992-1007.	2.0	202
75	Loss of MARCH5 mitochondrial E3 ubiquitin ligase induces cellular senescence through dynamin-related protein 1 and mitofusin 1. Journal of Cell Science, 2010, 123, 619-626.	1.2	201
76	The Soluble Form of Bax Regulates Mitochondrial Fusion via MFN2 Homotypic Complexes. Molecular Cell, 2011, 41, 150-160.	4.5	199
77	Cytomegalovirus cell death suppressor vMIA blocks Bax- but not Bak-mediated apoptosis by binding and sequestering Bax at mitochondria. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7988-7993.	3.3	179
78	Mutations in Fis1 disrupt orderly disposal of defective mitochondria. Molecular Biology of the Cell, 2014, 25, 145-159.	0.9	177
79	Bid, but Not Bax, Regulates VDAC Channels. Journal of Biological Chemistry, 2004, 279, 13575-13583.	1.6	174
80	The role of 2â€²-5â€² oligoadenylate-activated ribonucleaseâ€‰L in apoptosis. Cell Death and Differentiation, 1998, 5, 313-320.	5.0	173
81	Parkin is a lipid-responsive regulator of fat uptake in mice and mutant human cells. Journal of Clinical Investigation, 2011, 121, 3701-3712.	3.9	170
82	Loss of Bif-1 Suppresses Bax/Bak Conformational Change and Mitochondrial Apoptosis. Molecular and Cellular Biology, 2005, 25, 9369-9382.	1.1	167
83	The Solution Structure of Human Mitochondria Fission Protein Fis1 Reveals a Novel TPR-like Helix Bundle. Journal of Molecular Biology, 2003, 334, 445-458.	2.0	146
84	Bcl-xL sequesters its C-terminal membrane anchor in soluble, cytosolic homodimers. EMBO Journal, 2004, 23, 2146-2155.	3.5	143
85	Mitochondria in Ca2+ signaling and apoptosis. Journal of Bioenergetics and Biomembranes, 2000, 32, 35-46.	1.0	142
86	Mitochondriaâ€”Striking a balance between host and endosymbiont. Science, 2019, 365, .	6.0	130
87	Vps13D Encodes a Ubiquitin-Binding Protein that Is Required for the Regulation of Mitochondrial Size and Clearance. Current Biology, 2018, 28, 287-295.e6.	1.8	115
88	Role of Mitochondrial Remodeling in Programmed Cell Death in Drosophila melanogaster. Developmental Cell, 2007, 12, 807-816.	3.1	114
89	Endosomal Rab cycles regulate Parkin-mediated mitophagy. ELife, 2018, 7, .	2.8	113
90	Reciprocal Roles of Tom7 and OMA1 during Mitochondrial Import and Activation of PINK1. Molecular Cell, 2019, 73, 1028-1043.e5.	4.5	113

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91	Mitochondrial damage-associated inflammation highlights biomarkers in PRKN/PINK1 parkinsonism. Brain, 2020, 143, 3041-3051.	3.7	105
92	Polyubiquitin-sensor proteins reveal localization and linkage-type dependence of cellular ubiquitin signaling. Nature Methods, 2012, 9, 303-309.	9.0	104
93	Involvement of mitochondrial dynamics in the segregation of mitochondrial matrix proteins during stationary phase mitophagy. Nature Communications, 2013, 4, 2789.	5.8	95
94	STING induces LC3B lipidation onto single-membrane vesicles via the V-ATPase and ATG16L1-WD40 domain. Journal of Cell Biology, 2020, 219, .	2.3	90
95	Role of Membrane Association and Atg14-Dependent Phosphorylation in Beclin-1-Mediated Autophagy. Molecular and Cellular Biology, 2013, 33, 3675-3688.	1.1	87
96	Loss of TAX1BP1-Directed Autophagy Results in Protein Aggregate Accumulation in the Brain. Molecular Cell, 2020, 80, 779-795.e10.	4.5	85
97	Molecular and topological reorganizations in mitochondrial architecture interplay during Bax-mediated steps of apoptosis. ELife, 2019, 8, .	2.8	77
98	Engineering receptor-mediated cytotoxicity into human ribonucleases by steric blockade of inhibitor interaction. Nature Biotechnology, 1999, 17, 265-270.	9.4	75
99	Mitochondrial Quality Control and Restraining Innate Immunity. Annual Review of Cell and Developmental Biology, 2020, 36, 265-289.	4.0	73
100	Cytomegalovirus Proteins vMIA and m38.5 Link Mitochondrial Morphogenesis to Bcl-2 Family Proteins. Journal of Virology, 2008, 82, 6232-6243.	1.5	70
101	Role of the Ubiquitin Conjugation System in the Maintenance of Mitochondrial Homeostasis. Annals of the New York Academy of Sciences, 2008, 1147, 242-253.	1.8	67
102	IBRDC2, an IBR-type E3 ubiquitin ligase, is a regulatory factor for Bax and apoptosis activation. EMBO Journal, 2010, 29, 1458-1471.	3.5	67
103	ULK complex organization in autophagy by a C-shaped FIP200 N-terminal domain dimer. Journal of Cell Biology, 2020, 219, .	2.3	59
104	PINK1/Parkin Influences Cell Cycle by Sequestering TBK1 at Damaged Mitochondria, Inhibiting Mitosis. Cell Reports, 2019, 29, 225-235.e5.	2.9	58
105	A Systematic Search for Endoplasmic Reticulum (ER) Membrane-associated RING Finger Proteins Identifies Nixin/ZNRF4 as a Regulator of Calnexin Stability and ER Homeostasis. Journal of Biological Chemistry, 2011, 286, 8633-8643.	1.6	54
106	Conformation of BCL-XL upon Membrane Integration. Journal of Molecular Biology, 2015, 427, 2262-2270.	2.0	54
107	Structural mechanism of Bax inhibition by cytomegalovirus protein vMIA. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20901-20906.	3.3	53
108	CELL BIOLOGY: Cellular Demolition and the Rules of Engagement. Science, 2007, 315, 776-777.	6.0	52

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109	Chemogenomic Profiling of Endogenous PARK2 Expression Using a Genome-Edited Coincidence Reporter. ACS Chemical Biology, 2015, 10, 1188-1197.	1.6	52
110	Fluorescenceâ€based <scp>ATG</scp>8 sensors monitor localization and function of <scp>LC</scp>3/<scp>GABARAP</scp> proteins. EMBO Journal, 2017, 36, 549-564.	3.5	49
111	Image-based pooled whole-genome CRISPRi screening for subcellular phenotypes. Journal of Cell Biology, 2021, 220, .	2.3	48
112	VPS13D promotes peroxisome biogenesis. Journal of Cell Biology, 2021, 220, .	2.3	47
113	Bax Activates Endophilin B1 Oligomerization and Lipid Membrane Vesiculation. Journal of Biological Chemistry, 2009, 284, 34390-34399.	1.6	41
114	Ubiquitin signaling in neurodegenerative diseases: an autophagy and proteasome perspective. Cell Death and Differentiation, 2021, 28, 439-454.	5.0	39
115	Form follows function for mitochondria. Nature, 2016, 530, 288-289.	13.7	33
116	Deleterious mitochondrial DNA point mutations are overrepresented in Drosophila expressing a proofreading-defective DNA polymerase Î³. PLoS Genetics, 2018, 14, e1007805.	1.5	32
117	Cytotoxic onconase and ribonuclease a chimeras: comparison andin vitrocharacterization. Drug Delivery, 1993, 1, 3-10.	2.5	30
118	Two different axes CALCOCO2-RB1CC1 and OPTN-ATG9A initiate PRKN-mediated mitophagy. Autophagy, 2020, 16, 2105-2107.	4.3	27
119	Morphology of Mitochondria During Apoptosis: Worms-to-Beetles in Worms. Developmental Cell, 2005, 8, 298-299.	3.1	23
120	PINK1 rendered temperature sensitive by disease-associated and engineered mutations. Human Molecular Genetics, 2013, 22, 2572-2589.	1.4	23
121	Characterization of the membrane-inserted C-terminus of cytoprotective BCL-XL. Protein Expression and Purification, 2016, 122, 56-63.	0.6	22
122	Parkin mediates mitophagy during beige-to-white fat conversion. Science Signaling, 2018, 11, .	1.6	20
123	Neurolastin, a Dynamin Family GTPase, Regulates Excitatory Synapses and Spine Density. Cell Reports, 2015, 12, 743-751.	2.9	18
124	Endosome fusion induced by diphtheria toxin translocation domain. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8020-8025.	3.3	12
125	Balancing cell growth and death. Current Opinion in Cell Biology, 2012, 24, 802-803.	2.6	10
126	Mitochondrial Disease: mtDNA and Protein Segregation Mysteries in iPSCs. Current Biology, 2013, 23, R1052-R1054.	1.8	10

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127	Sequestration and autophagy of mitochondria do not cut proteins across the board. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6252-6253.	3.3	5
128	Mitochondrial Dynamics and Apoptosis. , 2011, , 109-138.		3
129	Letter to the Editor: Sequence-specific 1H, 13C and 15N resonance assignments of recombinant onconase/P-30 protein. Journal of Biomolecular NMR, 1999, 15, 343-344.	1.6	2
130	Active state of Parkin. Nature Structural and Molecular Biology, 2018, 25, 644-646.	3.6	2
131	Neurolastin, a dynamin family GTPase, translocates to mitochondria upon neuronal stress and alters mitochondrial morphology in vivo. Journal of Biological Chemistry, 2019, 294, 11498-11512.	1.6	1
132	State of GTPase cycle dictates mobility and localization of large mitochondrial GTPases, Mfn1 and 2. FASEB Journal, 2007, 21, A661.	0.2	0
133	Mitophagy as a quality control mechanism in Saccharomyces cerevisiae. FASEB Journal, 2013, 27, 994.3.	0.2	0
134	MiT/TFE transcription factors are activated during mitophagy downstream of Parkin and Atg5. Journal of Experimental Medicine, 2015, 212, 2129OIA71.	4.2	0
135	Acute Manipulation of Outer Membrane Phospholipid Composition Directly Alters Mitochondrial Dynamics and Ultrastructure. FASEB Journal, 2022, 36, .	0.2	0