Richard J Youle

List of Publications by Year
in descending order

135 papers	61,778 citations	3334 91 h-index	12946 131 g-index
170 all docs	170 docs citations	170 times ranked	50673 citing authors

#	Article	IF	Citations
1	Acute Manipulation of Outer Membrane Phospholipid Composition Directly Alters Mitochondrial Dynamics and Ultrastructure. FASEB Journal, 2022, 36, .	0.5	0
2	Ubiquitin signaling in neurodegenerative diseases: an autophagy and proteasome perspective. Cell Death and Differentiation, 2021, 28, 439-454.	11.2	39
3	VPS13D promotes peroxisome biogenesis. Journal of Cell Biology, 2021, 220, .	5.2	47
4	Image-based pooled whole-genome CRISPRi screening for subcellular phenotypes. Journal of Cell Biology, 2021, 220, .	5.2	48
5	Mitochondrial Quality Control and Restraining Innate Immunity. Annual Review of Cell and Developmental Biology, 2020, 36, 265-289.	9.4	73
6	Mitochondrial damage-associated inflammation highlights biomarkers in PRKN/PINK1 parkinsonism. Brain, 2020, 143, 3041-3051.	7.6	105
7	Loss of TAX1BP1-Directed Autophagy Results in Protein Aggregate Accumulation in the Brain. Molecular Cell, 2020, 80, 779-795.e10.	9.7	85
8	Two different axes CALCOCO2-RB1CC1 and OPTN-ATG9A initiate PRKN-mediated mitophagy. Autophagy, 2020, 16, 2105-2107.	9.1	27
9	ULK complex organization in autophagy by a C-shaped FIP200 N-terminal domain dimer. Journal of Cell Biology, 2020, 219, .	5.2	59
10	STING induces LC3B lipidation onto single-membrane vesicles via the V-ATPase and ATG16L1-WD40 domain. Journal of Cell Biology, 2020, 219, .	5.2	90
11	Mitochondriaâ€"Striking a balance between host and endosymbiont. Science, 2019, 365, .	12.6	130
12	PINK1/Parkin Influences Cell Cycle by Sequestering TBK1 at Damaged Mitochondria, Inhibiting Mitosis. Cell Reports, 2019, 29, 225-235.e5.	6.4	58
13	Reciprocal Roles of Tom7 and OMA1 during Mitochondrial Import and Activation of PINK1. Molecular Cell, 2019, 73, 1028-1043.e5.	9.7	113
14	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.	3.4	1
15	Spatiotemporal Control of ULK1 Activation by NDP52 and TBK1 during Selective Autophagy. Molecular Cell, 2019, 74, 347-362.e6.	9.7	314
16	Molecular and topological reorganizations in mitochondrial architecture interplay during Bax-mediated steps of apoptosis. ELife, 2019, 8, .	6.0	77
17	Mitophagy and Quality Control Mechanisms inÂMitochondrial Maintenance. Current Biology, 2018, 28, R170-R185.	3.9	1,262
18	Parkin mediates mitophagy during beige-to-white fat conversion. Science Signaling, 2018, 11, .	3.6	20

#	Article	IF	Citations
19	Vps13D Encodes a Ubiquitin-Binding Protein that Is Required for the Regulation of Mitochondrial Size and Clearance. Current Biology, 2018, 28, 287-295.e6.	3.9	115
20	Deleterious mitochondrial DNA point mutations are overrepresented in Drosophila expressing a proofreading-defective DNA polymerase Î³. PLoS Genetics, 2018, 14, e1007805.	3.5	32
21	Endosomal Rab cycles regulate Parkin-mediated mitophagy. ELife, 2018, 7, .	6.0	113
22	Active state of Parkin. Nature Structural and Molecular Biology, 2018, 25, 644-646.	8.2	2
23	PINK1 import regulation; a fine system to convey mitochondrial stress to the cytosol. BMC Biology, 2018, 16, 2.	3.8	226
24	Parkin and PINK1 mitigate STING-induced inflammation. Nature, 2018, 561, 258-262.	27.8	905
25	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.	7.8	49
26	Mitochondrial fission facilitates the selective mitophagy of protein aggregates. Journal of Cell Biology, 2017, 216, 3231-3247.	5.2	377
27	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.	7.1	554
28	The Mitochondrial Basis of Aging. Molecular Cell, 2016, 61, 654-666.	9.7	1,011
29	Mitochondrial Function, Biology, and Role in Disease. Circulation Research, 2016, 118, 1960-1991.	4.5	330
30	Form follows function for mitochondria. Nature, 2016, 530, 288-289.	27.8	33
31	Characterization of the membrane-inserted C-terminus of cytoprotective BCL-XL. Protein Expression and Purification, 2016, 122, 56-63.	1.3	22
32	Chemogenomic Profiling of Endogenous <i>PARK2</i> Expression Using a Genome-Edited Coincidence Reporter. ACS Chemical Biology, 2015, 10, 1188-1197.	3.4	52
33	The Roles of PINK1, Parkin, and Mitochondrial Fidelity in Parkinsonâ€™s Disease. Neuron, 2015, 85, 257-273.	8.1	1,632
34	MiT/TFE transcription factors are activated during mitophagy downstream of Parkin and Atg5. Journal of Cell Biology, 2015, 210, 435-450.	5.2	238
35	Endogenous Parkin Preserves Dopaminergic Substantia Nigral Neurons following Mitochondrial DNA Mutagenic Stress. Neuron, 2015, 87, 371-381.	8.1	277
36	Conformation of BCL-XL upon Membrane Integration. Journal of Molecular Biology, 2015, 427, 2262-2270.	4.2	54

#	Article	IF	Citations
37	Neurolastin, a Dynamin Family GTPase, Regulates Excitatory Synapses and Spine Density. Cell Reports, 2015, 12, 743-751.	6.4	18
38	The ubiquitin kinase PINK1 recruits autophagy receptors to induce mitophagy. Nature, 2015, 524, 309-314.	27.8	1,969
39	MiT/TFE transcription factors are activated during mitophagy downstream of Parkin and Atg5. Journal of Experimental Medicine, 2015, 212, 2129OIA71.	8.5	0
40	Mitochondrial Rab GAPs govern autophagosome biogenesis during mitophagy. ELife, 2014, 3, e01612.	6.0	242
41	Mutations in Fis1 disrupt orderly disposal of defective mitochondria. Molecular Biology of the Cell, 2014, 25, 145-159.	2.1	177
42	PINK1 phosphorylates ubiquitin to activate Parkin E3 ubiquitin ligase activity. Journal of Cell Biology, 2014, 205, 143-153.	5.2	1,004
43	Self and Nonself: How Autophagy Targets Mitochondria and Bacteria. Cell Host and Microbe, 2014, 15, 403-411.	11.0	259
44	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.	7.1	5
45	Involvement of mitochondrial dynamics in the segregation of mitochondrial matrix proteins during stationary phase mitophagy. Nature Communications, 2013, 4, 2789.	12.8	95
46	High-content genome-wide RNAi screens identify regulators of parkin upstream of mitophagy. Nature, 2013, 504, 291-295.	27.8	301
47	PINK1 rendered temperature sensitive by disease-associated and engineered mutations. Human Molecular Genetics, 2013, 22, 2572-2589.	2.9	23
48	Mitochondrial Disease: mtDNA and Protein Segregation Mysteries in iPSCs. Current Biology, 2013, 23, R1052-R1054.	3.9	10
49	PINK1 drives Parkin self-association and HECT-like E3 activity upstream of mitochondrial binding. Journal of Cell Biology, 2013, 200, 163-172.	5.2	209
50	Role of Membrane Association and Atg14-Dependent Phosphorylation in Beclin-1-Mediated Autophagy. Molecular and Cellular Biology, 2013, 33, 3675-3688.	2.3	87
51	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.	9.1	335
52	PINK1 is degraded through the N-end rule pathway. Autophagy, 2013, 9, 1758-1769.	9.1	507
53	Mitophagy as a quality control mechanism in Saccharomyces cerevisiae. FASEB Journal, 2013, 27, 994.3.	0.5	0
54	PINK1- and Parkin-mediated mitophagy at a glance. Journal of Cell Science, 2012, 125, 795-799.	2.0	465

#	Article	IF	Citations
55	Mitochondrial Quality Control Mediated by PINK1 and Parkin: Links to Parkinsonism. Cold Spring Harbor Perspectives in Biology, 2012, 4, a011338-a011338.	5.5	273
56	Polyubiquitin-sensor proteins reveal localization and linkage-type dependence of cellular ubiquitin signaling. Nature Methods, 2012, 9, 303-309.	19.0	104
57	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.	7.1	53
58	Anti-apoptotic MCL-1 localizes to the mitochondrial matrix and couples mitochondrial fusionÂto respiration. Nature Cell Biology, 2012, 14, 575-583.	10.3	347
59	Mitochondrial Fission, Fusion, and Stress. Science, 2012, 337, 1062-1065.	12.6	2,645
60	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.	7.0	523
61	Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy, 2012, 8, 445-544.	9.1	3,122
62	Balancing cell growth and death. Current Opinion in Cell Biology, 2012, 24, 802-803.	5.4	10
63	Mitochondrial Dynamics and Apoptosis. , 2011, , 109-138.		3
64	Bcl-xL Retrotranslocates Bax from the Mitochondria into the Cytosol. Cell, 2011, 145, 104-116.	28.9	512
65	Mitochondria in Apoptosis: Bcl-2 Family Members and Mitochondrial Dynamics. Developmental Cell, 2011, 21, 92-101.	7.0	1,198
66	The Soluble Form of Bax Regulates Mitochondrial Fusion via MFN2 Homotypic Complexes. Molecular Cell, 2011, 41, 150-160.	9.7	199
67	Hsp90-Cdc37 Chaperone Complex Regulates Ulk1- and Atg13-Mediated Mitophagy. Molecular Cell, 2011, 43, 572-585.	9.7	211
68	Mechanisms of mitophagy. Nature Reviews Molecular Cell Biology, 2011, 12, 9-14.	37.0	2,638
69	Regulating mitochondrial outer membrane proteins by ubiquitination and proteasomal degradation. Current Opinion in Cell Biology, 2011, 23, 476-482.	5.4	214
70	Targeting Mitochondrial Dysfunction: Role for PINK1 and Parkin in Mitochondrial Quality Control. Antioxidants and Redox Signaling, 2011, 14, 1929-1938.	5.4	330
71	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.	3.4	54
72	Parkin is a lipid-responsive regulator of fat uptake in mice and mutant human cells. Journal of Clinical Investigation, 2011, 121, 3701-3712.	8.2	170

#	Article	IF	Citations
73	IBRDC2, an IBR-type E3 ubiquitin ligase, is a regulatory factor for Bax and apoptosis activation. EMBO Journal, 2010, 29, 1458-1471.	7.8	67
74	Mitochondrial fission and fusion. Essays in Biochemistry, 2010, 47, 85-98.	4.7	209
75	Mff is an essential factor for mitochondrial recruitment of Drp1 during mitochondrial fission in mammalian cells. Journal of Cell Biology, 2010, 191, 1141-1158.	5.2	919
76	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.	7.1	286
77	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.	2.0	201
78	p62/SQSTM1 is required for Parkin-induced mitochondrial clustering but not mitophagy; VDAC1 is dispensable for both. Autophagy, 2010, 6, 1090-1106.	9.1	663
79	Mitochondrial membrane potential regulates PINK1 import and proteolytic destabilization by PARL. Journal of Cell Biology, 2010, 191, 933-942.	5.2	1,078
80	Proteasome and p97 mediate mitophagy and degradation of mitofusins induced by Parkin. Journal of Cell Biology, 2010, 191, 1367-1380.	5.2	1,161
81	PINK1 Is Selectively Stabilized on Impaired Mitochondria to Activate Parkin. PLoS Biology, 2010, 8, e1000298.	5.6	2,299
82	Parkin-induced mitophagy in the pathogenesis of Parkinson disease. Autophagy, 2009, 5, 706-708.	9.1	209
83	Bax Activates Endophilin B1 Oligomerization and Lipid Membrane Vesiculation. Journal of Biological Chemistry, 2009, 284, 34390-34399.	3.4	41
84	SLP-2 is required for stress-induced mitochondrial hyperfusion. EMBO Journal, 2009, 28, 1589-1600.	7.8	639
85	The Role of Mitochondria in Apoptosis. Annual Review of Genetics, 2009, 43, 95-118.	7.6	1,503
86	Parkin is recruited selectively to impaired mitochondria and promotes their autophagy. Journal of Cell Biology, 2008, 183, 795-803.	5.2	3,315
87	Role of the Ubiquitin Conjugation System in the Maintenance of Mitochondrial Homeostasis. Annals of the New York Academy of Sciences, 2008, 1147, 242-253.	3.8	67
88	The BCL-2 protein family: opposing activities that mediate cell death. Nature Reviews Molecular Cell Biology, 2008, 9, 47-59.	37.0	3,898
89	A Chemical Inhibitor of DRP1 Uncouples Mitochondrial Fission and Apoptosis. Molecular Cell, 2008, 29, 409-410.	9.7	204
90	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.	7.1	12

#	Article	IF	Citations
91	Mitochondrial dynamics and apoptosis. Genes and Development, 2008, 22, 1577-1590.	5.9	1,080
92	Cytomegalovirus Proteins vMIA and m38.5 Link Mitochondrial Morphogenesis to Bcl-2 Family Proteins. Journal of Virology, 2008, 82, 6232-6243.	3.4	70
93	OPA1 mutations associated with dominant optic atrophy impair oxidative phosphorylation and mitochondrial fusion. Brain, 2008, 131, 352-367.	7.6	285
94	Mitochondrial Fission and Fusion Mediators, hFis1 and OPA1, Modulate Cellular Senescence. Journal of Biological Chemistry, 2007, 282, 22977-22983.	3.4	245
95	The mitochondrial E3 ubiquitin ligase MARCH5 is required for Drp1 dependent mitochondrial division. Journal of Cell Biology, 2007, 178, 71-84.	5.2	420
96	CELL BIOLOGY: Cellular Demolition and the Rules of Engagement. Science, 2007, 315, 776-777.	12.6	52
97	Role of Mitochondrial Remodeling in Programmed Cell Death in Drosophila melanogaster. Developmental Cell, 2007, 12, 807-816.	7.0	114
98	State of GTPase cycle dictates mobility and localization of large mitochondrial GTPases, Mfn1 and 2. FASEB Journal, 2007, 21, A661.	0.5	0
99	Role of Bax and Bak in mitochondrial morphogenesis. Nature, 2006, 443, 658-662.	27.8	579
100	Nitric oxide-induced mitochondrial fission is regulated by dynamin-related GTPases in neurons. EMBO Journal, 2006, 25, 3900-3911.	7.8	603
101	How do Bax and Bak lead to permeabilization of the outer mitochondrial membrane?. Current Opinion in Cell Biology, 2006, 18, 685-689.	5.4	244
102	Mitochondrial fission in apoptosis. Nature Reviews Molecular Cell Biology, 2005, 6, 657-663.	37.0	681
103	Loss of Bif-1 Suppresses Bax/Bak Conformational Change and Mitochondrial Apoptosis. Molecular and Cellular Biology, 2005, 25, 9369-9382.	2.3	167
104	Morphology of Mitochondria During Apoptosis: Worms-to-Beetles in Worms. Developmental Cell, 2005, 8, 298-299.	7.0	23
105	Bid, but Not Bax, Regulates VDAC Channels. Journal of Biological Chemistry, 2004, 279, 13575-13583.	3.4	174
106	Endophilin B1 is required for the maintenance of mitochondrial morphology. Journal of Cell Biology, 2004, 166, 1027-1039.	5.2	226
107	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.	7.1	179
108	Bcl-xL sequesters its C-terminal membrane anchor in soluble, cytosolic homodimers. EMBO Journal, 2004, 23, 2146-2155.	7.8	143

#	Article	IF	Citations
109	Roles of the Mammalian Mitochondrial Fission and Fusion Mediators Fis1, Drp1, and Opa1 in Apoptosis. Molecular Biology of the Cell, 2004, 15, 5001-5011.	2.1	920
110	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.	5.2	393
111	Drp-1-Dependent Division of the Mitochondrial Network Blocks Intraorganellar Ca2+ Waves and Protects against Ca2+-Mediated Apoptosis. Molecular Cell, 2004, 16, 59-68.	9.7	440
112	The Solution Structure of Human Mitochondria Fission Protein Fis1 Reveals a Novel TPR-like Helix Bundle. Journal of Molecular Biology, 2003, 334, 445-458.	4.2	146
113	Mitochondrial release of AIF and EndoG requires caspase activation downstream of Bax/Bak-mediated permeabilization. EMBO Journal, 2003, 22, 4385-4399.	7.8	383
114	JNK-Mediated BIM Phosphorylation Potentiates BAX-Dependent Apoptosis. Neuron, 2003, 38, 899-914.	8.1	479
115	Mitofusin-1 protein is a generally expressed mediator of mitochondrial fusion in mammalian cells. Journal of Cell Science, 2003, 116, 2763-2774.	2.0	369
116	The permeability transition pore signals apoptosis by directing Bax translocation and multimerization. FASEB Journal, 2002, 16, 607-609.	0.5	241
117	Spatial and temporal association of Bax with mitochondrial fission sites, Drp1, and Mfn2 during apoptosis. Journal of Cell Biology, 2002, 159, 931-938.	5.2	743
118	The Role of Dynamin-Related Protein 1, a Mediator of Mitochondrial Fission, in Apoptosis. Developmental Cell, 2001, 1, 515-525.	7.0	1,564
119	Bax and Bak Coalesce into Novel Mitochondria-Associated Clusters during Apoptosis. Journal of Cell Biology, 2001, 153, 1265-1276.	5.2	418
120	Mitochondria in Ca2+ signaling and apoptosis. Journal of Bioenergetics and Biomembranes, 2000, 32, 35-46.	2.3	142
121	p38 Map Kinase Mediates Bax Translocation in Nitric Oxideâ€"Induced Apoptosis in Neurons. Journal of Cell Biology, 2000, 150, 335-348.	5.2	372
122	Structure of Bax. Cell, 2000, 103, 645-654.	28.9	1,008
123	Engineering receptor-mediated cytotoxicity into human ribonucleases by steric blockade of inhibitor interaction. Nature Biotechnology, 1999, 17, 265-270.	17.5	75
124	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.	2.8	2
125	Conformation of the Bax C-terminus regulates subcellular location and cell death. EMBO Journal, 1999, 18, 2330-2341.	7.8	667
126	The role of 2â€²-5â€² oligoadenylate-activated ribonucleaseâ€‰L in apoptosis. Cell Death and Differentiation, 1998, 5, 313-320.	11.2	173

#	Article	IF	Citations
127	Bax in Murine Thymus Is a Soluble Monomeric Protein That Displays Differential Detergent-induced Conformations. Journal of Biological Chemistry, 1998, 273, 10777-10783.	3.4	465
128	Movement of Bax from the Cytosol to Mitochondria during Apoptosis. Journal of Cell Biology, 1997, 139, 1281-1292.	5.2	1,667
129	A Study of the Interferon Antiviral Mechanism: Apoptosis Activation by the 2â€“5A System. Journal of Experimental Medicine, 1997, 186, 967-972.	8.5	256
130	Nonionic Detergents Induce Dimerization among Members of the Bcl-2 Family. Journal of Biological Chemistry, 1997, 272, 13829-13834.	3.4	541
131	Tumor regression with regional distribution of the targeted toxin TF-CRM107 in patients with malignant brain tumors. Nature Medicine, 1997, 3, 1362-1368.	30.7	517
132	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.	4.2	202
133	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.	8.1	338
134	Cytotoxic onconase and ribonuclease a chimeras: comparison andin vitrocharacterization. Drug Delivery, 1993, 1, 3-10.	5.7	30
135	Apoptosis and DNA degradation induced by 1-methyl-4-phenylpyridinium in neurons. Biochemical and Biophysical Research Communications, 1991, 181, 1442-1448.	2.1	216