Kah-Leong Lim

List of Publications by Citations

122 papers	15,991 citations	46 h-index	126 g-index
133 ext. papers	17,681 ext. citations	7.7 avg, IF	5.7 L-index

#	Paper	IF	Citations
122	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*, **2016**, 12, 1-222	10.2	3838
121	Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*, **2012**, 8, 445-544	10.2	2783
120	Guidelines for the use and interpretation of assays for monitoring autophagy in higher eukaryotes. *Autophagy*, **2008**, 4, 151-75	10.2	1920
119	Parkin ubiquitinates the alpha-synuclein-interacting protein, synphilin-1: implications for Lewy-body formation in Parkinson disease. *Nature Medicine*, **2001**, 7, 1144-50	50.5	643
118	Parkinson's disease-associated mutations in LRRK2 link enhanced GTP-binding and kinase activities to neuronal toxicity. *Human Molecular Genetics*, **2007**, 16, 223-32	5.6	466
117	Parkin mediates nonclassical, proteasomal-independent ubiquitination of synphilin-1: implications for Lewy body formation. *Journal of Neuroscience*, **2005**, 25, 2002-9	6.6	431
116	Disease-causing mutations in parkin impair mitochondrial ubiquitination, aggregation, and HDAC6-dependent mitophagy. *Journal of Cell Biology*, **2010**, 189, 671-9	7.3	420
115	Lysine 63-linked ubiquitination promotes the formation and autophagic clearance of protein inclusions associated with neurodegenerative diseases. *Human Molecular Genetics*, **2008**, 17, 431-9	5.6	330
114	Loss of locus coeruleus neurons and reduced startle in parkin null mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10744-9	11.5	275
113	Intraparticle Energy Level Alignment of Semiconducting Polymer Nanoparticles to Amplify Chemiluminescence for Ultrasensitive In Vivo Imaging of Reactive Oxygen Species. *ACS Nano*, **2016**, 10, 6400-9	16.7	228
112	Targeted disruption of the tyrosine phosphatase PTPalpha leads to constitutive downregulation of the kinases Src and Fyn. *Current Biology*, **1999**, 9, 535-8	6.3	208
111	Familial-associated mutations differentially disrupt the solubility, localization, binding and ubiquitination properties of parkin. *Human Molecular Genetics*, **2005**, 14, 2571-86	5.6	183
110	Stress-induced alterations in parkin solubility promote parkin aggregation and compromise parkin's protective function. *Human Molecular Genetics*, **2005**, 14, 3885-97	5.6	176
109	Parkin protects against LRRK2 G2019S mutant-induced dopaminergic neurodegeneration in Drosophila. *Journal of Neuroscience*, **2009**, 29, 11257-62	6.6	165
108	A sensitive two-photon probe to selectively detect monoamine oxidase B activity in Parkinson's disease models. *Nature Communications*, **2014**, 5, 3276	17.4	151
107	Deregulation of a STAT3-interleukin 8 signaling pathway promotes human glioblastoma cell proliferation and invasiveness. *Journal of Neuroscience*, **2008**, 28, 5870-8	6.6	131
106	Autophagy-mediated clearance of aggresomes is not a universal phenomenon. *Human Molecular Genetics*, **2008**, 17, 2570-82	5.6	130

105	AMP kinase activation mitigates dopaminergic dysfunction and mitochondrial abnormalities in Drosophila models of Parkinson's disease. *Journal of Neuroscience*, **2012**, 32, 14311-7	6.6	129
104	Novel monoclonal antibodies demonstrate biochemical variation of brain parkin with age. *Journal of Biological Chemistry*, **2003**, 278, 48120-8	5.4	123
103	Reactive oxygen species trigger Parkin/PINK1 pathway-dependent mitophagy by inducing mitochondrial recruitment of Parkin. *Journal of Biological Chemistry*, **2017**, 292, 16697-16708	5.4	122
102	Parkin-mediated lysine 63-linked polyubiquitination: a link to protein inclusions formation in Parkinson's and other conformational diseases?. *Neurobiology of Aging*, **2006**, 27, 524-9	5.6	114
101	Alterations in the solubility and intracellular localization of parkin by several familial Parkinson's disease-linked point mutations. *Journal of Neurochemistry*, **2005**, 93, 422-31	6	100
100	Drosophila overexpressing parkin R275W mutant exhibits dopaminergic neuron degeneration and mitochondrial abnormalities. *Journal of Neuroscience*, **2007**, 27, 8563-70	6.6	97
99	Mutations in LRRK2 increase phosphorylation of peroxiredoxin 3 exacerbating oxidative stress-induced neuronal death. *Human Mutation*, **2011**, 32, 1390-7	4.7	80
98	Role of the ubiquitin proteasome system in Parkinson's disease. *BMC Biochemistry*, **2007**, 8 Suppl 1, S13	4.8	80
97	PTEN-L is a novel protein phosphatase for ubiquitin dephosphorylation to inhibit PINK1-Parkin-mediated mitophagy. *Cell Research*, **2018**, 28, 787-802	24.7	76
96	A Small-Molecule Probe for Selective Profiling and Imaging of Monoamine Oxidase B Activities in Models of Parkinson's Disease. *Angewandte Chemie - International Edition*, **2015**, 54, 10821-5	16.4	75
95	Physical and functional interactions between receptor-like protein-tyrosine phosphatase alpha and p59fyn. *Journal of Biological Chemistry*, **1998**, 273, 8691-8	5.4	74
94	Inclusion body formation and neurodegeneration are parkin independent in a mouse model of alpha-synucleinopathy. *Journal of Neuroscience*, **2006**, 26, 3685-96	6.6	72
93	Protein misfolding and aggregation in Parkinson's disease. *Antioxidants and Redox Signaling*, **2009**, 11, 2119-34	8.4	71
92	Relative sensitivity of parkin and other cysteine-containing enzymes to stress-induced solubility alterations. *Journal of Biological Chemistry*, **2007**, 282, 12310-8	5.4	71
91	Mitochondrial dysfunction and Parkinson disease: a Parkin-AMPK alliance in neuroprotection. *Annals of the New York Academy of Sciences*, **2015**, 1350, 37-47	6.5	69
90	Parkin enhances the expression of cyclin-dependent kinase 6 and negatively regulates the proliferation of breast cancer cells. *Journal of Biological Chemistry*, **2010**, 285, 29231-8	5.4	68
89	Enhanced autophagy from chronic toxicity of iron and mutant A53T □synuclein: implications for neuronal cell death in Parkinson disease. *Journal of Biological Chemistry*, **2011**, 286, 33380-9	5.4	68
88	Superoxide drives progression of Parkin/PINK1-dependent mitophagy following translocation of Parkin to mitochondria. *Cell Death and Disease*, **2017**, 8, e3097	9.8	66

87	Endocytic pathways downregulate the L1-type cell adhesion molecule neuroglian to promote dendrite pruning in Drosophila. *Developmental Cell*, **2014**, 30, 463-78	10.2	62
86	Parkin pathway activation mitigates glioma cell proliferation and predicts patient survival. *Cancer Research*, **2012**, 72, 2543-53	10.1	62
85	A defined xeno-free and feeder-free culture system for the derivation, expansion and direct differentiation of transgene-free patient-specific induced pluripotent stem cells. *Biomaterials*, **2014**, 35, 2816-26	15.6	61
84	Ubiquitin-proteasome system dysfunction in Parkinson's disease: current evidence and controversies. *Expert Review of Proteomics*, **2007**, 4, 769-81	4.2	61
83	Convergence of Parkin, PINK1, and □Synuclein on Stress-induced Mitochondrial Morphological Remodeling. *Journal of Biological Chemistry*, **2015**, 290, 13862-74	5.4	59
82	MPTP and DSP-4 susceptibility of substantia nigra and locus coeruleus catecholaminergic neurons in mice is independent of parkin activity. *Neurobiology of Disease*, **2007**, 26, 312-22	7.5	58
81	Potassium channel dysfunction in human neuronal models of Angelman syndrome. *Science*, **2019**, 366, 1486-1492	33.3	58
80	Genetic insights into sporadic Parkinson's disease pathogenesis. *Current Genomics*, **2013**, 14, 486-501	2.6	52
79	Mitochondrial dynamics and Parkinson's disease: focus on parkin. *Antioxidants and Redox Signaling*, **2012**, 16, 935-49	8.4	50
78	Parkin Regulation and Neurodegenerative Disorders. *Frontiers in Aging Neuroscience*, **2015**, 7, 248	5.3	50
77	Lysine 63-linked polyubiquitin potentially partners with p62 to promote the clearance of protein inclusions by autophagy. *Autophagy*, **2008**, 4, 251-253	10.2	48
76	Molecular events underlying Parkinson's disease - an interwoven tapestry. *Frontiers in Neurology*, **2013**, 4, 33	4.1	45
75	K63-linked ubiquitination and neurodegeneration. *Neurobiology of Disease*, **2011**, 43, 9-16	7.5	44
74	DAMPs and neurodegeneration. *Ageing Research Reviews*, **2015**, 24, 17-28	12	42
73	Genetic models of Parkinson disease. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2009**, 1792, 604-15	6.9	42
72	Static Magnetic Field Stimulation Enhances Oligodendrocyte Differentiation and Secretion of Neurotrophic Factors. *Scientific Reports*, **2017**, 7, 6743	4.9	40
71	Interconversion of the kinetic identities of the tandem catalytic domains of receptor-like protein-tyrosine phosphatase PTPalpha by two point mutations is synergistic and substrate-dependent. *Journal of Biological Chemistry*, **1998**, 273, 28986-93	5.4	40
70	Ultrafast Detection of Peroxynitrite in Parkinson's Disease Models Using a Near-Infrared Fluorescent Probe. *Analytical Chemistry*, **2020**, 92, 4038-4045	7.8	39

69	Genetic or pharmacological activation of the Drosophila PGC-1□ortholog spargel rescues the disease phenotypes of genetic models of Parkinson's disease. *Neurobiology of Aging*, **2017**, 55, 33-37	5.6	38
68	Ubiqutination via K27 and K29 chains signals aggregation and neuronal protection of LRRK2 by WSB1. *Nature Communications*, **2016**, 7, 11792	17.4	38
67	Visualization of Intra-neuronal Motor Protein Transport through Upconversion Microscopy. *Angewandte Chemie - International Edition*, **2019**, 58, 9262-9268	16.4	37
66	Parkin mediates apparent E2-independent monoubiquitination in vitro and contains an intrinsic activity that catalyzes polyubiquitination. *PLoS ONE*, **2011**, 6, e19720	3.7	36
65	Nutraceuticals in Parkinson's Disease. *NeuroMolecular Medicine*, **2016**, 18, 306-21	4.6	35
64	ST3GAL1-Associated Transcriptomic Program in Glioblastoma Tumor Growth, Invasion, and Prognosis. *Journal of the National Cancer Institute*, **2016**, 108,	9.7	32
63	Kinetic analysis of two closely related receptor-like protein-tyrosine-phosphatases, PTP alpha and PTP epsilon. *FEBS Journal*, **1997**, 245, 693-700		32
62	The cast of molecular characters in Parkinson's disease: felons, conspirators, and suspects. *Annals of the New York Academy of Sciences*, **2003**, 991, 80-92	6.5	32
61	Thiol peroxidases ameliorate LRRK2 mutant-induced mitochondrial and dopaminergic neuronal degeneration in Drosophila. *Human Molecular Genetics*, **2014**, 23, 3157-65	5.6	31
60	Differential expression of splice variant and wild-type parkin in sporadic Parkinson's disease. *Neurogenetics*, **2005**, 6, 179-84	3	31
59	Phosphorylation of amyloid precursor protein by mutant LRRK2 promotes AICD activity and neurotoxicity in Parkinson's disease. *Science Signaling*, **2017**, 10,	8.8	30
58	Polydopamine Dots-Based Fluorescent Nanoswitch Assay for Reversible Recognition of Glutamic Acid and Al in Human Serum and Living Cell. *ACS Applied Materials & Interfaces*, **2018**, 10, 35760-35769	8.5	28
57	The genetics of Parkinson's disease. *Current Neurology and Neuroscience Reports*, **2002**, 2, 439-46	6.6	27
56	Antioxidants inhibit neuronal toxicity in Parkinson's disease-linked LRRK2. *Annals of Clinical and Translational Neurology*, **2016**, 3, 288-94	5.3	27
55	The Sources of Reactive Oxygen Species and Its Possible Role in the Pathogenesis of Parkinson's Disease. *Parkinsonls Disease*, **2018**, 2018, 9163040	2.6	27
54	A Flexi-PEGDA Upconversion Implant for Wireless Brain Photodynamic Therapy. *Advanced Materials* , **2020**, 32, e2001459	24	25
53	PGE1 and PGA1 bind to Nurr1 and activate its transcriptional function. *Nature Chemical Biology*, **2020**, 16, 876-886	11.7	23
52	Iron mitigates DMT1-mediated manganese cytotoxicity via the ASK1-JNK signaling axis: Implications of iron supplementation for manganese toxicity. *Scientific Reports*, **2016**, 6, 21113	4.9	23

51	AF-6 is a positive modulator of the PINK1/parkin pathway and is deficient in Parkinson's disease. *Human Molecular Genetics*, **2013**, 22, 2083-96	5.6	22
50	Arbutin Protects Against Parkinson's Disease-Associated Mitochondrial Dysfunction In Vitro and In Vivo. *NeuroMolecular Medicine*, **2020**, 22, 56-67	4.6	22
49	Puromycin Analogues Capable of Multiplexed Imaging and Profiling of Protein Synthesis and Dynamics in Live Cells and Neurons. *Angewandte Chemie - International Edition*, **2016**, 55, 4933-7	16.4	21
48	A Small-Molecule Probe for Selective Profiling and Imaging of Monoamine Oxidase B Activities in Models of Parkinson Disease. *Angewandte Chemie*, **2015**, 127, 10971-10975	3.6	20
47	Proteasome inhibition promotes Parkin-Ubc13 interaction and lysine 63-linked ubiquitination. *PLoS ONE*, **2013**, 8, e73235	3.7	19
46	Cytosolic PTEN-induced Putative Kinase 1 Is Stabilized by the NF- B Pathway and Promotes Non-selective Mitophagy. *Journal of Biological Chemistry*, **2015**, 290, 16882-93	5.4	17
45	Isolation of a novel protein tyrosine phosphatase inhibitor, 2-methyl-fervenulone, and its precursors from Streptomyces. *Journal of Natural Products*, **2000**, 63, 1641-6	4.9	17
44	Discovery of indolylpiperazinylpyrimidines with dual-target profiles at adenosine A2A and dopamine D2 receptors for Parkinson's disease treatment. *PLoS ONE*, **2018**, 13, e0188212	3.7	17
43	Transgenic Mice Overexpressing the Divalent Metal Transporter 1 Exhibit Iron Accumulation and Enhanced Parkin Expression in the Brain. *NeuroMolecular Medicine*, **2017**, 19, 375-386	4.6	16
42	Catalytic activation of the membrane distal domain of protein tyrosine phosphatase epsilon, but not CD45, by two point mutations. *BBA - Proteins and Proteomics*, **1999**, 1434, 275-83		16
41	p62-Mediated mitochondrial clustering attenuates apoptosis induced by mitochondrial depolarization. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2017**, 1864, 1308-1317	4.9	15
40	APP upregulation contributes to retinal ganglion cell degeneration via JNK3. *Cell Death and Differentiation*, **2018**, 25, 663-678	12.7	15
39	Molecular mechanisms of neurodegeneration in Parkinson's disease: clues from Mendelian syndromes. *IUBMB Life*, **2003**, 55, 315-22	4.7	15
38	Parkin-independent mitophagy-FKBP8 takes the stage. *EMBO Reports*, **2017**, 18, 864-865	6.5	14
37	Natural Molecules From Chinese Herbs Protecting Against Parkinson's Disease via Anti-oxidative Stress. *Frontiers in Aging Neuroscience*, **2018**, 10, 246	5.3	12
36	S-Nitrosylation of Divalent Metal Transporter 1 Enhances Iron Uptake to Mediate Loss of Dopaminergic Neurons and Motoric Deficit. *Journal of Neuroscience*, **2018**, 38, 8364-8377	6.6	12
35	Lewy Body-like Inclusions in Human Midbrain Organoids Carrying Glucocerebrosidase and Synuclein Mutations. *Annals of Neurology*, **2021**, 90, 490-505	9.4	12
34	Mitochondria-Targeted Two-Photon Fluorescent Photosensitizers for Cancer Cell Apoptosis via Spatial Selectability. *Advanced Healthcare Materials*, **2019**, 8, e1900212	10.1	10

33	Mitochondrial Dysfunction and Parkinson's Disease-Near-Infrared Photobiomodulation as a Potential Therapeutic Strategy. *Frontiers in Aging Neuroscience*, **2020**, 12, 89	5.3	10
32	Improved Bioavailability of Levodopa Using Floatable Spray-Coated Microcapsules for the Management of Parkinson's Disease. *NeuroMolecular Medicine*, **2018**, 20, 262-270	4.6	10
31	AF-6 Protects Against Dopaminergic Dysfunction and Mitochondrial Abnormalities in Models of Parkinson's Disease. *Frontiers in Cellular Neuroscience*, **2017**, 11, 241	6.1	10
30	Calmodulin binds to and inhibits the activity of the membrane distal catalytic domain of receptor protein-tyrosine phosphatase alpha. *Journal of Biological Chemistry*, **2000**, 275, 30075-81	5.4	10
29	Pharmacological or Genetic Activation of Hsp70 Protects against Loss of Parkin Function. *Neurodegenerative Diseases*, **2016**, 16, 304-16	2.3	10
28	Sequential Application of Discrete Topographical Patterns Enhances Derivation of Functional Mesencephalic Dopaminergic Neurons from Human Induced Pluripotent Stem Cells. *Scientific Reports*, **2018**, 8, 9567	4.9	10
27	Structure-Based Specific Detection and Inhibition of Monoamine Oxidases and Their Applications in Central Nervous System Diseases. *ChemBioChem*, **2019**, 20, 1487-1497	3.8	9
26	Mitochondria-targeted polydopamine nanoprobes for visualizing endogenous sulfur dioxide derivatives in a rat epilepsy model. *Chemical Communications*, **2020**, 56, 11823-11826	5.8	9
25	Vascular Bed Molecular Profiling by Differential Systemic Decellularization In Vivo. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 2396-2409	9.4	9
24	Two-Photon Enzymatic Probes Visualizing Sub-cellular/Deep-brain Caspase Activities in Neurodegenerative Models. *Scientific Reports*, **2016**, 6, 26385	4.9	8
23	Physiological and pathological roles of LRRK2 in the nuclear envelope integrity. *Human Molecular Genetics*, **2019**, 28, 3982-3996	5.6	7
22	Drosophila expressing human SOD1 successfully recapitulates mitochondrial phenotypic features of familial amyotrophic lateral sclerosis. *Neuroscience Letters*, **2016**, 624, 47-52	3.3	7
21	Cerebral transcriptome analysis reveals age-dependent progression of neuroinflammation in P301S mutant tau transgenic male mice. *Brain, Behavior, and Immunity*, **2019**, 80, 344-357	16.6	6
20	AMP Kinase Activation is Selectively Disrupted in the Ventral Midbrain of Mice Deficient in Parkin or PINK1 Expression. *NeuroMolecular Medicine*, **2019**, 21, 25-32	4.6	6
19	Non-mammalian animal models of Parkinson's disease for drug discovery. *Expert Opinion on Drug Discovery*, **2010**, 5, 165-76	6.2	5
18	Visualization of Intra-neuronal Motor Protein Transport through Upconversion Microscopy. *Angewandte Chemie*, **2019**, 131, 9363-9369	3.6	4
17	Puromycin Analogues Capable of Multiplexed Imaging and Profiling of Protein Synthesis and Dynamics in Live Cells and Neurons. *Angewandte Chemie*, **2016**, 128, 5017-5021	3.6	4
16	The 350-fold compacted Fugu parkin gene is structurally and functionally similar to human Parkin. *Gene*, **2005**, 346, 97-104	3.8	4

15	Identification of PP2A and S6 Kinase as Modifiers of Leucine-Rich Repeat Kinase-Induced Neurotoxicity. *NeuroMolecular Medicine*, **2020**, 22, 218-226	4.6	3
14	Animal models of Parkinson's disease 2012. *Parkinsonls Disease*, **2012**, 2012, 729428	2.6	2
13	Hippocampal transcriptome profiling reveals common disease pathways in chronic hypoperfusion and aging. *Aging*, **2021**, 13, 14651-14674	5.6	2
12	Activation of Autophagy Ameliorates Age-Related Neurogenesis Decline and Neurodysfunction in Adult Mice. *Stem Cell Reviews and Reports*, **2021**, 1	7.3	2
11	Mitochondrial homeostasis in Parkinson's disease - a triumvirate rule?. *Neural Regeneration Research*, **2017**, 12, 1270-1272	4.5	1
10	Nanotheranostic agents for neurodegenerative diseases. *Emerging Topics in Life Sciences*, **2020**, 4, 645-655	3.5	1
9	Loss of FEZ1, a gene deleted in Jacobsen syndrome, causes locomotion defects and early mortality by impairing motor neuron development. *Human Molecular Genetics*, **2021**, 30, 5-20	5.6	1
8	Dynamic Role of Ubiquitination in the Management of Misfolded Proteins Associated with Neurodegenerative Diseases. *Focus on Structural Biology*, **2009**, 77-95		1
7	Time-restricted feeding modulates the DNA methylation landscape, attenuates hallmark neuropathology and cognitive impairment in a mouse model of vascular dementia.. *Theranostics*, **2022**, 12, 3007-3023	12.1	1
6	Conditional disruption of AMP kinase in dopaminergic neurons promotes Parkinson's disease-associated phenotypes in vivo. *Neurobiology of Disease*, **2021**, 161, 105560	7.5	0
5	Intramolecular charge transfer enhancing strategy based MAO-A specific two-photon fluorescent probes for glioma cell/tissue imaging. *Chemical Communications*, **2021**, 57, 11260-11263	5.8	0
4	PARK2 Induces Autophagy Removal of Impaired Mitochondria via Ubiquitination **2014**, 175-188		
3	Oxidative Stress and Parkinson Disease **2011**, 139-151		
2	Energy regulation and Parkinson's disease **2020**, 205-220		
1	Photodynamic Therapy: A Flexi-PEGDA Upconversion Implant for Wireless Brain Photodynamic Therapy (Adv. Mater. 29/2020). *Advanced Materials*, **2020**, 32, 2070219	24	