Patrick A Lewis

List of Publications by Year
in descending order

110 papers	13,201 citations	70961 41 h-index	30010 103 g-index
120 all docs	120 docs citations	120 times ranked	23017 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
2	Identification of novel risk loci, causal insights, and heritable risk for Parkinson's disease: a meta-analysis of genome-wide association studies. Lancet Neurology, The, 2019, 18, 1091-1102.	4.9	1,414
3	Kinase activity is required for the toxic effects of mutant LRRK2/dardarin. Neurobiology of Disease, 2006, 23, 329-341.	2.1	683
4	Genome, transcriptome and proteome: the rise of omics data and their integration in biomedical sciences. Briefings in Bioinformatics, 2018, 19, 286-302.	3.2	498
5	Parkinson's disease induced pluripotent stem cells with triplication of the Î±-synuclein locus. Nature Communications, 2011, 2, 440.	5.8	406
6	Î±-Synucleinopathy associated with G51D SNCA mutation: a link between Parkinsonâ€™s disease and multiple system atrophy?. Acta Neuropathologica, 2013, 125, 753-769.	3.9	369
7	The Parkinson's diseaseâ€“linked proteins Fbxo7 and Parkin interact to mediate mitophagy. Nature Neuroscience, 2013, 16, 1257-1265.	7.1	292
8	The Parkinson Disease-associated Leucine-rich Repeat Kinase 2 (LRRK2) Is a Dimer That Undergoes Intramolecular Autophosphorylation. Journal of Biological Chemistry, 2008, 283, 16906-16914.	1.6	268
9	The R1441C mutation of LRRK2 disrupts GTP hydrolysis. Biochemical and Biophysical Research Communications, 2007, 357, 668-671.	1.0	244
10	Structure of the ROC domain from the Parkinson's disease-associated leucine-rich repeat kinase 2 reveals a dimeric GTPase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1499-1504.	3.3	218
11	DYT16, a novel young-onset dystonia-parkinsonism disorder: identification of a segregating mutation in the stress-response protein PRKRA. Lancet Neurology, The, 2008, 7, 207-215.	4.9	202
12	The genetics of Parkinson's syndromes: a critical review. Current Opinion in Genetics and Development, 2009, 19, 254-265.	1.5	195
13	Genetic and phenotypic characterization of complex hereditary spastic paraplegia. Brain, 2016, 139, 1904-1918.	3.7	170
14	Estimating the causal influence of body mass index on risk of Parkinson disease: A Mendelian randomisation study. PLoS Medicine, 2017, 14, e1002314.	3.9	152
15	Cancer and Neurodegeneration: Between the Devil and the Deep Blue Sea. PLoS Genetics, 2010, 6, e1001257.	1.5	141
16	LRRK2 is a negative regulator of Mycobacterium tuberculosis phagosome maturation in macrophages. EMBO Journal, 2018, 37, .	3.5	140
17	LRRK2: Cause, Risk, and Mechanism. Journal of Parkinson's Disease, 2013, 3, 85-103.	1.5	128
18	Parkinson's disease-linked mutations in VPS35 induce dopaminergic neurodegeneration. Human Molecular Genetics, 2014, 23, 4621-4638.	1.4	126

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19	Inhibition of LRRK2 kinase activity stimulates macroautophagy. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 2900-2910.	1.9	124
20	Cellâ€free assays for Î³â€secretase activity. FASEB Journal, 2000, 14, 2383-2386.	0.2	108
21	Identification of Candidate Parkinson Disease Genes by Integrating Genome-Wide Association Study, Expression, and Epigenetic Data Sets. JAMA Neurology, 2021, 78, 464.	4.5	95
22	Presenilin 1 Regulates Pharmacologically Distinct Î³-Secretase Activities. Journal of Biological Chemistry, 2000, 275, 26277-26284.	1.6	93
23	A Presenilin 1 Mutation Associated with Familial Frontotemporal Dementia Inhibits Î³-Secretase Cleavage of APP and Notch. Neurobiology of Disease, 2002, 9, 269-273.	2.1	92
24	Distinct clinical and neuropathological features of G51D SNCA mutation cases compared with SNCA duplication and H50Q mutation. Molecular Neurodegeneration, 2015, 10, 41.	4.4	90
25	Pathogenic Parkinsonâ€™s disease mutations across the functional domains of LRRK2 alter the autophagic/lysosomal response to starvation. Biochemical and Biophysical Research Communications, 2013, 441, 862-866.	1.0	79
26	Mutations in LRRK2/dardarin associated with Parkinson disease are more toxic than equivalent mutations in the homologous kinase LRRK1. Journal of Neurochemistry, 2007, 102, 93-102.	2.1	78
27	Genetic neuropathology of Parkinson's disease. International Journal of Clinical and Experimental Pathology, 2008, 1, 217-31.	0.5	70
28	mTOR independent regulation of macroautophagy by Leucine Rich Repeat Kinase 2 via Beclin-1. Scientific Reports, 2016, 6, 35106.	1.6	69
29	Familial Frontotemporal Dementia Associated with a Novel Presenilin-1 Mutation. Dementia and Geriatric Cognitive Disorders, 2002, 14, 13-21.	0.7	68
30	The Metalloprotease Inhibitor TIMP-3 Regulates Amyloid Precursor Protein and Apolipoprotein E Receptor Proteolysis. Journal of Neuroscience, 2007, 27, 10895-10905.	1.7	67
31	The endocytic membrane trafficking pathway plays a major role in the risk of Parkinson's disease. Movement Disorders, 2019, 34, 460-468.	2.2	66
32	LRRK2 and Human Disease: A Complicated Question or a Question of Complexes?. Science Signaling, 2012, 5, pe2.	1.6	64
33	Dysfunction of the autophagy/lysosomal degradation pathway is a shared feature of the genetic synucleinopathies. FASEB Journal, 2013, 27, 3424-3429.	0.2	61
34	Leucineâ€rich repeat kinase 2 interacts with p21â€activated kinase 6 to control neurite complexity in mammalian brain. Journal of Neurochemistry, 2015, 135, 1242-1256.	2.1	57
35	Increased brain expression of GPNMB is associated with genome wide significant risk for Parkinsonâ€™s disease on chromosome 7p15.3. Neurogenetics, 2017, 18, 121-133.	0.7	57
36	The function of ROCO proteins in health and disease. Biology of the Cell, 2009, 101, 183-191.	0.7	55

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37	LRRK2 and Autophagy. Advances in Neurobiology, 2017, 14, 89-105.	1.3	54
38	Investigating the utility of human embryonic stem cellâ€derived neurons to model ageing and neurodegenerative disease using wholeâ€genome gene expression and splicing analysis. Journal of Neurochemistry, 2012, 122, 738-751.	2.1	48
39	Additional rare variant analysis in Parkinsonâ€™s disease cases with and without known pathogenic mutations: evidence for oligogenic inheritance. Human Molecular Genetics, 2016, 25, ddw348.	1.4	48
40	Computational analysis of the LRRK2 interactome. PeerJ, 2015, 3, e778.	0.9	48
41	PAK6 Phosphorylates 14-3-3Î³ to Regulate Steady State Phosphorylation of LRRK2. Frontiers in Molecular Neuroscience, 2017, 10, 417.	1.4	46
42	Fine-Mapping, Gene Expression and Splicing Analysis of the Disease Associated LRRK2 Locus. PLoS ONE, 2013, 8, e70724.	1.1	45
43	Creation of an Open-Access, Mutation-Defined Fibroblast Resource for Neurological Disease Research. PLoS ONE, 2012, 7, e43099.	1.1	44
44	Divergent Î±-synuclein solubility and aggregation properties in G2019S LRRK2 Parkinson's disease brains with Lewy Body pathology compared to idiopathic cases. Neurobiology of Disease, 2013, 58, 183-190.	2.1	44
45	The R1441C mutation alters the folding properties of the ROC domain of LRRK2. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2009, 1792, 1194-1197.	1.8	42
46	Gene expression in the Parkinson's disease brain. Brain Research Bulletin, 2012, 88, 302-312.	1.4	42
47	Identification of sixteen novel candidate genes for late onset Parkinsonâ€™s disease. Molecular Neurodegeneration, 2021, 16, 35.	4.4	41
48	Parkinsonâ€™s disease: From human genetics to clinical trials. Science Translational Medicine, 2015, 7, 205ps20.	5.8	39
49	Weighted Protein Interaction Network Analysis of Frontotemporal Dementia. Journal of Proteome Research, 2017, 16, 999-1013.	1.8	39
50	Arsenite Stress Down-regulates Phosphorylation and 14-3-3 Binding of Leucine-rich Repeat Kinase 2 (LRRK2), Promoting Self-association and Cellular Redistribution. Journal of Biological Chemistry, 2014, 289, 21386-21400.	1.6	38
51	<scp>DNAJC</scp> proteins and pathways to parkinsonism. FEBS Journal, 2019, 286, 3080-3094.	2.2	37
52	Î±-Synuclein mutations cluster around a putative protein loop. Neuroscience Letters, 2013, 546, 67-70.	1.0	36
53	Stratification of candidate genes for Parkinsonâ€™s disease using weighted protein-protein interaction network analysis. BMC Genomics, 2018, 19, 452.	1.2	35
54	Comparative Protein Interaction Network Analysis Identifies Shared and Distinct Functions for the Human ROCO Proteins. Proteomics, 2018, 18, e1700444.	1.3	34

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55	Rare variants in LRRK1 and Parkinson's disease. Neurogenetics, 2014, 15, 49-57.	0.7	33
56	Dissecting the Phenotype and Genotype of <scp>PLA2G6</scp>â€Related Parkinsonism. Movement Disorders, 2022, 37, 148-161.	2.2	32
57	The LRRK2 signalling system. Cell and Tissue Research, 2018, 373, 39-50.	1.5	31
58	Preclinical modeling of chronic inhibition of the Parkinsonâ€™s disease associated kinase LRRK2 reveals altered function of the endolysosomal system in vivo. Molecular Neurodegeneration, 2021, 16, 17.	4.4	29
59	Codon 129 polymorphism of the human prion protein influences the kinetics of amyloid formation. Journal of General Virology, 2006, 87, 2443-2449.	1.3	28
60	Coding variation in GBA explains the majority of the SYT11â€GBA Parkinson's disease GWAS locus. Movement Disorders, 2018, 33, 1821-1823.	2.2	28
61	Emerging pathways in genetic Parkinsonâ€™s disease: tangles, Lewy bodies and LRRK2. FEBS Journal, 2008, 275, 5748-5757.	2.2	27
62	A Tangled Web â€“ Tau and Sporadic Parkinson's Disease. Frontiers in Psychiatry, 2010, 1, 150.	1.3	27
63	Pathogenic LRRK2 Mutations Do Not Alter Gene Expression in Cell Model Systems or Human Brain Tissue. PLoS ONE, 2011, 6, e22489.	1.1	27
64	Analysis of macroautophagy related proteins in G2019S LRRK2 Parkinsonâ€™s disease brains with Lewy body pathology. Brain Research, 2018, 1701, 75-84.	1.1	25
65	Removal of the glycosylphosphatidylinositol anchor from PrPSc by cathepsin D does not reduce prion infectivity. Biochemical Journal, 2006, 395, 443-448.	1.7	23
66	Leucineâ€rich repeat kinase 2 and lysosomal dyshomeostasis in Parkinson disease. Journal of Neurochemistry, 2020, 152, 273-283.	2.1	21
67	PINOT: an intuitive resource for integrating protein-protein interactions. Cell Communication and Signaling, 2020, 18, 92.	2.7	21
68	Genetic, Structural, and Molecular Insights into the Function of Ras of Complex Proteins Domains. Chemistry and Biology, 2014, 21, 809-818.	6.2	20
69	Vesicular Dysfunction and the Pathogenesis of Parkinsonâ€™s Disease: Clues From Genetic Studies. Frontiers in Neuroscience, 2019, 13, 1381.	1.4	20
70	The Presenilin 1 C92S Mutation Increases AÎ² 42 Production. Biochemical and Biophysical Research Communications, 2000, 277, 261-263.	1.0	19
71	Abrogation of LRRK2 dependent Rab10 phosphorylation with TLR4 activation and alterations in evoked cytokine release in immune cells. Neurochemistry International, 2021, 147, 105070.	1.9	18
72	Directing LRRK2 to membranes of the endolysosomal pathway triggers RAB phosphorylation and JIP4 recruitment. Neurobiology of Disease, 2022, 170, 105769.	2.1	18

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73	mTOR independent alteration in ULK1 Ser758 phosphorylation following chronic LRRK2 kinase inhibition. Bioscience Reports, 2018, 38, .	1.1	16
74	Network Analysis for Complex Neurodegenerative Diseases. Current Genetic Medicine Reports, 2020, 8, 17-25.	1.9	14
75	GTP binding controls complex formation by the human ROCO protein MASL 1. FEBS Journal, 2014, 281, 261-274.	2.2	13
76	GTP binding and intramolecular regulation by the ROC domain of Death Associated Protein Kinase 1. Scientific Reports, 2012, 2, 695.	1.6	12
77	Protein network analysis reveals selectively vulnerable regions and biological processes in FTD. Neurology: Genetics, 2018, 4, e266.	0.9	12
78	Leucine rich repeat kinase 2: a paradigm for pleiotropy. Journal of Physiology, 2019, 597, 3511-3521.	1.3	12
79	The emerging role of LRRK2 in tauopathies. Clinical Science, 2022, 136, 1071-1079.	1.8	12
80	James Parkinson: The Man Behind the Shaking Palsy. Journal of Parkinson's Disease, 2012, 2, 181-187.	1.5	10
81	Genetic variation across RNA metabolism and cell death gene networks is implicated in the semantic variant of primary progressive aphasia. Scientific Reports, 2019, 9, 10854.	1.6	9
82	Integrating protein networks and machine learning for disease stratification in the Hereditary Spastic Paraplegias. IScience, 2021, 24, 102484.	1.9	8
83	An integrated genomic approach to dissect the genetic landscape regulating the cell-to-cell transfer of Î±-synuclein. Cell Reports, 2021, 35, 109189.	2.9	8
84	Modelling the functional genomics of Parkinsonâ€™s disease inCaenorhabditis elegans:LRRK2and beyond. Bioscience Reports, 2021, 41, .	1.1	8
85	C9orf72, age at onset, and ancestry help discriminate behavioral from language variants in FTLD cohorts. Neurology, 2020, 95, e3288-e3302.	1.5	7
86	SORL1 mutation in a Greek family with Parkinson's disease and dementia. Annals of Clinical and Translational Neurology, 2021, 8, 1961-1969.	1.7	7
87	The Roc domain of LRRK2 as a hub for protein-protein interactions: a focus on PAK6 and its impact on RAB phosphorylation. Brain Research, 2022, 1778, 147781.	1.1	7
88	A step forward for LRRK2 inhibitors in Parkinsonâ€™s disease. Science Translational Medicine, 2022, 14, .	5.8	7
89	Leucine Rich Repeat Kinase 2: beyond Parkinsonâ€™s and beyond kinase inhibitors. Expert Opinion on Therapeutic Targets, 2017, 21, 751-753.	1.5	6
90	Measuring Lactase Enzymatic Activity in the Teaching Lab. Journal of Visualized Experiments, 2018, , .	0.2	6

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91	In silico comparative analysis of LRRK2 interactomes from brain, kidney and lung. Brain Research, 2021, 1765, 147503.	1.1	6
92	Vesicle trafficking and pathways to neurodegeneration. Molecular Neurodegeneration, 2021, 16, 56.	4.4	6
93	Vesicular dysfunction and pathways to neurodegeneration. Essays in Biochemistry, 2021, 65, 941-948.	2.1	5
94	Leucine-rich repeat kinase 2 (LRRK2): an update on the potential therapeutic target for Parkinsonâ€™s disease. Expert Opinion on Therapeutic Targets, 2022, 26, 537-546.	1.5	5
95	Deciphering the function of leucine-rich repeat kinase 2 and targeting its dysfunction in disease. Biochemical Society Transactions, 2012, 40, 1039-1041.	1.6	4
96	Mutations in LRRK2 amplify cell-to-cell protein aggregate propagation: a hypothesis. Acta Neuropathologica, 2018, 135, 973-976.	3.9	4
97	Assaying the Kinase Activity of LRRK2 in vitro. Journal of Visualized Experiments, 2012, , .	0.2	3
98	Pierre D. and the First Photographs of Parkinson's Disease. Movement Disorders, 2020, 35, 389-391.	2.2	3
99	From structure to Ã¦tiology: a new window on the biology of leucine-rich repeat kinase 2 and Parkinson's disease. Biochemical Journal, 2021, 478, 2945-2951.	1.7	3
100	Mad Fly Disease. Journal of Neuroscience, 2007, 27, 971-972.	1.7	2
101	Emerging pathways in genetic Parkinsonâ€™s disease. FEBS Journal, 2008, 275, 5747-5747.	2.2	2
102	Insights into the Influence of Specific Splicing Events on the Structural Organization of LRRK2. International Journal of Molecular Sciences, 2018, 19, 2784.	1.8	2
103	Alzheimerâ€™s Disease and Dementia. , 2019, , 25-82.		2
104	The Role of LRRK2 Kinase Activity in Cellular PD Models. , 2008, , 423-431.		1
105	Seventy-Two-Hour LRRK2 Kinase Activity Inhibition Increases Lysosomal GBA Expression in H4, a Human Neuroglioma Cell Line. International Journal of Molecular Sciences, 2022, 23, 6935.	1.8	1
106	An Introduction to Neurodegeneration. , 2019, , 1-23.		0
107	The Prion Diseases. , 2019, , 123-155.		0
108	Reply to: â€œLight and Shade in Patrick Lewis et al's Paper on the First Photographs of Parkinson's Diseaseâ€• Movement Disorders, 2020, 35, 1882-1882.	2.2	0

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109	Editorial: Protein Degradation Pathways in Parkinson's Disease and Neurodegeneration. Frontiers in Neuroscience, 2020, 14, 741.	1.4	0
110	Prions. ACS in Focus, 2022, , .	0.4	0