Thomas M Durcan

List of Publications by Year
in descending order

52 papers	7,064 citations	331642 21 h-index	189881 50 g-index
67 all docs	67 docs citations	67 times ranked	17114 citing authors

#	ARTICLE	IF	CITATIONS
1	Microfabricated disk technology: Rapid scale up in midbrain organoid generation. Methods, 2022, 203, 465-477.	3.8	15
2	A streamlined CRISPR workflow to introduce mutations and generate isogenic iPSCs for modeling amyotrophic lateral sclerosis. Methods, 2022, 203, 297-310.	3.8	22
3	Co-registration of Imaging Modalities (MRI, CT and PET) to Perform Frameless Stereotaxic Robotic Injections in the Common Marmoset. Neuroscience, 2022, 480, 143-154.	2.3	5
4	Selective localization of Mfn2 near PINK1 enables its preferential ubiquitination by Parkin on mitochondria. Open Biology, 2022, 12, 210255.	3.6	10
5	Rapid Generation of Ventral Spinal Cord-like Astrocytes from Human iPSCs for Modeling Non-Cell Autonomous Mechanisms of Lower Motor Neuron Disease. Cells, 2022, 11, 399.	4.1	7
6	FOXG1 dose tunes cell proliferation dynamics in human forebrain progenitor cells. Stem Cell Reports, 2022, 17, 475-488.	4.8	4
7	A light-inducible protein clustering system for in vivo analysis of Î±-synuclein aggregation in Parkinson disease. PLoS Biology, 2022, 20, e3001578.	5.6	12
8	An approach to measuring protein turnover in human induced pluripotent stem cell organoids by mass spectrometry. Methods, 2022, 203, 17-27.	3.8	5
9	Hydrogel Mechanics Influence the Growth and Development of Embedded Brain Organoids. ACS Applied Bio Materials, 2022, 5, 214-224.	4.6	23
10	Generation of homozygous PRKN, PINK1 and double PINK1/PRKN knockout cell lines from healthy induced pluripotent stem cells using CRISPR/Cas9 editing. Stem Cell Research, 2022, 62, 102806.	0.7	6
11	Identification of amyloid beta in small extracellular vesicles <i>via</i> Raman spectroscopy. Nanoscale Advances, 2021, 3, 4119-4132.	4.6	13
12	Development of an Î±-synuclein knockdown peptide and evaluation of its efficacy in Parkinsonâ€™s disease models. Communications Biology, 2021, 4, 232.	4.4	18
13	Pharmacological Inhibition of Brain EGFR Activation By a BBB-penetrating Inhibitor, AZD3759, Attenuates Î±-synuclein Pathology in a Mouse Model of Î±-Synuclein Propagation. Neurotherapeutics, 2021, 18, 979-997.	4.4	13
14	A Multistep Workflow to Evaluate Newly Generated iPSCs and Their Ability to Generate Different Cell Types. Methods and Protocols, 2021, 4, 50.	2.0	40
15	Midbrain organoids with an<i>SNCA</i>gene triplication model key features of synucleinopathy. Brain Communications, 2021, 3, fcab223.	3.3	37
16	Beneficial effects of cysteamine in Thy1-Î±-Syn mice and induced pluripotent stem cells with a SNCA gene triplication. Neurobiology of Disease, 2020, 145, 105042.	4.4	6
17	Applying hiPSCs and Biomaterials Towards an Understanding and Treatment of Traumatic Brain Injury. Frontiers in Cellular Neuroscience, 2020, 14, 594304.	3.7	10
18	The Neglected Genes of ALS: Cytoskeletal Dynamics Impact Synaptic Degeneration in ALS. Frontiers in Cellular Neuroscience, 2020, 14, 594975.	3.7	45

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19	Characterization of human iPSC-derived astrocytes with potential for disease modeling and drug discovery. Neuroscience Letters, 2020, 731, 135028.	2.1	40
20	Defining the Neural Kinome: Strategies and Opportunities for Small Molecule Drug Discovery to Target Neurodegenerative Diseases. ACS Chemical Neuroscience, 2020, 11, 1871-1886.	3.5	27
21	Stimulation of L-type calcium channels increases tyrosine hydroxylase and dopamine in ventral midbrain cells induced from somatic cells. Stem Cells Translational Medicine, 2020, 9, 697-712.	3.3	17
22	TNF receptorâ€“associated factor 6 interacts with ALS-linked misfolded superoxide dismutase 1 and promotes aggregation. Journal of Biological Chemistry, 2020, 295, 3808-3825.	3.4	16
23	Quantitative expansion microscopy for the characterization of the spectrin periodic skeleton of axons using fluorescence microscopy. Scientific Reports, 2020, 10, 2917.	3.3	15
24	The Quebec Parkinson Network: A Researcher-Patient Matching Platform and Multimodal Biorepository. Journal of Parkinson's Disease, 2020, 10, 301-313.	2.8	35
25	Characterization of Human iPSC-derived Spinal Motor Neurons by Single-cell RNA Sequencing. Neuroscience, 2020, 450, 57-70.	2.3	21
26	Patient-Derived Stem Cells, Another in vitro Model, or the Missing Link Toward Novel Therapies for Autism Spectrum Disorders?. Frontiers in Pediatrics, 2019, 7, 225.	1.9	10
27	One Step Into the Future: New iPSC Tools to Advance Research in Parkinsonâ€™s Disease and Neurological Disorders. Journal of Parkinson's Disease, 2019, 9, 265-281.	2.8	19
28	Bcl-2-associated athanogene 5 (BAG5) regulates Parkin-dependent mitophagy and cell death. Cell Death and Disease, 2019, 10, 907.	6.3	32
29	Implementation of an antibody characterization procedure and application to the major ALS/FTD disease gene C9ORF72. ELife, 2019, 8, .	6.0	79
30	Disruption of GRIN2B Impairs Differentiation in Human Neurons. Stem Cell Reports, 2018, 11, 183-196.	4.8	53
31	Mfn2 ubiquitination by PINK1/parkin gates the p97-dependent release of ER from mitochondria to drive mitophagy. ELife, 2018, 7, .	6.0	261
32	Open Science Meets Stem Cells: A New Drug Discovery Approach for Neurodegenerative Disorders. Frontiers in Neuroscience, 2018, 12, 47.	2.8	20
33	The Neuroprotective Role of Protein Quality Control in Halting the Development of Alpha-Synuclein Pathology. Frontiers in Molecular Neuroscience, 2017, 10, 311.	2.9	17
34	Defending the mitochondria: The pathways of mitophagy and mitochondrial-derived vesicles. International Journal of Biochemistry and Cell Biology, 2016, 79, 427-436.	2.8	98
35	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	9.1	4,701
36	USP8 and PARK2/parkin-mediated mitophagy. Autophagy, 2015, 11, 428-429.	9.1	35

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37	The E3 Ubiquitin Ligase Parkin Is Recruited to the 26 S Proteasome via the Proteasomal Ubiquitin Receptor Rpn13. Journal of Biological Chemistry, 2015, 290, 7492-7505.	3.4	32
38	The three â€˜Pâ€™s of mitophagy: PARKIN, PINK1, and post-translational modifications. Genes and Development, 2015, 29, 989-999.	5.9	324
39	<scp>USP</scp> 8 regulates mitophagy by removing <scp>K</scp> 6â€linked ubiquitin conjugates from parkin. EMBO Journal, 2014, 33, 2473-2491.	7.8	298
40	The Cell and Molecular Biology of Neurodegenerative Diseases: An Overview. Frontiers in Neurology, 2013, 4, 194.	2.4	12
41	Ataxin-3 and Its E3 Partners: Implications for Machadoâ€“Joseph Disease. Frontiers in Neurology, 2013, 4, 46.	2.4	28
42	Ataxin-3 Deubiquitination Is Coupled to Parkin Ubiquitination via E2 Ubiquitin-conjugating Enzyme. Journal of Biological Chemistry, 2012, 287, 531-541.	3.4	64
43	Most genome-wide significant susceptibility loci for schizophrenia and bipolar disorder reported to date cross-traditional diagnostic boundaries. Human Molecular Genetics, 2011, 20, 387-391.	2.9	233
44	The Machadoâ€“Joseph disease-associated mutant form of ataxin-3 regulates parkin ubiquitination and stability. Human Molecular Genetics, 2011, 20, 141-154.	2.9	129
45	Mutant ataxin-3 promotes the autophagic degradation of parkin. Autophagy, 2011, 7, 233-234.	9.1	35
46	Centrosome biogenesis continues in the absence of microtubules during prolonged Sâ€phase arrest. Journal of Cellular Physiology, 2010, 225, 454-465.	4.1	11
47	Isolation of human proteasomes and putative proteasome-interacting proteins using a novel affinity chromatography method. Experimental Cell Research, 2009, 315, 176-189.	2.6	27
48	Centrosome duplication proceeds during mimosineâ€induced G₁ cell cycle arrest. Journal of Cellular Physiology, 2008, 215, 182-191.	4.1	17
49	Tektin 2 is required for central spindle microtubule organization and the completion of cytokinesis. Journal of Cell Biology, 2008, 181, 595-603.	5.2	25
50	Digital Image Files in Light Microscopy. Methods in Cell Biology, 2007, 81, 315-333.	1.1	4
51	Generation of human midbrain organoids from induced pluripotent stem cells. MNI Open Research, 0, 3, 1.	1.0	7
52	Generation of human midbrain organoids from induced pluripotent stem cells. MNI Open Research, 0, 3, 1.	1.0	10