Lachlan H Thompson

List of Publications by Year
in descending order

67 papers	2,461 citations	201385 27 h-index	205818 48 g-index
69 all docs	69 docs citations	69 times ranked	3159 citing authors

#	Article	IF	Citations
1	Hippocampal Lewy pathology and cholinergic dysfunction are associated with dementia in Parkinsonâ€™s disease. Brain, 2014, 137, 2493-2508.	3.7	232
2	Identification of Dopaminergic Neurons of Nigral and Ventral Tegmental Area Subtypes in Grafts of Fetal Ventral Mesencephalon Based on Cell Morphology, Protein Expression, and Efferent Projections. Journal of Neuroscience, 2005, 25, 6467-6477.	1.7	212
3	Efficient production of mesencephalic dopamine neurons by Lmx1a expression in embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7613-7618.	3.3	196
4	The A9 dopamine neuron component in grafts of ventral mesencephalon is an important determinant for recovery of motor function in a rat model of Parkinsonâ€™s disease. Brain, 2010, 133, 482-495.	3.7	125
5	Reconstruction of the nigrostriatal dopamine pathway in the adult mouse brain. European Journal of Neuroscience, 2009, 30, 625-638.	1.2	116
6	Peptide-Based Scaffolds Support Human Cortical Progenitor Graft Integration to Reduce Atrophy and Promote Functional Repair in a Model of Stroke. Cell Reports, 2017, 20, 1964-1977.	2.9	88
7	Birth dating of midbrain dopamine neurons identifies A9 enriched tissue for transplantation into Parkinsonian mice. Experimental Neurology, 2012, 236, 58-68.	2.0	82
8	GIRK2 expression in dopamine neurons of the substantia nigra and ventral tegmental area. Journal of Comparative Neurology, 2012, 520, 2591-2607.	0.9	76
9	Identification of transplantable dopamine neuron precursors at different stages of midbrain neurogenesis. Experimental Neurology, 2009, 219, 341-354.	2.0	64
10	Are Stem Cell-Based Therapies for Parkinsonâ€™s Disease Ready for the Clinic in 2016?. Journal of Parkinson's Disease, 2016, 6, 57-63.	1.5	57
11	Reconstruction of brain circuitry by neural transplants generated from pluripotent stem cells. Neurobiology of Disease, 2015, 79, 28-40.	2.1	56
12	Viral Delivery of GDNF Promotes Functional Integration of Human Stem Cell Grafts in Parkinsonâ€™s Disease. Cell Stem Cell, 2020, 26, 511-526.e5.	5.2	56
13	Efficiently Specified Ventral Midbrain Dopamine Neurons from Human Pluripotent Stem Cells Under Xeno-Free Conditions Restore Motor Deficits in Parkinsonian Rodents. Stem Cells Translational Medicine, 2017, 6, 937-948.	1.6	55
14	Isolation and characterization of neural precursor cells from theSox1-GFP reporter mouse. European Journal of Neuroscience, 2005, 22, 1555-1569.	1.2	53
15	Cometin is a novel neurotrophic factor that promotes neurite outgrowth and neuroblast migration in vitro and supports survival of spiral ganglion neurons in vivo. Experimental Neurology, 2012, 233, 172-181.	2.0	52
16	Transcriptome analysis reveals transmembrane targets on transplantable midbrain dopamine progenitors. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1946-E1955.	3.3	52
17	Glycogen Synthase Kinase 3Î² and Activin/Nodal Inhibition in Human Embryonic Stem Cells Induces a Pre-Neuroepithelial State That Is Required for Specification to a Floor Plate Cell Lineage. Stem Cells, 2012, 30, 2400-2411.	1.4	51
18	Neurogenin2 identifies a transplantable dopamine neuron precursor in the developing ventral mesencephalon. Experimental Neurology, 2006, 198, 183-198.	2.0	44

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19	Trophic factors differentiate dopamine neurons vulnerable to Parkinson's disease. Neurobiology of Aging, 2013, 34, 873-886.	1.5	44
20	Neurons derived from human embryonic stem cells extend long-distance axonal projections through growth along host white matter tracts after intra-cerebral transplantation. Frontiers in Cellular Neuroscience, 2012, 6, 11.	1.8	41
21	Characterization of Meteorinâ€"An Evolutionary Conserved Neurotrophic Factor. Journal of Molecular Neuroscience, 2009, 39, 104-116.	1.1	38
22	Dynamics of transgene expression in a neural stem cell line transduced with lentiviral vectors incorporating the cHS4 insulator. Experimental Cell Research, 2004, 298, 611-623.	1.2	36
23	Functional properties and synaptic integration of genetically labelled dopaminergic neurons in intrastriatal grafts. European Journal of Neuroscience, 2005, 21, 2793-2799.	1.2	35
24	Cell intrinsic and extrinsic factors contribute to enhance neural circuit reconstruction following transplantation in Parkinsonian mice. Journal of Physiology, 2013, 591, 77-91.	1.3	33
25	A PITX3 -EGFP Reporter Line Reveals Connectivity of Dopamine and Non-dopamine Neuronal Subtypes in Grafts Generated from Human Embryonic Stem Cells. Stem Cell Reports, 2017, 9, 868-882.	2.3	32
26	Modulating Wnt signaling to improve cell replacement therapy for Parkinson's disease. Journal of Molecular Cell Biology, 2014, 6, 54-63.	1.5	31
27	Shear Containment of BDNF within Molecular Hydrogels Promotes Human Stem Cell Engraftment and Postinfarction Remodeling in Stroke. Advanced Biology, 2018, 2, 1800113.	3.0	28
28	Functional Characterization of Friedreich Ataxia iPS-Derived Neuronal Progenitors and Their Integration in the Adult Brain. PLoS ONE, 2014, 9, e101718.	1.1	27
29	Survival, differentiation, and connectivity of ventral mesencephalic dopamine neurons following transplantation. Progress in Brain Research, 2012, 200, 61-95.	0.9	25
30	Gli1 Is an Inducing Factor in Generating Floor Plate Progenitor Cells from Human Embryonic Stem Cells Â. Stem Cells, 2010, 28, 1805-1815.	1.4	24
31	Non-dopaminergic neurons in ventral mesencephalic transplants make widespread axonal connections in the host brain. Experimental Neurology, 2008, 213, 220-228.	2.0	23
32	Chondroitinase improves midbrain pathway reconstruction by transplanted dopamine progenitors in Parkinsonian mice. Molecular and Cellular Neurosciences, 2015, 69, 22-29.	1.0	23
33	Isolation of LMX1a Ventral Midbrain Progenitors Improves the Safety and Predictability of Human Pluripotent Stem Cell-Derived Neural Transplants in Parkinsonian Disease. Journal of Neuroscience, 2019, 39, 9521-9531.	1.7	23
34	A combined cell and gene therapy approach for homotopic reconstruction of midbrain dopamine pathways using human pluripotent stem cells. Cell Stem Cell, 2022, 29, 434-448.e5.	5.2	23
35	Long-Distance Axonal Growth and Protracted Functional Maturation of Neurons Derived from Human Induced Pluripotent Stem Cells After Intracerebral Transplantation. Stem Cells Translational Medicine, 2017, 6, 1547-1556.	1.6	21
36	Human stem cells harboring a suicide gene improve theÂsafety and standardisation of neural transplants in Parkinsonian rats. Nature Communications, 2021, 12, 3275.	5.8	21

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37	Transplantation of Fetal Midbrain Dopamine Progenitors into a Rodent Model of Parkinsonâ€™s Disease. Methods in Molecular Biology, 2013, 1059, 169-180.	0.4	21
38	Lentiviral delivery of Meteorin protects striatal neurons against excitotoxicity and reverses motor deficits in the quinolinic acid rat model. Neurobiology of Disease, 2011, 41, 160-168.	2.1	20
39	Modelling the dopamine and noradrenergic cell loss that occurs in Parkinson's disease and the impact on hippocampal neurogenesis. Hippocampus, 2018, 28, 327-337.	0.9	20
40	Axonal Growth of Midbrain Dopamine Neurons is Modulated by the Cell Adhesion Molecule ALCAM Through <i>Trans</i>-Heterophilic Interactions with L1cam, Chl1, and Semaphorins. Journal of Neuroscience, 2019, 39, 6656-6667.	1.7	20
41	An Optimized Protocol for the Generation of Midbrain Dopamine Neurons under Defined Conditions. STAR Protocols, 2020, 1, 100065.	0.5	18
42	Differential Dopamine Receptor Occupancy Underlies L-DOPA-Induced Dyskinesia in a Rat Model of Parkinson's Disease. PLoS ONE, 2014, 9, e90759.	1.1	16
43	Tissue Programmed Hydrogels Functionalized with GDNF Improve Human Neural Grafts in Parkinson's Disease. Advanced Functional Materials, 2021, 31, 2105301.	7.8	16
44	Gene marking of human neural stem/precursor cells using green fluorescent proteins. Journal of Gene Medicine, 2005, 7, 18-29.	1.4	14
45	Meningeal cells influence midbrain development and the engraftment of dopamine progenitors in Parkinsonian mice. Experimental Neurology, 2015, 267, 30-41.	2.0	12
46	FGF-MAPK signaling regulates human deep-layer corticogenesis. Stem Cell Reports, 2021, 16, 1262-1275.	2.3	12
47	Generation of striatal projection neurons extends into the neonatal period in the rat brain. Journal of Physiology, 2013, 591, 67-76.	1.3	7
48	Over-Expression of Meteorin Drives Gliogenesis Following Striatal Injury. Frontiers in Cellular Neuroscience, 2016, 10, 177.	1.8	7
49	Combined immunohistochemical and retrograde tracing reveals little evidence of innervation of the rat dentate gyrus by midbrain dopamine neurons. Frontiers in Biology, 2016, 11, 246-255.	0.7	7
50	Specification of murine ground state pluripotent stem cells to regional neuronal populations. Scientific Reports, 2017, 7, 16001.	1.6	7
51	Transcriptional Profiling of Xenogeneic Transplants: Examining Human Pluripotent Stem Cell-Derived Grafts in the Rodent Brain. Stem Cell Reports, 2019, 13, 877-890.	2.3	7
52	Unprecedented Potential for Neural Drug Discovery Based on Self-Organizing hiPSC Platforms. Molecules, 2020, 25, 1150.	1.7	7
53	Long-Term Motor Deficit and Diffuse Cortical Atrophy Following Focal Cortical Ischemia in Athymic Rats. Frontiers in Cellular Neuroscience, 2019, 13, 552.	1.8	6
54	Hemispheric cortical atrophy and chronic microglial activation following mild focal ischemic stroke in adult male rats. Journal of Neuroscience Research, 2021, 99, 3222-3237.	1.3	6

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55	Creation of GMP-Compliant iPSCs From Banked Umbilical Cord Blood. Frontiers in Cell and Developmental Biology, 2022, 10, 835321.	1.8	6
56	In vivo gene delivery to proliferating cells in the striatum generated in response to a 6-hydroxydopamine lesion of the nigro-striatal dopamine pathway. Neurobiology of Disease, 2008, 30, 343-352.	2.1	5
57	Transgenic reporter mice as tools for studies of transplantability and connectivity of dopamine neuron precursors in fetal tissue grafts. Progress in Brain Research, 2009, 175, 53-79.	0.9	5
58	Longitudinal hippocampal volumetric changes in mice following brain infarction. Scientific Reports, 2021, 11, 10269.	1.6	5
59	In Vivo Survival and Differentiation of Friedreich Ataxia iPSC-Derived Sensory Neurons Transplanted in the Adult Dorsal Root Ganglia. Stem Cells Translational Medicine, 2021, 10, 1157-1169.	1.6	4
60	Understanding the Influence of Target Acquisition on Survival, Integration, and Phenotypic Maturation of Dopamine Neurons within Stem Cell-Derived Neural Grafts in a Parkinson's Disease Model. Journal of Neuroscience, 2022, 42, 4995-5006.	1.7	4
61	Local Injection of Endothelin-1 in the Early Neonatal Rat Brain Models Ischemic Damage Associated with Motor Impairment and Diffuse Loss in Brain Volume. Neuroscience, 2018, 393, 110-122.	1.1	3
62	Ischemic Injury Does Not Stimulate Striatal Neuron Replacement Even during Periods of Active Striatal Neurogenesis. IScience, 2020, 23, 101175.	1.9	3
63	Focal Ischemic Injury to the Early Neonatal Rat Brain Models Cognitive and Motor Deficits with Associated Histopathological Outcomes Relevant to Human Neonatal Brain Injury. International Journal of Molecular Sciences, 2021, 22, 4740.	1.8	2
64	Histological characterization and quantification of newborn cells in the adult rodent brain. STAR Protocols, 2021, 2, 100614.	0.5	2
65	Novel pluripotent stem cell lines for enriched grafting in Parkinsonâ€™s disease. Neural Regeneration Research, 2020, 15, 255.	1.6	2
66	Developing stem cell-based therapies for neural repair. Frontiers in Cellular Neuroscience, 2013, 7, 198.	1.8	1
67	Capturing longitudinal impacts on cognition following stroke in rodent models using touchscreen testing. Alzheimer's and Dementia, 2020, 16, e044156.	0.4	0