Roman Chrast

List of Publications by Year
in descending order

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63	3,690	126708	133063
papers	citations	33	59
		h-index	g-index

66	66	66	5793
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lipid metabolism in myelinating glial cells: lessons from human inherited disorders and mouse models. Journal of Lipid Research, 2011, 52, 419-434.	2.0	228
2	Mutations in a Gene Encoding a Novel SH3/TPR Domain Protein Cause Autosomal Recessive Charcot-Marie-Tooth Type 4C Neuropathy. American Journal of Human Genetics, 2003, 73, 1106-1119.	2.6	185
3	Oligodendroglial myelination requires astrocyte-derived lipids. PLoS Biology, 2017, 15, e1002605.	2.6	179
4	Dysfunction in endoplasmic reticulum-mitochondria crosstalk underlies SIGMAR1 loss of function mediated motor neuron degeneration. Brain, 2015, 138, 875-890.	3.7	172
5	Local regulation of fat metabolism in peripheral nerves. Genes and Development, 2003, 17, 2450-2464.	2.7	161
6	Transcriptional regulator PRDM12 is essential for human pain perception. Nature Genetics, 2015, 47, 803-808.	9.4	137
7	Missense mutations inTENM4, a regulator of axon guidance and central myelination, cause essential tremor. Human Molecular Genetics, 2015, 24, 5677-5686.	1.4	134
8	Novel pathogenic pathways in diabetic neuropathy. Trends in Neurosciences, 2013, 36, 439-449.	4.2	128
9	Phosphatidic acid mediates demyelination in Lpin1 mutant mice. Genes and Development, 2008, 22, 1647-1661.	2.7	122
10	Expression of mitofusin 2R94Q in a transgenic mouse leads to Charcotâ€“Marieâ€“Tooth neuropathy type 2A. Brain, 2010, 133, 1460-1469.	3.7	102
11	SCAP is required for timely and proper myelin membrane synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21383-21388.	3.3	99
12	PPARÎ³ in Placental Angiogenesis. Endocrinology, 2010, 151, 4969-4981.	1.4	98
13	SH3TC2/KIAA1985 protein is required for proper myelination and the integrity of the node of Ranvier in the peripheral nervous system. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17528-17533.	3.3	97
14	Akt Regulates Axon Wrapping and Myelin Sheath Thickness in the PNS. Journal of Neuroscience, 2016, 36, 4506-4521.	1.7	97
15	Loss of tubulin deglutamylase <scp>CCP</scp> 1 causes infantileâ€onset neurodegeneration. EMBO Journal, 2018, 37, .	3.5	86
16	SH3TC2, a protein mutant in Charcotâ€“Marieâ€“Tooth neuropathy, links peripheral nerve myelination to endosomal recycling. Brain, 2010, 133, 2462-2474.	3.7	82
17	Singleâ€“minded and Down syndrome?. Nature Genetics, 1995, 10, 9-10.	9.4	76
18	Altered interplay between endoplasmic reticulum and mitochondria in Charcotâ€“Marieâ€“Tooth type 2A neuropathy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2328-2337.	3.3	73

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19	Loss of function mutations inHARScause a spectrum of inherited peripheral neuropathies. Brain, 2015, 138, 2161-2172.	3.7	71
20	Lack of GDAP1 Induces Neuronal Calcium and Mitochondrial Defects in a Knockout Mouse Model of Charcot-Marie-Tooth Neuropathy. PLoS Genetics, 2015, 11, e1005115.	1.5	70
21	Endoplasmic reticulum and mitochondria in diseases of motor and sensory neurons: a broken relationship?. Cell Death and Disease, 2018, 9, 333.	2.7	69
22	Cloning of Two Human Homologs of the Drosophila single-minded Gene SIM1 on Chromosome 6q and SIM2 on 21q Within the Down Syndrome Chromosomalâ€‰Region. Genome Research, 1997, 7, 615-624.	2.4	66
23	A role of peripheral myelin protein 2 in lipid homeostasis of myelinating schwann cells. Glia, 2014, 62, 1502-1512.	2.5	61
24	Hepatic-specific lipin-1 deficiency exacerbates experimental alcohol-induced steatohepatitis in mice. Hepatology, 2013, 58, 1953-1963.	3.6	60
25	Distribution of Monocarboxylate Transporters in the Peripheral Nervous System Suggests Putative Roles in Lactate Shuttling and Myelination. Journal of Neuroscience, 2015, 35, 4151-4156.	1.7	60
26	Mice with an adipocyte-specific lipin 1 separation-of-function allele reveal unexpected roles for phosphatidic acid in metabolic regulation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 642-647.	3.3	57
27	In vivo real-time dynamics of ATP and ROS production in axonal mitochondria show decoupling in mouse models of peripheral neuropathies. Acta Neuropathologica Communications, 2019, 7, 86.	2.4	44
28	Injured Axons Instruct Schwann Cells to Build Constricting Actin Spheres to Accelerate Axonal Disintegration. Cell Reports, 2019, 27, 3152-3166.e7.	2.9	43
29	Gene replacement therapy in a model of Charcot-Marie-Tooth 4C neuropathy. Brain, 2019, 142, 1227-1241.	3.7	43
30	Cell Autonomous Lipin 1 Function Is Essential for Development and Maintenance of White and Brown Adipose Tissue. Molecular and Cellular Biology, 2012, 32, 4794-4810.	1.1	40
31	PRDM12 Is Required for Initiation of the Nociceptive Neuron Lineage during Neurogenesis. Cell Reports, 2019, 26, 3484-3492.e4.	2.9	40
32	Sh3tc2 deficiency affects neuregulinâ€1/ErbB signaling. Glia, 2013, 61, 1041-1051.	2.5	39
33	Acidâ€sensing ion channel 1a drives AMPA receptor plasticity following ischaemia and acidosis in hippocampal CA1 neurons. Journal of Physiology, 2015, 593, 4373-4386.	1.3	36
34	Altered Distribution of Juxtaparanodal K_v1.2 Subunits Mediates Peripheral Nerve Hyperexcitability in Type 2 Diabetes Mellitus. Journal of Neuroscience, 2012, 32, 7493-7498.	1.7	34
35	Macrophage-Associated Lipin-1 Enzymatic Activity Contributes to Modified Low-Density Lipoproteinâ€“Induced Proinflammatory Signaling and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 324-334.	1.1	34
36	Lipin1 deficiency causes sarcoplasmic reticulum stress and chaperoneâ€responsive myopathy. EMBO Journal, 2019, 38, .	3.5	34

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37	SREBP-1c expression in Schwann cells is affected by diabetes and nutritional status. Molecular and Cellular Neurosciences, 2007, 35, 525-534.	1.0	32
38	PLEKHG5 deficiency leads to an intermediate form of autosomal-recessive Charcotâ€“Marieâ€“Tooth disease. Human Molecular Genetics, 2013, 22, 4224-4232.	1.4	31
39	A Hypomorphic Mutation in Lpin1 Induces Progressively Improving Neuropathy and Lipodystrophy in the Rat. Journal of Biological Chemistry, 2011, 286, 26781-26793.	1.6	30
40	Loss of lipin 1â€mediated phosphatidic acid phosphohydrolase activity in muscle leads to skeletal myopathy in mice. FASEB Journal, 2019, 33, 652-667.	0.2	30
41	Metabolic Interaction Between Schwann Cells and Axons Under Physiological and Disease Conditions. Frontiers in Cellular Neuroscience, 2020, 14, 148.	1.8	30
42	Neuronal activity in the hub of extrasynaptic Schwann cell-axon interactions. Frontiers in Cellular Neuroscience, 2013, 7, 228.	1.8	28
43	Characterization of molecular mechanisms underlying the axonal Charcotâ€“Marieâ€“Tooth neuropathy caused by MORC2 mutations. Human Molecular Genetics, 2019, 28, 1629-1644.	1.4	28
44	Aging of myelinating glial cells predominantly affects lipid metabolism and immune response pathways. Glia, 2012, 60, 751-760.	2.5	27
45	Liver-specific loss of lipin-1-mediated phosphatidic acid phosphatase activity does not mitigate intrahepatic TG accumulation in mice. Journal of Lipid Research, 2015, 56, 848-858.	2.0	24
46	Neuromuscular Junction Changes in a Mouse Model of Charcot-Marie-Tooth Disease Type 4C. International Journal of Molecular Sciences, 2018, 19, 4072.	1.8	24
47	Disrupted function of lactate transporter <scp>MCT1</scp>, but not <scp>MCT4</scp>, in Schwann cells affects the maintenance of motor endâ€plate innervation. Glia, 2021, 69, 124-136.	2.5	24
48	Linearization and purification of BAC DNA for the development of transgenic mice. Transgenic Research, 1999, 8, 147-150.	1.3	22
49	Biallelic variants in HPDL cause pure and complicated hereditary spastic paraplegia. Brain, 2021, 144, 1422-1434.	3.7	22
50	Myeloid Cell-Specific Lipin-1 Deficiency Stimulates Endocrine Adiponectin-FGF15 Axis and Ameliorates Ethanol-Induced Liver Injury in Mice. Scientific Reports, 2016, 6, 34117.	1.6	21
51	The Role of Peripheral Myelin Protein 2 in Remyelination. Cellular and Molecular Neurobiology, 2018, 38, 487-496.	1.7	21
52	In vivo time-lapse imaging of mitochondria in healthy and diseased peripheral myelin sheath. Mitochondrion, 2015, 23, 32-41.	1.6	18
53	PFN2 and GAMT as common molecular determinants of axonal Charcot-Marie-Tooth disease. Journal of Neurology, Neurosurgery and Psychiatry, 2018, 89, 870-878.	0.9	16
54	Blocking mitochondrial calcium release in Schwann cells prevents demyelinating neuropathies. Journal of Clinical Investigation, 2016, 126, 1023-1038.	3.9	14

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55	Complement factors in adult peripheral nerve: a potential role in energy metabolism. Neurochemistry International, 2004, 45, 353-359.	1.9	13
56	The Mouse Brain Transcriptome by SAGE: Differences in Gene Expression between P30 Brains of the Partial Trisomy 16 Mouse Model of Down Syndrome (Ts65Dn) and Normals. Genome Research, 2000, 10, 2006-2021.	2.4	13
57	Global Transcriptional Programs in Peripheral Nerve Endoneurium and DRG Are Resistant to the Onset of Type 1 Diabetic Neuropathy in Ins2Akita/+ Mice. PLoS ONE, 2010, 5, e10832.	1.1	12
58	Charcotâ€“Marieâ€“Tooth Disease type 4C: Novel mutations, clinical presentations, and diagnostic challenges. Muscle and Nerve, 2018, 57, 749-755.	1.0	12
59	Lipin1 is required for skeletal muscle development by regulating MEF2c and MyoD expression. Journal of Physiology, 2019, 597, 889-901.	1.3	12
60	In vitro models to study insulin and glucocorticoids modulation of trimethyltin (TMT)-induced neuroinflammation and neurodegeneration, and in vivo validation in db/db mice. Archives of Toxicology, 2019, 93, 1649-1664.	1.9	11
61	Sox4 participates in the modulation of Schwann cell myelination. European Journal of Neuroscience, 2015, 42, 1788-1796.	1.2	9
62	Epineurial adipocytes are dispensable for <scp>S</scp>chwann cell myelination. Journal of Neurochemistry, 2012, 123, 662-667.	2.1	5
63	Reply: IsSIGMAR1a confirmed FTD/MND gene?. Brain, 2015, 138, e394-e394.	3.7	0