Aaron D Gitler

List of Publications by Year
in descending order

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147 papers	21,435 citations	15504 65 h-index	12597 132 g-index
162 all docs	162 docs citations	162 times ranked	21623 citing authors

#	Article	IF	Citations
1	Î±-Synuclein Blocks ER-Golgi Traffic and Rab1 Rescues Neuron Loss in Parkinson's Models. Science, 2006, 313, 324-328.	12.6	1,268
2	Mutations in prion-like domains in hnRNPA2B1 and hnRNPA1 cause multisystem proteinopathy and ALS. Nature, 2013, 495, 467-473.	27.8	1,249
3	Ataxin-2 intermediate-length polyglutamine expansions are associated with increased risk for ALS. Nature, 2010, 466, 1069-1075.	27.8	1,117
4	Exome sequencing in amyotrophic lateral sclerosis identifies risk genes and pathways. Science, 2015, 347, 1436-1441.	12.6	823
5	Stress granules as crucibles of ALS pathogenesis. Journal of Cell Biology, 2013, 201, 361-372.	5.2	756
6	TDP-43 Is Intrinsically Aggregation-prone, and Amyotrophic Lateral Sclerosis-linked Mutations Accelerate Aggregation and Increase Toxicity. Journal of Biological Chemistry, 2009, 284, 20329-20339.	3.4	651
7	The tip of the iceberg: RNA-binding proteins with prion-like domains in neurodegenerative disease. Brain Research, 2012, 1462, 61-80.	2.2	572
8	Modifiers of C9orf72 dipeptide repeat toxicity connect nucleocytoplasmic transport defects to FTD/ALS. Nature Neuroscience, 2015, 18, 1226-1229.	14.8	528
9	Genome-wide Analyses Identify KIF5A as a Novel ALS Gene. Neuron, 2018, 97, 1268-1283.e6.	8.1	517
10	Neurodegenerative disease: models, mechanisms, and a new hope. DMM Disease Models and Mechanisms, 2017, 10, 499-502.	2.4	508
11	Î±-Synuclein is part of a diverse and highly conserved interaction network that includes PARK9 and manganese toxicity. Nature Genetics, 2009, 41, 308-315.	21.4	501
12	The Parkinson's disease protein Î±-synuclein disrupts cellular Rab homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 145-150.	7.1	479
13	Therapeutic reduction of ataxin-2 extends lifespan and reduces pathology in TDP-43 mice. Nature, 2017, 544, 367-371.	27.8	422
14	A suite of GatewayÂ®cloning vectors for high-throughput genetic analysis inSaccharomyces cerevisiae. Yeast, 2007, 24, 913-919.	1.7	419
15	Molecular Determinants and Genetic Modifiers of Aggregation and Toxicity for the ALS Disease Protein FUS/TLS. PLoS Biology, 2011, 9, e1000614.	5.6	396
16	Nuclear-Import Receptors Reverse Aberrant Phase Transitions of RNA-Binding Proteins with Prion-like Domains. Cell, 2018, 173, 677-692.e20.	28.9	376
17	A yeast TDP-43 proteinopathy model: Exploring the molecular determinants of TDP-43 aggregation and cellular toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6439-6444.	7.1	375
18	Defects in trafficking bridge Parkinson's disease pathology and genetics. Nature, 2016, 539, 207-216.	27.8	373

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19	A yeast functional screen predicts new candidate ALS disease genes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 20881-20890.	7.1	365
20	Spontaneous driving forces give rise to proteinâ˜'RNA condensates with coexisting phases and complex material properties. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7889-7898.	7.1	365
21	Semaphorin-Plexin Signaling Guides Patterning of the Developing Vasculature. Developmental Cell, 2004, 7, 117-123.	7.0	350
22	PlexinD1 and Semaphorin Signaling Are Required in Endothelial Cells for Cardiovascular Development. Developmental Cell, 2004, 7, 107-116.	7.0	338
23	Therapeutic modulation of eIF2Î± phosphorylation rescues TDP-43 toxicity in amyotrophic lateral sclerosis disease models. Nature Genetics, 2014, 46, 152-160.	21.4	321
24	Stress Granule Assembly Disrupts Nucleocytoplasmic Transport. Cell, 2018, 173, 958-971.e17.	28.9	303
25	Neurotoxic reactive astrocytes induce cell death via saturated lipids. Nature, 2021, 599, 102-107.	27.8	277
26	Prion-like disorders: blurring the divide between transmissibility and infectivity. Journal of Cell Science, 2010, 123, 1191-1201.	2.0	268
27	Bridging high-throughput genetic and transcriptional data reveals cellular responses to alpha-synuclein toxicity. Nature Genetics, 2009, 41, 316-323.	21.4	266
28	Local RNA Translation at the Synapse and in Disease: Figure 1.. Journal of Neuroscience, 2011, 31, 16086-16093.	3.6	264
29	Evaluating the role of the FUS/TLS-related gene EWSR1 in amyotrophic lateral sclerosis. Human Molecular Genetics, 2012, 21, 2899-2911.	2.9	246
30	Poly(GR) impairs protein translation and stress granule dynamics in C9orf72-associated frontotemporal dementia and amyotrophic lateral sclerosis. Nature Medicine, 2018, 24, 1136-1142.	30.7	241
31	Drosophila screen connects nuclear transport genes to DPR pathology in c9ALS/FTD. Scientific Reports, 2016, 6, 20877.	3.3	239
32	Insertion of Cre into the Pax3 locus creates a new allele of Splotch and identifies unexpected Pax3 derivatives. Developmental Biology, 2005, 280, 396-406.	2.0	216
33	Inhibition of RNA lariat debranching enzyme suppresses TDP-43 toxicity in ALS disease models. Nature Genetics, 2012, 44, 1302-1309.	21.4	214
34	ALS Genetics: Gains, Losses, and Implications for Future Therapies. Neuron, 2020, 108, 822-842.	8.1	212
35	The novel Parkinson's disease linked mutation G51D attenuates in vitro aggregation and membrane binding of Â-synuclein, and enhances its secretion and nuclear localization in cells. Human Molecular Genetics, 2014, 23, 4491-4509.	2.9	194
36	TDP-43 represses cryptic exon inclusion in the FTDâ€“ALS gene UNC13A. Nature, 2022, 603, 124-130.	27.8	193

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37	CRISPRâ€“Cas9 screens in human cells and primary neurons identify modifiers of C9ORF72 dipeptide-repeat-protein toxicity. Nature Genetics, 2018, 50, 603-612.	21.4	178
38	GTPase Activity Plays a Key Role in the Pathobiology of LRRK2. PLoS Genetics, 2010, 6, e1000902.	3.5	177
39	Knockout of reactive astrocyte activating factors slows disease progression in an ALS mouse model. Nature Communications, 2020, 11, 3753.	12.8	176
40	CCNF mutations in amyotrophic lateral sclerosis and frontotemporal dementia. Nature Communications, 2016, 7, 11253.	12.8	174
41	A Cellular System that Degrades Misfolded Proteins and Protects against Neurodegeneration. Molecular Cell, 2014, 55, 15-30.	9.7	157
42	Nf1 has an essential role in endothelial cells. Nature Genetics, 2003, 33, 75-79.	21.4	153
43	Parkinsonâ€™s Disease Genes VPS35 and EIF4G1 Interact Genetically and Converge on Î±-Synuclein. Neuron, 2015, 85, 76-87.	8.1	149
44	LRRK2 modifies Î±-syn pathology and spread in mouse models and human neurons. Acta Neuropathologica, 2019, 137, 961-980.	7.7	142
45	RNA-binding proteins with prion-like domains in ALS and FTLD-U. Prion, 2011, 5, 179-187.	1.8	140
46	Glycolytic Enzymes Coalesce in G Bodies under Hypoxic Stress. Cell Reports, 2017, 20, 895-908.	6.4	139
47	There has been an awakening: Emerging mechanisms of C9orf72 mutations in FTD/ALS. Brain Research, 2016, 1647, 19-29.	2.2	133
48	Exome sequencing to identify de novo mutations in sporadic ALS trios. Nature Neuroscience, 2013, 16, 851-855.	14.8	129
49	Ataxin-2 intermediate-length polyglutamine expansions in European ALS patients. Human Molecular Genetics, 2011, 20, 1697-1700.	2.9	127
50	Axonal transport and secretion of fibrillar forms of Î±-synuclein, Aî²42 peptide and HTTExon 1. Acta Neuropathologica, 2016, 131, 539-548.	7.7	127
51	Profilin 1 Associates with Stress Granules and ALS-Linked Mutations Alter Stress Granule Dynamics. Journal of Neuroscience, 2014, 34, 8083-8097.	3.6	126
52	A blinded international study on the reliability of genetic testing for GGGGCC-repeat expansions inC9orf72reveals marked differences in results among 14 laboratories. Journal of Medical Genetics, 2014, 51, 419-424.	3.2	118
53	Spt4 selectively regulates the expression of C9orf72 sense and antisense mutant transcripts. Science, 2016, 353, 708-712.	12.6	116
54	Compartmentalization of superoxide dismutase 1 (SOD1G93A) aggregates determines their toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15811-15816.	7.1	114

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55	Single-cell transcriptomic analysis of the adult mouse spinal cord reveals molecular diversity of autonomic and skeletal motor neurons. Nature Neuroscience, 2021, 24, 572-583.	14.8	110
56	p53 is a central regulator driving neurodegeneration caused by C9orf72 poly(PR). Cell, 2021, 184, 689-708.e20.	28.9	104
57	A prion-like protein regulator of seed germination undergoes hydration-dependent phase separation. Cell, 2021, 184, 4284-4298.e27.	28.9	99
58	Molecular markers of cardiac endocardial cushion development. Developmental Dynamics, 2003, 228, 643-650.	1.8	97
59	Kinetic Analysis of npBAF to nBAF Switching Reveals Exchange of SS18 with CREST and Integration with Neural Developmental Pathways. Journal of Neuroscience, 2013, 33, 10348-10361.	3.6	89
60	RPS25 is required for efficient RAN translation of C9orf72 and other neurodegenerative disease-associated nucleotide repeats. Nature Neuroscience, 2019, 22, 1383-1388.	14.8	87
61	ATXN2 trinucleotide repeat length correlates with risk of ALS. Neurobiology of Aging, 2017, 51, 178.e1-178.e9.	3.1	86
62	Internalization, axonal transport and release of fibrillar forms of alpha-synuclein. Neurobiology of Disease, 2018, 109, 219-225.	4.4	80
63	ALS-Associated Ataxin 2 PolyQ Expansions Enhance Stress-Induced Caspase 3 Activation and Increase TDP-43 Pathological Modifications. Journal of Neuroscience, 2012, 32, 9133-9142.	3.6	75
64	Activation of HIPK2 Promotes ER Stress-Mediated Neurodegeneration in Amyotrophic Lateral Sclerosis. Neuron, 2016, 91, 41-55.	8.1	75
65	PolyQ Repeat Expansions in ATXN2 Associated with ALS Are CAA Interrupted Repeats. PLoS ONE, 2011, 6, e17951.	2.5	73
66	Fragile X protein mitigates TDP-43 toxicity by remodeling RNA granules and restoring translation. Human Molecular Genetics, 2015, 24, ddv389.	2.9	72
67	Distinct repertoires of microRNAs present in mouse astrocytes compared to astrocyte-secreted exosomes. PLoS ONE, 2017, 12, e0171418.	2.5	68
68	The modulation of Amyotrophic Lateral Sclerosis risk by Ataxin-2 intermediate polyglutamine expansions is a specific effect. Neurobiology of Disease, 2012, 45, 356-361.	4.4	66
69	Toxic expanded GGGGCC repeat transcription is mediated by the PAF1 complex in C9orf72-associated FTD. Nature Neuroscience, 2019, 22, 863-874.	14.8	65
70	Semisynthetic and in Vitro Phosphorylation of Alpha-Synuclein at Y39 Promotes Functional Partly Helical Membrane-Bound States Resembling Those Induced by PD Mutations. ACS Chemical Biology, 2016, 11, 2428-2437.	3.4	64
71	C9orf72 -derived arginine-containing dipeptide repeats associate with axonal transport machinery and impede microtubule-based motility. Science Advances, 2021, 7, .	10.3	57
72	Discovery and characterization of three novel synuclein genes in zebrafish. Developmental Dynamics, 2008, 237, 2490-2495.	1.8	54

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73	Targeted Exon Capture and Sequencing in Sporadic Amyotrophic Lateral Sclerosis. PLoS Genetics, 2014, 10, e1004704.	3.5	54
74	Efficient Prevention of Neurodegenerative Diseases by Depletion of Starvation Response Factor Ataxin-2. Trends in Neurosciences, 2017, 40, 507-516.	8.6	51
75	Prime Time for Â-Synuclein. Journal of Neuroscience, 2007, 27, 2433-2434.	3.6	48
76	BraInMap Elucidates the Macromolecular Connectivity Landscape of Mammalian Brain. Cell Systems, 2020, 10, 333-350.e14.	6.2	48
77	The Role of the Parkinson's Disease Gene PARK9 in Essential Cellular Pathways and the Manganese Homeostasis Network in Yeast. PLoS ONE, 2012, 7, e34178.	2.5	47
78	Nuclear transport dysfunction: a common theme in amyotrophic lateral sclerosis and frontotemporal dementia. Journal of Neurochemistry, 2016, 138, 134-144.	3.9	45
79	Tie2-Creâ€“Induced Inactivation of a Conditional Mutant Nf1 Allele in Mouse Results in a Myeloproliferative Disorder that Models Juvenile Myelomonocytic Leukemia. Pediatric Research, 2004, 55, 581-584.	2.3	40
80	Beer and Bread to Brains and Beyond: Can Yeast Cells Teach Us about Neurodegenerative Disease?. NeuroSignals, 2008, 16, 52-62.	0.9	40
81	Evolution of a Human-Specific Tandem Repeat Associated with ALS. American Journal of Human Genetics, 2020, 107, 445-460.	6.2	39
82	Model Organisms Reveal Insight into Human Neurodegenerative Disease: Ataxin-2 Intermediate-Length Polyglutamine Expansions Are a Risk Factor for ALS. Journal of Molecular Neuroscience, 2011, 45, 676-683.	2.3	38
83	Genetic Spectrum and Variability in Chinese Patients with Amyotrophic Lateral Sclerosis. , 2019, 10, 1199.		38
84	Distinct TDP-43 pathology in ALS patients with ataxin 2 intermediate-length polyQ expansions. Acta Neuropathologica, 2012, 124, 221-230.	7.7	37
85	The epidemiology and genetics of Amyotrophic lateral sclerosis in China. Brain Research, 2018, 1693, 121-126.	2.2	36
86	Symmetric dimethylation of poly-GR correlates with disease duration in C9orf72 FTLD and ALS and reduces poly-GR phase separation and toxicity. Acta Neuropathologica, 2020, 139, 407-410.	7.7	36
87	Exome sequencing identifies a DNAJB6 mutation in a family with dominantly-inherited limb-girdle muscular dystrophy. Neuromuscular Disorders, 2014, 24, 431-435.	0.6	35
88	Congenital muscular dystrophy and generalized epilepsy caused by GMPPB mutations. Brain Research, 2014, 1575, 66-71.	2.2	34
89	TDP-43 toxicity in yeast. Methods, 2011, 53, 238-245.	3.8	33
90	Evidence That Î±-Synuclein Does Not Inhibit Phospholipase D. Biochemistry, 2009, 48, 1077-1083.	2.5	31

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91	A versatile system to record cell-cell interactions. ELife, 2020, 9, .	6.0	30
92	Kermit 2/XGIPC, an IGF1 receptor interacting protein, is required for IGF signaling in Xenopus eye development. Development (Cambridge), 2006, 133, 3651-3660.	2.5	29
93	Targeted next-generation sequencing improves diagnosis of hereditary spastic paraplegia in Chinese patients. Journal of Molecular Medicine, 2018, 96, 701-712.	3.9	29
94	Yeast screen for modifiers of C9orf72 poly(glycine-arginine) dipeptide repeat toxicity. FEMS Yeast Research, 2018, 18, .	2.3	25
95	Cloning and characterization of zebrafish tbx1. Gene Expression Patterns, 2003, 3, 645-651.	0.8	21
96	Yeast genetic screen reveals novel therapeutic strategy for ALS. Rare Diseases (Austin, Tex), 2013, 1, e24420.	1.8	21
97	ERAD defects and the HFE-H63D variant are associated with increased risk of liver damages in Alpha 1-Antitrypsin Deficiency. PLoS ONE, 2017, 12, e0179369.	2.5	21
98	A new approach for rare variation collapsing on functional protein domains implicates specific genic regions in ALS. Genome Research, 2019, 29, 809-818.	5.5	21
99	Variants in KIAA0825 underlie autosomal recessive postaxial polydactyly. Human Genetics, 2019, 138, 593-600.	3.8	16
100	Genome-wide synthetic lethal CRISPR screen identifies FIS1 as a genetic interactor of ALS-linked C9ORF72. Brain Research, 2020, 1728, 146601.	2.2	16
101	Evaluating noncoding nucleotide repeat expansions in amyotrophic lateral sclerosis. Neurobiology of Aging, 2014, 35, 936.e1-936.e4.	3.1	15
102	Clogging information flow in ALS. Science, 2014, 345, 1118-1119.	12.6	12
103	TDP-43 in ALS: Stay on Targetâ€¦Almost There. Neuron, 2014, 81, 463-465.	8.1	12
104	Cracking the cryptic code in amyotrophic lateral sclerosis and frontotemporal dementia: Towards therapeutic targets and biomarkers. Clinical and Translational Medicine, 2022, 12, e818.	4.0	11
105	A yeast model for polyalanine-expansion aggregation and toxicity. Molecular Biology of the Cell, 2011, 22, 1971-1984.	2.1	10
106	Modeling Human Disease. Science, 2012, 337, 269-269.	12.6	10
107	Pour Some Sugar on TDP(-43). Molecular Cell, 2018, 71, 649-651.	9.7	10
108	Just Took a DNA Test, Turns Out 100% Not That Phase. Molecular Cell, 2020, 78, 193-194.	9.7	10

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109	High-throughput Yeast Plasmid Overexpression Screen. Journal of Visualized Experiments, 2011, , .	0.3	9
110	Analysis of <scp>COPII</scp> Vesicles Indicates a Role for the Emp47â€“Ssp120 Complex in Transport of Cell Surface Glycoproteins. Traffic, 2016, 17, 191-210.	2.7	9
111	Ataxin-2 Is Droppinâ€™ Some Knowledge. Neuron, 2018, 98, 673-675.	8.1	9
112	Singling out motor neurons in the age of single-cell transcriptomics. Trends in Genetics, 2022, 38, 904-919.	6.7	9
113	Regulating Heart Development: The Role ofNf1. Cell Cycle, 2003, 2, 95-97.	2.6	8
114	TDP-43 and FUS/TLS yield a target-rich haul in ALS. Nature Neuroscience, 2012, 15, 1467-1469.	14.8	7
115	It's all starting to come together. ELife, 2015, 4, .	6.0	7
116	Another Reason to Exercise. Science, 2011, 334, 606-607.	12.6	6
117	Identification and functional analysis of novel mutations in the SOD1 gene in Chinese patients with amyotrophic lateral sclerosis. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2019, 20, 222-228.	1.7	6
118	Loss of CREST leads to neuroinflammatory responses and ALS-like motor defects in mice. Translational Neurodegeneration, 2019, 8, 13.	8.0	6
119	Raise the Roof: Boosting the Efficacy of a Spinal Muscular Atrophy Therapy. Neuron, 2017, 93, 3-5.	8.1	5
120	A neurodegenerative-disease protein forms beneficial aggregates in healthy muscle. Nature, 2018, 563, 477-478.	27.8	5
121	A matter of balance. ELife, 2018, 7, .	6.0	5
122	Phosphorylation Leads the Way for Protein Aggregate Disassembly. Developmental Cell, 2018, 45, 279-281.	7.0	4
123	A memory of eS25 loss drives resistance phenotypes. Nucleic Acids Research, 2020, 48, 7279-7297.	14.5	4
124	Genome-Wide Analyses Identify KIF5A as a Novel ALS Gene. SSRN Electronic Journal, 0, , .	0.4	4
125	Regulating heart development: the role of Nf1. Cell Cycle, 2003, 2, 96-8.	2.6	4
126	Parallel PARKing: Parkinsonâ€™s Genes Function in Common Pathway. Neuron, 2013, 77, 377-379.	8.1	3

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127	Old moms say, no Sir. Science, 2017, 355, 1126-1127.	12.6	3
128	An optimized ATAC-seq protocol for genome-wide mapping of active regulatory elements in primary mouse cortical neurons. STAR Protocols, 2021, 2, 100854.	1.2	3
129	Neurodegeneration: A Leg Up on TDP-43. Current Biology, 2015, 25, R728-R731.	3.9	2
130	Susan Lee Lindquist (1949â€“2016). Nature, 2016, 540, 40-40.	27.8	2
131	Axons Gonna Ride â€™til They Canâ€™t No More. Neuron, 2019, 104, 179-181.	8.1	2
132	Neurodegenerative geneâ€™s function is not all about those bases. Nature, 2020, 585, 34-35.	27.8	2
133	Disease models and mechanisms in the classroom. DMM Disease Models and Mechanisms, 2009, 2, 103-106.	2.4	1
134	Hunting the G-unit in Huntingtonâ€™s. Brain, 2018, 141, 1586-1589.	7.6	1
135	Unlocking the Mystery of ALS. Scientific American, 2017, 316, 46-51.	1.0	0
136	[O1â€“03â€“06]: IDENTIFICATION OF AN ITGA7 VARIANT ASSOCIATED WITH ALZHEIMER's DISEASE AND MULTIPLE OTHER NEURODEGENERATIVE DISEASES. Alzheimer's and Dementia, 2017, 13, P193.	0.8	0
137	[P2â€“096]: NOVEL MISSENSE VARIANT ON EPHA1 IN A PROTECTED APOE4 FAMILY. Alzheimer's and Dementia, 2017, 13, P643.	0.8	0
138	[PLâ€05â€“01â€“01]: CELLULAR MECHANISMS OF FRONTOTEMPORAL LOBAR DEGENERATION (FTLD). Alzheimer's and Dementia, 2017, 13, P1451.	0.8	0
139	These violent repeats have violent extends. Neurology: Genetics, 2018, 4, e247.	1.9	0
140	P1â€135: RARE MISSENSE VARIANTS ON ZNF679 AND CTDâ€3214H19.16 SEGREGATE IN A FAMILY WITH A HISTORY OF SYNUCLEINOPATHY. Alzheimer's and Dementia, 2018, 14, P324.	0.8	0
141	In search of lost trafficking. Brain, 2018, 141, 3282-3285.	7.6	0
142	You come at the misfolded proteins, you best not miss. Trends in Biochemical Sciences, 2021, , .	7.5	0
143	Regrowing axons with alternative splicing. ELife, 2016, 5, .	6.0	0
144	Phenotypic Heterogeneity among GBA p.R202X Carriers in Lewy Body Spectrum Disorders. Biomedicines, 2022, 10, 160.	3.2	0

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145	Confirming Pathogenicity of the F386L PSEN1 Variant in a South Asian Family With Early-Onset Alzheimer Disease. Neurology: Genetics, 2022, 8, e647.	1.9	0
146	Why you always in a mood? Pumpinâ€™ polyP, actinâ€™ brand new. Neuron, 2022, 110, 1603-1605.	8.1	0
147	APOE told me put my fat in the bag and nobody gets hurt. Cell, 2022, 185, 2201-2203.	28.9	0