Michael J Gandal

List of Publications by Citations

74 papers	7,203 citations	36 h-index	84 g-index
98 ext. papers	10,639 ext. citations	15.5 avg, IF	5.53 L-index

#	Paper	IF	Citations
74	Discovery of the first genome-wide significant risk loci for attention deficit/hyperactivity disorder. *Nature Genetics*, **2019**, 51, 63-75	36.3	826
73	Shared molecular neuropathology across major psychiatric disorders parallels polygenic overlap. *Science*, **2018**, 359, 693-697	33.3	547
72	Transcriptome-wide isoform-level dysregulation in ASD, schizophrenia, and bipolar disorder. *Science*, **2018**, 362,	33.3	434
71	Human Gut Microbiota from Autism Spectrum Disorder Promote Behavioral Symptoms in Mice. *Cell* , **2019**, 177, 1600-1618.e17	56.2	379
70	Genome-wide changes in lncRNA, splicing, and regional gene expression patterns in autism. *Nature*, **2016**, 540, 423-427	50.4	362
69	Chromosome conformation elucidates regulatory relationships in developing human brain. *Nature*, **2016**, 538, 523-527	50.4	334
68	Comprehensive functional genomic resource and integrative model for the human brain. *Science*, **2018**, 362,	33.3	319
67	Integrative functional genomic analysis of human brain development and neuropsychiatric risks. *Science*, **2018**, 362,	33.3	277
66	Systems biology and gene networks in neurodevelopmental and neurodegenerative disorders. *Nature Reviews Genetics*, **2015**, 16, 441-58	30.1	270
65	Deletion of vanilloid receptor 1-expressing primary afferent neurons for pain control. *Journal of Clinical Investigation*, **2004**, 113, 1344-52	15.9	252
64	Validating oscillations and delayed auditory responses as translational biomarkers of autism. *Biological Psychiatry*, **2010**, 68, 1100-6	7.9	218
63	Gamma synchrony: towards a translational biomarker for the treatment-resistant symptoms of schizophrenia. *Neuropharmacology*, **2012**, 62, 1504-18	5.5	206
62	MEG detection of delayed auditory evoked responses in autism spectrum disorders: towards an imaging biomarker for autism. *Autism Research*, **2010**, 3, 8-18	5.1	172
61	Ketamine modulates theta and gamma oscillations. *Journal of Cognitive Neuroscience*, **2010**, 22, 1452-64	3.1	164
60	GABAB-mediated rescue of altered excitatory-inhibitory balance, gamma synchrony and behavioral deficits following constitutive NMDAR-hypofunction. *Translational Psychiatry*, **2012**, 2, e142	8.6	144
59	Inherited and De Novo Genetic Risk for Autism Impacts Shared Networks. *Cell*, **2019**, 178, 850-866.e26	56.2	142
58	Transcriptome and epigenome landscape of human cortical development modeled in organoids. *Science*, **2018**, 362,	33.3	142

57	N-methyl-d-aspartic acid receptor antagonist-induced frequency oscillations in mice recreate pattern of electrophysiological deficits in schizophrenia. *Neuroscience*, **2009**, 158, 705-12	3.9	135
56	The contribution of rare variants to risk of schizophrenia in individuals with and without intellectual disability. *Nature Genetics*, **2017**, 49, 1167-1173	36.3	132
55	The road to precision psychiatry: translating genetics into disease mechanisms. *Nature Neuroscience* , **2016**, 19, 1397-1407	25.5	131
54	Mouse behavioral endophenotypes for schizophrenia. *Brain Research Bulletin*, **2010**, 83, 147-61	3.9	127
53	mGluR5-antagonist mediated reversal of elevated stereotyped, repetitive behaviors in the VPA model of autism. *PLoS ONE*, **2011**, 6, e26077	3.7	117
52	A genome-wide association study of shared risk across psychiatric disorders implicates gene regulation during fetal neurodevelopment. *Nature Neuroscience*, **2019**, 22, 353-361	25.5	93
51	Mice with reduced NMDA receptor expression: more consistent with autism than schizophrenia?. *Genes, Brain and Behavior*, **2012**, 11, 740-50	3.6	88
50	Dysbindin-1 mutant mice implicate reduced fast-phasic inhibition as a final common disease mechanism in schizophrenia. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, E962-70	11.5	83
49	Genome-wide association study of more than 40,000 bipolar disorder cases provides new insights into the underlying biology. *Nature Genetics*, **2021**, 53, 817-829	36.3	83
48	Parvalbumin cell ablation of NMDA-R1 causes increased resting network excitability with associated social and self-care deficits. *Neuropsychopharmacology*, **2014**, 39, 1603-13	8.7	81
47	Pyramidal cell selective ablation of N-methyl-D-aspartate receptor 1 causes increase in cellular and network excitability. *Biological Psychiatry*, **2015**, 77, 556-68	7.9	75
46	In vitro-in vivo correlations of scalable PLGA-risperidone implants for the treatment of schizophrenia. *Pharmaceutical Research*, **2010**, 27, 1730-7	4.5	75
45	Genetic Control of Expression and Splicing in Developing Human Brain Informs Disease Mechanisms. *Cell*, **2019**, 179, 750-771.e22	56.2	70
44	A novel electrophysiological model of chemotherapy-induced cognitive impairments in mice. *Neuroscience*, **2008**, 157, 95-104	3.9	64
43	NMDA antagonists recreate signal-to-noise ratio and timing perturbations present in schizophrenia. *Neurobiology of Disease*, **2012**, 46, 93-100	7.5	63
42	Discovery of the first genome-wide significant risk loci for ADHD		62
41	Cannabis-induced psychosis associated with high potency "wax dabs". *Schizophrenia Research*, **2016**, 172, 211-2	3.6	56
40	Measuring the maturity of the fast-spiking interneuron transcriptional program in autism, schizophrenia, and bipolar disorder. *PLoS ONE*, **2012**, 7, e41215	3.7	49

39	MeCP2+/- mouse model of RTT reproduces auditory phenotypes associated with Rett syndrome and replicate select EEG endophenotypes of autism spectrum disorder. *Neurobiology of Disease*, **2012**, 46, 88-92	7.5	40
38	Mapping genomic loci implicates genes and synaptic biology in schizophrenia.. *Nature*, **2022**,	50.4	35
37	Strong correlation of downregulated genes related to synaptic transmission and mitochondria in post-mortem autism cerebral cortex. *Journal of Neurodevelopmental Disorders*, **2018**, 10, 18	4.6	31
36	NMDA antagonist MK801 recreates auditory electrophysiology disruption present in autism and other neurodevelopmental disorders. *Behavioural Brain Research*, **2012**, 234, 233-7	3.4	30
35	Convergence of circuit dysfunction in ASD: a common bridge between diverse genetic and environmental risk factors and common clinical electrophysiology. *Frontiers in Cellular Neuroscience* , **2014**, 8, 414	6.1	25
34	Integrative genomics identifies a convergent molecular subtype that links epigenomic with transcriptomic differences in autism. *Nature Communications*, **2020**, 11, 4873	17.4	23
33	Synaptic and Gene Regulatory Mechanisms in Schizophrenia, Autism, and 22q11.2 Copy Number Variant-Mediated Risk for Neuropsychiatric Disorders. *Biological Psychiatry*, **2020**, 87, 150-163	7.9	23
32	A Robust Method Uncovers Significant Context-Specific Heritability in Diverse Complex Traits. *American Journal of Human Genetics*, **2020**, 106, 71-91	11	21
31	Identification of neural oscillations and epileptiform changes in human brain organoids. *Nature Neuroscience*, **2021**, 24, 1488-1500	25.5	20
30	Profiling allele-specific gene expression in brains from individuals with autism spectrum disorder reveals preferential minor allele usage. *Nature Neuroscience*, **2019**, 22, 1521-1532	25.5	17
29	Integrative network analysis reveals biological pathways associated with Williams syndrome. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, **2019**, 60, 585-598	7.9	14
28	Quantum computing at the frontiers of biological sciences. *Nature Methods*, **2021**, 18, 701-709	21.6	14
27	Transcriptomic Insight Into the Polygenic Mechanisms Underlying Psychiatric Disorders. *Biological Psychiatry*, **2021**, 89, 54-64	7.9	12
26	Mechanisms of Neuronal Alternative Splicing and Strategies for Therapeutic Interventions. *Journal of Neuroscience*, **2019**, 39, 8193-8199	6.6	11
25	Genome-wide association study of over 40,000 bipolar disorder cases provides new insights into the underlying biology		11
24	Dissecting the Shared Genetic Architecture of Suicide Attempt, Psychiatric Disorders, and Known Risk Factors. *Biological Psychiatry*, **2021**,	7.9	11
23	Spatial fine-mapping for gene-by-environment effects identifies risk hot spots for schizophrenia. *Nature Communications*, **2018**, 9, 5296	17.4	10
22	Nicotine normalizes event related potentials in COMT-Val-tg mice and increases gamma and theta spectral density. *Behavioral Neuroscience*, **2012**, 126, 332-43	2.1	9

21	Brain gene co-expression networks link complement signaling with convergent synaptic pathology in schizophrenia. *Nature Neuroscience*, **2021**, 24, 799-809	25.5	9
20	Alterations in Retrotransposition, Synaptic Connectivity, and Myelination Implicated by Transcriptomic Changes Following Maternal Immune Activation in Nonhuman Primates. *Biological Psychiatry*, **2021**, 89, 896-910	7.9	7
19	Shared Molecular Neuropathology Across Major Psychiatric Disorders Parallels Polygenic Overlap. *Focus (American Psychiatric Publishing)*, **2019**, 17, 66-72	1.1	6
18	Full-length transcript sequencing of human and mouse cerebral cortex identifies widespread isoform diversity and alternative splicing. *Cell Reports*, **2021**, 37, 110022	10.6	5
17	Whole genome sequencing in multiplex families reveals novel inherited and de novo genetic risk in autism		5
16	Maternal Immune Activation during Pregnancy Alters Postnatal Brain Growth and Cognitive Development in Nonhuman Primate Offspring. *Journal of Neuroscience*, **2021**, 41, 9971-9987	6.6	3
15	Genetic control of gene expression and splicing in the developing human brain		3
14	Shared molecular neuropathology across major psychiatric disorders parallels polygenic overlap		3
13	TGF superfamily signaling regulates the state of human stem cell pluripotency and competency to create telencephalic organoids		3
12	Broad transcriptomic dysregulation across the cerebral cortex in ASD		3
11	Polygenicity in Psychiatry-Like It or Not, We Have to Understand It. *Biological Psychiatry*, **2021**, 89, 2-4	7.9	3
10	The Genetics-Driven Revival in Neuropsychiatric Drug Development. *Biological Psychiatry*, **2016**, 79, 628-30	7.9	2
9	Human Astrocytes Exhibit Tumor Microenvironment-, Age-, and Sex-Related Transcriptomic Signatures.. *Journal of Neuroscience*, **2022**,	6.6	2
8	Brain gene co-expression networks link complement signaling with convergent synaptic pathology in schizophrenia		2
7	Neuronal and glial 3D chromatin architecture informs the cellular etiology of brain disorders. *Nature Communications*, **2021**, 12, 3968	17.4	2
6	Associations between patterns in comorbid diagnostic trajectories of individuals with schizophrenia and etiological factors. *Nature Communications*, **2021**, 12, 6617	17.4	1
5	Leveraging eQTLs to identify individual-level tissue of interest for a complex trait. *PLoS Computational Biology*, **2021**, 17, e1008915	5	1
4	Association between resting-state functional brain connectivity and gene expression is altered in autism spectrum disorder		1

3	Human Astrocytes Exhibit Tumor Microenvironment-, Age-, and Sex-Related Transcriptomic Signatures		1
2	Postnatal immune activation causes social deficits in a mouse model of tuberous sclerosis: Role of microglia and clinical implications. *Science Advances*, **2021**, 7, eabf2073	14.3	1
1	Banking on Polygenicity to Disentangle Psychiatric Comorbidity. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, **2018**, 3, 577-578	3.4	