

Istvan Mody

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6212209/istvan-mody-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

123
papers

15,487
citations

63
h-index

124
g-index

125
ext. papers

17,131
ext. citations

10
avg, IF

6.75
L-index

#	Paper	IF	Citations
123	Inhibitory interneuron deficit links altered network activity and cognitive dysfunction in Alzheimer model. <i>Cell</i> , 2012 , 149, 708-21	56.2	655
122	Neuroactive steroids reduce neuronal excitability by selectively enhancing tonic inhibition mediated by delta subunit-containing GABAA receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 14439-44	11.5	646
121	Reducing excessive GABA-mediated tonic inhibition promotes functional recovery after stroke. <i>Nature</i> , 2010 , 468, 305-9	50.4	598
120	Ovarian cycle-linked changes in GABA(A) receptors mediating tonic inhibition alter seizure susceptibility and anxiety. <i>Nature Neuroscience</i> , 2005 , 8, 797-804	25.5	487
119	Extrasynaptic GABA(A) receptors: their function in the CNS and implications for disease. <i>Neuron</i> , 2012 , 73, 23-34	13.9	449
118	Regulation of NMDA channel function by endogenous Ca(2+)-dependent phosphatase. <i>Nature</i> , 1994 , 369, 235-9	50.4	445
117	Diversity of inhibitory neurotransmission through GABA(A) receptors. <i>Trends in Neurosciences</i> , 2004 , 27, 569-75	13.3	409
116	Increased number of synaptic GABA(A) receptors underlies potentiation at hippocampal inhibitory synapses. <i>Nature</i> , 1998 , 395, 172-7	50.4	407
115	Selective modulation of tonic and phasic inhibitions in dentate gyrus granule cells. <i>Journal of Neurophysiology</i> , 2002 , 87, 2624-8	3.2	403
114	NMDA receptors of dentate gyrus granule cells participate in synaptic transmission following kindling. <i>Nature</i> , 1987 , 326, 701-4	50.4	368
113	High-frequency oscillations: what is normal and what is not?. <i>Epilepsia</i> , 2009 , 50, 598-604	6.4	362
112	Astrocyte Kir4.1 ion channel deficits contribute to neuronal dysfunction in Huntington's disease model mice. <i>Nature Neuroscience</i> , 2014 , 17, 694-703	25.5	356
111	Perisynaptic localization of delta subunit-containing GABA(A) receptors and their activation by GABA spillover in the mouse dentate gyrus. <i>Journal of Neuroscience</i> , 2003 , 23, 10650-61	6.6	347
110	Local generation of fast ripples in epileptic brain. <i>Journal of Neuroscience</i> , 2002 , 22, 2012-21	6.6	331
109	Neurofibromin regulation of ERK signaling modulates GABA release and learning. <i>Cell</i> , 2008 , 135, 549-60	6.2	311
108	High-frequency oscillations after status epilepticus: epileptogenesis and seizure genesis. <i>Epilepsia</i> , 2004 , 45, 1017-23	6.4	280
107	GABA(A)R plasticity during pregnancy: relevance to postpartum depression. <i>Neuron</i> , 2008 , 59, 207-13	13.9	279

106	Which GABA(A) receptor subunits are necessary for tonic inhibition in the hippocampus?. <i>Journal of Neuroscience</i> , 2008 , 28, 1421-6	6.6	279
105	Activation of GABAA receptors: views from outside the synaptic cleft. <i>Neuron</i> , 2007 , 56, 763-70	13.9	265
104	Altered expression of the delta subunit of the GABAA receptor in a mouse model of temporal lobe epilepsy. <i>Journal of Neuroscience</i> , 2004 , 24, 8629-39	6.6	265
103	Receptors with different affinities mediate phasic and tonic GABA(A) conductances in hippocampal neurons. <i>Journal of Neuroscience</i> , 2002 , 22, RC223	6.6	258
102	The splicing regulator Rbfox1 (A2BP1) controls neuronal excitation in the mammalian brain. <i>Nature Genetics</i> , 2011 , 43, 706-11	36.3	242
101	Low ethanol concentrations selectively augment the tonic inhibition mediated by delta subunit-containing GABAA receptors in hippocampal neurons. <i>Journal of Neuroscience</i> , 2004 , 24, 8379-82	6.6	214
100	A new naturally occurring GABA(A) receptor subunit partnership with high sensitivity to ethanol. <i>Nature Neuroscience</i> , 2007 , 10, 40-8	25.5	210
99	Distinguishing between GABA(A) receptors responsible for tonic and phasic conductances. <i>Neurochemical Research</i> , 2001 , 26, 907-13	4.6	203
98	Pathological cell-cell interactions elicited by a neuropathogenic form of mutant Huntingtin contribute to cortical pathogenesis in HD mice. <i>Neuron</i> , 2005 , 46, 433-44	13.9	198
97	GABA transporter-1 (GAT1)-deficient mice: differential tonic activation of GABAA versus GABAB receptors in the hippocampus. <i>Journal of Neurophysiology</i> , 2003 , 90, 2690-701	3.2	191
96	The main source of ambient GABA responsible for tonic inhibition in the mouse hippocampus. <i>Journal of Physiology</i> , 2007 , 582, 1163-78	3.9	189
95	Neurosteroid synthesis-mediated regulation of GABA(A) receptors: relevance to the ovarian cycle and stress. <i>Journal of Neuroscience</i> , 2007 , 27, 2155-62	6.6	188
94	GABA transporter deficiency causes tremor, ataxia, nervousness, and increased GABA-induced tonic conductance in cerebellum. <i>Journal of Neuroscience</i> , 2005 , 25, 3234-45	6.6	188
93	Disruption of GABA(A) receptors on GABAergic interneurons leads to increased oscillatory power in the olfactory bulb network. <i>Journal of Neurophysiology</i> , 2001 , 86, 2823-33	3.2	184
92	Altered localization of GABA(A) receptor subunits on dentate granule cell dendrites influences tonic and phasic inhibition in a mouse model of epilepsy. <i>Journal of Neuroscience</i> , 2007 , 27, 7520-31	6.6	181
91	Perpetual inhibitory activity in mammalian brain slices generated by spontaneous GABA release. <i>Brain Research</i> , 1991 , 545, 142-50	3.7	176
90	Connectomics and epilepsy. <i>Current Opinion in Neurology</i> , 2013 , 26, 186-94	7.1	172
89	Seizures and enhanced cortical GABAergic inhibition in two mouse models of human autosomal dominant nocturnal frontal lobe epilepsy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 19152-7	11.5	172

88	Hippocampal network hyperactivity after selective reduction of tonic inhibition in GABA A receptor alpha5 subunit-deficient mice. <i>Journal of Neurophysiology</i> , 2006 , 95, 2796-807	3.2	168
87	Modulation of synaptic GABAA receptor function by PKA and PKC in adult hippocampal neurons. <i>Journal of Neuroscience</i> , 1999 , 19, 674-83	6.6	164
86	Binding kinetics of calbindin-D(28k) determined by flash photolysis of caged Ca(2+). <i>Biophysical Journal</i> , 2000 , 79, 3009-18	2.9	161
85	The process of epileptogenesis: a pathophysiological approach. <i>Current Opinion in Neurology</i> , 2001 , 14, 187-92	7.1	158
84	Control of hippocampal gamma oscillation frequency by tonic inhibition and excitation of interneurons. <i>Nature Neuroscience</i> , 2010 , 13, 205-12	25.5	157
83	A hybrid approach to measuring electrical activity in genetically specified neurons. <i>Nature Neuroscience</i> , 2005 , 8, 1619-26	25.5	147
82	Calmodulin as a direct detector of Ca2+ signals. <i>Nature Neuroscience</i> , 2011 , 14, 301-4	25.5	142
81	Deletion of astroglial Dicer causes non-cell-autonomous neuronal dysfunction and degeneration. <i>Journal of Neuroscience</i> , 2011 , 31, 8306-19	6.6	135
80	Surviving granule cells of the sclerotic human hippocampus have reduced Ca(2+) influx because of a loss of calbindin-D(28k) in temporal lobe epilepsy. <i>Journal of Neuroscience</i> , 2000 , 20, 1831-6	6.6	125
79	Number, density, and surface/cytoplasmic distribution of GABA transporters at presynaptic structures of knock-in mice carrying GABA transporter subtype 1-green fluorescent protein fusions. <i>Journal of Neuroscience</i> , 2002 , 22, 10251-66	6.6	123
78	Cell type- and synapse-specific variability in synaptic GABAA receptor occupancy. <i>European Journal of Neuroscience</i> , 2000 , 12, 810-8	3.5	122
77	Aspects of the homeostatic plasticity of GABAA receptor-mediated inhibition. <i>Journal of Physiology</i> , 2005 , 562, 37-46	3.9	114
76	Synaptic communication among hippocampal interneurons: properties of spontaneous IPSCs in morphologically identified cells. <i>Journal of Neuroscience</i> , 1997 , 17, 8427-42	6.6	113
75	Dantrolene-Na (Dantrium) blocks induction of long-term potentiation in hippocampal slices. <i>Neuroscience Letters</i> , 1989 , 98, 172-8	3.3	113
74	Halothane enhances tonic neuronal inhibition by elevating intracellular calcium. <i>Brain Research</i> , 1991 , 538, 319-23	3.7	107
73	Excitability changes related to GABAA receptor plasticity during pregnancy. <i>Journal of Neuroscience</i> , 2009 , 29, 9592-601	6.6	97
72	Establishing a physiological environment for visualized in vitro brain slice recordings by increasing oxygen supply and modifying aCSF content. <i>Journal of Neuroscience Methods</i> , 2009 , 183, 107-13	3	92
71	Glutamatergic synapses onto hippocampal interneurons: precision timing without lasting plasticity. <i>Trends in Neurosciences</i> , 1999 , 22, 228-35	13.3	90

70	Synapse-specific contribution of the variation of transmitter concentration to the decay of inhibitory postsynaptic currents. <i>Biophysical Journal</i> , 2001 , 80, 1251-61	2.9	88
69	Activation of NMDA receptors in rat dentate gyrus granule cells by spontaneous and evoked transmitter release. <i>Journal of Neurophysiology</i> , 2003 , 90, 786-97	3.2	80
68	Protein kinase Cdelta regulates ethanol intoxication and enhancement of GABA-stimulated tonic current. <i>Journal of Neuroscience</i> , 2008 , 28, 11890-9	6.6	74
67	Selective reduction of cholecystokinin-positive basket cell innervation in a model of temporal lobe epilepsy. <i>Journal of Neuroscience</i> , 2010 , 30, 8993-9006	6.6	73
66	Resolving the fast kinetics of cooperative binding: Ca ²⁺ buffering by calretinin. <i>PLoS Biology</i> , 2007 , 5, e311	9.7	72
65	Casein kinase-II regulates NMDA channel function in hippocampal neurons. <i>Nature Neuroscience</i> , 1999 , 2, 125-32	25.5	71
64	Astrocyte Intermediaries of Septal Cholinergic Modulation in the Hippocampus. <i>Neuron</i> , 2016 , 90, 853-65	3.9	71
63	Finding a better drug for epilepsy: antiepileptogenesis targets. <i>Epilepsia</i> , 2012 , 53, 1868-76	6.4	68
62	A method for isolating and patch-clamping single mammalian taste receptor cells. <i>Brain Research</i> , 1989 , 503, 326-9	3.7	66
61	GABAR Modulator for Postpartum Depression. <i>Cell</i> , 2019 , 176, 1	56.2	63
60	The molecular basis of kindling. <i>Brain Pathology</i> , 1993 , 3, 395-403	6	58
59	Kindling-induced epilepsy alters calcium currents in granule cells of rat hippocampal slices. <i>Brain Research</i> , 1990 , 531, 88-94	3.7	57
58	Differential activation of glutamate receptors by spontaneously released transmitter in slices of neocortex. <i>Neuroscience Letters</i> , 1990 , 114, 265-71	3.3	55
57	A new meaning for "Gin & Tonic": tonic inhibition as the target for ethanol action in the brain. <i>Alcohol</i> , 2007 , 41, 145-53	2.7	54
56	Ion channels in epilepsy. <i>International Review of Neurobiology</i> , 1998 , 42, 199-226	4.4	52
55	Requirement of NMDA receptor/channels for intracellular high-energy phosphates and the extent of intraneuronal calcium buffering in cultured mouse hippocampal neurons. <i>Neuroscience Letters</i> , 1988 , 93, 73-8	3.3	52
54	Changes in hippocampal neuronal activity during and after unilateral selective hippocampal ischemia in vivo. <i>Journal of Neuroscience</i> , 2011 , 31, 851-60	6.6	50
53	The multifaceted role of inhibition in epilepsy: seizure-genesis through excessive GABAergic inhibition in autosomal dominant nocturnal frontal lobe epilepsy. <i>Current Opinion in Neurology</i> , 2008 , 21, 155-60	7.1	50

52	N17 Modifies mutant Huntingtin nuclear pathogenesis and severity of disease in HD BAC transgenic mice. <i>Neuron</i> , 2015 , 85, 726-41	13.9	48
51	Silent GABAA synapses during flurazepam withdrawal are region-specific in the hippocampal formation. <i>Journal of Neuroscience</i> , 1997 , 17, 3467-75	6.6	45
50	A TinyOS-enabled MICA2-based wireless neural interface. <i>IEEE Transactions on Biomedical Engineering</i> , 2006 , 53, 1416-24	5	44
49	L-type Ca ²⁺ channel-mediated short-term plasticity of GABAergic synapses. <i>Nature Neuroscience</i> , 2001 , 4, 975-6	25.5	41
48	Substance P enhances NMDA channel function in hippocampal dentate gyrus granule cells. <i>Journal of Neurophysiology</i> , 1998 , 80, 113-9	3.2	41
47	The dynamics of synchronized neurotransmitter release determined from compound spontaneous IPSCs in rat dentate granule neurones in vitro. <i>Journal of Physiology</i> , 1998 , 510 (Pt 2), 477-97	3.9	39
46	Whole-cell voltage-clamp recordings in granule cells acutely isolated from hippocampal slices of adult or aged rats. <i>Neuroscience Letters</i> , 1989 , 96, 70-5	3.3	38
45	Extrasynaptic GABAA receptors in the crosshairs of hormones and ethanol. <i>Neurochemistry International</i> , 2008 , 52, 60-4	4.4	37
44	Bi-Fi: an embedded sensor/system architecture for REMOTE biological monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2007 , 11, 611-8		35
43	Kindling induces transient NMDA receptor-mediated facilitation of high-frequency input in the rat dentate gyrus. <i>Journal of Neurophysiology</i> , 2001 , 85, 2195-202	3.2	35
42	Hippocampal zinc infusion delays the development of afterdischarges and seizures in a kindling model of epilepsy. <i>Epilepsia</i> , 2009 , 50, 870-9	6.4	34
41	In vitro gamma oscillations following partial and complete ablation of β -subunit-containing GABAA receptors from parvalbumin interneurons. <i>Neuropharmacology</i> , 2015 , 88, 91-8	5.5	32
40	Glutamatergic input from specific sources influences the nucleus accumbens-ventral pallidum information flow. <i>Brain Structure and Function</i> , 2012 , 217, 37-48	4	32
39	Gamma-hydroxybutyrate reduces mitogen-activated protein kinase phosphorylation via GABA B receptor activation in mouse frontal cortex and hippocampus. <i>Journal of Biological Chemistry</i> , 2003 , 278, 42006-11	5.4	32
38	Diminished KCC2 confounds synapse specificity of LTP during senescence. <i>Nature Neuroscience</i> , 2016 , 19, 1197-200	25.5	32
37	Differences between the scaling of miniature IPSCs and EPSCs recorded in the dendrites of CA1 mouse pyramidal neurons. <i>Journal of Physiology</i> , 2006 , 576, 191-6	3.9	31
36	Decreased sensitivity to Group III mGluR agonists in the lateral perforant path following kindling. <i>Neuropharmacology</i> , 1999 , 38, 927-33	5.5	31
35	Altered gamma oscillations during pregnancy through loss of β -subunit-containing GABA(A) receptors on parvalbumin interneurons. <i>Frontiers in Neural Circuits</i> , 2013 , 7, 144	3.5	29

34	Localization of the A kinase anchoring protein AKAP79 in the human hippocampus. <i>European Journal of Neuroscience</i> , 2000 , 12, 1155-64	3.5	29
33	Spike timing of lacunosom-moleculare targeting interneurons and CA3 pyramidal cells during high-frequency network oscillations in vitro. <i>Journal of Neurophysiology</i> , 2007 , 98, 96-104	3.2	28
32	Interneuronal GABAA receptors inside and outside of synapses. <i>Current Opinion in Neurobiology</i> , 2014 , 26, 57-63	7.6	26
31	Rosiglitazone prevents the memory deficits induced by amyloid-beta oligomers via inhibition of inflammatory responses. <i>Neuroscience Letters</i> , 2014 , 578, 7-11	3.3	26
30	Protective effect of ifenprodil against spreading depression in the mouse entorhinal cortex. <i>Journal of Neurophysiology</i> , 2004 , 92, 2610-4	3.2	26
29	Kinetic properties of DM-nitrophen binding to calcium and magnesium. <i>Biophysical Journal</i> , 2005 , 88, 4421-33	2.9	23
28	Endogenous GABA activates small-conductance K ⁺ channels underlying slow IPSCs in rat hippocampal neurons. <i>Journal of Neurophysiology</i> , 1997 , 77, 2202-8	3.2	22
27	Integrity of perforant path fibers and the frequency of action potential independent excitatory and inhibitory synaptic events in dentate gyrus granule cells. <i>Synapse</i> , 1991 , 9, 219-24	2.4	22
26	Identification of neural oscillations and epileptiform changes in human brain organoids. <i>Nature Neuroscience</i> , 2021 , 24, 1488-1500	25.5	20
25	Kindling enhances kainate receptor-mediated depression of GABAergic inhibition in rat granule cells. <i>European Journal of Neuroscience</i> , 2002 , 16, 861-7	3.5	18
24	Evolution of temporal and spectral dynamics of pathologic high-frequency oscillations (pHFOs) during epileptogenesis. <i>Epilepsia</i> , 2015 , 56, 1879-89	6.4	17
23	Ovarian cycle-linked plasticity of GABAA receptor subunits in hippocampal interneurons affects Δ oscillations in vivo. <i>Frontiers in Cellular Neuroscience</i> , 2014 , 8, 222	6.1	17
22	Silencing-induced metaplasticity in hippocampal cultured neurons. <i>Journal of Neurophysiology</i> , 2008 , 100, 690-7	3.2	17
21	Cell properties in the epileptic hippocampus. <i>Hippocampus</i> , 1994 , 4, 275-80	3.5	17
20	Down-regulation of norepinephrine sensitivity after induction of long-term neuronal plasticity (kindling) in the rat dentate gyrus. <i>Brain Research</i> , 1989 , 476, 367-72	3.7	17
19	The GAD-given Right of Dentate Gyrus Granule Cells to Become GABAergic. <i>Epilepsy Currents</i> , 2002 , 2, 143-145	1.3	13
18	Glutamate receptor activation in the kindled dentate gyrus. <i>Epilepsia</i> , 2000 , 41 Suppl 6, S100-3	6.4	13
17	Preferential enhancement of GluN2B-containing native NMDA receptors by the endogenous modulator 24S-hydroxycholesterol in hippocampal neurons. <i>Neuropharmacology</i> , 2019 , 148, 11-20	5.5	13

16	5-HT4-receptors modulate induction of long-term depression but not potentiation at hippocampal output synapses in acute rat brain slices. <i>PLoS ONE</i> , 2014 , 9, e88085	3.7	9
15	Intracellular bicarbonate regulates action potential generation via KCNQ channel modulation. <i>Journal of Neuroscience</i> , 2014 , 34, 4409-17	6.6	8
14	Mossy Cells in the Dorsal and Ventral Dentate Gyrus Differ in Their Patterns of Axonal Projections. <i>Journal of Neuroscience</i> , 2021 , 41, 991-1004	6.6	8
13	Novel Quantitative Analyses of Spontaneous Synaptic Events in Cortical Pyramidal Cells Reveal Subtle Parvalbumin-Expressing Interneuron Dysfunction in a Knock-In Mouse Model of Alzheimer Disease. <i>ENeuro</i> , 2018 , 5,	3.9	7
12	Novel test of motor and other dysfunctions in mouse neurological disease models. <i>Journal of Neuroscience Methods</i> , 2014 , 221, 151-8	3	5
11	A tale of timing and transport. <i>Neuron</i> , 2003 , 39, 729-30	13.9	5
10	WONOEPP appraisal: molecular and cellular imaging in epilepsy. <i>Epilepsia</i> , 2015 , 56, 505-13	6.4	4
9	Activity-dependent changes in structure and function of hippocampal neurons. <i>Hippocampus</i> , 1993 , 3, 99-111	3.5	4
8	Another "tonic" in the realm of epilepsy. <i>Epilepsy Currents</i> , 2004 , 4, 248-9	1.3	3
7	Noradrenergic modulation of excitability in acute and chronic model epilepsies. <i>Epilepsy Research Supplement</i> , 1992 , 8, 321-34		3
6	Amyloid β induces interneuron-specific changes in the hippocampus of APPNL-F mice. <i>PLoS ONE</i> , 2020 , 15, e0233700	3.7	2
5	Plasticity of GABAA receptors relevant toneurosteroid actions. <i>Epilepsia</i> , 2010 , 51, 49-49	6.4	2
4	Introduction to the supplement. <i>Epilepsia</i> , 2010 , 51, 1-1	6.4	1
3	Defining the nature of human pluripotent stem cell-derived interneurons via single-cell analysis. <i>Stem Cell Reports</i> , 2021 , 16, 2548-2564	8	1
2	"One swallow does not make a summer" ... or does it?. <i>Epilepsy Currents</i> , 2008 , 8, 73-5	1.3	
1	Calcium and Autosomal Dominant Nocturnal Frontal Lobe Epilepsy (ADNFLE). <i>Epilepsy Currents</i> , 2003 , 3, 221-222	1.3	