## Tõnis Timmusk

List of Publications by Year in descending order

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98 11,672 44 97
papers citations h-index g-index

102 102 102 11718 all docs docs citations times ranked citing authors

#	Article	IF	Citations
1	Loss of Huntingtin-Mediated BDNF Gene Transcription in Huntington's Disease. Science, 2001, 293, 493-498.	12.6	1,191
2	Mouse and ratBDNF gene structure and expression revisited. Journal of Neuroscience Research, 2007, 85, 525-535.	2.9	847
3	Multiple promoters direct tissue-specific expression of the rat BDNF gene. Neuron, 1993, 10, 475-489.	8.1	812
4	Huntingtin interacts with REST/NRSF to modulate the transcription of NRSE-controlled neuronal genes. Nature Genetics, 2003, 35, 76-83.	21.4	807
5	Identification of a Signaling Pathway Involved in Calcium Regulation of BDNF Expression. Neuron, 1998, 20, 727-740.	8.1	658
6	Differential expression of mRNAs for neurotrophins and their receptors after axotomy of the sciatic nerve Journal of Cell Biology, 1993, 123, 455-465.	<b>5.</b> 2	646
7	Dissecting the human BDNF locus: Bidirectional transcription, complex splicing, and multiple promoters. Genomics, 2007, 90, 397-406.	2.9	591
8	Peripheral expression and biological activities of GDNF, a new neurotrophic factor for avian and mammalian peripheral neurons Journal of Cell Biology, 1995, 130, 137-148.	5.2	548
9	Novel neurotrophic factor CDNF protects and rescues midbrain dopamine neurons in vivo. Nature, 2007, 448, 73-77.	27.8	382
10	Neuronal Expression of Zinc Finger Transcription Factor REST/NRSF/XBR Gene. Journal of Neuroscience, 1998, 18, 1280-1296.	3.6	349
11	LRRTM1 on chromosome 2p12 is a maternally suppressed gene that is associated paternally with handedness and schizophrenia. Molecular Psychiatry, 2007, 12, 1129-1139.	7.9	300
12	Widespread and Developmentally Regulated Expression of Neurotrophin-4 mRNA in Rat Brain and Peripheral Tissues. European Journal of Neuroscience, 1993, 5, 605-613.	2.6	248
13	Differential usage of multiple brain-derived neurotrophic factor promoters in the rat brain following neuronal activation Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 8802-8806.	7.1	229
14	Identification of <i>cis </i> -Elements and Transcription Factors Regulating Neuronal Activity-Dependent Transcription of Human <i>BDNF </i> Gene. Journal of Neuroscience, 2011, 31, 3295-3308.	3.6	208
15	MANF is widely expressed in mammalian tissues and differently regulated after ischemic and epileptic insults in rodent brain. Molecular and Cellular Neurosciences, 2008, 39, 356-371.	2.2	162
16	A novel gene family encoding leucine-rich repeat transmembrane proteins differentially expressed in the nervous systema † Sequence data from this article have been deposited with the DDBJ/EMBL/GenBank Data Libraries under Accession Nos. AY182024 (human LRRTM1), AY182026 (human LRRTM2), AY182028 (human LRRTM3), AY182030 (human LRRTM4), AY182025 (mouse LRRTM1), AY182027 (mouse LRRTM2), AY182029 (mouse LRRTM3), and AY182031 (mouse LRRTM4) Genomics, 2003, 81, 411-421.	2.9	144
17	CREB Family Transcription Factors Are Major Mediators of BDNF Transcriptional Autoregulation in Cortical Neurons. Journal of Neuroscience, 2020, 40, 1405-1426.	3.6	138
18	A Novel N-terminal Isoform of the Neuron-specific K-Cl Cotransporter KCC2. Journal of Biological Chemistry, 2007, 282, 30570-30576.	3.4	129

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19	Long-lasting behavioural and molecular alterations induced by early postnatal fluoxetine exposure are restored by chronic fluoxetine treatment in adult mice. European Neuropsychopharmacology, 2009, 19, 97-108.	0.7	128
20	Neuron-specific splicing of zinc finger transcription factor REST/NRSF/XBR is frequent in neuroblastomas and conserved in human, mouse and rat. Molecular Brain Research, 1999, 72, 30-39.	2.3	118
21	Identification of brain-derived neurotrophic factor promoter regions mediating tissue-specific, axotomy-, and neuronal activity-induced expression in transgenic mice Journal of Cell Biology, 1995, 128, 185-199.	5.2	113
22	The CB1 cannabinoid receptor signals striatal neuroprotection via a PI3K/Akt/mTORC1/BDNF pathway. Cell Death and Differentiation, 2015, 22, 1618-1629.	11.2	109
23	Brain Insults in Rats Induce Increased Expression of the BDNF Gene through Differential Use of Multiple Promoters. European Journal of Neuroscience, 1994, 6, 587-596.	2.6	108
24	Functional Diversity of Human Basic Helix-Loop-Helix Transcription Factor TCF4 Isoforms Generated by Alternative 5′ Exon Usage and Splicing. PLoS ONE, 2011, 6, e22138.	2.5	106
25	Expression of Neurotrophins and Their Receptors in Primary Astroglial Cultures: Induction by Cyclic AMPâ€Elevating Agents. Journal of Neurochemistry, 1994, 63, 509-516.	3.9	103
26	Differential regulation of Bdnf expression in cortical neurons by class-selective histone deacetylase inhibitors. Neuropharmacology, 2013, 75, 106-115.	4.1	103
27	Brain-derived Neurotrophic Factor Expression in Vivols under the Control of Neuron-restrictive Silencer Element. Journal of Biological Chemistry, 1999, 274, 1078-1084.	3.4	102
28	Human TrkB gene: novel alternative transcripts, protein isoforms and expression pattern in the prefrontal cerebral cortex during postnatal development. Journal of Neurochemistry, 2010, 113, 952-964.	3.9	101
29	Developmental regulation of brain-derived neurotrophic factor messenger RNAs transcribed from different promoters in the rat brain. Neuroscience, 1994, 60, 287-291.	2.3	94
30	Expression and Alternative Splicing of Mouse Gfra4 Suggest Roles in Endocrine Cell Development. Molecular and Cellular Neurosciences, 2000, 15, 522-533.	2.2	90
31	Pitt–Hopkins syndrome-associated mutations in TCF4 lead to variable impairment of the transcription factor function ranging from hypomorphic to dominant-negative effects. Human Molecular Genetics, 2012, 21, 2873-2888.	2.9	87
32	Change in Neurotrophins and Their Receptor mRNAs in the Rat Forebrain After Status Epilepticus Induced by Pilocarpine. Epilepsia, 1996, 37, 198-207.	5.1	84
33	Expression of mRNA encoding neurotrophins and neurotrophin receptors in rat thymus, spleen tissue and immunocompetent cells. Regulation of neurotrophin-4 mRNA expression by mitogens and leukotriene B4. FEBS Journal, 1994, 223, 733-741.	0.2	82
34	Human Glial Cell Line-derived Neurotrophic Factor Receptor $\hat{l}\pm4$ Is the Receptor for Persephin and Is Predominantly Expressed in Normal and Malignant Thyroid Medullary Cells. Journal of Biological Chemistry, 2001, 276, 9344-9351.	3.4	77
35	AP-1 Transcription Factors Mediate BDNF-Positive Feedback Loop in Cortical Neurons. Journal of Neuroscience, 2016, 36, 1290-1305.	3.6	76
36	Two novel mammalian nogo receptor homologs differentially expressed in the central and peripheral nervous systemsa <sup>+</sup> . Molecular and Cellular Neurosciences, 2003, 24, 581-594.	2.2	74

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37	Neuron-specific Bcl-2 Homology 3 Domain-only Splice Variant of Bak Is Anti-apoptotic in Neurons, but Pro-apoptotic in Non-neuronal Cells. Journal of Biological Chemistry, 2001, 276, 16240-16247.	3.4	72
38	Neurotrophins and theirtrk receptors in cultured cells of the glial lineage and in white matter of the central nervous system. Journal of Molecular Neuroscience, 1995, 6, 237-248.	2.3	69
39	Increased expression of trkB and trkC messenger RNAS in the rat forebrain after focal mechanical injury. Neuroscience, 1993, 57, 901-912.	2.3	65
40	Alternative splicing and expression of human and mouse NFAT genes. Genomics, 2008, 92, 279-291.	2.9	64
41	Structure, alternative splicing, and expression of the human and mouse KCNIP gene family. Genomics, 2005, 86, 581-593.	2.9	63
42	Nuclear Factor of Activated T-Cells Isoform c4 (NFATc4/NFAT3) as a Mediator of Antiapoptotic Transcription in NMDA Receptor-Stimulated Cortical Neurons. Journal of Neuroscience, 2009, 29, 15331-15340.	3.6	63
43	Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue-type plasminogen activator. Journal of Neuroscience Research, 1989, 23, 274-281.	2.9	61
44	NFâ€PBâ€dependent regulation of brainâ€derived neurotrophic factor in hippocampal neurons by Xâ€linked inhibitor of apoptosis protein. European Journal of Neuroscience, 2009, 30, 958-966.	2.6	59
45	Regulatory elements and transcriptional regulation by testosterone and retinoic acid of the rat nerve growth factor receptor promoter. Gene, 1992, 121, 247-254.	2.2	43
46	Analysis of transcriptional initiation and translatability of brain-derived neurotrophic factor mRNAs in the rat brain. Neuroscience Letters, 1994, 177, 27-31.	2.1	43
47	Altered Expression Profile of IgLON Family of Neural Cell Adhesion Molecules in the Dorsolateral Prefrontal Cortex of Schizophrenic Patients. Frontiers in Molecular Neuroscience, 2018, 11, 8.	2.9	43
48	Forkhead Transcription Factor FOXO3a Levels Are Increased in Huntington Disease Because of Overactivated Positive Autofeedback Loop. Journal of Biological Chemistry, 2014, 289, 32845-32857.	3.4	42
49	Targeted expression of a multifunctional chimeric neurotrophin in the lesioned sciatic nerve accelerates regeneration of sensory and motor axons. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 5269-5274.	7.1	41
50	Neuronal K+/Cl- co-transporter (KCC2) transgenes lacking neurone restrictive silencer element recapitulate CNS neurone-specific expression and developmental up-regulation of endogenous KCC2 gene. Journal of Neurochemistry, 2005, 95, 1144-1155.	3.9	39
51	Dopamine crossâ€reacts with adrenoreceptors in cortical astrocytes to induce BDNF expression, CREB signaling and morphological transformation. Glia, 2018, 66, 206-216.	4.9	39
52	The Intellectual Disability and Schizophrenia Associated Transcription Factor TCF4 Is Regulated by Neuronal Activity and Protein Kinase A. Journal of Neuroscience, 2017, 37, 10516-10527.	3.6	35
53	Entorhinal cortex regulation of multiple brain-derived neurotrophic factor promoters in the rat hippocampus. Neuroscience, 1993, 57, 891-896.	2.3	34
54	Tissue-specific and neural activity-regulated expression of human BDNF gene in BAC transgenic mice. BMC Neuroscience, 2009, 10, 68.	1.9	34

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55	Regulation of different human NFAT isoforms by neuronal activity. Journal of Neurochemistry, 2016, 137, 394-408.	3.9	31
56	Partial deletion of TCF4 in three generation family with non-syndromic intellectual disability, without features of Pitt-Hopkins syndrome. European Journal of Medical Genetics, 2016, 59, 310-314.	1.3	30
57	Expression of mRNAs for neurotrophins and their receptors in the rat choroid plexus and dura mater. NeuroReport, 1995, 6, 1997-2000.	1,2	29
58	Up-regulation of trkB mRNA expression in the rat striatum after seizures. Neuroscience Letters, 1995, 194, 181-184.	2.1	29
59	Regulation of extracellular serotonin levels and brain-derived neurotrophic factor in rats with high and low exploratory activity. Brain Research, 2008, 1194, 110-117.	2.2	28
60	Nâ€ŧerminally truncated BAF57 isoforms contribute to the diversity of SWI/SNF complexes in neurons. Journal of Neurochemistry, 2009, 109, 807-818.	3.9	28
61	Expression of NGF and GDNF family members and their receptors during peripheral nerve development and differentiation of Schwann cells in vitro. Neuroscience Letters, 2010, 469, 135-140.	2.1	22
62	Cocaine-induced epigenetic DNA modification in mouse addiction-specific and non-specific tissues. Neuropharmacology, 2018, 139, 13-25.	4.1	22
63	Intronic enhancer region governs transcript-specific Bdnf expression in rodent neurons. ELife, 2021, 10, .	6.0	22
64	Structural and Functional Characterization of the Rat Neurotrophin-4 Gene. Molecular and Cellular Neurosciences, 1997, 9, 264-275.	2.2	20
65	Differential regulation of BDNF and NT-3 mRNA levels in primary cultures of rat cerebellar neurons. Neurochemistry International, 1998, 32, 87-91.	3.8	20
66	Dendritic Localization of Mammalian neuralized mRNA Encoding a Protein with Transcription Repression Activities. Molecular and Cellular Neurosciences, 2002, 20, 649-668.	2.2	20
67	Novel transcripts reveal a complex structure of the human TRKA gene and imply the presence of multiple protein isoforms. BMC Neuroscience, 2015, 16, 78.	1.9	19
68	Efficient use of a translation start codon in <scp>BDNF</scp> exon I. Journal of Neurochemistry, 2015, 134, 1015-1025.	3.9	19
69	Introducing Pitt-Hopkins syndrome-associated mutations of <i>TCF4</i> to <i>Drosophila daughterless</i> . Biology Open, 2015, 4, 1762-1771.	1.2	19
70	Nucleolar Enrichment of Brain Proteins with Critical Roles in Human Neurodevelopment. Molecular and Cellular Proteomics, 2016, 15, 2055-2075.	3.8	19
71	Subcellular localization and transcription regulatory potency of KCNIP/Calsenilin/DREAM/KChIP proteins in cultured primary cortical neurons do not provide support for their role in ⟨i⟩CRE⟨ i⟩â€dependent gene expression. Journal of Neurochemistry, 2012, 123, 29-43.	3.9	18
72	Expression analysis of the CLCA gene family in mouse and human with emphasis on the nervous system. BMC Developmental Biology, 2009, 9, 10.	2.1	17

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73	Glucocorticoid Receptor Stimulation Resulting from Early Life Stress Affects Expression of DNA Methyltransferases in Rat Prefrontal Cortex. Journal of Molecular Neuroscience, 2019, 68, 99-110.	2.3	16
74	Seizures increasetrkC mRNA expression in the dentate gyrus of rat hippocampus. Journal of Molecular Neuroscience, 1995, 6, 11-22.	2.3	15
75	Neurotoxic injury in rat hippocampus differentially affects multiple trkB and trkC transcripts. Neuroscience Letters, 1995, 196, 1-4.	2.1	15
76	Meta-coexpression conservation analysis of microarray data: a "subset" approach provides insight into brain-derived neurotrophic factor regulation. BMC Genomics, 2009, 10, 420.	2.8	15
77	The role of DNA methyltransferase activity in cocaine treatment and withdrawal in the nucleus accumbens of mice. Addiction Biology, 2020, 25, e12720.	2.6	12
78	Daughterless, the <i>Drosophila</i> orthologue of TCF4, is required for associative learning and maintenance of synaptic proteome. DMM Disease Models and Mechanisms, 2020, 13, .	2.4	12
79	BAC transgenic mice reveal distal cisâ€regulatory elements governing BDNF gene expression. Genesis, 2010, 48, 214-219.	1.6	11
80	Bidirectional transcription from human LRRTM2/CTNNA1 and LRRTM1/CTNNA2 gene loci leads to expression of N-terminally truncated CTNNA1 and CTNNA2 isoforms. Biochemical and Biophysical Research Communications, 2011, 411, 56-61.	2.1	11
81	GLI2 cell-specific activity is controlled at the level of transcription and RNA processing: Consequences to cancer metastasis. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2016, 1862, 46-55.	3.8	10
82	Neuralized family member NEURL1 is a ubiquitin ligase for the cGMP-specific phosphodiesterase 9A. Scientific Reports, 2019, 9, 7104.	3.3	10
83	Functional consequences of TCF4 missense substitutions associated with Pitt-Hopkins syndrome, mild intellectual disability, and schizophrenia. Journal of Biological Chemistry, 2021, 297, 101381.	3.4	10
84	Neuralized-2: Expression in human and rodents and interaction with Delta-like ligands. Biochemical and Biophysical Research Communications, 2009, 389, 420-425.	2.1	9
85	Sumoylation regulates the transcriptional activity of different human NFAT isoforms in neurons. Neuroscience Letters, 2017, 653, 302-307.	2.1	9
86	The Fuchs corneal dystrophy-associated CTG repeat expansion in the TCF4 gene affects transcription from its alternative promoters. Scientific Reports, 2020, 10, 18424.	3.3	9
87	LRRTM1 protein is located in the endoplasmic reticulum (ER) in mammalian cells. Molecular Psychiatry, 2007, 12, 1057-1057.	7.9	8
88	PGC-1α Signaling Increases GABA(A) Receptor Subunit α2 Expression, GABAergic Neurotransmission and Anxiety-Like Behavior in Mice. Frontiers in Molecular Neuroscience, 2021, 14, 588230.	2.9	8
89	Indole-like Trk receptor antagonists. European Journal of Medicinal Chemistry, 2016, 121, 541-552.	5.5	6
90	BAC-based cellular model for screening regulators of BDNF gene transcription. BMC Neuroscience, 2014, 15, 75.	1.9	3

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91	Rat NEURL1 3′UTR is alternatively spliced and targets mRNA to dendrites. Neuroscience Letters, 2016, 635, 71-76.	2.1	3
92	Drastic Effects on the Microbiome of a Young Rower Engaged in High-Endurance Exercise After a Month Usage of a Dietary Fiber Supplement. Frontiers in Nutrition, 2021, 8, 654008.	3.7	3
93	Neuronal-activity regulated gene expression: emphasis on BDNF. SpringerPlus, 2015, 4, L38.	1.2	2
94	Usage of Bacterial Artificial Chromosomes for Studying BDNF Gene Regulation in Primary Cultures of Cortical Neurons and Astrocytes. Neuromethods, 2018, , 13-25.	0.3	2
95	Isoform-Specific Reduction of the Basic Helix-Loop-Helix Transcription Factor TCF4 Levels in Huntington's Disease. ENeuro, 2021, 8, ENEURO.0197-21.2021.	1.9	2
96	Immune response to a conserved enteroviral epitope of the major capsid VP1 protein is associated with lower risk of cardiovascular disease. EBioMedicine, 2022, 76, 103835.	6.1	2
97	Structure and Regulation of BDNF and NT-4 Genes. , 1995, , 235-260.		1
98	Melanoma-specific antigen-associated antitumor antibody reactivity as an immune-related biomarker for targeted immunotherapies. Communications Medicine, 2022, 2, .	4.2	1