Tommaso Pizzorusso

List of Publications by Year
in descending order

111 papers	11,473 citations	50244 46 h-index	30058 103 g-index
122 all docs	122 docs citations	122 times ranked	10414 citing authors

#	Article	IF	Citations
1	The gut microbiota of environmentally enriched mice regulates visual cortical plasticity. Cell Reports, 2022, 38, 110212.	2.9	23
2	Learning to count biological structures with ratersâ€™ uncertainty. Medical Image Analysis, 2022, 80, 102500.	7.0	5
3	Age-Related Cognitive and Motor Decline in a Mouse Model of CDKL5 Deficiency Disorder is Associated with Increased Neuronal Senescence and Death. , 2021, 12, 764.		16
4	Chondroitin 6-sulphate is required for neuroplasticity and memory in ageing. Molecular Psychiatry, 2021, 26, 5658-5668.	4.1	36
5	The Role of Preclinical Models in Creatine Transporter Deficiency: Neurobiological Mechanisms, Biomarkers and Therapeutic Development. Genes, 2021, 12, 1123.	1.0	8
6	MEYE: Web App for Translational and Real-Time Pupillometry. ENeuro, 2021, 8, ENEURO.0122-21.2021.	0.9	11
7	MiRâ€29 coordinates ageâ€dependent plasticity brakes in the adult visual cortex. EMBO Reports, 2021, 22, .	2.0	1
8	Running towards amblyopia recovery. Scientific Reports, 2020, 10, 12661.	1.6	10
9	Novel translational phenotypes and biomarkers for creatine transporter deficiency. Brain Communications, 2020, 2, fcaa089.	1.5	14
10	Cyclocreatine treatment ameliorates the cognitive, autistic and epileptic phenotype in a mouse model of Creatine Transporter Deficiency. Scientific Reports, 2020, 10, 18361.	1.6	14
11	Cyclin-dependentâ€“like kinase 5 is required for pain signaling in human sensory neurons and mouse models. Science Translational Medicine, 2020, 12, .	5.8	13
12	Interplay between Metabolism, Nutrition and Epigenetics in Shaping Brain DNA Methylation, Neural Function and Behavior. Genes, 2020, 11, 742.	1.0	18
13	3D Printable Device for Automated Operant Conditioning in the Mouse. ENeuro, 2020, 7, ENEURO.0502-19.2020.	0.9	6
14	MiRâ€29 coordinates ageâ€dependent plasticity brakes in the adult visual cortex. EMBO Reports, 2020, 21, e50431.	2.0	15
15	The roles of perineuronal nets and the perinodal extracellular matrix inÂneuronal function. Nature Reviews Neuroscience, 2019, 20, 451-465.	4.9	320
16	Site-specific abnormalities in the visual system of a mouse model of CDKL5 deficiency disorder. Human Molecular Genetics, 2019, 28, 2851-2861.	1.4	30
17	Rodent Models of Developmental Ischemic Stroke for Translational Research: Strengths and Weaknesses. Neural Plasticity, 2019, 2019, 1-16.	1.0	20
18	Brain mitochondrial proteome alteration driven by creatine deficiency suggests novel therapeutic venues for creatine deficiency syndromes. Neuroscience, 2019, 409, 276-289.	1.1	8

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19	p75 Neurotrophin Receptor Activation Regulates the Timing of the Maturation of Cortical Parvalbumin Interneuron Connectivity and Promotes Juvenile-like Plasticity in Adult Visual Cortex. Journal of Neuroscience, 2019, 39, 4489-4510.	1.7	48
20	Inhibition of Semaphorin3A Promotes Ocular Dominance Plasticity in the Adult Rat Visual Cortex. Molecular Neurobiology, 2019, 56, 5987-5997.	1.9	26
21	A Nervous System-Specific Model of Creatine Transporter Deficiency Recapitulates the Cognitive Endophenotype of the Disease: a Longitudinal Study. Scientific Reports, 2019, 9, 62.	1.6	14
22	CDKL5 protein substitution therapy rescues neurological phenotypes of a mouse model of CDKL5 disorder. Human Molecular Genetics, 2018, 27, 1572-1592.	1.4	49
23	Fluoxetine Modulates the Activity of Hypothalamic POMC Neurons via mTOR Signaling. Molecular Neurobiology, 2018, 55, 9267-9279.	1.9	13
24	The antidepressant fluoxetine acts on energy balance and leptin sensitivity via BDNF. Scientific Reports, 2018, 8, 1781.	1.6	32
25	iPSC-derived neurons profiling reveals GABAergic circuit disruption and acetylated Î±-tubulin defect which improves after iHDAC6 treatment in Rett syndrome. Experimental Cell Research, 2018, 368, 225-235.	1.2	36
26	Loss of Mecp2 Causes Atypical Synaptic and Molecular Plasticity of Parvalbumin-Expressing Interneurons Reflecting Rett Syndromeâ€“Like Sensorimotor Defects. ENeuro, 2018, 5, ENEURO.0086-18.2018.	0.9	36
27	Perineuronal nets control visual input via thalamic recruitment of cortical PV interneurons. ELife, 2018, 7, .	2.8	46
28	Mir-132/212 is required for maturation of binocular matching of orientation preference and depth perception. Nature Communications, 2017, 8, 15488.	5.8	31
29	Searching for biomarkers of CDKL5 disorder: early-onset visual impairment in CDKL5 mutant mice. Human Molecular Genetics, 2017, 26, 2290-2298.	1.4	55
30	Focal Stroke in the Developing Rat Motor Cortex Induces Age- and Experience-Dependent Maladaptive Plasticity of Corticospinal System. Frontiers in Neural Circuits, 2017, 11, 47.	1.4	11
31	miRNA in Neuronal Networks Maturation and Plasticity. , 2017, , 211-224.		1
32	Perineuronal Nets and CNS Plasticity and Repair. Neural Plasticity, 2016, 2016, 1-2.	1.0	32
33	A mouse model for creatine transporter deficiency reveals early onset cognitive impairment and neuropathology associated with brain aging. Human Molecular Genetics, 2016, 25, 4186-4200.	1.4	39
34	Dendritic Spine Instability in a Mouse Model of CDKL5 Disorder Is Rescued by Insulin-like Growth Factor 1. Biological Psychiatry, 2016, 80, 302-311.	0.7	106
35	Editorial for Ã¢â‚¬Å“Regulatory RNAs in the nervous systemÃ¢â‚¬Â• Frontiers in Cellular Neuroscience, 2015, 9, 38.	1.8	1
36	Dynamic DNA methylation in the brain: a new epigenetic mark for experience-dependent plasticity. Frontiers in Cellular Neuroscience, 2015, 9, 331.	1.8	67

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37	Experience-dependent DNA methylation regulates plasticity in the developing visual cortex. Nature Neuroscience, 2015, 18, 956-958.	7.1	46
38	Perilesional Treatment with Chondroitinase ABC and Motor Training Promote Functional Recovery After Stroke in Rats. Cerebral Cortex, 2015, 25, 202-212.	1.6	73
39	Perineuronal net digestion with chondroitinase restores memory in mice with tau pathology. Experimental Neurology, 2015, 265, 48-58.	2.0	104
40	Mapping Pathological Phenotypes in a Mouse Model of CDKL5 Disorder. PLoS ONE, 2014, 9, e91613.	1.1	145
41	Inflammatory Lung Disease in Rett Syndrome. Mediators of Inflammation, 2014, 2014, 1-15.	1.4	19
42	Synaptic plasticity and signaling in rett syndrome. Developmental Neurobiology, 2014, 74, 178-196.	1.5	31
43	p140Cap Regulates Memory and Synaptic Plasticity through Src-Mediated and Citron-N-Mediated Actin Reorganization. Journal of Neuroscience, 2014, 34, 1542-1553.	1.7	54
44	Novel siRNA delivery strategy: a new â€œstrandâ€•in CNS translational medicine?. Cellular and Molecular Life Sciences, 2014, 71, 1-20.	2.4	24
45	A novel mouse model of creatine transporter deficiency. F1000Research, 2014, 3, 228.	0.8	42
46	Depletion of Perineuronal Nets Enhances Recognition Memory and Long-Term Depression in the Perirhinal Cortex. Journal of Neuroscience, 2013, 33, 7057-7065.	1.7	190
47	In Vivo Distribution and Toxicity of PAMAM Dendrimers in the Central Nervous System Depend on Their Surface Chemistry. Molecular Pharmaceutics, 2013, 10, 249-260.	2.3	154
48	Extracellular matrix inhibits structural and functional plasticity of dendritic spines in the adult visual cortex. Nature Communications, 2013, 4, 1484.	5.8	121
49	Molecular Mechanisms at the Basis of Plasticity in the Developing Visual Cortex: Epigenetic Processes and Gene Programs. Journal of Experimental Neuroscience, 2013, 7, JEN.S12958.	2.3	15
50	Environment, Leptin Sensitivity, and Hypothalamic Plasticity. Neural Plasticity, 2013, 2013, 1-8.	1.0	31
51	System Consolidation of Spatial Memories in Mice: Effects of Enriched Environment. Neural Plasticity, 2013, 2013, 1-12.	1.0	35
52	Vascular Dysfunction in a Mouse Model of Rett Syndrome and Effects of Curcumin Treatment. PLoS ONE, 2013, 8, e64863.	1.1	41
53	Functionalized Carbon Nanotubes in the Brain: Cellular Internalization and Neuroinflammatory Responses. PLoS ONE, 2013, 8, e80964.	1.1	89
54	MicroRNA212/132 family: Molecular transducer of neuronal function and plasticity. International Journal of Biochemistry and Cell Biology, 2012, 44, 6-10.	1.2	67

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55	In vivo degradation of functionalized carbon nanotubes after stereotactic administration in the brain cortex. Nanomedicine, 2012, 7, 1485-1494.	1.7	104
56	Multiwalled Carbon Nanotube Antennas Induce Effective Plasmid DNA Transfection of Bacterial Cells. Journal of Nanoneuroscience, 2012, 2, 56-62.	0.5	5
57	Carbon nanotube-mediated wireless cell permeabilization: drug and gene uptake. Nanomedicine, 2011, 6, 1709-1718.	1.7	31
58	Experience-dependent expression of miR-132 regulates ocular dominance plasticity. Nature Neuroscience, 2011, 14, 1237-1239.	7.1	117
59	ERK Pathway Activation Bidirectionally Affects Visual Recognition Memory and Synaptic Plasticity in the Perirhinal Cortex. Frontiers in Behavioral Neuroscience, 2011, 5, 84.	1.0	43
60	The short-time structural plasticity of dendritic spines is altered in a model of Rett syndrome. Scientific Reports, 2011, 1, 45.	1.6	75
61	Reduced AKT/mTOR signaling and protein synthesis dysregulation in a Rett syndrome animal model. Human Molecular Genetics, 2011, 20, 1182-1196.	1.4	202
62	Functional motor recovery from brain ischemic insult by carbon nanotube-mediated siRNA silencing. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10952-10957.	3.3	217
63	GABAergic Circuit Development and Its Implication for CNS Disorders. Neural Plasticity, 2011, 2011, 1-2.	1.0	6
64	Increased Susceptibility to Cortical Spreading Depression in the Mouse Model of Familial Hemiplegic Migraine Type 2. PLoS Genetics, 2011, 7, e1002129.	1.5	179
65	In Vitro and In Vivo Biocompatibility Testing of Functionalized Carbon Nanotubes. Methods in Molecular Biology, 2010, 625, 67-83.	0.4	19
66	The biocompatibility of amino functionalized CdSe/ZnS quantum-dot-Doped SiO2 nanoparticles with primary neural cells and their gene carrying performance. Biomaterials, 2010, 31, 6555-6566.	5.7	73
67	Involvement of the parietal cortex in perceptual learning (Eureka effect): An interference approach using rTMS. Neuropsychologia, 2010, 48, 1807-1812.	0.7	21
68	High cortical spreading depression susceptibility and migraineâ€associated symptoms in Ca_v2.1 S218L mice. Annals of Neurology, 2010, 67, 85-98.	2.8	206
69	Epigenetic treatments of adult rats promote recovery from visual acuity deficits induced by longâ€term monocular deprivation. European Journal of Neuroscience, 2010, 31, 2185-2192.	1.2	90
70	Synaptic determinants of Rett syndrome. Frontiers in Synaptic Neuroscience, 2010, 2, 28.	1.3	47
71	A sensitive period for environmental regulation of eating behavior and leptin sensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16673-16678.	3.3	49
72	Animals lacking link protein have attenuated perineuronal nets and persistent plasticity. Brain, 2010, 133, 2331-2347.	3.7	411

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73	Reducing Intracortical Inhibition in the Adult Visual Cortex Promotes Ocular Dominance Plasticity. Journal of Neuroscience, 2010, 30, 361-371.	1.7	284
74	Early Environmental Enrichment Moderates the Behavioral and Synaptic Phenotype of MeCP2 Null Mice. Biological Psychiatry, 2010, 67, 657-665.	0.7	189
75	Reduced Responsiveness to Long-Term Monocular Deprivation of Parvalbumin Neurons Assessed by c-Fos Staining in Rat Visual Cortex. PLoS ONE, 2009, 4, e4342.	1.1	32
76	Pluronic-coated carbon nanotubes do not induce degeneration of cortical neurons in vivo and in vitro. Nanomedicine: Nanotechnology, Biology, and Medicine, 2009, 5, 96-104.	1.7	91
77	Adipocytes differentiation in the presence of Pluronic F127â€“coated carbon nanotubes. Nanomedicine: Nanotechnology, Biology, and Medicine, 2009, 5, 378-381.	1.7	11
78	Ras-Guanine Nucleotide-Releasing Factor 1 (Ras-GRF1) Controls Activation of Extracellular Signal-Regulated Kinase (ERK) Signaling in the Striatum and Long-Term Behavioral Responses to Cocaine. Biological Psychiatry, 2009, 66, 758-768.	0.7	96
79	Erasing Fear Memories. Science, 2009, 325, 1214-1215.	6.0	14
80	Characterization of an alginate-based drug delivery system for neurological applications. Medical Engineering and Physics, 2008, 30, 848-855.	0.8	35
81	Disruption of the prefrontal cortex function by rTMS produces a category-specific enhancement of the reaction times during visual object identification. Neuropsychologia, 2008, 46, 2725-2731.	0.7	20
82	Visual experience and plasticity of the visual cortex: a role for epigenetic mechanisms. Frontiers in Bioscience - Landmark, 2008, 13, 3000.	3.0	18
83	Developmental Downregulation of Histone Posttranslational Modifications Regulates Visual Cortical Plasticity. Neuron, 2007, 53, 747-759.	3.8	178
84	Developmental Downregulation of Histone Posttranslational Modifications Regulates Visual Cortical Plasticity. Neuron, 2007, 54, 177.	3.8	3
85	A Richness that Cures. Neuron, 2007, 54, 508-510.	3.8	15
86	Visual Stimulation Activates ERK in Synaptic and Somatic Compartments of Rat Cortical Neurons with Parallel Kinetics. PLoS ONE, 2007, 2, e604.	1.1	47
87	Structural and functional recovery from early monocular deprivation in adult rats. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8517-8522.	3.3	321
88	A Kinase with a Vision. , 2006, 557, 122-132.		15
89	Extracellular Matrix and Visual Cortical Plasticity. Neuron, 2004, 44, 905-908.	3.8	95
90	A Cacna1a Knockin Migraine Mouse Model with Increased Susceptibility to Cortical Spreading Depression. Neuron, 2004, 41, 701-710.	3.8	595

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91	Molecular basis of plasticity in the visual cortex. Trends in Neurosciences, 2003, 26, 369-378.	4.2	252
92	Patterned Vision Causes CRE-Mediated Gene Expression in the Visual Cortex through PKA and ERK. Journal of Neuroscience, 2003, 23, 7012-7020.	1.7	79
93	Reactivation of Ocular Dominance Plasticity in the Adult Visual Cortex. Science, 2002, 298, 1248-1251.	6.0	1,441
94	Heterozygous Knock-Out Mice for Brain-Derived Neurotrophic Factor Show a Pathway-Specific Impairment of Long-Term Potentiation But Normal Critical Period for Monocular Deprivation. Journal of Neuroscience, 2002, 22, 10072-10077.	1.7	78
95	Electrophysiology of the postreceptoral visual pathway in mice. Documenta Ophthalmologica, 2002, 104, 69-82.	1.0	13
96	Requirement of ERK Activation for Visual Cortical Plasticity. Science, 2001, 292, 2337-2340.	6.0	192
97	Requirement of the nicotinic acetylcholine receptor Â2 subunit for the anatomical and functional development of the visual system. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6453-6458.	3.3	225
98	Critical periods during sensory development. Current Opinion in Neurobiology, 2000, 10, 138-145.	2.0	438
99	Brain-Derived Neurotrophic Factor Causes cAMP Response Element-Binding Protein Phosphorylation in Absence of Calcium Increases in Slices and Cultured Neurons from Rat Visual Cortex. Journal of Neuroscience, 2000, 20, 2809-2816.	1.7	124
100	Effects of Neurotrophins on Cortical Plasticity: Same or Different?. Journal of Neuroscience, 2000, 20, 2155-2165.	1.7	77
101	Role of neurotrophins in the development and plasticity of the visual system: experiments on dark rearing. International Journal of Psychophysiology, 2000, 35, 189-196.	0.5	18
102	TrkA activation in the rat visual cortex by antirat trkA IgG prevents the effect of monocular deprivation. European Journal of Neuroscience, 1999, 11, 204-212.	1.2	35
103	The visual physiology of the wild type mouse determined with pattern VEPs. Vision Research, 1999, 39, 3071-3081.	0.7	183
104	BDNF Regulates the Maturation of Inhibition and the Critical Period of Plasticity in Mouse Visual Cortex. Cell, 1999, 98, 739-755.	13.5	1,072
105	Vision in mice with neuronal redundancy due to inhibition of developmental cell death. Visual Neuroscience, 1999, 16, 721-726.	0.5	18
106	Nerve growth factor and brain-derived neurotrophic factor increase neurotransmitter release in the rat visual cortex. European Journal of Neuroscience, 1998, 10, 2185-2191.	1.2	113
107	Temporal Aspects of Contrast Visual Evoked Potentials in the Pigmented Rat: Effect of Dark Rearing. Vision Research, 1997, 37, 389-395.	0.7	28
108	Transplant of Schwann Cells Allows Normal Development of the Visual Cortex of Dark-reared Rats. European Journal of Neuroscience, 1997, 9, 102-112.	1.2	14

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109	Plasticity in the developing visual system. Current Opinion in Neurology, 1996, 9, 122-125.	1.8	19
110	Functional postnatal development of the rat primary visual cortex and the role of visual experience: Dark rearing and monocular deprivation. Vision Research, 1994, 34, 709-720.	0.7	599
111	A novel mouse model of creatine transporter deficiency. F1000Research, 0, 3, 228.	0.8	0