Nicola Marchi

List of Publications by Year
in descending order

113 papers	6,726 citations	47006 47 h-index	64796 79 g-index
119 all docs	119 docs citations	119 times ranked	7340 citing authors

#	Article	IF	Citations
1	Seizure-Promoting Effect of Blood?Brain Barrier Disruption. Epilepsia, 2007, 48, 732-742.	5.1	442
2	The role of shear stress in Blood-Brain Barrier endothelial physiology. BMC Neuroscience, 2011, 12, 40.	1.9	325
3	Antagonism of peripheral inflammation reduces the severity of status epilepticus. Neurobiology of Disease, 2009, 33, 171-181.	4.4	270
4	Serum S100Î². Cancer, 2003, 97, 2806-2813.	4.1	249
5	Consequences of Repeated Blood-Brain Barrier Disruption in Football Players. PLoS ONE, 2013, 8, e56805.	2.5	246
6	Peripheral markers of bloodâ€“brain barrier damage. Clinica Chimica Acta, 2004, 342, 1-12.	1.1	207
7	Bloodâ€“brain barrier dysfunction and epilepsy: Pathophysiologic role and therapeutic approaches. Epilepsia, 2012, 53, 1877-1886.	5.1	199
8	Inflammatory pathways of seizure disorders. Trends in Neurosciences, 2014, 37, 55-65.	8.6	196
9	Inhibition of the Multidrug Transporter P-Glycoprotein Improves Seizure Control in Phenytoin-treated Chronic Epileptic Rats. Epilepsia, 2006, 47, 672-680.	5.1	191
10	Peripheral markers of brain damage and blood-brain barrier dysfunction. Restorative Neurology and Neuroscience, 2003, 21, 109-21.	0.7	163
11	In Vivo and In Vitro Effects of Pilocarpine: Relevance to Ictogenesis. Epilepsia, 2007, 48, 1934-1946.	5.1	151
12	Development of a Humanized In Vitro Blood?Brain Barrier Model to Screen for Brain Penetration of Antiepileptic Drugs. Epilepsia, 2007, 48, 505-516.	5.1	147
13	Efficacy of Anti-Inflammatory Therapy in a Model of Acute Seizures and in a Population of Pediatric Drug Resistant Epileptics. PLoS ONE, 2011, 6, e18200.	2.5	130
14	Significance of MDR1 and multiple drug resistance in refractory human epileptic brain. BMC Medicine, 2004, 2, 37.	5.5	128
15	A Dynamic in vitro BBB Model for the Study of Immune Cell Trafficking into the Central Nervous System. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 767-777.	4.3	119
16	Cerebrovascular pathology during the progression of experimental Alzheimer's disease. Neurobiology of Disease, 2016, 88, 107-117.	4.4	107
17	IFN-Î³, IL-17A, or zonulin rapidly increase the permeability of the blood-brain and small intestinal epithelial barriers: Relevance for neuro-inflammatory diseases. Biochemical and Biophysical Research Communications, 2018, 507, 274-279.	2.1	107
18	Bloodâ€“brain barrier damage, but not parenchymal white blood cells, is a hallmark of seizure activity. Brain Research, 2010, 1353, 176-186.	2.2	98

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19	Pattern of P450 expression at the human bloodâ€“brain barrier: Roles of epileptic condition and laminar flow. Epilepsia, 2010, 51, 1408-1417.	5.1	96
20	HIITing the brain with exercise: mechanisms, consequences and practical recommendations. Journal of Physiology, 2020, 598, 2513-2530.	2.9	92
21	Serum Transthyretin Monomer as a Possible Marker of Blood-to-CSF Barrier Disruption. Journal of Neuroscience, 2003, 23, 1949-1955.	3.6	87
22	Nanomaterial-mediated CNS delivery of diagnostic and therapeutic agents. Advanced Drug Delivery Reviews, 2012, 64, 605-613.	13.7	87
23	A Pilot Study on Brain-to-Plasma Partition of 10,11-Dyhydro-10-hydroxy-5H-dibenzo(b,f)azepine-5-carboxamide and MDR1 Brain Expression in Epilepsy Patients Not Responding to Oxcarbazepine. Epilepsia, 2005, 46, 1613-1619.	5.1	86
24	SEMA4D compromises bloodâ€“brain barrier, activates microglia, and inhibits remyelination in neurodegenerative disease. Neurobiology of Disease, 2015, 73, 254-268.	4.4	84
25	Bloodâ€“brain barrier damage and brain penetration of antiepileptic drugs: Role of serum proteins and brain edema. Epilepsia, 2009, 50, 664-677.	5.1	81
26	Inflammatory events in hippocampal slice cultures prime neuronal susceptibility to excitotoxic injury: a crucial role of P2X₇ receptorâ€mediated ILâ€1Î² release. Journal of Neurochemistry, 2008, 106, 271-280.	3.9	78
27	Vascular and Parenchymal Mechanisms in Multiple Drug Resistance: a Lesson from Human Epilepsy. Current Drug Targets, 2003, 4, 297-304.	2.1	75
28	Acute induction of epileptiform discharges by pilocarpine in the in vitro isolated guinea-pig brain requires enhancement of bloodâ€“brain barrier permeability. Neuroscience, 2008, 151, 303-312.	2.3	74
29	Management of the patient with medically refractory epilepsy. Expert Review of Neurotherapeutics, 2009, 9, 1791-1802.	2.8	72
30	Significance of Ubiquitin Carboxy-Terminal Hydrolase L1 Elevations in Athletes after Sub-Concussive Head Hits. PLoS ONE, 2014, 9, e96296.	2.5	72
31	Cellular localization and functional significance of CYP3A4 in the human epileptic brain. Epilepsia, 2011, 52, 562-571.	5.1	70
32	Cerebrovascular Remodeling and Epilepsy. Neuroscientist, 2013, 19, 304-312.	3.5	69
33	Serum S100B: A Potential Biomarker for Suicidality in Adolescents?. PLoS ONE, 2010, 5, e11089.	2.5	67
34	Peripheral detection of S100Î² during cardiothoracic surgery: what are we really measuring?. Annals of Thoracic Surgery, 2004, 78, 46-52.	1.3	65
35	Blood-Brain Barrier P450 Enzymes and Multidrug Transporters in Drug Resistance: A Synergistic Role in Neurological Diseases. Current Drug Metabolism, 2011, 12, 742-749.	1.2	65
36	The pericyteâ€“glia interface at the bloodâ€“brain barrier. Clinical Science, 2018, 132, 361-374.	4.3	63

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37	Modulation of peripheral cytotoxic cells and ictogenesis in a model of seizures. Epilepsia, 2011, 52, 1627-1634.	5.1	61
38	Prenatal exposure to thalidomide, altered vasculogenesis, and CNS malformations. Neuroscience, 2006, 142, 267-283.	2.3	60
39	S100Î² as a predictor of brain metastases. Cancer, 2005, 104, 817-824.	4.1	59
40	The Etiological Role of Blood-Brain Barrier Dysfunction in Seizure Disorders. Cardiovascular Psychiatry and Neurology, 2011, 2011, 1-9.	0.8	58
41	Bloodâ€“brain barrier, bulk flow, and interstitial clearance in epilepsy. Journal of Neuroscience Methods, 2016, 260, 118-124.	2.5	58
42	Topographic Reorganization of Cerebrovascular Mural Cells under Seizure Conditions. Cell Reports, 2018, 23, 1045-1059.	6.4	57
43	Seizure progression and inflammatory mediators promote pericytosis and pericyte-microglia clustering at the cerebrovasculature. Neurobiology of Disease, 2018, 113, 70-81.	4.4	56
44	HIV Neuroinfection and Alzheimerâ€™s Disease: Similarities and Potential Links?. Frontiers in Cellular Neuroscience, 2018, 12, 307.	3.7	56
45	Redistribution of PDGFRÎ² cells and NG2DsRed pericytes at the cerebrovasculature after status epilepticus. Neurobiology of Disease, 2014, 71, 151-158.	4.4	55
46	Selective and persistent upregulation of mdr1b mRNA and P-glycoprotein in the parahippocampal cortex of chronic epileptic rats. Epilepsy Research, 2004, 60, 203-213.	1.6	54
47	Blood-Brain Barrier Damage Induces Release of Î±2-Macroglobulin. Molecular and Cellular Proteomics, 2003, 2, 234-241.	3.8	53
48	A role for inflammation in status epilepticus is revealed by a review of current therapeutic approaches. Epilepsia, 2013, 54, 30-32.	5.1	51
49	Determinants of drug brain uptake in a rat model of seizure-associated malformations of cortical development. Neurobiology of Disease, 2006, 24, 429-442.	4.4	47
50	Pathophysiological implications of neurovascular P450 in brain disorders. Drug Discovery Today, 2016, 21, 1609-1619.	6.4	46
51	Overexpression of pregnane X and glucocorticoid receptors and the regulation of cytochrome P450 in human epileptic brain endothelial cells. Epilepsia, 2017, 58, 576-585.	5.1	45
52	Improving the clinical management of traumatic brain injury through the pharmacokinetic modeling of peripheral blood biomarkers. Fluids and Barriers of the CNS, 2016, 13, 21.	5.0	40
53	Zika Virus Infection Promotes Local Inflammation, Cell Adhesion Molecule Upregulation, and Leukocyte Recruitment at the Blood-Brain Barrier. MBio, 2020, 11, .	4.1	40
54	Is Peripheral Immunity Regulated by Blood-Brain Barrier Permeability Changes?. PLoS ONE, 2014, 9, e101477.	2.5	38

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55	Expression and functional relevance of <scp>UGT</scp>1<scp>A</scp>4 in a cohort of human drugâ€resistant epileptic brains. Epilepsia, 2013, 54, 1562-1570.	5.1	37
56	PDGFRÎ²+ cells in human and experimental neuro-vascular dysplasia and seizures. Neuroscience, 2015, 306, 18-27.	2.3	37
57	A pericyteâ€glia scarring develops at the leaky capillaries in the hippocampus during seizure activity. Epilepsia, 2019, 60, 1399-1411.	5.1	37
58	Peripheral Blood and Salivary Biomarkers of Bloodâ€“Brain Barrier Permeability and Neuronal Damage: Clinical and Applied Concepts. Frontiers in Neurology, 2020, 11, 577312.	2.4	36
59	ProApolipoprotein A1. Cancer, 2008, 112, 1313-1324.	4.1	35
60	Transporters in Drug-Refractory Epilepsy: Clinical Significance. Clinical Pharmacology and Therapeutics, 2010, 87, 13-15.	4.7	35
61	Microglia proliferation plays distinct roles in acquired epilepsy depending on disease stages. Epilepsia, 2021, 62, 1931-1945.	5.1	33
62	Differential impact of dose-range glyphosate on locomotor behavior, neuronal activity, glio-cerebrovascular structures, and transcript regulations in zebrafish larvae. Chemosphere, 2021, 267, 128986.	8.2	31
63	Cerebrovascular heterogeneity and neuronal excitability. Neuroscience Letters, 2018, 667, 75-83.	2.1	28
64	Neurovascular unit dysfunction as a mechanism of seizures and epilepsy during aging. Epilepsia, 2022, 63, 1297-1313.	5.1	27
65	Hepatic and hippocampal cytochrome P450 enzyme overexpression during spontaneous recurrent seizures. Epilepsia, 2018, 59, 123-134.	5.1	24
66	Early cerebrovascular and long-term neurological modifications ensue following juvenile mild traumatic brain injury in male mice. Neurobiology of Disease, 2020, 141, 104952.	4.4	24
67	Sertralineâ€induced potentiation of the CYP3A4â€dependent neurotoxicity of carbamazepine: An in vitro study. Epilepsia, 2015, 56, 439-449.	5.1	23
68	The blood-brain barrier hypothesis in drug resistant epilepsy. Brain, 2012, 135, e211-e211.	7.6	22
69	Effect of status epilepticus and antiepileptic drugs on CYP2E1 brain expression. Neuroscience, 2014, 281, 124-134.	2.3	22
70	Competitive apnea and its effect on the human brain: focus on the redox regulation of bloodâ€brain barrier permeability and neuronalâ€parenchymal integrity. FASEB Journal, 2018, 32, 2305-2314.	0.5	22
71	Is Salivary S100B a Biomarker of Traumatic Brain Injury? A Pilot Study. Frontiers in Neurology, 2020, 11, 528.	2.4	22
72	Multimodal investigations of trans-endothelial cell trafficking under condition of disrupted blood-brain barrier integrity. BMC Neuroscience, 2010, 11, 34.	1.9	21

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73	In vitro responsiveness of human-drug-resistant tissue to antiepileptic drugs: Insights into the mechanisms of pharmacoresistance. Brain Research, 2006, 1086, 201-213.	2.2	20
74	A pro-convulsive carbamazepine metabolite: Quinolinic acid in drug resistant epileptic human brain. Neurobiology of Disease, 2012, 46, 692-700.	4.4	20
75	Central nervous system lymphatic unit, immunity, and epilepsy: Is there a link?. Epilepsia Open, 2019, 4, 30-39.	2.4	20
76	The GRâ€ANXA1 pathway is a pathological player and a candidate target in epilepsy. FASEB Journal, 2019, 33, 13998-14009.	0.5	19
77	Seizure activity triggers tau hyperphosphorylation and amyloidogenic pathways. Epilepsia, 2022, 63, 919-935.	5.1	19
78	Combined effects of prenatal inhibition of vasculogenesis and neurogenesis on rat brain development. Neurobiology of Disease, 2008, 32, 499-509.	4.4	18
79	The mGlu7 receptor provides protective effects against epileptogenesis and epileptic seizures. Neurobiology of Disease, 2019, 129, 13-28.	4.4	18
80	Machine Learning Analysis of the Cerebrovascular Thrombi Proteome in Human Ischemic Stroke: An Exploratory Study. Frontiers in Neurology, 2020, 11, 575376.	2.4	18
81	Peripheral Routes to Neurodegeneration: Passing Through the Bloodâ€“Brain Barrier. Frontiers in Aging Neuroscience, 2020, 12, 3.	3.4	18
82	Hypoxemia increases blood-brain barrier permeability during extreme apnea in humans. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1120-1135.	4.3	18
83	Small Vessel Ischemic Disease of the Brain and Brain Metastases in Lung Cancer Patients. PLoS ONE, 2009, 4, e7242.	2.5	17
84	Pregnane X Receptor Deletion Modifies Recognition Memory and Electroencephalographic Activity. Neuroscience, 2018, 370, 130-138.	2.3	16
85	Modulation of glucocorticoid receptor in human epileptic endothelial cells impacts drug biotransformation in an inÂvitro bloodâ€“brain barrier model. Epilepsia, 2018, 59, 2049-2060.	5.1	16
86	Neurovascular Drug Biotransformation Machinery in Focal Human Epilepsies: Brain CYP3A4 Correlates with Seizure Frequency and Antiepileptic Drug Therapy. Molecular Neurobiology, 2019, 56, 8392-8407.	4.0	16
87	Evidence for Status Epilepticus and Pro-Inflammatory Changes after Intranasal Kainic Acid Administration in Mice. PLoS ONE, 2016, 11, e0150793.	2.5	16
88	Lack of CAR impacts neuronal function and cerebrovascular integrity in vivo. Experimental Neurology, 2016, 283, 39-48.	4.1	14
89	Perinatal exposure to a dietary pesticide cocktail does not increase susceptibility to high-fat diet-induced metabolic perturbations at adulthood but modifies urinary and fecal metabolic fingerprints in C57Bl6/J mice. Environment International, 2020, 144, 106010.	10.0	14
90	Robust and Gradient Thickness Porous Membranes for In Vitro Modeling of Physiological Barriers. Advanced Materials Technologies, 2020, 5, 2000474.	5.8	13

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91	Constitutive Androstane Receptor: A Peripheral and a Neurovascular Stress or Environmental Sensor. Cells, 2020, 9, 2426.	4.1	13
92	Experimental Myocardial Infarction Elicits Time-Dependent Patterns of Vascular Hypoxia in Peripheral Organs and in the Brain. Frontiers in Cardiovascular Medicine, 2020, 7, 615507.	2.4	13
93	Dimorphic metabolic and endocrine disorders in mice lacking the constitutive androstane receptor. Scientific Reports, 2019, 9, 20169.	3.3	10
94	Gravitational Transitions Increase Posterior Cerebral Perfusion and Systemic Oxidative-nitrosative Stress: Implications for Neurovascular Unit Integrity. Neuroscience, 2020, 441, 142-160.	2.3	9
95	Life-long Dietary Pesticide Cocktail Induces Astrogliosis Along with Behavioral Adaptations and Activates p450 Metabolic Pathways. Neuroscience, 2020, 446, 225-237.	2.3	8
96	Neurovascular multiparametric MRI defines epileptogenic and seizure propagation regions in experimental mesiotemporal lobe epilepsy. Epilepsia, 2021, 62, 1244-1255.	5.1	8
97	Varying modalities of perinatal exposure to a pesticide cocktail elicit neurological adaptations in mice and zebrafish. Environmental Pollution, 2021, 278, 116755.	7.5	8
98	Concussion history in rugby union players is associated with depressed cerebrovascular reactivity and cognition. Scandinavian Journal of Medicine and Science in Sports, 2021, 31, 2291-2299.	2.9	7
99	Diagnostic biomarker kinetics: how brain-derived biomarkers distribute through the human body, and how this affects their diagnostic significance: the case of S100B. Fluids and Barriers of the CNS, 2022, 19, 32.	5.0	7
100	Longitudinal In Vivo Imaging of the Cerebrovasculature: Relevance to CNS Diseases. Journal of Visualized Experiments, 2016, , .	0.3	6
101	COPD is deleterious for pericytes: implications during training-induced angiogenesis in skeletal muscle. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H1142-H1151.	3.2	5
102	Chronic Glucocorticoids Consumption Triggers and Worsens Experimental Alzheimerâ€™s Disease-Like Pathology by Detrimental Immune Modulations. Neuroendocrinology, 2022, 112, 982-997.	2.5	5
103	Experimental status epilepticus, COXâ€2 and BDNF: Connecting the dots. Epilepsia Open, 2021, 6, 466-467.	2.4	2
104	Experimental Models of Inflammation in Epilepsy Research. , 2017, , 961-974.		1
105	Bloodâ€“Brain Barrier in Disease States. , 2019, , 21-37.		1
106	Drug Permeation Across the Fetal Maternal Barrier. , 2009, , 153-170.		1
107	INFLAMMATION | Cerebrovascular Diseases, Seizures, and Epilepsy. , 2009, , 574-584.		0
108	Factors Modulating Seizure Susceptibility. , 2010, , 193-201.		0

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109	Pro- and Anti-inflammatory Neurovascular Processes in Epilepsy: A Fragile and Dynamic Equilibrium. Agents and Actions Supplements, 2021, , 1-20.	0.2	0
110	ANTIEPILEPTIC DRUGS | Pathways of Drug Diffusion into the Epileptic Brain. , 2009, , 79-90.		0
111	Bloodâ€“Brain Barrier, Blood Flow, Neoplasms and Epilespy. , 2010, , 21-34.		0
112	gravitational Transitions Increase Blood-brain Barrier Permeability In Humans. Medicine and Science in Sports and Exercise, 2020, 52, 780-781.	0.4	0
113	Significance of developmental meningeal lymphatic dysfunction in experimental post-traumatic injury. Brain, Behavior, & Immunity - Health, 2022, , 100466.	2.5	0