Ranjana Patnaik

List of Publications by Citations

84 papers	1,332 citations	22 h-index	31 g-index
89 ext. papers	1,532 ext. citations	3.5 avg, IF	4.61 L-index

#	Paper	IF	Citations
84	Cocaine-induced breakdown of the blood-brain barrier and neurotoxicity. *International Review of Neurobiology*, **2009**, 88, 297-334	4.4	71
83	Size- and age-dependent neurotoxicity of engineered metal nanoparticles in rats. *Molecular Neurobiology*, **2013**, 48, 386-96	6.2	53
82	Effect of Chlorogenic Acid Supplementation in MPTP-Intoxicated Mouse. *Frontiers in Pharmacology*, **2018**, 9, 757	5.6	48
81	Drug delivery to the spinal cord tagged with nanowire enhances neuroprotective efficacy and functional recovery following trauma to the rat spinal cord. *Annals of the New York Academy of Sciences*, **2007**, 1122, 197-218	6.5	48
80	Aquaporin-4 inhibition mediates piroxicam-induced neuroprotection against focal cerebral ischemia/reperfusion injury in rodents. *PLoS ONE*, **2013**, 8, e73481	3.7	46
79	Resveratrol inhibits matrix metalloproteinases to attenuate neuronal damage in cerebral ischemia: a molecular docking study exploring possible neuroprotection. *Neural Regeneration Research*, **2015**, 10, 568-75	4.5	42
78	Melatonin renders neuroprotection by protein kinase C mediated aquaporin-4 inhibition in animal model of focal cerebral ischemia. *Life Sciences*, **2014**, 100, 97-109	6.8	40
77	Nano-drug delivery and neuroprotection in spinal cord injury. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 5014-37	1.3	38
76	Exploring neuroprotective potential of Withania somnifera phytochemicals by inhibition of GluN2B-containing NMDA receptors: An in silico study. *Medical Hypotheses*, **2016**, 92, 35-43	3.8	36
75	Quercetin in hypoxia-induced oxidative stress: novel target for neuroprotection. *International Review of Neurobiology*, **2012**, 102, 107-46	4.4	36
74	The role of ASIC1a in neuroprotection elicited by quercetin in focal cerebral ischemia. *Brain Research*, **2011**, 1383, 289-99	3.7	36
73	Antibodies to serotonin attenuate closed head injury induced blood brain barrier disruption and brain pathology. *Annals of the New York Academy of Sciences*, **2007**, 1122, 295-312	6.5	35
72	Silicon dioxide nanoparticles (SiO2, 40-50 nm) exacerbate pathophysiology of traumatic spinal cord injury and deteriorate functional outcome in the rat. An experimental study using pharmacological and morphological approaches. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 4970-80	1.3	29
71	Superior neuroprotective effects of cerebrolysin in heat stroke following chronic intoxication of Cu or Ag engineered nanoparticles. A comparative study with other neuroprotective agents using biochemical and morphological approaches in the rat. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 7549-69	1.3	29
70	Sleep Deprivation-Induced Blood-Brain Barrier Breakdown and Brain Dysfunction are Exacerbated by Size-Related Exposure to Ag and Cu Nanoparticles. Neuroprotective Effects of a 5-HT3 Receptor Antagonist Ondansetron. *Molecular Neurobiology*, **2015**, 52, 867-81	6.2	27
69	The role of functionalized magnetic iron oxide nanoparticles in the central nervous system injury and repair: new potentials for neuroprotection with Cerebrolysin therapy. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 577-95	1.3	26
68	Cerebrolysin Attenuates Heat Shock Protein (HSP 72 KD) Expression in the Rat Spinal Cord Following Morphine Dependence and Withdrawal: Possible New Therapy for Pain Management. *Current Neuropharmacology*, **2011**, 9, 223-35	7.6	25

67	Nanowired-drug delivery enhances neuroprotective efficacy of compounds and reduces spinal cord edema formation and improves functional outcome following spinal cord injury in the rat. *Acta Neurochirurgica Supplementum*, **2010**, 106, 343-50	1.7	24
66	Pathophysiology of Blood-Brain Barrier in Brain Injury in Cold and Hot Environments: Novel Drug Targets for Neuroprotection. *CNS and Neurological Disorders - Drug Targets*, **2016**, 15, 1045-1071	2.6	23
65	Co-Administration of TiO2 Nanowired Mesenchymal Stem Cells with Cerebrolysin Potentiates Neprilysin Level and Reduces Brain Pathology in Alzheimer's Disease. *Molecular Neurobiology*, **2018**, 55, 300-311	6.2	23
64	Diabetes aggravates nanoparticles induced breakdown of the blood-brain barrier permeability, brain edema formation, alterations in cerebral blood flow and neuronal injury. An experimental study using physiological and morphological investigations in the rat. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 7231-45	1.3	22
63	TiO2-Nanowired Delivery of Mesenchymal Stem Cells Thwarts Diabetes- Induced Exacerbation of Brain Pathology in Heat Stroke: An Experimental Study in the Rat Using Morphological and Biochemical Approaches. *CNS and Neurological Disorders - Drug Targets*, **2015**, 14, 386-99	2.6	22
62	Pharmacokinetics and brain penetration study of chlorogenic acid in rats. *Xenobiotica*, **2019**, 49, 339-345	2	21
61	Neuroprotective effect of chlorogenic acid in global cerebral ischemia-reperfusion rat model. *Naunyn-Schmiedeberg's Archives of Pharmacology*, **2019**, 392, 1293-1309	3.4	20
60	Nanowired Delivery of Growth Hormone Attenuates Pathophysiology of Spinal Cord Injury and Enhances Insulin-Like Growth Factor-1 Concentration in the Plasma and the Spinal Cord. *Molecular Neurobiology*, **2015**, 52, 837-45	6.2	20
59	Exacerbation of brain pathology after partial restraint in hypertensive rats following SiO_2 nanoparticles exposure at high ambient temperature. *Molecular Neurobiology*, **2013**, 48, 368-79	6.2	19
58	Neuroprotective potential of Piroxicam in cerebral ischemia: an in silico evaluation of the hypothesis to explore its therapeutic efficacy by inhibition of aquaporin-4 and acid sensing ion channel1a. *Medical Hypotheses*, **2012**, 79, 352-7	3.8	19
57	Zinc protoporphyrin IX attenuates closed head injury-induced edema formation, blood-brain barrier disruption, and serotonin levels in the rat. *Acta Neurochirurgica Supplementum*, **2006**, 96, 151-6	1.7	19
56	Nanoparticles Exacerbate Both Ubiquitin and Heat Shock Protein Expressions in Spinal Cord Injury: Neuroprotective Effects of the Proteasome Inhibitor Carfilzomib and the Antioxidant Compound H-290/51. *Molecular Neurobiology*, **2015**, 52, 882-98	6.2	18
55	Inhibition of Gelatinases (MMP-2 and MMP-9) by Withania somnifera Phytochemicals Confers Neuroprotection in Stroke: An In Silico Analysis. *Interdisciplinary Sciences, Computational Life Sciences*, **2018**, 10, 722-733	3.5	18
54	Cold Environment Exacerbates Brain Pathology and Oxidative Stress Following Traumatic Brain Injuries: Potential Therapeutic Effects of Nanowired Antioxidant Compound H-290/51. *Molecular Neurobiology*, **2018**, 55, 276-285	6.2	18
53	Histamine receptors influence blood-spinal cord barrier permeability, edema formation, and spinal cord blood flow following trauma to the rat spinal cord. *Acta Neurochirurgica Supplementum*, **2006**, 96, 316-21	1.7	18
52	Exacerbation of Methamphetamine Neurotoxicity in Cold and Hot Environments: Neuroprotective Effects of an Antioxidant Compound H-290/51. *Molecular Neurobiology*, **2015**, 52, 1023-33	6.2	17
51	Chapter 9 - Nanoparticles influence pathophysiology of spinal cord injury and repair. *Progress in Brain Research*, **2009**, 180, 154-80	2.9	17
50	Pathophysiology of blood-brain barrier in brain tumor. Novel therapeutic advances using nanomedicine. *International Review of Neurobiology*, **2020**, 151, 1-66	4.4	17

49	Development of in vivo drug-induced neurotoxicity models. *Expert Opinion on Drug Metabolism and Toxicology*, **2014**, 10, 1637-61	5.5	16
48	Histamine H3 Inverse Agonist BF 2649 or Antagonist with Partial H4 Agonist Activity Clobenpropit Reduces Amyloid Beta Peptide-Induced Brain Pathology in Alzheimer's Disease. *Molecular Neurobiology*, **2018**, 55, 312-321	6.2	15
47	Timed Release of Cerebrolysin Using Drug-Loaded Titanate Nanospheres Reduces Brain Pathology and Improves Behavioral Functions in Parkinson's Disease. *Molecular Neurobiology*, **2018**, 55, 359-369	6.2	15
46	An in-silico strategy to explore neuroprotection by quercetin in cerebral ischemia: a novel hypothesis based on inhibition of matrix metalloproteinase (MMPs) and acid sensing ion channel 1a (ASIC1a). *Medical Hypotheses*, **2012**, 79, 76-81	3.8	15
45	Diabetes exacerbates nanoparticles induced brain pathology. *CNS and Neurological Disorders - Drug Targets*, **2012**, 11, 26-39	2.6	15
44	Withania somniferaphytochemicals confer neuroprotection by selective inhibition of nNos: Anin silicostudy to search potent and selective inhibitors for human nNOS. *Journal of Theoretical and Computational Chemistry*, **2017**, 16, 1750042	1.8	14
43	Exacerbation of blood-brain barrier breakdown, edema formation, nitric oxide synthase upregulation and brain pathology after heat stroke in diabetic and hypertensive rats. Potential neuroprotection with cerebrolysin treatment. *International Review of Neurobiology*, **2019**, 146, 83-102	4.4	13
42	Novel Treatment Strategies Using TiO-Nanowired Delivery of Histaminergic Drugs and Antibodies to Tau With Cerebrolysin for Superior Neuroprotection in the Pathophysiology of Alzheimer's Disease. *International Review of Neurobiology*, **2017**, 137, 123-165	4.4	13
41	Histaminergic Receptors Modulate Spinal Cord Injury-Induced Neuronal Nitric Oxide Synthase Upregulation and Cord Pathology: New Roles of Nanowired Drug Delivery for Neuroprotection. *International Review of Neurobiology*, **2017**, 137, 65-98	4.4	11
40	Intravenous Administration of Functionalized Magnetic Iron Oxide Nanoparticles Does Not Induce CNS Injury in the Rat: Influence of Spinal Cord Trauma and Cerebrolysin Treatment. *International Review of Neurobiology*, **2017**, 137, 47-63	4.4	11
39	Alleviation of glutamate mediated neuronal insult by piroxicam in rodent model of focal cerebral ischemia: a possible mechanism of GABA agonism. *Journal of Physiology and Biochemistry*, **2014**, 70, 901-13	5	11
38	Blood-Central Nervous System Barriers in Morphine Dependence and Withdrawal **2004**, 299-328		11
37	Mild traumatic brain injury exacerbates Parkinson's disease induced hemeoxygenase-2 expression and brain pathology: Neuroprotective effects of co-administration of TiO nanowired mesenchymal stem cells and cerebrolysin. *Progress in Brain Research*, **2020**, 258, 157-231	2.9	11
36	A possible therapeutic potential of quercetin through inhibition of Ecalpain in hypoxia induced neuronal injury: a molecular dynamics simulation study. *Neural Regeneration Research*, **2016**, 11, 1247-53	4.5	10
35	Changes in electrolyte concentrations alter the impedance during ischemia-reperfusion injury in rat brain. *Physiological Measurement*, **2019**, 40, 105004	2.9	9
34	Cerebral Tissue Oxidative Ischemia-Reperfusion Injury in Connection with Experimental Cardiac Arrest and Cardiopulmonary Resuscitation: Effect of Mild Hypothermia and Methylene Blue. *Molecular Neurobiology*, **2018**, 55, 115-121	6.2	9
33	Antibodies to dynorphin a (1-17) attenuate closed head injury induced blood-brain barrier disruption, brain edema formation and brain pathology in the rat. *Acta Neurochirurgica Supplementum*, **2010**, 106, 301-6	1.7	9
32	Simulated annealing-based particle swarm optimisation with adaptive jump strategy for modelling of dynamic cerebral pressure autoregulation mechanism. *International Journal of Bio-Inspired Computation*, **2011**, 3, 225	2.9	8

31	Withania somnifera Phytochemicals Confer Neuroprotection by Inhibition of the Catalytic Domain of Human Matrix Metalloproteinase-9. *Letters in Drug Design and Discovery*, **2017**, 14,	0.8	8
30	Concussive head injury exacerbates neuropathology of sleep deprivation: Superior neuroprotection by co-administration of TiO-nanowired cerebrolysin, alpha-melanocyte-stimulating hormone, and mesenchymal stem cells. *Progress in Brain Research*, **2020**, 258, 1-77	2.9	8
29	Co-administration of TiO-nanowired dl-3-n-butylphthalide (dl-NBP) and mesenchymal stem cells enhanced neuroprotection in Parkinson's disease exacerbated by concussive head injury. *Progress in Brain Research*, **2020**, 258, 101-155	2.9	8
28	Identification of potential inhibitors of PARP-1, a regulator of caspase-independent cell death pathway, from Withania somnifera phytochemicals for combating neurotoxicity: A structure-based in-silico study. *Journal of Theoretical and Computational Chemistry*, **2017**, 16, 1750062	1.8	7
27	Cardiac Arrest Alters Regional Ubiquitin Levels in Association with the Blood-Brain Barrier Breakdown and Neuronal Damages in the Porcine Brain. *Molecular Neurobiology*, **2015**, 52, 1043-53	6.2	7
26	Prolactin attenuates global cerebral ischemic injury in rat model by conferring neuroprotection. *Brain Injury*, **2020**, 34, 685-693	2.1	7
25	Repeated Forced Swim Exacerbates Methamphetamine-Induced Neurotoxicity: Neuroprotective Effects of Nanowired Delivery of 5-HT3-Receptor Antagonist Ondansetron. *Molecular Neurobiology*, **2018**, 55, 322-334	6.2	7
24	Cognitive effects of NSAIDs in cerebral ischemia: a hypothesis exploring mechanical action mediated pharmacotherapy. *Medical Hypotheses*, **2012**, 79, 393-5	3.8	6
23	Neuroprotective effects of 5-HT receptor antagonist ondansetron on morphine withdrawal induced brain edema formation, blood-brain barrier dysfunction, neuronal injuries, glial activation and heat shock protein upregulation in the brain. *International Review of Neurobiology*, **2019**, 146, 209-228	4.4	5
22	Combination therapy of ifenprodil with piroxicam may be an effective therapeutic intervention in cerebral stroke: a hypothesis. *Medical Hypotheses*, **2012**, 79, 516-8	3.8	5
21	Withanolide a penetrates brain via intra-nasal administration and exerts neuroprotection in cerebral ischemia reperfusion injury in mice. *Xenobiotica*, **2020**, 50, 957-966	2	5
20	Cerebrolysin enhances spinal cord conduction and reduces blood-spinal cord barrier breakdown, edema formation, immediate early gene expression and cord pathology after injury. *Progress in Brain Research*, **2020**, 258, 397-438	2.9	4
19	Neuroprotection by □calpain and matrix metalloproteinases inhibition by Piroxicam in cerebral ischemia: an in silico study. *Medicinal Chemistry Research*, **2013**, 22, 5112-5119	2.2	3
18	Does Piroxicam really protect ischemic neurons and influence neuronal firing in cerebral ischemia? An exploration towards therapeutics. *Medical Hypotheses*, **2013**, 81, 429-35	3.8	3
17	Diabetes exacerbates brain pathology following a focal blast brain injury: New role of a multimodal drug cerebrolysin and nanomedicine. *Progress in Brain Research*, **2020**, 258, 285-367	2.9	3
16	Neuroprotective effects of quercetin in chemical hypoxia: in silico evaluation of the hypothesis exploring PKC inhibition-mediated pharmacotherapy. *Medicinal Chemistry Research*, **2013**, 22, 4836-4841	2.2	2
15	Neuroprotective Potential of Small Molecule Phytochemicals in Stroke Therapy **2019**, 155-175		1
14	Superior antioxidant and anti-ischemic neuroprotective effects of cerebrolysin in heat stroke following intoxication of engineered metal Ag and Cu nanoparticles: A comparative biochemical and physiological study with other stroke therapies. *Progress in Brain Research*, **2021**, 266, 301-348	2.9	1

13	Histamine H3 and H4 receptors modulate Parkinson's disease induced brain pathology. Neuroprotective effects of nanowired BF-2649 and clobenpropit with anti-histamine-antibody therapy. *Progress in Brain Research*, **2021**, 266, 1-73	2.9	1
12	Piroxicam-mediated modulatory action of 5-hydroxytryptamine serves as a "brake" on neuronal excitability in ischemic stroke. *Neural Regeneration Research*, **2015**, 10, 1418-20	4.5	1
11	Unmasking the potential role of plant-based medicine Plumbagin in oral cancer: A Novel Paradigm. *Oral Science International*,	0.5	1
10	Upregulation of hemeoxygenase enzymes HO-1 and HO-2 following ischemia-reperfusion injury in connection with experimental cardiac arrest and cardiopulmonary resuscitation: Neuroprotective effects of methylene blue. *Progress in Brain Research*, **2021**, 265, 317-375	2.9	1
9	Comparative Evaluation of Effectiveness of 2% Lignocaine Hydrochloride with Clonidine Hydrochloride versus 2% Lignocaine Hydrochloride with Adrenaline Bitartrate as Local Anesthetic for Adult Patients Undergoing Surgical Extraction of Impacted Mandibular Third Molars: A Randomized Controlled Clinical Study. *Contemporary Clinical Dentistry*, **2021**, 12, 308-312	0.6	1
8	Neuroprotective effects of insulin like growth factor-1 on engineered metal nanoparticles Ag, Cu and Al induced blood-brain barrier breakdown, edema formation, oxidative stress, upregulation of neuronal nitric oxide synthase and brain pathology. *Progress in Brain Research*, **2021**, 266, 97-121	2.9	0
7	Nanodelivery of oxiracetam enhances memory, functional recovery and induces neuroprotection following concussive head injury. *Progress in Brain Research*, **2021**, 265, 139-230	2.9	0
6	Alzheimer's disease neuropathology is exacerbated following traumatic brain injury. Neuroprotection by co-administration of nanowired mesenchymal stem cells and cerebrolysin with monoclonal antibodies to amyloid beta peptide. *Progress in Brain Research*, **2021**, 265, 1-97	2.9	0
5	Modelling of dynamic cerebral pressure autoregulation using sequential genetic algorithm. *International Journal of Mathematical Modelling and Numerical Optimisation*, **2010**, 1, 299	0.3	
4	Methamphetamine exacerbates pathophysiology of traumatic brain injury at high altitude. Neuroprotective effects of nanodelivery of a potent antioxidant compound H-290/51. *Progress in Brain Research*, **2021**, 266, 123-193	2.9	
3	Rapid Determination of Nitrate in Brain Regions and Cerebrospinal Fluid of Transient Bilateral Common Carotid Artery Occlusion Rat Model by HPLC-UV. *Proceedings of the National Academy of Sciences India Section A - Physical Sciences*, **2021**, 91, 361-368	0.9	
2	Nanodelivery of traditional Chinese Gingko Biloba extract EGb-761 and bilobalide BN-52021 induces superior neuroprotective effects on pathophysiology of heat stroke. *Progress in Brain Research*, **2021**, 265, 249-315	2.9	
1	Retraction notice to "Melatonin renders neuroprotection by protein kinase C mediated aquaporin-4 inhibition in animal model of focal cerebral ischemia" [Life Sci. 100 (2014) 97-109]. *Life Sciences*, **2021**, 281, 119209	6.8	