Kochupurackal P Mohanakumar

List of Publications by Year
in descending order

110 papers	4,178 citations	101543 36 h-index	128289 60 g-index
110 all docs	110 docs citations	110 times ranked	4395 citing authors

#	Article	IF	Citations
1	Neuroprotection by bromocriptine against 1â€methylâ€4â€phenylâ€1,2,3,6â€tetrahydropyridineâ€induced neurotoxicity in mice¹. FASEB Journal, 1998, 12, 905-912.	0.5	219
2	Quercetin up-regulates mitochondrial complex-I activity to protect against programmed cell death in rotenone model of Parkinsonâ€™s disease in rats. Neuroscience, 2013, 236, 136-148.	2.3	179
3	Association of l-DOPA with recovery following Ayurveda medication in Parkinsonâ€™s disease. Journal of the Neurological Sciences, 2000, 176, 124-127.	0.6	122
4	Melatonin protects against rotenone-induced oxidative stress in a hemiparkinsonian rat model. Journal of Pineal Research, 2007, 42, 247-253.	7.4	114
5	Neuroprotection by sodium salicylate against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced neurotoxicity. Brain Research, 2000, 864, 281-290.	2.2	113
6	Acute intranigral infusion of rotenone in rats causes progressive biochemical lesions in the striatum similar to Parkinson's disease. Brain Research, 2005, 1049, 147-155.	2.2	111
7	Non-steroidal anti-inflammatory drug sodium salicylate, but not diclofenac or celecoxib, protects against 1-methyl-4-phenyl pyridinium-induced dopaminergic neurotoxicity in rats. Brain Research, 2003, 966, 245-252.	2.2	107
8	Melatonin protects against oxidative stress caused by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in the mouse nigrostriatum. Journal of Pineal Research, 2004, 36, 25-32.	7.4	106
9	In Vivo Generation of Hydroxyl Radicals and MPTPâ€induced Dopaminergic Toxicity in the Basal Ganglia. Annals of the New York Academy of Sciences, 1994, 738, 25-36.	3.8	104
10	Ferrousâ€Citrate Complex and Nigral Degeneration: Evidence for Freeâ€radical Formation and Lipid Peroxidation^a. Annals of the New York Academy of Sciences, 1994, 738, 392-399.	3.8	104
11	Manganese: A transition metal protects nigrostriatal neurons from oxidative stress in the iron-induced animal model of Parkinsonism. Neuroscience, 1998, 85, 1101-1111.	2.3	103
12	Quercetin Improves Behavioral Deficiencies, Restores Astrocytes and Microglia, and Reduces Serotonin Metabolism in 3â€Nitropropionic Acidâ€Induced Rat Model of Huntington's Disease. CNS Neuroscience and Therapeutics, 2014, 20, 10-19.	3.9	101
13	Apparent Role of Hydroxyl Radicals in Oxidative Brain Injury Induced by Sodium Nitroprusside. Free Radical Biology and Medicine, 1998, 24, 1065-1073.	2.9	95
14	Swim-test as a function of motor impairment in MPTP model of Parkinson's disease: A comparative study in two mouse strains. Behavioural Brain Research, 2005, 163, 159-167.	2.2	88
15	S-nitrosothiols and nitric oxide, but not sodium nitroprusside, protect nigrostriatal dopamine neurons against iron-induced oxidative stress in vivo. , 1996, 23, 58-60.		85
16	Nitric Oxide. Annals of the New York Academy of Sciences, 2002, 962, 389-401.	3.8	83
17	Neuroprotective Potential of Silymarin against <scp>CNS</scp> Disorders: Insight into the Pathways and Molecular Mechanisms of Action. CNS Neuroscience and Therapeutics, 2013, 19, 847-853.	3.9	79
18	l-deprenyl protects against rotenone-induced, oxidative stress-mediated dopaminergic neurodegeneration in rats. Neurochemistry International, 2006, 49, 28-40.	3.8	78

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19	Acetaminophen and aspirin inhibit superoxide anion generation and lipid peroxidation, and protect against 1-methyl-4-phenyl pyridinium-induced dopaminergic neurotoxicity in rats. Neurochemistry International, 2004, 44, 355-360.	3.8	76
20	Mitochondrial NAD⁺â€linked State 3 respiration and complexâ€I activity are compromised in the cerebral cortex of 3â€nitropropionic acidâ€induced rat model of Huntingtonâ€™s disease. Journal of Neurochemistry, 2008, 104, 420-434.	3.9	73
21	Behavioral differences in a rotenone-induced hemiparkinsonian rat model developed following intranigral or median forebrain bundle infusion. Brain Research, 2005, 1051, 25-34.	2.2	71
22	Neuroprotection by nitric oxide against hydroxyl radical-induced nigral neurotoxicity. Journal of Chemical Neuroanatomy, 1998, 14, 195-205.	2.1	63
23	Melatonin inhibits 6â€hydroxydopamine production in the brain to protect against experimental parkinsonism in rodents. Journal of Pineal Research, 2009, 47, 293-300.	7.4	62
24	Long-Term L-DOPA Treatment Causes Indiscriminate Increase in Dopamine Levels at the Cost of Serotonin Synthesis in Discrete Brain Regions of Rats. Cellular and Molecular Neurobiology, 2007, 27, 985-996.	3.3	60
25	Melatonin enhances <scp>L</scp>â€<scp>DOPA</scp> therapeutic effects, helps to reduce its dose, and protects dopaminergic neurons in 1â€methylâ€4â€phenylâ€1,2,3,6â€tetrahydropyridineâ€induced parkinsonism in mice. Journal of Pineal Research, 2015, 58, 262-274.	7.4	60
26	Hypothyroidism in the developing rat brain is associated with marked oxidative stress and aberrant intraneuronal accumulation of neurofilaments. Neuroscience Research, 2001, 40, 273-279.	1.9	58
27	Antioxidant Mechanism and Protection of Nigral Neurons Against MPP⁺ Toxicity by Deprenyl (Selegiline). Annals of the New York Academy of Sciences, 1994, 738, 214-221.	3.8	55
28	In vivo hydroxyl radical generation in the striatum following systemic administration of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in mice. Brain Research, 2000, 852, 221-224.	2.2	52
29	Rats with unilateral median forebrain bundle, but not striatal or nigral, lesions by the neurotoxins MPP+ or rotenone display differential sensitivity to amphetamine and apomorphine. Pharmacology Biochemistry and Behavior, 2006, 84, 321-329.	2.9	49
30	Low Levels of Prohibitin in Substantia Nigra Makes Dopaminergic Neurons Vulnerable in Parkinsonâ€™s Disease. Molecular Neurobiology, 2018, 55, 804-821.	4.0	47
31	D-deprenyl protects nigrostriatal neurons against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced dopaminergic neurotoxicity. Synapse, 2003, 50, 7-13.	1.2	44
32	Aging and Neurodegeneration: A Tangle of Models and Mechanisms. , 2016, 7, 111.		44
33	Nimodipine, an L-type calcium channel blocker attenuates mitochondrial dysfunctions to protect against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced Parkinsonism in mice. Neurochemistry International, 2016, 99, 221-232.	3.8	44
34	In vitro and in vivo evidences that antioxidant action contributes to the neuroprotective effects of the neuronal nitric oxide synthase and monoamine oxidase-B inhibitor, 7-nitroindazole. Neurochemistry International, 2008, 52, 990-1001.	3.8	43
35	Melatonin synergizes with low doses of Lâ€<scp>DOPA</scp> to improve dendritic spine density in the mouse striatum in experimental Parkinsonism. Journal of Pineal Research, 2013, 55, 304-312.	7.4	42
36	Dissociation of serotoninergic and dopaminergic components in acute effects of 1-methy 1-4-pheny 1-1,2,3,6-tetrahydropyridine in mice. Brain Research Bulletin, 1992, 28, 355-364.	3.0	41

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37	Resistance of Golden Hamster to lâ€Methylâ€4â€Phenylâ€1,2,3,6 Tetrahydropyridine: Relationship with Low Levels of Regional Monoamine Oxidase B. Journal of Neurochemistry, 1994, 62, 1906-1912.	3.9	40
38	Sexual dimorphic effect in the genetic association of monoamine oxidase A (MAOA) markers with autism spectrum disorder. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2014, 50, 11-20.	4.8	39
39	Melatonin protects against behavioural dysfunctions and dendritic spine damage in 3-nitropropionic acid-induced rat model of Huntington's disease. Behavioural Brain Research, 2014, 264, 91-104.	2.2	38
40	Neuro-nutraceuticals: The path to brain health via nourishment is not so distant. Neurochemistry International, 2015, 89, 1-6.	3.8	38
41	Attention deficit-hyperactivity disorder suffers from mitochondrial dysfunction. BBA Clinical, 2016, 6, 153-158.	4.1	38
42	Unilateral implantation of dopamine-loaded biodegradable hydrogel in the striatum attenuates motor abnormalities in the 6-hydroxydopamine model of hemi-parkinsonism. Behavioural Brain Research, 2007, 184, 11-18.	2.2	37
43	Antiparkinsonian Effects of Aqueous Methanolic Extract of Hyoscyamus niger Seeds Result From its Monoamine Oxidase Inhibitory and Hydroxyl Radical Scavenging Potency. Neurochemical Research, 2011, 36, 177-186.	3.3	37
44	Serotonin synthesis inhibition in olivo-cerebellar system attenuates harmaline-induced tremor in Swiss albino mice. Behavioural Brain Research, 2003, 145, 31-36.	2.2	33
45	Tea and Parkinson's disease: Constituents of tea synergize with antiparkinsonian drugs to provide better therapeutic benefits. Neurochemistry International, 2015, 89, 181-190.	3.8	32
46	L-DOPA induced-endogenous 6-hydroxydopamine is the cause of aggravated dopaminergic neurodegeneration in Parkinsonâ€™s disease patients. Medical Hypotheses, 2012, 79, 271-273.	1.5	31
47	Mitochondrial Deficits Accompany Cognitive Decline Following Single Bilateral Intracerebroventricular Streptozotocin. Current Alzheimer Research, 2015, 12, 785-795.	1.4	31
48	SLC6A4 markers modulate platelet 5-HT level and specific behaviors of autism: A study from an Indian population. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2015, 56, 196-206.	4.8	30
49	Mitochondrial functional alterations in relation to pathophysiology of Huntingtonâ€™s disease. Journal of Bioenergetics and Biomembranes, 2010, 42, 217-226.	2.3	29
50	2-Phenylethylamine, a constituent of chocolate and wine, causes mitochondrial complex-I inhibition, generation of hydroxyl radicals and depletion of striatal biogenic amines leading to psycho-motor dysfunctions in Balb/c mice. Neurochemistry International, 2010, 57, 637-646.	3.8	28
51	Nitric oxide synthase inhibitors protect against rotenone-induced, oxidative stress mediated parkinsonism in rats. Neurochemistry International, 2013, 62, 674-683.	3.8	28
52	Can Cyclic Nucleotide Phosphodiesterase Inhibitors Be Drugs for Parkinsonâ€™s Disease?. Molecular Neurobiology, 2018, 55, 822-834.	4.0	28
53	Aspirin Curtails the Acetaminophen-Induced Rise in Brain Norepinephrine Levels. Metabolic Brain Disease, 2004, 19, 71-77.	2.9	27
54	Reduced NADH coenzyme Q dehydrogenase activity in platelets of Parkinson's disease, but not Parkinson plus patients, from an Indian population. Journal of the Neurological Sciences, 2009, 279, 39-42.	0.6	26

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55	l-DOPA-induced 6-hydroxydopamine production in the striata of rodents is sensitive to the degree of denervation. Neurochemistry International, 2010, 56, 357-362.	3.8	26
56	Sodium salicylate protects against rotenone-induced Parkinsonism in rats. Synapse, 2013, 67, 502-514.	1.2	26
57	Reinforcing mitochondrial functions in aging brain: An insight into Parkinson's disease therapeutics. Journal of Chemical Neuroanatomy, 2019, 95, 29-42.	2.1	25
58	Striatal dopamine level contributes to hydroxyl radical generation and subsequent neurodegeneration in the striatum in 3-nitropropionic acid-induced Huntington's disease in rats. Neurochemistry International, 2009, 55, 431-437.	3.8	24
59	Serotonin mediated immunoregulation and neural functions: Complicity in the aetiology of autism spectrum disorders. Neuroscience and Biobehavioral Reviews, 2015, 55, 413-431.	6.1	23
60	Acute intranigral homocysteine administration produces stereotypic behavioral changes and striatal dopamine depletion in Sprague–Dawley rats. Brain Research, 2006, 1075, 81-92.	2.2	22
61	Neuro-nutraceuticals: Further insights into their promise for brain health. Neurochemistry International, 2016, 95, 1-3.	3.8	21
62	Salicylic acid protects against chronic l-DOPA-induced 6-OHDA generation in experimental model of parkinsonism. Brain Research, 2010, 1344, 192-199.	2.2	20
63	Genetic variants of MAOB affect serotonin level and specific behavioral attributes to increase autism spectrum disorder (ASD) susceptibility in males. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2016, 71, 123-136.	4.8	20
64	Effects of serotoninergic drugs on tremor induced by physostigmine in rats. Behavioural Brain Research, 2000, 109, 187-193.	2.2	19
65	Quercetin improves the activity of the ubiquitin–proteasomal system in 150Q mutated huntingtin–expressing cells but exerts detrimental effects on neuronal survivability. Journal of Neuroscience Research, 2015, 93, 1581-1591.	2.9	18
66	Nimodipine attenuates the parkinsonian neurotoxin, MPTP-induced changes in the calcium binding proteins, calpain and calbindin. Journal of Chemical Neuroanatomy, 2019, 95, 89-94.	2.1	18
67	Antagonistic pleiotropic effects of nitric oxide in the pathophysiology of Parkinson's disease. Free Radical Research, 2015, 49, 1129-1139.	3.3	17
68	Tremorogenesis by physostigmine is unrelated to acetylcholinesterase inhibition: Evidence for serotoninergic involvement. Neuroscience Letters, 1990, 120, 91-93.	2.1	15
69	A mitochondrial basis for Huntington–s disease: therapeutic prospects. Molecular and Cellular Biochemistry, 2014, 389, 277-291.	3.1	14
70	Effects of p-chlorophenylalanine on striatal acetylcholinesterase activity and on biogenic amine levels in nuclei raphe and caudate-putamen during physostigmine-induced tremor in rats. Neuroscience Letters, 2001, 299, 105-108.	2.1	13
71	Calcium channel agonist, (Â±)-Bay K8644, causes a transient increase in striatal monoamine oxidase activity in Balb/c mice. Neuroscience Letters, 2003, 342, 73-76.	2.1	13
72	Apoptotic Mode of Cell Death in Substantia Nigra Following Intranigral Infusion of the Parkinsonian Neurotoxin, MPP+ in Sprague-Dawley Rats: Cellular, Molecular and Ultrastructural Evidences. Neurochemical Research, 2007, 32, 1238-1247.	3.3	13

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73	Parkinson's disease cybrids, differentiated or undifferentiated, maintain morphological and biochemical phenotypes different from those of control cybrids. Journal of Neuroscience Research, 2013, 91, 963-970.	2.9	13
74	Gender-Specific Effect of 5-HT and 5-HIAA on Threshold Level of Behavioral Symptoms and Sex-Bias in Prevalence of Autism Spectrum Disorder. Frontiers in Neuroscience, 2019, 13, 1375.	2.8	13
75	Acetylcholinesterase changes in the central nervous system of mice during the development of morphine tolerance addiction and withdrawal. Brain Research Bulletin, 1983, 10, 589-596.	3.0	12
76	Potential Contribution of Monoamine Oxidase A Gene Variants in ADHD and Behavioral Co-Morbidities: Scenario in Eastern Indian Probands. Neurochemical Research, 2014, 39, 843-852.	3.3	12
77	Engraftment of Mouse Embryonic Stem Cells Differentiated by Default Leads to Neuroprotection, Behaviour Revival and Astrogliosis in Parkinsonian Rats. PLoS ONE, 2013, 8, e72501.	2.5	12
78	Evidence for the involvement of central serotonergic mechanisms in cholinergic tremor induced by tacrine in Balb/c mice. Behavioural Brain Research, 2005, 163, 227-236.	2.2	11
79	Intrastriatal infusion of the Parkinsonian neurotoxin, MPP+, induces damage of striatal cell nuclei in Sprague–Dawley rats. Journal of Chemical Neuroanatomy, 2006, 32, 90-100.	2.1	11
80	Profilin-2 increased expression and its altered interaction with Î²-actin in the striatum of 3-nitropropionic acid-induced Huntingtonâ€™s disease in rats. Neuroscience, 2014, 281, 216-228.	2.3	11
81	Pilot study indicate role of preferentially transmitted monoamine oxidase gene variants in behavioral problems of male ADHD probands. BMC Medical Genetics, 2017, 18, 109.	2.1	11
82	Long term L-DOPA treatment causes production of 6-OHDA in the mouse striatum: Involvement of hydroxyl radical. Annals of Neurosciences, 2009, 16, 160-165.	1.7	11
83	Evidence for Hydroxyl Radical Scavenging Action of Nitric Oxide Donors in the Protection Against 1-Methyl-4-phenylpyridinium-induced Neurotoxicity in Rats. Neurochemical Research, 2008, 33, 985-995.	3.3	10
84	Earlyâ€life treatment of antiserotonin antibodies alters sensitivity to serotonin receptors, nociceptive stimulus and serotonin metabolism in adult rats. International Journal of Developmental Neuroscience, 2010, 28, 317-324.	1.6	10
85	Region-specific attenuation of a trypsin-like protease in substantia nigra following dopaminergic neurotoxicity by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Brain Research, 2000, 882, 191-195.	2.2	9
86	Atropine, a muscarinic cholinergic receptor antagonist increases serotonin, but not dopamine levels in discrete brain regions of mice. Neuroscience Letters, 2007, 423, 100-103.	2.1	9
87	Taurine fails to protect against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced striatal dopamine depletion in mice. Amino Acids, 2008, 35, 457-461.	2.7	9
88	Neonatal treatment with 5-HT antiserum alters 5-HT metabolism and function in adult rats. NeuroReport, 1995, 7, 238-240.	1.2	9
89	Tremorogenesis by LON-954 [N-carbamoyl-2-(2,6-dichlorophenyl) acetamidine hydrochloride]: Evidence for the involvement of 5-hydroxytryptamine. Brain Research Bulletin, 1989, 22, 191-195.	3.0	8
90	Calcium channel agonist, (Â±)-Bay K8644, causes an immediate increase in the striatal 1-methyl-4-phenylpyridinium level following systemic administration of the dopaminergic neurotoxin, 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine, in Balb/c mice. Neuroscience Letters, 2003, 346, 69-72.	2.1	8

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91	A synthetic human proline-rich-polypeptide enhances hydroxyl radical generation and fails to protect dopaminergic neurons against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced toxicity in mice. Neuroscience Letters, 2005, 375, 187-191.	2.1	8
92	Neurochemical Mechanisms Underlying Neuroprotective Actions of Bromocriptine, Salicylate, d- and L-Deprenyl in Neurodegeneration caused by MPTP. , 2000, , 289-293.		8
93	Monoamine oxidase B gene variants associated with attention deficit hyperactivity disorder in the Indo-Caucasoid population from West Bengal. BMC Genetics, 2016, 17, 92.	2.7	7
94	The Parkinsonian neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine on membrane currents and intrasynaptosomal calcium. Neuroscience Research Communications, 2002, 30, 35-42.	0.2	6
95	Synthetic bovine proline-rich-polypeptides generate hydroxyl radicals and fail to protect dopaminergic neurons against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced dopaminergic neurotoxicity in mice. Neuropeptides, 2006, 40, 291-298.	2.2	6
96	Regenerative Therapy in Experimental Parkinsonism: Mixed Population of Differentiated Mouse Embryonic Stem Cells, Rather Than Magnetically Sorted and Enriched Dopaminergic Cells Provide Neuroprotection. CNS Neuroscience and Therapeutics, 2014, 20, 717-727.	3.9	6
97	5-Hydroxytryptamine in the phrenic nerve diaphragm: Evidence for its existence and release. Neuroscience Letters, 1989, 97, 345-349.	2.1	5
98	Supersensitivity of spinal dopaminergic receptors in rat after chronic haloperidol. Brain Research Bulletin, 1992, 28, 133-135.	3.0	5
99	Neuro-nutraceuticals: Natural products nourish the brain but be aware of contrary effects. Neurochemistry International, 2021, 150, 105159.	3.8	5
100	Behavioral and neurochemical alterations following intracerebroventricular administration of anti-serotonin antibodies in adult Balb/c mice. Journal of Chemical Neuroanatomy, 1998, 14, 141-149.	2.1	4
101	Embryonic Stem Cells Derived Neuron Transplantation Recovery in Models of Parkinsonism in Relation to Severity of the Disorder in Rats. Rejuvenation Research, 2015, 18, 173-184.	1.8	4
102	Fluctuations of acetylcholinesterase in the mouse spinal cord and in vivo sodium effect during the development of morphine tolerance, dependence, and withdrawal. Neurochemical Research, 1986, 11, 505-520.	3.3	3
103	The Legacy of Nitric Oxide: Impact on Disease Biology. Nitric Oxide - Biology and Chemistry, 2014, 43, 1-2.	2.7	3
104	The light at the end of the tunnel gets vivid for spinal muscular atrophy. Journal of Neurochemistry, 2020, 153, 545-548.	3.9	2
105	Glycosidases and Lipid Metabolism in the Central Nervous System of the Hedgehog (<i>Paraechinus micropus</i>). Cells Tissues Organs, 1982, 114, 339-346.	2.3	1
106	Ayurveda in Parkinsonâ€™s disease. Journal of the Neurological Sciences, 2001, 184, 91-92.	0.6	1
107	Synthesis of Fluorinated 2,3-Disubstituted Benzofurans Potential Î²-Amyloid Aggregation Inhibitors. Heterocycles, 2010, 80, 663.	0.7	1
108	Neural functions of the aging brain: Daily living, developmental and geriatric disabilities. Journal of Chemical Neuroanatomy, 2019, 95, 1-5.	2.1	1

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109	Neonatal treatment with 5-HT antiserum alters 5-HT metabolism and function in adult rats. NeuroReport, 1995, 7, 238-240.	1.2	1
110	Distribution of Carboxylic Esterases in the Telencephalon and Diencephalon of a Microchiropteran Bat (<i>Taphozous melanopogo</i><i>n</i> Temminck). Cells Tissues Organs, 1983, 116, 312-321.	2.3	0