

Ayikoe G Mensah-Nyagan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9314262/publications.pdf>

Version: 2024-02-01

99
papers

3,693
citations

87888

38
h-index

149698

56
g-index

104
all docs

104
docs citations

104
times ranked

3410
citing authors

#	ARTICLE	IF	CITATIONS
1	Neuroactive steroids: State of the art and new perspectives. Cellular and Molecular Life Sciences, 2008, 65, 777-797.	5.4	208
2	Localization of 17beta-hydroxysteroid dehydrogenase and characterization of testosterone in the brain of the male frog.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 1423-1428.	7.1	117
3	Evidence for a key role of steroids in the modulation of pain. Psychoneuroendocrinology, 2009, 34, S169-S177.	2.7	105
4	Inflammatory Pain Upregulates Spinal Inhibition via Endogenous Neurosteroid Production. Journal of Neuroscience, 2005, 25, 11768-11776.	3.6	95
5	Cellular distribution and bioactivity of the key steroidogenic enzyme, cytochrome P450side chain cleavage, in sensory neural pathways. Journal of Neurochemistry, 2003, 86, 1233-1246.	3.9	91
6	Allopregnanolone prevents and suppresses oxaliplatin-evoked painful neuropathy: Multi-parametric assessment and direct evidence. Pain, 2011, 152, 170-181.	4.2	86
7	Alzheimer, mitochondria and gender. Neuroscience and Biobehavioral Reviews, 2016, 67, 89-101.	6.1	85
8	Improvement of neuronal bioenergetics by neurosteroids: Implications for age-related neurodegenerative disorders. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 2427-2438.	3.8	84
9	In Vivo and In Vitro Evidence for the Biosynthesis of Testosterone in the Telencephalon of the Female Frog. Journal of Neurochemistry, 1996, 67, 413-422.	3.9	82
10	Anatomical and cellular localization of neuroactive 5 α -reduced steroid-synthesizing enzymes in the spinal cord. Journal of Comparative Neurology, 2004, 477, 286-299.	1.6	82
11	Sex hormone-related neurosteroids differentially rescue bioenergetic deficits induced by amyloid- β^2 or hyperphosphorylated tau protein. Cellular and Molecular Life Sciences, 2016, 73, 201-215.	5.4	79
12	Neurogenic Pain and Steroid Synthesis in the Spinal Cord. Journal of Molecular Neuroscience, 2006, 28, 17-32.	2.3	78
13	Biochemical and functional evidence for the control of pain mechanisms by dehydroepiandrosterone endogenously synthesized in the spinal cord. FASEB Journal, 2008, 22, 93-104.	0.5	76
14	HS3ST2 expression is critical for the abnormal phosphorylation of tau in Alzheimer's disease-related tau pathology. Brain, 2015, 138, 1339-1354.	7.6	75
15	Substance P inhibits progesterone conversion to neuroactive metabolites in spinal sensory circuit: A potential component of nociception. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9044-9049.	7.1	70
16	Potential role of allopregnanolone for a safe and effective therapy of neuropathic pain. Progress in Neurobiology, 2014, 113, 70-78.	5.7	68
17	Endogenous steroid production in the spinal cord and potential involvement in neuropathic pain modulation. Journal of Steroid Biochemistry and Molecular Biology, 2008, 109, 286-293.	2.5	66
18	The neuroprotector kynurenic acid increases neuronal cell survival through neprilysin induction. Neuropharmacology, 2013, 70, 254-260.	4.1	65

#	ARTICLE	IF	CITATIONS
19	Molecular and neurochemical evidence for the biosynthesis of dehydroepiandrosterone in the adult rat spinal cord. <i>Journal of Neurochemistry</i> , 2005, 93, 1220-1230.	3.9	64
20	Cellular and functional evidence for a protective action of neurosteroids against vincristine chemotherapy-induced painful neuropathy. <i>Cellular and Molecular Life Sciences</i> , 2010, 67, 3017-3034.	5.4	62
21	Immunocytochemical Localization and Biological Activity of Hydroxysteroid Sulfotransferase in the Frog Brain. <i>Journal of Neurochemistry</i> , 1999, 72, 848-857.	3.9	60
22	Impact of neuropathic pain on the gene expression and activity of cytochrome P450side-chain-cleavage in sensory neural networks. <i>Cellular and Molecular Life Sciences</i> , 2004, 61, 2274-84.	5.4	60
23	The endozepine triakontatetrapeptide diazepam-binding inhibitor [17â€“50] stimulates neurosteroid biosynthesis in the frog hypothalamus. <i>Neuroscience</i> , 1998, 83, 555-570.	2.3	57
24	The biological activity of 3Î±-hydroxysteroid oxido-reductase in the spinal cord regulates thermal and mechanical pain thresholds after sciatic nerve injury. <i>Neurobiology of Disease</i> , 2008, 30, 30-41.	4.4	57
25	Sciatic nerve injury induces apoptosis of dorsal root ganglion satellite glial cells and selectively modifies neurosteroidogenesis in sensory neurons. <i>Glia</i> , 2010, 58, 169-180.	4.9	57
26	Progress in dorsal root ganglion neurosteroidogenic activity: Basic evidence and pathophysiological correlation. <i>Progress in Neurobiology</i> , 2010, 92, 33-41.	5.7	54
27	Alzheimer's Disease, Oestrogen and Mitochondria: an Ambiguous Relationship. <i>Molecular Neurobiology</i> , 2012, 46, 151-160.	4.0	51
28	Inhibition of the Mitochondrial Enzyme ABAD Restores the Amyloid-Î²-Mediated Deregulation of Estradiol. <i>PLoS ONE</i> , 2011, 6, e28887.	2.5	49
29	The octadecaneuropeptide ODN stimulates neurosteroid biosynthesis through activation of central-type benzodiazepine receptors. <i>Journal of Neurochemistry</i> , 2008, 76, 128-138.	3.9	48
30	Anatomical and biochemical evidence for the synthesis of unconjugated and sulfated neurosteroids in amphibians. <i>Brain Research Reviews</i> , 2001, 37, 13-24.	9.0	47
31	Regulation of neurosteroid allopregnanolone biosynthesis in the rat spinal cord by glycine and the alkaloidal analogs strychnine and gelsemine. <i>Neuroscience</i> , 2008, 153, 154-161.	2.3	46
32	Detecting spatial memory deficits beyond blindness in tg2576 Alzheimer mice. <i>Neurobiology of Aging</i> , 2013, 34, 716-730.	3.1	45
33	Comparative Analysis of Gelsemine and <i>Gelsemium sempervirens</i> Activity on Neurosteroid Allopregnanolone Formation in the Spinal Cord and Limbic System. <i>Evidence-based Complementary and Alternative Medicine</i> , 2011, 2011, 1-10.	1.2	43
34	Modulation of neurosteroid production in human neuroblastoma cells by Alzheimer's disease key proteins. <i>Journal of Neurobiology</i> , 2006, 66, 868-881.	3.6	40
35	Pharmacological effect of gelsemine on anxiety-like behavior in rat. <i>Behavioural Brain Research</i> , 2013, 253, 90-94.	2.2	40
36	Milestones on Steroids and the Nervous System: 10â€“Years of Basic and Translational Research. <i>Journal of Neuroendocrinology</i> , 2012, 24, 1-15.	2.6	39

#	ARTICLE	IF	CITATIONS
37	Local modulation of steroid action: rapid control of enzymatic activity. <i>Frontiers in Neuroscience</i> , 2015, 9, 83.	2.8	39
38	Dose-dependent and sequence-sensitive effects of amyloid- β^2 peptide on neurosteroidogenesis in human neuroblastoma cells. <i>Neurochemistry International</i> , 2008, 52, 948-955.	3.8	38
39	Selective regulation of 3β -hydroxysteroid oxidoreductase expression in dorsal root ganglion neurons: A possible mechanism to cope with peripheral nerve injury-induced chronic pain. <i>Pain</i> , 2010, 150, 522-534.	4.2	38
40	Social Isolation in Early versus Late Adolescent Mice Is Associated with Persistent Behavioral Deficits That Can Be Improved by Neurosteroid-Based Treatment. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 208.	3.7	38
41	TSPO Ligands Boost Mitochondrial Function and Pregnenolone Synthesis. <i>Journal of Alzheimer's Disease</i> , 2019, 72, 1045-1058.	2.6	38
42	Mechanisms for the Specific Properties of β -Hydroxybutyrate in Brain. <i>Medicinal Research Reviews</i> , 2016, 36, 363-388.	10.5	35
43	Tryptophan metabolites modify brain $A\beta^2$ peptide degradation: A role in Alzheimer's disease?. <i>Progress in Neurobiology</i> , 2020, 190, 101800.	5.7	34
44	Seasonal variation of the impact of a stressful procedure on open field behaviour and blood corticosterone in laboratory mice. <i>Behavioural Brain Research</i> , 2006, 167, 342-348.	2.2	32
45	Testosterone and estrogen in multiple sclerosis: from pathophysiology to therapeutics. <i>Expert Review of Neurotherapeutics</i> , 2018, 18, 515-522.	2.8	31
46	Regulation of Neurosteroid Biosynthesis in the Frog Diencephalon by GABA and Endoepines. <i>Hormones and Behavior</i> , 2001, 40, 218-225.	2.1	30
47	Peripheral neuropathy and neurosteroid formation in the central nervous system. <i>Brain Research Reviews</i> , 2008, 57, 454-459.	9.0	30
48	β -Hydroxybutyrate (Xyrem) ameliorates clinical symptoms and neuropathology in a mouse model of Alzheimer's disease. <i>Neurobiology of Aging</i> , 2015, 36, 832-844.	3.1	30
49	Allopregnanolone and its analog BR 297 rescue neuronal cells from oxidative stress-induced death through bioenergetic improvement. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 631-642.	3.8	30
50	Immunohistochemical localization of 3β -hydroxysteroid dehydrogenase and 5α -reductase in the brain of the African lungfish <i>Protopterus annectens</i> . <i>Journal of Comparative Neurology</i> , 2001, 438, 123-135.	1.6	29
51	Effect of streptozotocin-induced diabetes on the gene expression and biological activity of 3β -hydroxysteroid dehydrogenase in the rat spinal cord. <i>Neuroscience</i> , 2005, 135, 869-877.	2.3	29
52	The translocator protein ligand XBD173 improves clinical symptoms and neuropathological markers in the SJL/J mouse model of multiple sclerosis. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 3016-3027.	3.8	28
53	Allopregnanolone and Progesterone in Experimental Neuropathic Pain: Former and New Insights with a Translational Perspective. <i>Cellular and Molecular Neurobiology</i> , 2019, 39, 523-537.	3.3	27
54	5-HIAA induces neprilysin to ameliorate pathophysiology and symptoms in a mouse model for Alzheimer's disease. <i>Acta Neuropathologica Communications</i> , 2018, 6, 136.	5.2	26

#	ARTICLE	IF	CITATIONS
55	Xanthurenic Acid Binds to Neuronal G-Protein-Coupled Receptors That Secondarily Activate Cationic Channels in the Cell Line NCB-20. <i>PLoS ONE</i> , 2012, 7, e48553.	2.5	25
56	Disruption of Sema3A/PlexinA1 inhibitory signalling in oligodendrocytes as a therapeutic strategy to promote remyelination. <i>EMBO Molecular Medicine</i> , 2019, 11, e10378.	6.9	25
57	Microglial Cell Morphology and Phagocytic Activity Are Critically Regulated by the Neurosteroid Allopregnanolone: A Possible Role in Neuroprotection. <i>Cells</i> , 2021, 10, 698.	4.1	25
58	Neurosteroids: Measurement and pathophysiologic relevance. <i>Neurochemistry International</i> , 2008, 52, 503-505.	3.8	24
59	Selective regulation of neurosteroid biosynthesis in human neuroblastoma cells under hydrogen peroxide-induced oxidative stress condition. <i>Neuroscience</i> , 2008, 151, 758-770.	2.3	23
60	An autophagy-targeting peptide to treat chronic inflammatory demyelinating polyneuropathies. <i>Journal of Autoimmunity</i> , 2018, 92, 114-125.	6.5	23
61	Neurosteroids and neuropathic pain management: Basic evidence and therapeutic perspectives. <i>Frontiers in Neuroendocrinology</i> , 2019, 55, 100795.	5.2	23
62	Novel analogs of allopregnanolone show improved efficiency and specificity in neuroprotection and stimulation of proliferation. <i>Journal of Neurochemistry</i> , 2016, 139, 782-794.	3.9	21
63	The Triakontatetrapeptide (TTN) Stimulates Thymidine Incorporation in Rat Astrocytes Through Peripheral-Type Benzodiazepine Receptors. <i>Journal of Neurochemistry</i> , 2002, 75, 701-707.	3.9	20
64	Neurosteroid 3 β -Androstanediol Efficiently Counteracts Paclitaxel-Induced Peripheral Neuropathy and Painful Symptoms. <i>PLoS ONE</i> , 2013, 8, e80915.	2.5	20
65	Gamma-hydroxybutyrate, acting through an anti-apoptotic mechanism, protects native and amyloid-precursor-protein-transfected neuroblastoma cells against oxidative stress-induced death. <i>Neuroscience</i> , 2014, 263, 203-215.	2.3	20
66	Age-related vulnerability of pattern separation in C57BL/6J mice. <i>Neurobiology of Aging</i> , 2018, 62, 120-129.	3.1	20
67	Serum-based differentiation between multiple sclerosis and amyotrophic lateral sclerosis by Random Forest classification of FTIR spectra. <i>Analyst</i> , The, 2019, 144, 4647-4652.	3.5	20
68	The small GTPase RhoA regulates the expression and function of the sodium channel Nav1.5 in breast cancer cells. <i>International Journal of Oncology</i> , 2014, 44, 539-547.	3.3	19
69	A single acute pharmacological dose of γ -hydroxybutyrate modifies multiple gene expression patterns in rat hippocampus and frontal cortex. <i>Physiological Genomics</i> , 2010, 41, 146-160.	2.3	19
70	In vivo evidence for the production of sulfated steroids in the frog brain. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2000, 126, 213-219.	1.6	18
71	Assessment of neuroactive steroid formation in diabetic rat spinal cord using high-performance liquid chromatography and continuous flow scintillation detection. <i>Neurochemistry International</i> , 2008, 52, 554-559.	3.8	16
72	A Role for Xanthurenic Acid in the Control of Brain Dopaminergic Activity. <i>International Journal of Molecular Sciences</i> , 2021, 22, 6974.	4.1	16

#	ARTICLE	IF	CITATIONS
73	Characterization of a new rat model for chronic inflammatory demyelinating polyneuropathies. <i>Journal of Neuroimmunology</i> , 2015, 278, 1-10.	2.3	15
74	Neuroprotective Effects of Neuroactive Steroids in the Spinal Cord and Peripheral Nerves. <i>Journal of Molecular Neuroscience</i> , 2006, 28, 1-2.	2.3	14
75	Xanthurenic acid is localized in neurons in the central nervous system. <i>Neuroscience</i> , 2016, 329, 226-238.	2.3	14
76	Behavioral and electromyographic assessment of oxaliplatin-induced motor dysfunctions: Evidence for a therapeutic effect of allopregnanolone. <i>Behavioural Brain Research</i> , 2017, 320, 440-449.	2.2	14
77	In vivo regulation of vasomotricity by nitric oxide and prostanoids during gestation. <i>European Journal of Pharmacology</i> , 2001, 427, 143-149.	3.5	13
78	Evidence for effective structure-based neuromodulatory effects of new analogues of neurosteroid allopregnanolone. <i>Journal of Neuroendocrinology</i> , 2018, 30, e12568.	2.6	13
79	The TOTEM RRMS (Testosterone Treatment on neuroprotection and Myelin Repair in Relapsing) Tj ETQq1 1 0.784314 rgBT /Overlock placebo-controlled trial. <i>Trials</i> , 2020, 21, 591.	1.6	11
80	Neuropeptide Y Inhibits the Biosynthesis of Sulfated Neurosteroids in the Hypothalamus through Activation of Y1 Receptors. <i>Endocrinology</i> , 2002, 143, 1950-1963.	2.8	11
81	Regulatory effect of dehydroepiandrosterone on spinal cord nociceptive function. <i>Frontiers in Bioscience - Elite</i> , 2010, E2, 1528-1537.	1.8	10
82	FTY720 controls disease severity and attenuates sciatic nerve damage in chronic experimental autoimmune neuritis. <i>Journal of Neuroinflammation</i> , 2019, 16, 54.	7.2	10
83	A proposed preventive role for Gamma-hydroxybutyrate (XyremR) in Alzheimer's disease. <i>Alzheimer's Research and Therapy</i> , 2016, 8, 37.	6.2	9
84	Discovery of Imidazoquinazolinone Derivatives as TSPO Ligands Modulating Neurosteroidogenesis and Cellular Bioenergetics in Neuroblastoma Cells Expressing Amyloid Precursor Protein. <i>ChemistrySelect</i> , 2017, 2, 6452-6457.	1.5	9
85	Neonatal ventral hippocampal lesions modify pain perception and evoked potentials in rats. <i>Behavioural Brain Research</i> , 2012, 234, 167-174.	2.2	8
86	Beneficial effects of Gelsemium-based treatment against paclitaxel-induced painful symptoms. <i>Neurological Sciences</i> , 2018, 39, 2183-2196.	1.9	7
87	Neurophysiological responses to unpleasant stimuli (acute electrical stimulations and emotional) Tj ETQq1 1 0.784314 rgBT /Overlock	3.3	6
88	Raman Imaging Reveals Accumulation of Hemoproteins in Plaques from Alzheimer's Diseased Tissues. <i>ACS Chemical Neuroscience</i> , 2021, 12, 2940-2945.	3.5	6
89	Calcium and cAMP signaling induced by gamma-hydroxybutyrate receptor(s) stimulation in NCB-20 neurons. <i>Neuroscience</i> , 2010, 167, 49-59.	2.3	5
90	Behavioral, Electrophysiological, and Histological Characterization of a New Rat Model for Neoadjuvant Chemotherapy-Induced Neuropathic Pain: Therapeutic Potential of Duloxetine and Allopregnanolone Concomitant Treatment. <i>Neurotoxicity Research</i> , 2020, 38, 145-162.	2.7	5

#	ARTICLE	IF	CITATIONS
91	A Narrative Review on Axonal Neuroprotection in Multiple Sclerosis. <i>Neurology and Therapy</i> , 2022, 11, 981-1042.	3.2	5
92	Transfection of Human Neuroblastoma Cells with Alzheimer's Disease Brain Hallmarks as a Promising Strategy to Investigate the Role of Neurosteroidogenesis in Neuroprotection. <i>BioValley Monographs</i> , 2012, , 50-59.	0.1	4
93	Protective effect of 4-Phenylbutyrate against proteolipid protein mutation-induced endoplasmic reticulum stress and oligodendroglial cell death. <i>Neurochemistry International</i> , 2018, 118, 185-194.	3.8	4
94	Rapid Discrimination of Neuromyelitis Optica Spectrum Disorder and Multiple Sclerosis Using Machine Learning on Infrared Spectra of Sera. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2791.	4.1	4
95	Translocator Protein Ligand PIGA1138 Reduces Disease Symptoms and Severity in Experimental Autoimmune Encephalomyelitis Model of Primary Progressive Multiple Sclerosis. <i>Molecular Neurobiology</i> , 2022, 59, 1744-1765.	4.0	3
96	H1153Y-KCNH2 Mutation Identified in a Sudden Arrhythmic Death Syndrome Case Alters Channel Gating. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9235.	4.1	2
97	Steroids, spinal cord and pain sensation. <i>Hormone Molecular Biology and Clinical Investigation</i> , 2011, 7, 377-84.	0.7	1
98	Application of Confocal Laser-Scanning Microscopy to Comparative Endocrinology. <i>Annals of the New York Academy of Sciences</i> , 1998, 839, 331-335.	3.8	0
99	Gelsemium effect against nerve injury-induced mechanical allodynia and hyperalgesia. <i>International Journal of High Dilution Research</i> , 2021, 18, 06-06.	0.1	0