Vesna Jevtovic-Todorovic

List of Publications by Year
in descending order

64 papers	3,806 citations	236925 25 h-index	123424 61 g-index
102 all docs	102 docs citations	102 times ranked	2808 citing authors

#	Article	IF	Citations
1	Early Exposure to Common Anesthetic Agents Causes Widespread Neurodegeneration in the Developing Rat Brain and Persistent Learning Deficits. Journal of Neuroscience, 2003, 23, 876-882.	3.6	1,832
2	General anesthesia activates BDNF-dependent neuroapoptosis in the developing rat brain. Apoptosis: an International Journal on Programmed Cell Death, 2006, 11, 1603-1615.	4.9	211
3	Melatonin reduces the severity of anesthesia-induced apoptotic neurodegeneration in the developing rat brain. Neurobiology of Disease, 2006, 21, 522-530.	4.4	173
4	General Anesthesia Causes Long-term Impairment of Mitochondrial Morphogenesis and Synaptic Transmission in Developing Rat Brain. Anesthesiology, 2011, 115, 992-1002.	2.5	164
5	Exposure of Developing Brain to General Anesthesia. Anesthesiology, 2018, 128, 832-839.	2.5	95
6	5Î²-Reduced Neuroactive Steroids Are Novel Voltage-Dependent Blockers of T-Type Ca2+ Channels in Rat Sensory Neurons in Vitro and Potent Peripheral Analgesics in Vivo. Molecular Pharmacology, 2004, 66, 1223-1235.	2.3	80
7	General Anesthetics and Neurotoxicity. Anesthesiology Clinics, 2016, 34, 439-451.	1.4	72
8	The anesthetics nitrous oxide and ketamine are more neurotoxic to old than to young rat brain. Neurobiology of Aging, 2005, 26, 947-956.	3.1	62
9	General Anesthesia Causes Epigenetic Histone Modulation of c-Fos and Brain-derived Neurotrophic Factor, Target Genes Important for Neuronal Development in the Immature Rat Hippocampus. Anesthesiology, 2016, 124, 1311-1327.	2.5	62
10	The role of peripheral T-type calcium channels in pain transmission. Cell Calcium, 2006, 40, 197-203.	2.4	61
11	Anesthesia and the developing brain. Current Opinion in Anaesthesiology, 2011, 24, 395-399.	2.0	52
12	CaV3.2 T-Type Calcium Channels in Peripheral Sensory Neurons Are Important for Mibefradil-Induced Reversal of Hyperalgesia and Allodynia in Rats with Painful Diabetic Neuropathy. PLoS ONE, 2014, 9, e91467.	2.5	50
13	Hematopoietic pannexin 1 function is critical for neuropathic pain. Scientific Reports, 2017, 7, 42550.	3.3	49
14	Selective inhibition of Ca _V 3.2 channels reverses hyperexcitability of peripheral nociceptors and alleviates postsurgical pain. Science Signaling, 2018, 11, .	3.6	48
15	Developmental Synaptogenesis and General Anesthesia: A Kiss of Death?. Current Pharmaceutical Design, 2012, 18, 6225-6231.	1.9	37
16	General Anesthetics and the Developing Brain. Journal of Neurosurgical Anesthesiology, 2005, 17, 204-206.	1.2	35
17	Anesthesia-Induced Developmental Neurodegeneration: The Role of Neuronal Organelles. Frontiers in Neurology, 2012, 3, 141.	2.4	34
18	Functional Implications of an Early Exposure to General Anesthesia: Are We Changing the Behavior of Our Children?. Molecular Neurobiology, 2013, 48, 288-293.	4.0	32

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19	The Fas Ligand/Fas Death Receptor Pathways Contribute to Propofol-Induced Apoptosis and Neuroinflammation in the Brain of Neonatal Rats. Neurotoxicity Research, 2016, 30, 434-452.	2.7	32
20	Sex differences in neurodevelopmental abnormalities caused by early-life anaesthesia exposure: a narrative review. British Journal of Anaesthesia, 2020, 124, e81-e91.	3.4	31
21	Hyperexcitability of Rat Thalamocortical Networks after Exposure to General Anesthesia during Brain Development. Journal of Neuroscience, 2015, 35, 1481-1492.	3.6	30
22	Early exposure to general anesthesia impairs social and emotional development in rats. Molecular Neurobiology, 2020, 57, 41-50.	4.0	30
23	A holistic approach to anesthesia-induced neurotoxicity and its implications for future mechanistic studies. Neurotoxicology and Teratology, 2017, 60, 24-32.	2.4	29
24	The role of Tâ€type calcium channels in the subiculum: to burst or not to burst?. Journal of Physiology, 2017, 595, 6327-6348.	2.9	29
25	Neonatal Propofol Anesthesia Changes Expression of Synaptic Plasticity Proteins and Increases Stereotypic and Anxyolitic Behavior in Adult Rats. Neurotoxicity Research, 2017, 32, 247-263.	2.7	28
26	Nanoparticle fullerol alleviates radiculopathy via NLRP3 inflammasome and neuropeptides. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 2049-2059.	3.3	27
27	Early Exposure to Ketamine Impairs Axonal Pruning in Developing Mouse Hippocampus. Molecular Neurobiology, 2018, 55, 164-172.	4.0	27
28	Sevoflurane Exposure Results in Sex-Specific Transgenerational Upregulation of Target IEGs in the Subiculum. Molecular Neurobiology, 2020, 57, 11-22.	4.0	26
29	Standards for preclinical research and publications in developmental anaesthetic neurotoxicity: expert opinion statement from the SmartTots preclinical working group. British Journal of Anaesthesia, 2020, 124, 585-593.	3.4	26
30	Inhibition of CaV3.2 T-type calcium channels in peripheral sensory neurons contributes to analgesic properties of epipregnanolone. Psychopharmacology, 2014, 231, 3503-3515.	3.1	25
31	Neurosteroids in Pain Management: A New Perspective on an Old Player. Frontiers in Pharmacology, 2018, 9, 1127.	3.5	24
32	Are neuroactive steroids promising therapeutic agents in the management of acute and chronic pain?. Psychoneuroendocrinology, 2009, 34, S178-S185.	2.7	23
33	Neuroactive steroids alphaxalone and CDNC24 are effective hypnotics and potentiators of GABAA currents, but are not neurotoxic to the developing rat brain. British Journal of Anaesthesia, 2020, 124, 603-613.	3.4	23
34	Novel neuroactive steroid with hypnotic and Tâ€type calcium channel blocking properties exerts effective analgesia in a rodent model of postâ€surgical pain. British Journal of Pharmacology, 2020, 177, 1735-1753.	5.4	18
35	Neonatal propofol anesthesia modifies activityâ€dependent processes and induces transient hyperlocomotor response to <scp>d</scp>â€amphetamine during adolescence in rats. International Journal of Developmental Neuroscience, 2015, 47, 266-277.	1.6	17
36	Using animal models to evaluate the functional consequences of anesthesia during early neurodevelopment. Neurobiology of Learning and Memory, 2019, 165, 106834.	1.9	17

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37	Histone Deacetylase Inhibitor Entinostat (MS-275) Restores Anesthesia-induced Alteration of Inhibitory Synaptic Transmission in the Developing Rat Hippocampus. Molecular Neurobiology, 2018, 55, 222-228.	4.0	16
38	The T-type calcium channel isoform Cav3.1 is a target for the hypnotic effect of the anaesthetic neurosteroid (3Î²,5Î²,17Î²)-3-hydroxyandrostane-17-carbonitrile. British Journal of Anaesthesia, 2021, 126, 245-255.	3.4	16
39	Differential effects of the novel neurosteroid hypnotic (3Î²,5Î²,17Î²)-3-hydroxyandrostane-17-carbonitrile on electroencephalogram activity in male and female rats. British Journal of Anaesthesia, 2021, 127, 435-446.	3.4	14
40	CaV3.1 isoform of T-type calcium channels supports excitability of rat and mouse ventral tegmental area neurons. Neuropharmacology, 2018, 135, 343-354.	4.1	13
41	General Anesthesia and Young Brain: What is New?. Journal of Neurosurgical Anesthesiology, 2018, 30, 217-222.	1.2	12
42	Novel neurosteroid hypnotic blocks T-type calcium channel-dependent rebound burst firing and suppresses long-term potentiation in the rat subiculum. British Journal of Anaesthesia, 2019, 122, 643-651.	3.4	12
43	Do We Have Viable Protective Strategies against Anesthesia-Induced Developmental Neurotoxicity?. International Journal of Molecular Sciences, 2022, 23, 1128.	4.1	11
44	Anesthesia and Cancer, Friend or Foe? A Narrative Review. Frontiers in Oncology, 2021, 11, 803266.	2.8	11
45	Neonatal Ketamine Alters High-Frequency Oscillations and Synaptic Plasticity in the Subiculum But Does not Affect Sleep Macrostructure in Adolescent Rats. Frontiers in Systems Neuroscience, 2020, 14, 26.	2.5	9
46	The Role of Free Oxygen Radicals in Lasting Hyperexcitability of Rat Subicular Neurons After Exposure to General Anesthesia During Brain Development. Molecular Neurobiology, 2020, 57, 208-216.	4.0	8
47	Anesthetics and Cognitive Impairments in Developing Children. JAMA Pediatrics, 2017, 171, 1135.	6.2	7
48	Neonatal anesthesia and dysregulation of the epigenome. Biology of Reproduction, 2021, 105, 720-734.	2.7	7
49	Synthetic neuroactive steroids as new sedatives and anaesthetics: Back to the future. Journal of Neuroendocrinology, 2022, 34, e13086.	2.6	7
50	Testosterone: much more for the brain than a sex hormone. British Journal of Anaesthesia, 2022, , .	3.4	7
51	Nonapoptotic caspases in neural development and in anesthesia-induced neurotoxicity. Trends in Neurosciences, 2022, 45, 446-458.	8.6	7
52	Chronic Exposure to Nitrous Oxide Increases [³H]MK801 Binding in the Cerebral Cortex, but Not in the Hippocampus of Adult Mice. Annals of the New York Academy of Sciences, 2005, 1053, 301-308.	3.8	6
53	Neuron-Glia Crosstalk Plays a Major Role in the Neurotoxic Effects of Ketamine via Extracellular Vesicles. Frontiers in Cell and Developmental Biology, 2021, 9, 691648.	3.7	6
54	Preemptive Analgesic Effect of Intrathecal Applications of Neuroactive Steroids in a Rodent Model of Post-Surgical Pain: Evidence for the Role of T-Type Calcium Channels. Cells, 2020, 9, 2674.	4.1	5

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55	Developing brain and general anesthesia -- is there a cause for concern?. F1000 Medicine Reports, 2010, 2, 68.	2.9	5
56	Detrimental effects of general anaesthesia on young primates: are we closer to understanding the link?. British Journal of Anaesthesia, 2021, 126, 575-577.	3.4	4
57	General Anesthesia and the Young Brain: The Importance of Novel Strategies with Alternate Mechanisms of Action. International Journal of Molecular Sciences, 2022, 23, 1889.	4.1	3
58	Introduction to the special issue â€œDevelopmental neurotoxicity associated with pediatric general anesthesia: Preclinical findingsâ€• Neurotoxicology and Teratology, 2017, 60, 1.	2.4	2
59	Pharmacological Antagonism of T-Type Calcium Channels Constrains Rebound Burst Firing in Two Distinct Subpopulations of GABA Neurons in the Rat Ventral Tegmental Area: Implications for Î±-Lipoic Acid. Frontiers in Pharmacology, 2019, 10, 1402.	3.5	2
60	Good Gas, Bad Gas. Anesthesia and Analgesia, 2014, 118, 1160-1162.	2.2	1
61	Neonatal Isoflurane Does Not Affect Sleep Architecture and Minimally Alters Neuronal Beta Oscillations in Adolescent Rats. Frontiers in Behavioral Neuroscience, 2021, 15, 703859.	2.0	1
62	Beyond Anesthesia Apoptosis. Anesthesiology, 2020, 133, 495-496.	2.5	1
63	Sex hormones and the young brain: are we ready to embrace neuroprotective strategies?. British Journal of Anaesthesia, 2021, , .	3.4	1
64	Corrigendum to â€œPotential mechanism of cell death in the developing rat brain induced by propofol anesthesiaâ€•International Journal of Developmental Neuroscience 27(3) 279â€“287 (2009). International Journal of Developmental Neuroscience, 2010, 28, 225-225.	1.6	0