Steven F Maier

List of Publications by Year
in descending order

90 papers	7,594 citations	57719 44 h-index	54882 84 g-index
91 all docs	91 docs citations	91 times ranked	8695 citing authors

#	Article	IF	Citations
1	Suppression of active phase voluntary wheel running in male rats by unilateral chronic constriction injury: Enduring therapeutic effects of a brief treatment of morphine combined with TLR4 or P2X7 antagonists. Journal of Neuroscience Research, 2022, 100, 265-277.	1.3	8
2	SARS-CoV-2 spike S1 subunit induces neuroinflammatory, microglial and behavioral sickness responses: Evidence of PAMP-like properties. Brain, Behavior, and Immunity, 2022, 100, 267-277.	2.0	86
3	Preconditioning by voluntary wheel running attenuates later neuropathic pain via nuclear factor E2â€“related factor 2 antioxidant signaling in rats. Pain, 2022, 163, 1939-1951.	2.0	13
4	Postoperative cognitive dysfunction is made persistent with morphine treatment in aged rats. Neurobiology of Aging, 2021, 98, 214-224.	1.5	33
5	Comparing the effects of two different strains of mycobacteria, Mycobacterium vaccae NCTC 11659 and M. vaccae ATCC 15483, on stress-resilient behaviors and lipid-immune signaling in rats. Brain, Behavior, and Immunity, 2021, 91, 212-229.	2.0	12
6	Experimental autoimmune encephalopathy (EAE)-induced hippocampal neuroinflammation and memory deficits are prevented with the non-opioid TLR2/TLR4 antagonist (+)-naltrexone. Behavioural Brain Research, 2021, 396, 112896.	1.2	16
7	Toll-like receptor 2 and 4 antagonism for the treatment of experimental autoimmune encephalomyelitis (EAE)-related pain. Brain, Behavior, and Immunity, 2021, 93, 80-95.	2.0	11
8	Aging and miR-155 in mice influence survival and neuropathic pain after spinal cord injury. Brain, Behavior, and Immunity, 2021, 97, 365-370.	2.0	28
9	The behavioral and neurochemical effects of an inescapable stressor are time of day dependent. Stress, 2020, 23, 405-416.	0.8	5
10	Acute stress induces the rapid and transient induction of caspase-1, gasdermin D and release of constitutive IL-1Î² protein in dorsal hippocampus. Brain, Behavior, and Immunity, 2020, 90, 70-80.	2.0	9
11	Alzheimerâ€™s Disease: Protective Effects of Mycobacterium vaccae, a Soil-Derived Mycobacterium with Anti-Inflammatory and Anti-Tubercular Properties, on the Proteomic Profiles of Plasma and Cerebrospinal Fluid in Rats. Journal of Alzheimer's Disease, 2020, 78, 965-987.	1.2	4
12	Acute stress induces chronic neuroinflammatory, microglial and behavioral priming: A role for potentiated NLRP3 inflammasome activation. Brain, Behavior, and Immunity, 2020, 89, 32-42.	2.0	28
13	Could Probiotics Be Used to Mitigate Neuroinflammation?. ACS Chemical Neuroscience, 2019, 10, 13-15.	1.7	25
14	Methamphetamine Activates Toll-Like Receptor 4 to Induce Central Immune Signaling within the Ventral Tegmental Area and Contributes to Extracellular Dopamine Increase in the Nucleus Accumbens Shell. ACS Chemical Neuroscience, 2019, 10, 3622-3634.	1.7	60
15	Glucocorticoids mediate stress induction of the alarmin HMGB1 and reduction of the microglia checkpoint receptor CD200R1 in limbic brain structures. Brain, Behavior, and Immunity, 2019, 80, 678-687.	2.0	18
16	Controllable stress elicits circuit-specific patterns of prefrontal plasticity in males, but not females. Brain Structure and Function, 2019, 224, 1831-1843.	1.2	38
17	Oxycodone, fentanyl, and morphine amplify established neuropathic pain in male rats. Pain, 2019, 160, 2634-2640.	2.0	18
18	A single peri-sciatic nerve administration of the adenosine 2A receptor agonist ATL313 produces long-lasting anti-allodynia and anti-inflammatory effects in male rats. Brain, Behavior, and Immunity, 2019, 76, 116-125.	2.0	14

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19	Microglia: Neuroimmune-sensors of stress. Seminars in Cell and Developmental Biology, 2019, 94, 176-185.	2.3	86
20	Spinal Cord Injury in Rats Dysregulates Diurnal Rhythms of Fecal Output and Liver Metabolic Indicators. Journal of Neurotrauma, 2019, 36, 1923-1934.	1.7	16
21	Circadian misalignment has differential effects on affective behavior following exposure to controllable or uncontrollable stress. Behavioural Brain Research, 2019, 359, 440-445.	1.2	16
22	New tools for understanding coping and resilience. Neuroscience Letters, 2019, 693, 54-57.	1.0	14
23	Repeated Morphine Prolongs Postoperative Pain in Male Rats. Anesthesia and Analgesia, 2019, 128, 161-167.	1.1	33
24	Neuroinflammatory priming to stress is differentially regulated in male and female rats. Brain, Behavior, and Immunity, 2018, 70, 257-267.	2.0	85
25	Pattern recognition receptors mediate pro-inflammatory effects of extracellular mitochondrial transcription factor A (TFAM). Molecular and Cellular Neurosciences, 2018, 89, 71-79.	1.0	30
26	A novel platform for in vivo detection of cytokine release within discrete brain regions. Brain, Behavior, and Immunity, 2018, 71, 18-22.	2.0	28
27	Two models of inescapable stress increase tph2 mRNA expression in the anxiety-related dorsomedial part of the dorsal raphe nucleus. Neurobiology of Stress, 2018, 8, 68-81.	1.9	26
28	Behavioural and neural sequelae of stressor exposure are not modulated by controllability in females. European Journal of Neuroscience, 2018, 47, 959-967.	1.2	37
29	MicroRNA-124 and microRNA-146a both attenuate persistent neuropathic pain induced by morphine in male rats. Brain Research, 2018, 1692, 9-11.	1.1	25
30	DREADDed microglia in pain: Implications for spinal inflammatory signaling in male rats. Experimental Neurology, 2018, 304, 125-131.	2.0	79
31	Sustained reversal of central neuropathic pain induced by a single intrathecal injection of adenosine A 2A receptor agonists. Brain, Behavior, and Immunity, 2018, 69, 470-479.	2.0	29
32	Protraction of neuropathic pain by morphine is mediated by spinal damage associated molecular patterns (DAMPs) in male rats. Brain, Behavior, and Immunity, 2018, 72, 45-50.	2.0	60
33	Stress disinhibits microglia via down-regulation of CD200R: A mechanism of neuroinflammatory priming. Brain, Behavior, and Immunity, 2018, 69, 62-73.	2.0	58
34	Immunization with Mycobacterium vaccae induces an anti-inflammatory milieu in the CNS: Attenuation of stress-induced microglial priming, alarmins and anxiety-like behavior. Brain, Behavior, and Immunity, 2018, 73, 352-363.	2.0	66
35	Mycobacterium vaccae immunization protects aged rats from surgery-elicited neuroinflammation and cognitive dysfunction. Neurobiology of Aging, 2018, 71, 105-114.	1.5	45
36	Stress and aging act through common mechanisms to elicit neuroinflammatory priming. Brain, Behavior, and Immunity, 2018, 73, 133-148.	2.0	57

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37	Aging and an Immune Challenge Interact to Produce Prolonged, but Not Permanent, Reductions in Hippocampal L-LTP and mBDNF in a Rodent Model with Features of Delirium. ENeuro, 2018, 5, ENEURO.0009-18.2018.	0.9	15
38	Spinal Cord Injury in Rats Disrupts the Circadian System. ENeuro, 2018, 5, ENEURO.0328-18.2018.	0.9	32
39	Behavioral assessment of neuropathic pain, fatigue, and anxiety in experimental autoimmune encephalomyelitis (EAE) and attenuation by interleukin-10 gene therapy. Brain, Behavior, and Immunity, 2017, 59, 49-54.	2.0	50
40	Exploring acute-to-chronic neuropathic pain in rats after contusion spinal cord injury. Experimental Neurology, 2017, 295, 46-54.	2.0	42
41	Supradural inflammatory soup in awake and freely moving rats induces facial allodynia that is blocked by putative immune modulators. Brain Research, 2017, 1664, 87-94.	1.1	20
42	Constriction of the buccal branch of the facial nerve produces unilateral craniofacial allodynia. Brain, Behavior, and Immunity, 2017, 64, 59-64.	2.0	4
43	High-fat diet and aging interact to produce neuroinflammation and impair hippocampal- and amygdalar-dependent memory. Neurobiology of Aging, 2017, 58, 88-101.	1.5	138
44	Danger Signals and Inflammasomes: Stress-Evoked Sterile Inflammation in Mood Disorders. Neuropsychopharmacology, 2017, 42, 36-45.	2.8	160
45	Glucocorticoids Mediate Short-Term High-Fat Diet Induction of Neuroinflammatory Priming, the NLRP3 Inflammasome, and the Danger Signal HMGB1. ENeuro, 2016, 3, ENEURO.0113-16.2016.	0.9	54
46	Diminished circadian rhythms in hippocampal microglia may contribute to age-related neuroinflammatory sensitization. Neurobiology of Aging, 2016, 47, 102-112.	1.5	54
47	The Alarmin HMGB1 Mediates Age-Induced Neuroinflammatory Priming. Journal of Neuroscience, 2016, 36, 7946-7956.	1.7	103
48	Posterior insular cortex is necessary for conditioned inhibition of fear. Neurobiology of Learning and Memory, 2016, 134, 317-327.	1.0	49
49	Morphine amplifies mechanical allodynia via TLR4 in a rat model of spinal cord injury. Brain, Behavior, and Immunity, 2016, 58, 348-356.	2.0	58
50	Learned helplessness at fifty: Insights from neuroscience.. Psychological Review, 2016, 123, 349-367.	2.7	424
51	Stable, long-term, spatial memory in young and aged rats achieved with a one day Morris water maze training protocol. Learning and Memory, 2016, 23, 699-702.	0.5	7
52	Nitroxidative Signaling Mechanisms in Pathological Pain. Trends in Neurosciences, 2016, 39, 862-879.	4.2	93
53	Stress-induced neuroinflammatory priming: A liability factor in the etiology of psychiatric disorders. Neurobiology of Stress, 2016, 4, 62-70.	1.9	112
54	Morphine paradoxically prolongs neuropathic pain in rats by amplifying spinal NLRP3 inflammasome activation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3441-50.	3.3	292

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55	Stress-induced neuroinflammatory priming is time of day dependent. Psychoneuroendocrinology, 2016, 66, 82-90.	1.3	58
56	The danger-associated molecular pattern HMGB1 mediates the neuroinflammatory effects of methamphetamine. Brain, Behavior, and Immunity, 2016, 51, 99-108.	2.0	60
57	The redox state of the alarmin HMGB1 is a pivotal factor in neuroinflammatory and microglial priming: A role for the NLRP3 inflammasome. Brain, Behavior, and Immunity, 2016, 55, 215-224.	2.0	106
58	Activation of a Habenuloâ€“Raphe Circuit Is Critical for the Behavioral and Neurochemical Consequences of Uncontrollable Stress in the Male Rat. ENeuro, 2016, 3, ENEURO.0229-16.2016.	0.9	50
59	A robust activity marking system for exploring active neuronal ensembles. ELife, 2016, 5, .	2.8	115
60	Behavioral control blunts reactions to contemporaneous and future adverse events: Medial prefrontal cortex plasticity and a corticostriatal network. Neurobiology of Stress, 2015, 1, 12-22.	1.9	110
61	Greater glucocorticoid receptor activation in hippocampus of aged rats sensitizes microglia. Neurobiology of Aging, 2015, 36, 1483-1495.	1.5	62
62	Stress Induces the Danger-Associated Molecular Pattern HMGB-1 in the Hippocampus of Male Sprague Dawley Rats: A Priming Stimulus of Microglia and the NLRP3 Inflammasome. Journal of Neuroscience, 2015, 35, 316-324.	1.7	177
63	Adenosine 2A receptor agonism: A single intrathecal administration attenuates motor paralysis in experimental autoimmune encephalopathy in rats. Brain, Behavior, and Immunity, 2015, 46, 50-54.	2.0	14
64	Stress sounds the alarmin: The role of the danger-associated molecular pattern HMGB1 in stress-induced neuroinflammatory priming. Brain, Behavior, and Immunity, 2015, 48, 1-7.	2.0	178
65	Effects of Adolescent Caffeine Consumption on Cocaine Sensitivity. Neuropsychopharmacology, 2015, 40, 813-821.	2.8	17
66	Select steroid hormone glucuronide metabolites can cause toll-like receptor 4 activation and enhanced pain. Brain, Behavior, and Immunity, 2015, 44, 128-136.	2.0	13
67	The role of hepatic and splenic macrophages in E. coli-induced memory impairments in aged rats. Brain, Behavior, and Immunity, 2015, 43, 60-67.	2.0	7
68	Microglia inflammatory responses are controlled by an intrinsic circadian clock. Brain, Behavior, and Immunity, 2015, 45, 171-179.	2.0	207
69	Running Reduces Uncontrollable Stress-Evoked Serotonin and Potentiates Stress-Evoked Dopamine Concentrations in the Rat Dorsal Striatum. PLoS ONE, 2015, 10, e0141898.	1.1	41
70	Learned stressor resistance requires extracellular signal-regulated kinase in the prefrontal cortex. Frontiers in Behavioral Neuroscience, 2014, 8, 348.	1.0	28
71	Pathological pain and the neuroimmune interface. Nature Reviews Immunology, 2014, 14, 217-231.	10.6	703
72	High-fat diet consumption disrupts memory and primes elevations in hippocampal IL-1Î², an effect that can be prevented with dietary reversal or IL-1 receptor antagonism. Brain, Behavior, and Immunity, 2014, 42, 22-32.	2.0	127

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73	Systemic Administration of Propentofylline, Ibudilast, and (+)-Naltrexone Each Reverses Mechanical Allodynia in a Novel Rat Model of Central Neuropathic Pain. Journal of Pain, 2014, 15, 407-421.	0.7	45
74	Suppression of Voluntary Wheel Running in Rats Is Dependent onÂthe Site of Inflammation: Evidence for Voluntary Running as aÂMeasure of Hind Paw-Evoked Pain. Journal of Pain, 2014, 15, 121-128.	0.7	42
75	Chronic exposure to exogenous glucocorticoids primes microglia to pro-inflammatory stimuli and induces NLRP3 mRNA in the hippocampus. Psychoneuroendocrinology, 2014, 40, 191-200.	1.3	136
76	Anxiogenic effects of brief swim stress are sensitive to stress history. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 2013, 44, 17-22.	2.5	15
77	Uncontrollable, But Not Controllable, Stress Desensitizes 5-HT_{1A}Receptors in the Dorsal Raphe Nucleus. Journal of Neuroscience, 2011, 31, 14107-14115.	1.7	74
78	Role of the medial prefrontal cortex in coping and resilience. Brain Research, 2010, 1355, 52-60.	1.1	237
79	5-Hydroxytryptamine 2C Receptors in the Basolateral Amygdala Are Involved in the Expression of Anxiety After Uncontrollable Traumatic Stress. Biological Psychiatry, 2010, 67, 339-345.	0.7	173
80	Selective activation of dorsal raphe nucleusâ€projecting neurons in the ventral medial prefrontal cortex by controllable stress. European Journal of Neuroscience, 2009, 30, 1111-1116.	1.2	86
81	Medial prefrontal cortical activation modulates the impact of controllable and uncontrollable stressor exposure on a social exploration test of anxiety in the rat. Stress, 2009, 12, 445-450.	0.8	73
82	Behavioral control, the medial prefrontal cortex, and resilience. Dialogues in Clinical Neuroscience, 2006, 8, 397-406.	1.8	182
83	Stressor controllability and learned helplessness: The roles of the dorsal raphe nucleus, serotonin, and corticotropin-releasing factor. Neuroscience and Biobehavioral Reviews, 2005, 29, 829-841.	2.9	606
84	Electrolytic lesions and pharmacological inhibition of the dorsal raphe nucleus prevent stressor potentiation of morphine conditioned place preference in rats. Psychopharmacology, 2004, 171, 191-198.	1.5	34
85	Inescapable shock activates serotonergic neurons in all raphe nuclei of rat. Behavioural Brain Research, 2004, 153, 233-239.	1.2	66
86	Immune-to-central nervous system communication and its role in modulating pain and cognition: Implications for cancer and cancer treatment. Brain, Behavior, and Immunity, 2003, 17, 125-131.	2.0	100
87	Bi-directional immuneâ€“brain communication: Implications for understanding stress, pain, and cognition. Brain, Behavior, and Immunity, 2003, 17, 69-85.	2.0	254
88	The contribution of the vagus nerve in interleukin-1Î² -induced fever is dependent on dose. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R929-R934.	0.9	133
89	Exposure to inescapable but not escapable shock increases extracellular levels of 5-HT in the dorsal raphe nucleus of the rat. Brain Research, 1998, 783, 115-120.	1.1	153
90	Escapable and inescapable stress differentially alter extracellular levels of 5-HT in the basolateral amygdala of the rat. Brain Research, 1998, 812, 113-120.	1.1	188