David K Bilkey

List of Publications by Year
in descending order

104 papers	4,229 citations	94433 37 h-index	128289 60 g-index
105 all docs	105 docs citations	105 times ranked	3586 citing authors

#	Article	IF	Citations
1	Aberrant phase precession of lateral septal cells in a maternal immune activation model of schizophrenia risk may disrupt the integration of location with reward. Journal of Neuroscience, 2022, , JN-RM-0039-22.	3.6	1
2	Eventâ€Predictive Cognition: A Root for Conceptual Human Thought. Topics in Cognitive Science, 2021, 13, 10-24.	1.9	21
3	Neural Markers of Event Boundaries. Topics in Cognitive Science, 2021, 13, 128-141.	1.9	10
4	Hippocampal Sequencing Mechanisms Are Disrupted in a Maternal Immune Activation Model of Schizophrenia Risk. Journal of Neuroscience, 2021, 41, 6954-6965.	3.6	10
5	Impaired discrimination of a subanesthetic dose of ketamine in a maternal immune activation model of schizophrenia risk. Journal of Psychopharmacology, 2021, 35, 1141-1151.	4.0	3
6	Maternal immune activation alters the sequential structure of ultrasonic communications in male rats. Brain, Behavior, & Immunity - Health, 2021, 16, 100304.	2.5	6
7	Disorganization of Oscillatory Activity in Animal Models of Schizophrenia. Frontiers in Neural Circuits, 2021, 15, 741767.	2.8	6
8	Hippocampal coding of conspecific position. Brain Research, 2020, 1745, 146920.	2.2	1
9	Learning, planning, and control in a monolithic neural event inference architecture. Neural Networks, 2019, 117, 135-144.	5.9	37
10	Communication between the Anterior Cingulate Cortex and Ventral Tegmental Area during a Cost-Benefit Reversal Task. Cell Reports, 2019, 26, 2353-2361.e3.	6.4	14
11	Anterior cingulate cortex encoding of effortful behavior. Journal of Neurophysiology, 2019, 121, 701-714.	1.8	43
12	Maternal immune activation altered microglial immunoreactivity in the brain of postnatal day 2 rat offspring. Synapse, 2019, 73, e22072.	1.2	17
13	Synchrony and Physiological Arousal Increase Cohesion and Cooperation in Large Naturalistic Groups. Scientific Reports, 2018, 8, 127.	3.3	54
14	Effects of maternal immune activation on brain arginine metabolism of postnatal day 2 rat offspring. Schizophrenia Research, 2018, 192, 431-441.	2.0	10
15	Maternal immune activation leads to increased nNOS immunoreactivity in the brain of postnatal day 2 rat offspring. Synapse, 2018, 72, e22011.	1.2	6
16	Hippocampal place cell encoding of sloping terrain. Hippocampus, 2018, 28, 767-782.	1.9	18
17	Conflict and adaptation signals in the anterior cingulate cortex and ventral tegmental area. Scientific Reports, 2018, 8, 11732.	3.3	3
18	Spared motivational modulation of cognitive effort in a maternal immune activation model of schizophrenia risk.. Behavioral Neuroscience, 2018, 132, 66-74.	1.2	13

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19	Reversal learning impairments in the maternal immune activation rat model of schizophrenia.. Behavioral Neuroscience, 2018, 132, 520-525.	1.2	12
20	Circulating anti-MÃ¼llerian hormone (AMH) associates with the maturity of boysâ€™ drawings: Does AMH slow cognitive development in males?. Endocrine, 2017, 57, 528-534.	2.3	5
21	Exposure to complex environments results in more sparse representations of space in the hippocampus. Hippocampus, 2017, 27, 1178-1191.	1.9	14
22	Circadian-scale periodic bursts in theta and gamma-band coherence between hippocampus, cingulate and insular cortices. Neurobiology of Sleep and Circadian Rhythms, 2017, 3, 26-37.	2.8	4
23	Anterior Cingulate Cortex Modulation of the Ventral Tegmental Area in an Effort Task. Cell Reports, 2017, 19, 2220-2230.	6.4	42
24	Strangers in a Stadium. Social Psychological and Personality Science, 2017, 8, 509-518.	3.9	5
25	Maternal immune activation alters sensitivity to action-outcome contingency in adult rat offspring. Brain, Behavior, and Immunity, 2017, 63, 81-87.	4.1	15
26	Maternal immune activation in rats produces temporal perception impairments in adult offspring analogous to those observed in schizophrenia. PLoS ONE, 2017, 12, e0187719.	2.5	17
27	Incipient Social Groups: An Analysis via In-Vivo Behavioral Tracking. PLoS ONE, 2016, 11, e0149880.	2.5	17
28	The frequency of hippocampal theta rhythm is modulated on a circadian period and is entrained by food availability. Frontiers in Behavioral Neuroscience, 2015, 9, 61.	2.0	18
29	Prenatal immune activation alters hippocampal place cell firing characteristics in adult animals. Brain, Behavior, and Immunity, 2015, 48, 232-243.	4.1	21
30	Altered arginine metabolism in the hippocampus and prefrontal cortex of maternal immune activation rat offspring. Schizophrenia Research, 2013, 148, 151-156.	2.0	22
31	Spectrum of Short- and Long-Term Brain Pathology and Long-Term Behavioral Deficits in Male Repeated Hypoxic Rats Closely Resembling Human Extreme Prematurity. Journal of Neuroscience, 2013, 33, 11863-11877.	3.6	18
32	Enhanced hippocampal neuronal excitability and LTP persistence associated with reduced behavioral flexibility in the maternal immune activation model of schizophrenia. Hippocampus, 2013, 23, 1395-1409.	1.9	50
33	Aberrant neural synchrony in the maternal immune activation model: using translatable measures to explore targeted interventions. Frontiers in Behavioral Neuroscience, 2013, 7, 217.	2.0	31
34	Neural encoding of competitive effort in the anterior cingulate cortex. Nature Neuroscience, 2012, 15, 1290-1297.	14.8	106
35	Clozapine administration ameliorates disrupted long-range synchrony in a neurodevelopmental animal model of schizophrenia. Schizophrenia Research, 2012, 135, 112-115.	2.0	29
36	Place, space, and taste: Combining context and spatial information in a hippocampal navigation system. Hippocampus, 2012, 22, 442-454.	1.9	3

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37	The firing rate of hippocampal CA1 place cells is modulated with a circadian period. Hippocampus, 2012, 22, 1325-1337.	1.9	24
38	The sex bias in novelty preference of preadolescent mouse pups may require testicular MÃ¼llerian inhibiting substance. Behavioural Brain Research, 2011, 221, 304-306.	2.2	17
39	Behavioural deficits associated with maternal immune activation in the rat model of schizophrenia. Behavioural Brain Research, 2011, 225, 382-387.	2.2	62
40	The Stature of Boys Is Inversely Correlated to the Levels of Their Sertoli Cell Hormones: Do the Testes Restrain the Maturation of Boys?. PLoS ONE, 2011, 6, e20533.	2.5	18
41	The velocityâ€related firing property of hippocampal place cells is dependent on selfâ€movement. Hippocampus, 2010, 20, 573-583.	1.9	24
42	Altered Plasticity in Hippocampal CA1, But Not Dentate Gyrus, Following Long-Term Environmental Enrichment. Journal of Neurophysiology, 2010, 103, 3320-3329.	1.8	48
43	Neurons in the Rat Anterior Cingulate Cortex Dynamically Encode Costâ€“Benefit in a Spatial Decision-Making Task. Journal of Neuroscience, 2010, 30, 7705-7713.	3.6	130
44	Abnormal Long-Range Neural Synchrony in a Maternal Immune Activation Animal Model of Schizophrenia. Journal of Neuroscience, 2010, 30, 12424-12431.	3.6	126
45	The maternal immune activation (MIA) model of schizophrenia produces pre-pulse inhibition (PPI) deficits in both juvenile and adult rats but these effects are not associated with maternal weight loss. Behavioural Brain Research, 2010, 213, 323-327.	2.2	71
46	Bilateral NMDA lesions centered on the postrhinal cortex have minimal effects on hippocampal place cell firing. Hippocampus, 2009, 19, 221-227.	1.9	10
47	Endogenous secreted amyloid precursor protein-Î± regulates hippocampal NMDA receptor function, long-term potentiation and spatial memory. Neurobiology of Disease, 2008, 31, 250-260.	4.4	163
48	Immune activation during mid-gestation disrupts sensorimotor gating in rat offspring. Behavioural Brain Research, 2008, 190, 156-159.	2.2	111
49	Space and context in the temporal cortex. Hippocampus, 2007, 17, 813-825.	1.9	20
50	ADHD-like hyperactivity, with no attention deficit, in adult rats after repeated hypoxia during the equivalent of extreme prematurity. Journal of Neuroscience Methods, 2007, 166, 315-322.	2.5	21
51	Amusia is associated with deficits in spatial processing. Nature Neuroscience, 2007, 10, 915-921.	14.8	111
52	Lesions of the Vestibular System Disrupt Hippocampal Theta Rhythm in the Rat. Journal of Neurophysiology, 2006, 96, 4-14.	1.8	109
53	The dynamic nature of spatial encoding in the hippocampus.. Behavioral Neuroscience, 2005, 119, 1533-1545.	1.2	17
54	Hippocampal nitric oxide synthase and arginase and age-associated behavioral deficits. Hippocampus, 2005, 15, 642-655.	1.9	49

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55	Ten- to 12-Hz EEG Oscillation in the Rat Hippocampus and Rhinal Cortex That Is Modulated by Environmental Familiarity. Journal of Neurophysiology, 2005, 93, 1246-1254.	1.8	30
56	Hippocampal Place Cells Show Increased Sensitivity to Changes in the Local Environment Following Prefrontal Cortex Lesions. Cerebral Cortex, 2005, 15, 720-731.	2.9	31
57	The effects of vestibular lesions on hippocampal function in rats. Progress in Neurobiology, 2005, 75, 391-405.	5.7	85
58	Vestibular influences on CA1 neurons in the rat hippocampus: an electrophysiological study in vivo. Experimental Brain Research, 2004, 155, 245-250.	1.5	71
59	Excitotoxic lesions of the pre- and parasubiculum disrupt the place fields of hippocampal pyramidal cells. Hippocampus, 2004, 14, 107-116.	1.9	29
60	When is the perirhinal cortex necessary for the performance of spatial memory tasks?. Neuroscience and Biobehavioral Reviews, 2004, 28, 611-624.	6.1	59
61	NEUROSCIENCE: In the Place Space. Science, 2004, 305, 1245-1246.	12.6	7
62	Cannabinoid CB1 receptor protein expression in the rat hippocampus and entorhinal, perirhinal, postrhinal and temporal cortices: regional variations and age-related changes. Brain Research, 2003, 979, 235-239.	2.2	43
63	Theta- and movement velocity-related firing of hippocampal neurons is disrupted by lesions centered on the perirhinal cortex. Hippocampus, 2003, 13, 93-108.	1.9	34
64	Changes in NOS protein expression and activity in the rat hippocampus, entorhinal and postrhinal cortices after unilateral electrolytic perirhinal cortex lesions. Hippocampus, 2003, 13, 561-571.	1.9	9
65	Nitric oxide synthase and arginase in the rat hippocampus and the entorhinal, perirhinal, postrhinal, and temporal cortices: Regional variations and age-related changes. Hippocampus, 2003, 13, 859-867.	1.9	51
66	A lightweight microdrive for single-unit recording in freely moving rats and pigeons. Methods, 2003, 30, 152-158.	3.8	39
67	Prefrontal Cortex Lesions Modify the Spatial Properties of Hippocampal Place Cells. Cerebral Cortex, 2003, 13, 444-451.	2.9	62
68	Long-Term Effects of Permanent Vestibular Lesions on Hippocampal Spatial Firing. Journal of Neuroscience, 2003, 23, 6490-6498.	3.6	174
69	Bilateral peripheral vestibular lesions produce long-term changes in spatial learning in the rat. Journal of Vestibular Research: Equilibrium and Orientation, 2003, 13, 9-16.	2.0	82
70	Bilateral peripheral vestibular lesions produce long-term changes in spatial learning in the rat. Journal of Vestibular Research: Equilibrium and Orientation, 2003, 13, 9-16.	2.0	32
71	The effects of NMDA lesions centered on the postrhinal cortex on spatial memory tasks in the rat.. Behavioral Neuroscience, 2002, 116, 860-873.	1.2	16
72	Instability in the Place Field Location of Hippocampal Place Cells after Lesions Centered on the Perirhinal Cortex. Journal of Neuroscience, 2001, 21, 4016-4025.	3.6	55

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73	Excitotoxic lesions of the pre- and parasubiculum disrupt object recognition and spatial memory processes.. Behavioral Neuroscience, 2001, 115, 112-124.	1.2	41
74	The effect of excitotoxic lesions centered on the hippocampus or perirhinal cortex in object recognition and spatial memory tasks.. Behavioral Neuroscience, 2001, 115, 94-111.	1.2	112
75	The effects of separate and combined perirhinal and prefrontal cortex lesions on spatial memory tasks in the rat. Cognitive, Affective and Behavioral Neuroscience, 2000, 28, 12-20.	1.3	13
76	Perirhinal cortex: Lost in space?. Behavioral and Brain Sciences, 1999, 22, 444-445.	0.7	181
77	A low cost, high precision subminiature microdrive for extracellular unit recording in behaving animals. Journal of Neuroscience Methods, 1999, 92, 87-90.	2.5	52
78	Intrinsic theta-frequency membrane potential oscillations in layer III/V perirhinal cortex neurons of the rat. , 1999, 9, 510-518.		35
79	The effect of excitotoxic lesions centered on the perirhinal cortex in two versions of the radial arm maze task.. Behavioral Neuroscience, 1999, 113, 672-682.	1.2	45
80	Direct connection between perirhinal cortex and hippocampus is a major constituent of the lateral perforant path. Hippocampus, 1998, 6, 125-135.	1.9	26
81	Lesions of perirhinal cortex produce spatial memory deficits in the radial maze. Hippocampus, 1998, 8, 114-121.	1.9	56
82	Is there a direct projection from perirhinal cortex to the hippocampus?. , 1998, 8, 424-425.		9
83	Synchronous modulation of perirhinal cortex neuronal activity during cholinergically mediated (type II) hippocampal theta. , 1998, 8, 526-532.		16
84	Perirhinal cortex contributions to performance in the Morris Water Maze.. Behavioral Neuroscience, 1998, 112, 304-315.	1.2	70
85	Transfer of epileptogenesis between perirhinal cortex and amygdala induced by electrical kindling. Brain Research, 1997, 771, 71-79.	2.2	13
86	Parallel involvement of perirhinal and lateral entorhinal cortex in the polysynaptic activation of hippocampus by olfactory inputs. , 1997, 7, 296-306.		23
87	Current source density analysis of the potential evoked in hippocampus by perirhinal cortex stimulation. , 1997, 7, 389-396.		31
88	Current source density analysis of the potential evoked in hippocampus by perirhinal cortex stimulation. Hippocampus, 1997, 7, 389-396.	1.9	2
89	Long-term potentiation in the perirhinal-hippocampal pathway is NMDA dependent. NeuroReport, 1996, 7, 1241-1244.	1.2	10
90	Long-term potentiation in the in vitro perirhinal cortex displays associative properties. Brain Research, 1996, 733, 297-300.	2.2	48

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91	Characterization of epileptiform field potentials recorded in the in vitro perirhinal cortex of amygdala-kindled epileptogenesis. Brain Research, 1996, 741, 44-51.	2.2	13
92	Direct connection between perirhinal cortex and hippocampus is a major constituent of the lateral perforant path. Hippocampus, 1996, 6, 125-135.	1.9	16
93	Lesions of rat perirhinal cortex exacerbate the memory deficit observed following damage to the fimbria-fornix.. Behavioral Neuroscience, 1995, 109, 620-630.	1.2	83
94	The effects of perirhinal cortical lesions on spatial reference memory in the rat. Behavioural Brain Research, 1994, 63, 101-109.	2.2	137
95	Effects of perforant path procaine on hippocampal type 2 rhythmical slow-wave activity (theta) in the urethane-anesthetized rat. Hippocampus, 1994, 4, 683-695.	1.9	10
96	Subtotal perirhinal cortex lesions increase exploratory behavior in the rat without producing deficits in the Morris water maze. Cognitive, Affective and Behavioral Neuroscience, 1994, 22, 195-202.	1.3	23
97	Epileptogenesis in Perirhinal Cortex In Vitro. Psychiatry and Clinical Neurosciences, 1993, 47, 320-321.	1.8	1
98	The infusion of an NMDA antagonist into perirhinal cortex suppresses amygdala-kindled seizures. Brain Research, 1992, 587, 285-290.	2.2	41
99	Kindling-induced persistent alterations in the membrane and synaptic properties of CA1 pyramidal neurons. Brain Research, 1991, 561, 324-331.	2.2	37
100	Variation in electrophysiology and morphology of hippocampal CA3 pyramidal cells. Brain Research, 1990, 514, 77-83.	2.2	72
101	TheN-methyl-D-aspartate antagonists aminophosphonovalerate and carâ˜ypiperazinephosphonate retard the development and expression of kindled seizures. Brain Research, 1990, 506, 227-235.	2.2	195
102	Field potential evidence for long-term potentiation of feed-forward inhibition in the rat dentate gyrus. Brain Research, 1987, 401, 87-94.	2.2	75
103	A procedure for the computerized representation and presentation of rotated and reflected stimuli. Behavior Research Methods, 1987, 19, 419-421.	1.3	1
104	Anterior cingulate cortex and ventral tegmental area activity during cost-benefit decision-making following maternal immune activation. Schizophrenia Bulletin Open, 0, , .	1.7	0