Verner P Bingman

List of Publications by Year
in descending order

96	2,998	172457	182427
papers	citations	29 h-index	51 g-index

97	97	97	1366
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Connections of the pigeon dorsomedial forebrain studied with WGAâ€HRP and ³Hâ€proline. Journal of Comparative Neurology, 1986, 245, 454-470.	1.6	213
2	Large-scale network organization in the avian forebrain: a connectivity matrix and theoretical analysis. Frontiers in Computational Neuroscience, 2013, 7, 89.	2.1	191
3	Homing in Pigeons: The Role of the Hippocampal Formation in the Representation of Landmarks Used for Navigation. Journal of Neuroscience, 1999, 19, 311-315.	3.6	184
4	The distribution of neurotransmitters and neurotransmitterâ€related enzymes in the dorsomedial telencephalon of the pigeon (Columba livia). Journal of Comparative Neurology, 1991, 314, 467-477.	1.6	136
5	Hippocampal formation is required for geometric navigation in pigeons. European Journal of Neuroscience, 2004, 20, 1937-1944.	2.6	118
6	The importance of comparative studies and ecological validity for understanding hippocampal structure and cognitive function. Hippocampus, 1992, 2, 213-219.	1.9	103
7	Lateralization of Spatial Learning in the Avian Hippocampal Formation.. Behavioral Neuroscience, 2004, 118, 333-344.	1.2	91
8	The Homing Pigeon Hippocampus and Space: In Search of Adaptive Specialization. Brain, Behavior and Evolution, 2003, 62, 117-127.	1.7	88
9	The Avian Hippocampus, Homing in Pigeons and the Memory Representation of Large-Scale Space. Integrative and Comparative Biology, 2005, 45, 555-564.	2.0	84
10	Unimpaired acquisition of spatial reference memory, but impaired homing performance in hippocampal-ablated pigeons. Behavioural Brain Research, 1988, 27, 179-187.	2.2	82
11	The maturation of research into the avian hippocampal formation: Recent discoveries from one of the nature's foremost navigators. Hippocampus, 2015, 25, 1193-1211.	1.9	65
12	Hippocampal theta rhythm in awake, freely moving homing pigeons. Hippocampus, 2000, 10, 627-631.	1.9	64
13	Wind drift, compensation, and the use of landmarks by nocturnal bird migrants. Animal Behaviour, 1982, 30, 49-53.	1.9	60
14	Spatial response properties of homing pigeon hippocampal neurons: correlations with goal locations, movement between goals, and environmental context in a radial-arm arena. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2004, 190, 1047-1062.	1.6	57
15	Hippocampus and homing in pigeons: left and right hemispheric differences in navigational map learning. European Journal of Neuroscience, 2001, 13, 1617-1624.	2.6	56
16	Spatial-specificity of single-units in the hippocampal formation of freely moving homing pigeons. Hippocampus, 2005, 15, 26-40.	1.9	55
17	Lateralized functional components of spatial cognition in the avian hippocampal formation: Evidence from single-unit recordings in freely moving homing pigeons. Hippocampus, 2006, 16, 125-140.	1.9	53
18	Maps in birds: representational mechanisms and neural bases. Current Opinion in Neurobiology, 2002, 12, 745-750.	4.2	52

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19	Migratory navigation in birds: new opportunities in an era of fast-developing tracking technology. Journal of Experimental Biology, 2011, 214, 3705-3712.	1.7	51
20	Hippocampalâ€dependent familiar area map supports corrective reâ€orientation following navigational error during pigeon homing: a GPSâ€tracking study. European Journal of Neuroscience, 2009, 29, 2389-2400.	2.6	46
21	Neuronal Implementation of Hippocampal-Mediated Spatial Behavior: A Comparative Evolutionary Perspective. Behavioral and Cognitive Neuroscience Reviews, 2006, 5, 80-91.	3.9	45
22	Asymmetrical participation of the left and right hippocampus for representing environmental geometry in homing pigeons. Behavioural Brain Research, 2007, 178, 160-171.	2.2	45
23	Goal recognition and hippocampal formation in the homing pigeon (Columba livia).. Behavioral Neuroscience, 1997, 111, 1245-1256.	1.2	44
24	Impaired retention of preoperatively acquired spatial reference memory in homing pigeons following hippocampal ablation. Behavioural Brain Research, 1987, 24, 147-156.	2.2	43
25	Slope-based encoding of a goal location is unaffected by hippocampal lesions in homing pigeons (Columba livia). Behavioural Brain Research, 2009, 205, 322-326.	2.2	40
26	Reflections on the Structural-Functional Evolution of the Hippocampus: What Is the Big Deal about a Dentate Gyrus. Brain, Behavior and Evolution, 2017, 90, 53-61.	1.7	36
27	A lateralized avian hippocampus: preferential role of the left hippocampal formation in homing pigeon sun compass-based spatial learning. European Journal of Neuroscience, 2005, 22, 2549-2559.	2.6	35
28	Avian hippocampal role in space and content memory. European Journal of Neuroscience, 2009, 30, 1900-1908.	2.6	33
29	Spared feature-structure discrimination but diminished salience of environmental geometry in hippocampal-lesioned homing pigeons (Columba livia).. Behavioral Neuroscience, 2006, 120, 835-841.	1.2	32
30	Participation of the homing pigeon thalamofugal visual pathway in sunâ€compass associative learning. European Journal of Neuroscience, 2002, 15, 197-210.	2.6	30
31	Nocturnal homing in the tropical amblypygid Phrynus pseudoparvulus (Class Arachnida, Order) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.8	30
32	Representing the Richness of Avian Spatial Cognition: Properties of a Lateralized Homing Pigeon Hippocampus. Reviews in the Neurosciences, 2006, 17, 17-28.	2.9	29
33	Multimodal sensory reliance in the nocturnal homing of the amblypygid Phrynus pseudoparvulus (Class Arachnida, Order Amblypygi)?. Behavioural Processes, 2014, 108, 123-130.	1.1	29
34	Hippocampus Lesions Impair Landmark Array Spatial Learning in Homing Pigeons: A Laboratory Study. Neurobiology of Learning and Memory, 2002, 78, 65-78.	1.9	28
35	The effects of a changing ambient magnetic field on single-unit activity in the homing pigeon hippocampus. Brain Research Bulletin, 2006, 70, 158-164.	3.0	27
36	The relative importance of location and feature cues for homing pigeon (Columba livia) goal recognition.. Journal of Comparative Psychology (Washington, D C: 1983), 1996, 110, 77-87.	0.5	26

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37	Importance of the antenniform legs, but not vision, for homing by the neotropical whip spider, Paraphrynus laevifrons. Journal of Experimental Biology, 2016, 220, 885-890.	1.7	26
38	The avian hippocampus and the hypothetical maps used by navigating migratory birds (with some) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 465-474.	1.6	25
39	Animal Navigation. , 2011, , 51-76.		25
40	Evidence for perceptual neglect of environmental features in hippocampalâ€lesioned pigeons during homing. European Journal of Neuroscience, 2014, 40, 3102-3110.	2.6	24
41	Amblypygids: Model Organisms for the Study of Arthropod Navigation Mechanisms in Complex Environments?. Frontiers in Behavioral Neuroscience, 2016, 10, 47.	2.0	24
42	Network structure of functional hippocampal lateralization in birds. Hippocampus, 2015, 25, 1418-1428.	1.9	23
43	Data Fusion of Acoustics, Infrared, and Marine Radar for Avian Study. IEEE Sensors Journal, 2015, 15, 6625-6632.	4.7	23
44	The homing pigeon hippocampus and the development of landmark navigation. Developmental Psychobiology, 1998, 33, 305-315.	1.6	21
45	Of Birds and Men: Convergent Evolution in Hippocampal Lateralization and Spatial Cognition. Cortex, 2006, 42, 99-100.	2.4	20
46	An age-related deficit in spatialâ€“feature reference memory in homing pigeons (Columba livia). Behavioural Brain Research, 2015, 280, 1-5.	2.2	20
47	Hippocampal participation in navigational map learning in young homing pigeons is dependent on training experience. European Journal of Neuroscience, 2000, 12, 742-750.	2.6	19
48	Visual performance of pigeons following hippocampal lesions. Behavioural Brain Research, 1992, 51, 203-209.	2.2	18
49	Hippocampal lesions in homing pigeons do not impair feature-quality or feature-quantity discrimination. Behavioural Brain Research, 2014, 260, 83-91.	2.2	18
50	Evidence for muscarinic acetyicholine receptor subtypes in the pigeon telencephalon. Journal of Comparative Neurology, 1995, 362, 271-282.	1.6	17
51	Nocturnal navigation by whip spiders: antenniform legs mediate near-distance olfactory localization of a shelter. Animal Behaviour, 2019, 149, 45-54.	1.9	16
52	Olfaction and the homing ability of pigeons in the Southeastern United States. The Journal of Experimental Zoology, 1996, 276, 186-192.	1.4	14
53	Detection of Magnetic Field Intensity Gradient by Homing Pigeons (Columba livia) in a Novel â€œVirtual Magnetic Mapâ€•Conditioning Paradigm. PLoS ONE, 2013, 8, e72869.	2.5	14
54	Changes in hippocampal volume and neuron number co-occur with memory decline in old homing pigeons (Columba livia). Neurobiology of Learning and Memory, 2016, 131, 117-120.	1.9	14

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55	Further experiments on the relationship between hippocampus and orientation following phase-shift in homing pigeons. Behavioural Brain Research, 2000, 108, 157-167.	2.2	13
56	Importance of the hippocampus for the learning of route fidelity in homing pigeons. Biology Letters, 2020, 16, 20200095.	2.3	13
57	On the transfer of spatial learning between geometrically different shaped environments in the terrestrial toad, Rhinella arenarum. Animal Cognition, 2020, 23, 55-70.	1.8	11
58	Responses of pigeon (Columba livia) Wulst neurons during acquisition and reversal of a visual discrimination task.. Behavioral Neuroscience, 2008, 122, 1139-1147.	1.2	10
59	Right hemisphere advantage in the development of route fidelity in homing pigeons. Animal Behaviour, 2017, 123, 395-409.	1.9	10
60	c-Fos revealed lower hippocampal participation in older homing pigeons when challenged with a spatial memory task. Neurobiology of Aging, 2020, 87, 98-107.	3.1	10
61	Multisensory integration supports configural learning of a home refuge in the whip spiderPhrynus marginemaculatus. Journal of Experimental Biology, 2021, 224, .	1.7	10
62	Self-derived chemical cues support home refuge recognition in the whip spider Phrynus marginemaculatus (Amblypygi: Phrynidae). Journal of Arachnology, 2019, 47, 290.	0.5	10
63	Conditioned discrimination of magnetic inclination in a spatial-orientation arena task by homing pigeons (Columba livia). Journal of Experimental Biology, 2014, 217, 4123-31.	1.7	9
64	Requiem for a heavyweight â€“ can anything more be learned from homing pigeons about the sensory and spatial-representational basis of avian navigation?. Journal of Experimental Biology, 2018, 221, .	1.7	9
65	GPS-profiling of retrograde navigational impairments associated with hippocampal lesion in homing pigeons. Behavioural Brain Research, 2021, 412, 113408.	2.2	9
66	The Mating Call of the Terrestrial Toad, <i>Rhinella arenarum</i>, as a Cue for Spatial Orientation and Its Associated Brain Activity. Brain, Behavior and Evolution, 2019, 94, 7-17.	1.7	8
67	Slope-based and geometric encoding of a goal location by the terrestrial toad (Rhinella arenarum).. Journal of Comparative Psychology (Washington, D C: 1983), 2017, 131, 362-369.	0.5	8
68	Time-of-day discriminative learning in homing pigeons,Columba livia. Learning and Behavior, 1999, 27, 295-302.	3.4	7
69	Individual variation in migratory path and behavior among Eastern Lark Sparrows. Animal Migration, 2014, 2, .	1.0	7
70	Remembering spatial cognition as a hippocampal functional component. Behavioral and Brain Sciences, 1994, 17, 473-474.	0.7	6
71	Brain contrasts between migratory and nonmigratory North American lark sparrows (Chondestes) Tj ETQq1 1 0.784314 rgBT /Overlock	1.2	6
72	Development of site fidelity in the nocturnal amblypygid, Phrynus marginemaculatus. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 313-328.	1.6	6

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73	Drawing on the brain: An ALE meta-analysis of functional brain activation during drawing. Arts in Psychotherapy, 2020, 71, 101690.	1.2	6
74	Coastal and offshore counts of migratory sparrows and warblers as revealed by recordings of nocturnal flight calls along the Ohio coast of Lake Erie. Wilson Journal of Ornithology, 2016, 128, 503-509.	0.2	5
75	Detoured flight direction responses along the southwest coast of Lake Erie by night-migrating birds. Auk, 2019, 136, .	1.4	5
76	Vertical-surface navigation in the Neotropical whip spider Paraphrynus laevifrons (Arachnida:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	1.8	5
77	On a Search for a Neurogenomics of Cognitive Processes Supporting Avian Migration and Navigation. Integrative and Comparative Biology, 2020, 60, 967-975.	2.0	5
78	Visual control of refuge recognition in the whip spider Phrynus marginemaculatus. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2021, 207, 729-737.	1.6	5
79	Olfaction and the navigational performance of homing pigeons on the Atlantic coast of Morocco. Italian Journal of Zoology, 2000, 67, 359-364.	0.6	4
80	The Effects of Zinc Sulphate Anosmia on Homing Pigeons, Columba livia, in a Homing and a Nonâ€homing Experiment. Ethology, 1998, 104, 111-118.	1.1	4
81	Morning flight behavior of nocturnally migrating birds along the western basin of Lake Erie. Journal of Field Ornithology, 2018, 89, 140-148.	0.5	4
82	Distortion of the local magnetic field appears to neither disrupt nocturnal navigation nor cue shelter recognition in the amblypygidParaphrynus laevifrons. Ethology, 2020, 126, 403-412.	1.1	4
83	Avian forebrain processing of magnetic intensity and inclination: hippocampus, anterior forebrain Wulst and an unexpected double-dissociation. Ethology Ecology and Evolution, 2021, 33, 230-247.	1.4	4
84	Spatial and feature-based memory representation in free-flying homing pigeons. Animal Cognition, 2010, 13, 733-743.	1.8	3
85	Involvement of the Avian Dorsal Thalamic Nuclei in Homing Pigeon Navigation. Frontiers in Behavioral Neuroscience, 2017, 11, 213.	2.0	3
86	Aging is associated with larger brain mass and volume in homing pigeons (Columba livia). Neuroscience Letters, 2019, 698, 39-43.	2.1	3
87	Making the Case for the Intelligence of Avian Navigation. , 2011, , 39-50.		3
88	Making a stronger case for comparative research to investigate the behavioral and neurological bases of three-dimensional navigation. Behavioral and Brain Sciences, 2013, 36, 557-558.	0.7	2
89	Local geometric properties do not support reorientation in hippocampus-engaged homing pigeons.. Behavioral Neuroscience, 2019, 133, 255-264.	1.2	2
90	Exploring Higher-Order Conceptual Learning in an Arthropod with a Large Multisensory Processing Center. Insects, 2022, 13, 81.	2.2	2

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91	Space, feature, and risk sensitivity in homing pigeons (Columba livia): Broadening the conversation on the role of the avian hippocampus in memory. Learning and Behavior, 2022, 50, 99-112.	1.0	2
92	Initial orientation of homing pigeons on the Atlantic coast of Morocco is affected by a strong preferred compass direction (PCD). Italian Journal of Zoology, 2004, 71, 325-328.	0.6	1
93	Timeâ€ofâ€Day Discriminative Learning: Contrasting the Use of Spatial Compared to Feature Information in Homing Pigeons (Columba livia). Ethology, 2016, 122, 982-990.	1.1	1
94	Age-associated decline in septum neuronal activation during spatial learning in homing pigeons (Columba livia). Behavioural Brain Research, 2021, 397, 112948.	2.2	1
95	Open field, panel length discrimination by homing pigeons (Columba livia). Learning and Motivation, 2018, 63, 142-149.	1.2	0
96	Flight directions of songbirds are unaffected by the topography of Lake Erieâ€™s southern coastline during fall migration. Journal of Field Ornithology, 2021, 92, 260-272.	0.5	0