Arne D Ekstrom

List of Publications by Year
in descending order

101 papers	9,113 citations	50170 46 h-index	48187 88 g-index
107 all docs	107 docs citations	107 times ranked	8585 citing authors

#	Article	IF	Citations
1	Cellular networks underlying human spatial navigation. Nature, 2003, 425, 184-188.	13.7	1,102
2	Single-Neuron Responses in Humans during Execution and Observation of Actions. Current Biology, 2010, 20, 750-756.	1.8	1,062
3	Human hippocampal theta activity during virtual navigation. Hippocampus, 2005, 15, 881-889.	0.9	346
4	Brain Oscillations Control Timing of Single-Neuron Activity in Humans. Journal of Neuroscience, 2007, 27, 3839-3844.	1.7	316
5	Frequency-specific network connectivity increases underlie accurate spatiotemporal memory retrieval. Nature Neuroscience, 2013, 16, 349-356.	7.1	277
6	Differential Connectivity of Perirhinal and Parahippocampal Cortices within Human Hippocampal Subregions Revealed by High-Resolution Functional Imaging. Journal of Neuroscience, 2012, 32, 6550-6560.	1.7	276
7	How and when the fMRI BOLD signal relates to underlying neural activity: The danger in dissociation. Brain Research Reviews, 2010, 62, 233-244.	9.1	269
8	A contextual binding theory of episodic memory: systems consolidation reconsidered. Nature Reviews Neuroscience, 2019, 20, 364-375.	4.9	246
9	NMDA Receptor Antagonism Blocks Experience-Dependent Expansion of Hippocampal â€œPlace Fieldsâ€• Neuron, 2001, 31, 631-638.	3.8	216
10	Reduced cortical thickness in hippocampal subregions among cognitively normal apolipoprotein E e4 carriers. NeuroImage, 2008, 41, 1177-1183.	2.1	193
11	Neural Oscillations Associated with Item and Temporal Order Maintenance in Working Memory. Journal of Neuroscience, 2011, 31, 10803-10810.	1.7	187
12	A critical review of the allocentric spatial representation and its neural underpinnings: toward a network-based perspective. Frontiers in Human Neuroscience, 2014, 8, 803.	1.0	182
13	A sense of direction in human entorhinal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6487-6492.	3.3	179
14	Prestimulus theta activity predicts correct source memory retrieval. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10702-10707.	3.3	160
15	Low-frequency theta oscillations in the human hippocampus during real-world and virtual navigation. Nature Communications, 2017, 8, 14415.	5.8	157
16	A comparative study of human and rat hippocampal lowâ€frequency oscillations during spatial navigation. Hippocampus, 2013, 23, 656-661.	0.9	145
17	Space, time, and episodic memory: The hippocampus is all over the cognitive map. Hippocampus, 2018, 28, 680-687.	0.9	145
18	CA1 and CA3 differentially support spontaneous retrieval of episodic contexts within human hippocampal subfields. Nature Communications, 2018, 9, 294.	5.8	140

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19	Dissociable networks involved in spatial and temporal order source retrieval. NeuroImage, 2011, 56, 1803-1813.	2.1	125
20	Spatial and temporal episodic memory retrieval recruit dissociable functional networks in the human brain. Learning and Memory, 2007, 14, 645-654.	0.5	124
21	Behavioral correlates of human hippocampal delta and theta oscillations during navigation. Journal of Neurophysiology, 2011, 105, 1747-1755.	0.9	122
22	Interacting networks of brain regions underlie human spatial navigation: a review and novel synthesis of the literature. Journal of Neurophysiology, 2017, 118, 3328-3344.	0.9	114
23	Volume of hippocampal subfields and episodic memory in childhood and adolescence. NeuroImage, 2014, 94, 162-171.	2.1	112
24	Multiple interacting brain areas underlie successful spatiotemporal memory retrieval in humans. Scientific Reports, 2014, 4, 6431.	1.6	112
25	Advances in high-resolution imaging and computational unfolding of the human hippocampus. NeuroImage, 2009, 47, 42-49.	2.1	94
26	Medial Septal Nucleus Theta Frequency Deep Brain Stimulation Improves Spatial Working Memory after Traumatic Brain Injury. Journal of Neurotrauma, 2013, 30, 131-139.	1.7	92
27	Human Hippocampal CA1 Involvement during Allocentric Encoding of Spatial Information. Journal of Neuroscience, 2009, 29, 10512-10519.	1.7	91
28	A network approach for modulating memory processes via direct and indirect brain stimulation: Toward a causal approach for the neural basis of memory. Neurobiology of Learning and Memory, 2016, 134, 162-177.	1.0	90
29	Oscillations Go the Distance: Low-Frequency Human Hippocampal Oscillations Code Spatial Distance in the Absence of Sensory Cues during Teleportation. Neuron, 2016, 89, 1180-1186.	3.8	89
30	More than spikes: common oscillatory mechanisms for content specific neural representations during perception and memory. Current Opinion in Neurobiology, 2015, 31, 33-39.	2.0	88
31	Expected reward modulates encoding-related theta activity before an event. NeuroImage, 2013, 64, 68-74.	2.1	85
32	Complementary Roles of Human Hippocampal Subregions during Retrieval of Spatiotemporal Context. Journal of Neuroscience, 2014, 34, 6834-6842.	1.7	83
33	Why vision is important to how we navigate. Hippocampus, 2015, 25, 731-735.	0.9	82
34	Correlation Between BOLD fMRI and Theta-Band Local Field Potentials in the Human Hippocampal Area. Journal of Neurophysiology, 2009, 101, 2668-2678.	0.9	80
35	Longitudinal changes in medial temporal cortical thickness in normal subjects with the APOE-4 polymorphism. NeuroImage, 2010, 53, 37-43.	2.1	77
36	Family History of Alzheimer's Disease and Hippocampal Structure in Healthy People. American Journal of Psychiatry, 2010, 167, 1399-1406.	4.0	71

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37	Successful retrieval of competing spatial environments in humans involves hippocampal pattern separation mechanisms. ELife, 2015, 4, .	2.8	70
38	Human spatial navigation: representations across dimensions and scales. Current Opinion in Behavioral Sciences, 2017, 17, 84-89.	2.0	63
39	Impairments in precision, rather than spatial strategy, characterize performance on the virtual Morris Water Maze: A case study. Neuropsychologia, 2016, 80, 90-101.	0.7	62
40	Complementary Roles of Human Hippocampal Subfields in Differentiation and Integration of Spatial Context. Journal of Cognitive Neuroscience, 2015, 27, 546-559.	1.1	61
41	Characterizing interneuron and pyramidal cells in the human medial temporal lobe in vivo using extracellular recordings. Hippocampus, 2007, 17, 49-57.	0.9	60
42	Human neural systems underlying rigid and flexible forms of allocentric spatial representation. Human Brain Mapping, 2013, 34, 1070-1087.	1.9	60
43	Septohippocampal Neuromodulation Improves Cognition after Traumatic Brain Injury. Journal of Neurotrauma, 2015, 32, 1822-1832.	1.7	59
44	Multifaceted roles for low-frequency oscillations in bottom-up and top-down processing during navigation and memory. NeuroImage, 2014, 85, 667-677.	2.1	58
45	High-resolution 7T fMRI of Human Hippocampal Subfields during Associative Learning. Journal of Cognitive Neuroscience, 2015, 27, 1194-1206.	1.1	54
46	Right-lateralized Brain Oscillations in Human Spatial Navigation. Journal of Cognitive Neuroscience, 2010, 22, 824-836.	1.1	51
47	Different â€œroutesâ€•to a cognitive map: dissociable forms of spatial knowledge derived from route and cartographic map learning. Memory and Cognition, 2014, 42, 1106-1117.	0.9	51
48	Dissociations within human hippocampal subregions during encoding and retrieval of spatial information. Hippocampus, 2011, 21, 694-701.	0.9	49
49	The Spectro-Contextual Encoding and Retrieval Theory of Episodic Memory. Frontiers in Human Neuroscience, 2014, 8, 75.	1.0	49
50	A Modality-Independent Network Underlies the Retrieval of Large-Scale Spatial Environments in the Human Brain. Neuron, 2019, 104, 611-622.e7.	3.8	49
51	Mental simulation of routes during navigation involves adaptive temporal compression. Cognition, 2016, 157, 14-23.	1.1	46
52	Close but no cigar: Spatial precision deficits following medial temporal lobe lesions provide novel insight into theoretical models of navigation and memory. Hippocampus, 2018, 28, 31-41.	0.9	46
53	Precision, binding, and the hippocampus: Precisely what are we talking about?. Neuropsychologia, 2020, 138, 107341.	0.7	46
54	Roles of human hippocampal subfields in retrieval of spatial and temporal context. Behavioural Brain Research, 2015, 278, 549-558.	1.2	44

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55	Specific responses of human hippocampal neurons are associated with better memory. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10503-10508.	3.3	44
56	Fornix damage limits verbal memory functional compensation in multiple sclerosis. NeuroImage, 2012, 59, 2932-2940.	2.1	43
57	Differential Recruitment of Brain Networks following Route and Cartographic Map Learning of Spatial Environments. PLoS ONE, 2012, 7, e44886.	1.1	40
58	Dissociation of frontalâ€midline deltaâ€theta and posterior alpha oscillations: A mobile EEG study. Psychophysiology, 2018, 55, e13090.	1.2	38
59	Contrasting roles of neural firing rate and local field potentials in human memory. Hippocampus, 2007, 17, 606-617.	0.9	36
60	Category Selectivity for Face and Scene Recognition in Human Medial Parietal Cortex. Current Biology, 2020, 30, 2707-2715.e3.	1.8	34
61	Network-based brain stimulation selectively impairs spatial retrieval. Brain Stimulation, 2018, 11, 213-221.	0.7	32
62	Reduced hippocampal CA2, CA3, and dentate gyrus activity in asymptomatic people at genetic risk for Alzheimer's disease. NeuroImage, 2010, 53, 1077-1084.	2.1	27
63	The role of the fornix in human navigational learning. Cortex, 2020, 124, 97-110.	1.1	26
64	How Much of What We Learn in Virtual Reality Transfers to Real-World Navigation?. Multisensory Research, 2020, 33, 479-503.	0.6	26
65	Regional variation in neurovascular coupling and why we still lack a Rosetta Stone. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20190634.	1.8	26
66	Medial septal stimulation increases seizure threshold and improves cognition in epileptic rats. Brain Stimulation, 2019, 12, 735-742.	0.7	25
67	Landmarks: A solution for spatial navigation and memory experiments in virtual reality. Behavior Research Methods, 2021, 53, 1046-1059.	2.3	24
68	Path integration in large-scale space and with novel geometries: Comparing vector addition and encoding-error models. PLoS Computational Biology, 2020, 16, e1007489.	1.5	22
69	Partially overlapping spatial environments trigger reinstatement in hippocampus and schema representations in prefrontal cortex. Nature Communications, 2021, 12, 6231.	5.8	22
70	High-resolution depth electrode localization and imaging in patients with pharmacologically intractable epilepsy. Journal of Neurosurgery, 2008, 108, 812-815.	0.9	21
71	Grid coding, spatial representation, and navigation: Should we assume an isomorphism?. Hippocampus, 2020, 30, 422-432.	0.9	20
72	Learning-dependent evolution of spatial representations in large-scale virtual environments.. Journal of Experimental Psychology: Learning Memory and Cognition, 2019, 45, 497-514.	0.7	18

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73	Flexible network community organization during the encoding and retrieval of spatiotemporal episodic memories. Network Neuroscience, 2019, 3, 1070-1093.	1.4	17
74	Which way is the bookstore? A closer look at the judgments of relative directions task. Spatial Cognition and Computation, 2019, 19, 93-129.	0.6	17
75	Gray matter loss correlates with mesial temporal lobe neuronal hyperexcitability inside the human seizureâ€onset zone. Epilepsia, 2012, 53, 25-34.	2.6	16
76	Temporal encoding strategies result in boosts to final free recall performance comparable to spatial ones. Memory and Cognition, 2018, 46, 17-31.	0.9	15
77	Perspective: Assessing the Flexible Acquisition, Integration, and Deployment of Human Spatial Representations and Information. Frontiers in Human Neuroscience, 2018, 12, 281.	1.0	14
78	Combination and competition between path integration and landmark navigation in the estimation of heading direction. PLoS Computational Biology, 2022, 18, e1009222.	1.5	14
79	A Tale of Two Temporal Coding Strategies: Common and Dissociable Brain Regions Involved in Recency versus Associative Temporal Order Retrieval Strategies. Journal of Cognitive Neuroscience, 2017, 29, 739-754.	1.1	13
80	An Important Step toward Understanding the Role of Body-based Cues on Human Spatial Memory for Large-Scale Environments. Journal of Cognitive Neuroscience, 2021, 33, 167-179.	1.1	13
81	Pattern Separation in the Human Hippocampus: Response to Quiroga. Trends in Cognitive Sciences, 2021, 25, 423-424.	4.0	11
82	Hippocampal volume and navigational ability: The map(ping) is not to scale. Neuroscience and Biobehavioral Reviews, 2021, 126, 102-112.	2.9	10
83	Recovery of Theta Frequency Oscillations in Rats Following Lateral Fluid Percussion Corresponds With a Mild Cognitive Phenotype. Frontiers in Neurology, 2020, 11, 600171.	1.1	9
84	Largely intact memory for spatial locations during navigation in an individual with dense amnesia. Neuropsychologia, 2022, 170, 108225.	0.7	9
85	Time-Frequency Analysis of Scalp EEG With Hilbert-Huang Transform and Deep Learning. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1549-1559.	3.9	8
86	Deceived and distorted: Game outcome retrospectively determines the reported time of action.. Journal of Experimental Psychology: Human Perception and Performance, 2011, 37, 1458-1469.	0.7	7
87	Rightward and leftward biases in temporal reproduction of objects represented in central and peripheral spaces. Neurobiology of Learning and Memory, 2018, 153, 71-78.	1.0	7
88	Dynamic Neural Network Reconfiguration During the Generation and Reinstatement of Mnemonic Representations. Frontiers in Human Neuroscience, 2018, 12, 292.	1.0	7
89	Cognitive Neuroscience: Navigating Human Verbal Memory. Current Biology, 2014, 24, R167-R168.	1.8	6
90	Verbal cues flexibly transform spatial representations in human memory. Memory, 2019, 27, 465-479.	0.9	5

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91	Effects of youth authorship on the appraisal of paintings.. Psychology of Aesthetics, Creativity, and the Arts, 2010, 4, 235-246.	1.0	4
92	Early Intervention via Stimulation of the Medial Septal Nucleus Improves Cognition and Alters Markers of Epileptogenesis in Pilocarpine-Induced Epilepsy. Frontiers in Neurology, 2021, 12, 708957.	1.1	4
93	Reply to â€˜Active and effective replay: systems consolidation reconsidered againâ€™. Nature Reviews Neuroscience, 2019, 20, 507-508.	4.9	3
94	Assessment of a Short, Focused Training to Reduce Symptoms of Cybersickness. Presence: Teleoperators and Virtual Environments, 2018, 27, 361-377.	0.3	1
95	Cognitive Neuroscience: Why Do We Get Lost When We Are Stressed?. Current Biology, 2020, 30, R439-R441.	1.8	1
96	Title is missing!. , 2020, 16, e1007489.		0
97	Title is missing!. , 2020, 16, e1007489.		0
98	Title is missing!. , 2020, 16, e1007489.		0
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