John F Guzowski

List of Publications by Year in descending order

39 papers	7,850 citations	136885 32 h-index	330025 37 g-index
41 all docs	41 docs citations	41 times ranked	6828 citing authors

#	Article	IF	Citations
1	Environment-specific expression of the immediate-early gene Arc in hippocampal neuronal ensembles. Nature Neuroscience, 1999, 2, 1120-1124.	7.1	920
2	Inhibition of Activity-Dependent Arc Protein Expression in the Rat Hippocampus Impairs the Maintenance of Long-Term Potentiation and the Consolidation of Long-Term Memory. Journal of Neuroscience, 2000, 20, 3993-4001.	1.7	916
3	Experience-Dependent Gene Expression in the Rat Hippocampus after Spatial Learning: A Comparison of the Immediate-Early GenesArc, c-fos, andzif268. Journal of Neuroscience, 2001, 21, 5089-5098.	1.7	668
4	Neuronal Competition and Selection During Memory Formation. Science, 2007, 316, 457-460.	6.0	573
5	The Immediate Early GeneArc/Arg3.1: Regulation, Mechanisms, and Function. Journal of Neuroscience, 2008, 28, 11760-11767.	1.7	436
6	Differences in Hippocampal Neuronal Population Responses to Modifications of an Environmental Context: Evidence for Distinct, Yet Complementary, Functions of CA3 and CA1 Ensembles. Journal of Neuroscience, 2004, 24, 6489-6496.	1.7	407
7	Mapping behaviorally relevant neural circuits with immediate-early gene expression. Current Opinion in Neurobiology, 2005, 15, 599-606.	2.0	349
8	Insights into immediate-early gene function in hippocampal memory consolidation using antisense oligonucleotide and fluorescent imaging approaches. Hippocampus, 2002, 12, 86-104.	0.9	345
9	Ensemble Dynamics of Hippocampal Regions CA3 and CA1. Neuron, 2004, 44, 581-584.	3.8	302
10	A hybrid 3D watershed algorithm incorporating gradient cues and object models for automatic segmentation of nuclei in confocal image stacks. Cytometry, 2003, 56A, 23-36.	1.8	276
11	Experience-Dependent Coincident Expression of the Effector Immediate-Early GenesArcandHomer 1ain Hippocampal and Neocortical Neuronal Networks. Journal of Neuroscience, 2002, 22, 10067-10071.	1.7	272
12	Using immediate-early genes to map hippocampal subregional functions. Learning and Memory, 2007, 14, 758-770.	0.5	229
13	Memory-influencing intra-basolateral amygdala drug infusions modulate expression of Arc protein in the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10718-10723.	3.3	222
14	Spatial exploration inducesARC, a plasticity-related immediate-early gene, only in calcium/calmodulin-dependent protein kinase II-positive principal excitatory and inhibitory neurons of the rat forebrain. Journal of Comparative Neurology, 2006, 498, 317-329.	0.9	217
15	Synaptic Activity-Induced Conversion of Intronic to Exonic Sequence in Homer 1 Immediate Early Gene Expression. Journal of Neuroscience, 2002, 22, 167-175.	1.7	177
16	Recent behavioral history modifies coupling between cell activity and Arc gene transcription in hippocampal CA1 neurons. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1077-1082.	3.3	155
17	Networks of neurons, networks of genes: An integrated view of memory consolidation. Neurobiology of Learning and Memory, 2008, 89, 269-284.	1.0	139
18	Systemic lipopolysaccharide administration impairs retrieval of contextâ€“object discrimination, but not spatial, memory: Evidence for selective disruption of specific hippocampus-dependent memory functions during acute neuroinflammation. Brain, Behavior, and Immunity, 2015, 44, 159-166.	2.0	114

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19	Cisplatin-induced mitochondrial dysfunction is associated with impaired cognitive function in rats. Free Radical Biology and Medicine, 2017, 102, 274-286.	1.3	110
20	Rapid Activation of Plasticity-Associated Gene Transcription in Hippocampal Neurons Provides a Mechanism for Encoding of One-Trial Experience. Journal of Neuroscience, 2009, 29, 898-906.	1.7	101
21	Imaging neural activity with temporal and cellular resolution using FISH. Current Opinion in Neurobiology, 2001, 11, 579-584.	2.0	97
22	Expression and Function of SNAP-25 as a Universal SNARE Component in GABAergic Neurons. Journal of Neuroscience, 2006, 26, 7826-7838.	1.7	97
23	Acute Neuroinflammation Impairs Context Discrimination Memory and Disrupts Pattern Separation Processes in Hippocampus. Journal of Neuroscience, 2014, 34, 12470-12480.	1.7	94
24	A multiâ€•model approach to simultaneous segmentation and classification of heterogeneous populations of cell nuclei in 3D confocal microscope images. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2007, 71A, 724-736.	1.1	90
25	Hierarchical, model-based merging of multiple fragments for improved three-dimensional segmentation of nuclei. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2005, 63A, 20-33.	1.1	88
26	Amyloid suppresses induction of genes critical for memory consolidation in APPâ€ƒ+â€ƒPS1 transgenic mice. Journal of Neurochemistry, 2004, 88, 434-442.	2.1	80
27	Cellular Compartment Analysis of Temporal Activity by Fluorescence In Situ Hybridization (catFISH). Current Protocols in Neuroscience, 2001, 15, 1.8.1-1.8.16.	2.6	61
28	3D-catFISH: a system for automated quantitative three-dimensional compartmental analysis of temporal gene transcription activity imaged by fluorescence in situ hybridization. Journal of Neuroscience Methods, 2004, 139, 13-24.	1.3	54
29	Mapping neuronal activation and the influence of adrenergic signaling during contextual memory retrieval. Learning and Memory, 2005, 12, 239-247.	0.5	46
30	Temporal dynamics of Arc gene induction in hippocampus: Relationship to context memory formation. Neurobiology of Learning and Memory, 2012, 97, 313-320.	1.0	45
31	Selective cholinergic depletion of the hippocampus spares both behaviorally induced Arc transcription and spatial learning and memory. Hippocampus, 2007, 17, 227-234.	0.9	32
32	Advanced imaging of multiple mRNAs in brain tissue using a custom hyperspectral imager and multivariate curve resolution. Journal of Neuroscience Methods, 2007, 160, 144-148.	1.3	32
33	Loss of activity-dependent Arc gene expression in the retrosplenial cortex after hippocampal inactivation: Interaction in a higher-order memory circuit. Neurobiology of Learning and Memory, 2012, 97, 124-131.	1.0	30
34	A form of perforant path LTP can occur without ERK1/2 phosphorylation or immediate early gene induction. Learning and Memory, 2007, 14, 433-445.	0.5	24
35	Retrieval-induced NMDA receptor-dependent Arc expression in two models of cocaine-cue memory. Neurobiology of Learning and Memory, 2014, 116, 79-89.	1.0	23
36	Hypothesis. Anesthesiology, 2008, 109, 768-770.	1.3	15

#	Article	IF	Citations
37	Immediate-early gene transcriptional activation in hippocampus CA1 and CA3 does not accurately reflect rapid, pattern completion-based retrieval of context memory. Learning and Memory, 2015, 22, 1-5.	0.5	7
38	Imaging multiple endogenous and exogenous fluorescent species in cells and tissues. , 2006, , .		3
39	Immediate Early Genes and the Mapping of Environmental Representations in Hippocampal Neural Networks. , 2006, , 159-176.		2