# Brett A Johnson

List of Publications by Year
in descending order



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|---|---|---|---|
| 48 papers | 2,802 citations | 218592 26 h-index | 243529 44 g-index |
| 49 all docs | 49 docs citations | 49 times ranked | 1277 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Chemotopic odorant coding in a mammalian olfactory system. Journal of Comparative Neurology, 2007, 503, 1-34. | 0.9 | 255 |
| 2 | Modular representations of odorants in the glomerular layer of the rat olfactory bulb and the effects of stimulus concentration. Journal of Comparative Neurology, 2000, 422, 496-509. | 0.9 | 225 |
| 3 | Perceptual Correlates of Neural Representations Evoked by Odorant Enantiomers. Journal of Neuroscience, 2001, 21, 9837-9843. | 1.7 | 176 |
| 4 | Spatial coding of odorant features in the glomerular layer of the rat olfactory bulb. , 1998, 393, 457-471. | | 175 |
| 5 | Olfactory coding in the mammalian olfactory bulb. Brain Research Reviews, 2003, 42, 23-32. | 9.1 | 151 |
| 6 | Multidimensional chemotopic responses to n-aliphatic acid odorants in the rat olfactory bulb. Journal of Comparative Neurology, 1999, 409, 529-548. | 0.9 | 150 |
| 7 | Relational representation in the olfactory system. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1953-1958. | 3.3 | 139 |
| 8 | Spontaneous versus Reinforced Olfactory Discriminations. Journal of Neuroscience, 2002, 22, 6842-6845. | 1.7 | 116 |
| 9 | Functional mapping of the rat olfactory bulb using diverse odorants reveals modular responses to functional groups and hydrocarbon structural features. Journal of Comparative Neurology, 2002, 449, 180-194. | 0.9 | 101 |
| 10 | Odorant molecular length: One aspect of the olfactory code. Journal of Comparative Neurology, 2000, 426, 330-338. | 0.9 | 98 |
| 11 | A learned odor evokes an enhanced Fos-like glomerular response in the olfactory bulb of young rats. Brain Research, 1995, 699, 192-200. | 1.1 | 90 |
| 12 | The unusual substrate specificity of eukaryotic protein carboxyl methyltransferases. Trends in Biochemical Sciences, 1987, 12, 155-158. | 3.7 | 89 |
| 13 | Enzymic protein carboxyl methylation at physiological pH: cyclic imide formation explains rapid methyl turnover. Biochemistry, 1985, 24, 2581-2586. | 1.2 | 83 |
| 14 | Local and global chemotopic organization: General features of the glomerular representations of aliphatic odorants differing in carbon number. Journal of Comparative Neurology, 2004, 480, 234-249. | 0.9 | 66 |
| 15 | Optimal conditions for the use of protein l-isoaspartyl methyltransferase in assessing the isoaspartate content of peptides and proteins. Analytical Biochemistry, 1991, 192, 384-391. | 1.1 | 63 |
| 16 | Interactions between odorant functional group and hydrocarbon structure influence activity in glomerular response modules in the rat olfactory bulb. Journal of Comparative Neurology, 2005, 483, 205-216. | 0.9 | 63 |
| 17 | Deamidation of calmodulin at neutral and alkaline pH: Quantitative relationships between ammonia loss and the susceptibility of calmodulin to modification by protein carboxyl methyltransferase. Archives of Biochemistry and Biophysics, 1989, 268, 276-286. | 1.4 | 62 |
| 18 | Predicting odorant quality perceptions from multidimensional scaling of olfactory bulb glomerular activity patterns.. Behavioral Neuroscience, 2006, 120, 1337-1345. | 0.6 | 54 |

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|---|---|---|---|
| 19 | Fragmentation of isoaspartyl peptides and proteins by carboxypeptidase Y: release of isoaspartyl dipeptides as a result of internal and external cleavage. Biochemistry, 1990, 29, 4373-4380. | 1.2 | 49 |
| 20 | Spatial distribution of [14C]2-deoxyglucose uptake in the glomerular layer of the rat olfactory bulb following early odor preference learning. Journal of Comparative Neurology, 1996, 376, 557-566. | 0.9 | 48 |
| 21 | Spatial representations of odorants in olfactory bulbs of rats and mice: Similarities and differences in chemotopic organization. Journal of Comparative Neurology, 2009, 514, 658-673. | 0.9 | 46 |
| 22 | Effects of functional group position on spatial representations of aliphatic odorants in the rat olfactory bulb. Journal of Comparative Neurology, 2005, 483, 192-204. | 0.9 | 42 |
| 23 | Protein L-isoaspartyl methyltransferase in postmortem brains of aged humans. Neurobiology of Aging, 1991, 12, 19-24. | 1.5 | 38 |
| 24 | Kinetic properties of bovine brain proteinl-isoaspartyl methyltransferase determined using a synthetic isoaspartyl peptide substrate. Neurochemical Research, 1993, 18, 87-94. | 1.6 | 34 |
| 25 | Glomerular activity patterns evoked by natural odor objects in the rat olfactory bulb are related to patterns evoked by major odorant components. Journal of Comparative Neurology, 2010, 518, 1542-1555. | 0.9 | 31 |
| 26 | Purification, Biochemical Characterization, Binding Activity, and Selectivity of a Glutamate Binding Protein from Bovine Brain. Journal of Neurochemistry, 1984, 42, 397-406. | 2.1 | 30 |
| 27 | Odorants with multiple oxygen-containing functional groups and other odorants with high water solubility preferentially activate posterior olfactory bulb glomeruli. Journal of Comparative Neurology, 2007, 502, 468-482. | 0.9 | 30 |
| 28 | Imaging Cajalâ€™s neuronal avalanche: how wide-field optical imaging of the point-spread advanced the understanding of neocortical structureâ€“function relationship. Neurophotonics, 2017, 4, 031217. | 1.7 | 26 |
| 29 | Analysis of stable protein methylation in cultured cells. Archives of Biochemistry and Biophysics, 1992, 293, 85-92. | 1.4 | 23 |
| 30 | Long hydrocarbon chains serve as unique molecular features recognized by ventral glomeruli of the rat olfactory bulb. Journal of Comparative Neurology, 2006, 498, 16-30. | 0.9 | 22 |
| 31 | Broad Activation of the Glomerular Layer Enhances Subsequent Olfactory Responses. Chemical Senses, 2007, 32, 51-55. | 1.1 | 22 |
| 32 | Modification of synthetic peptides related to lactate dehydrogenase (231-242) by protein carboxyl methyltransferase and tyrosine protein kinase: effects of introducing an isopeptide bond between aspartic acid-235 and serine-236. Biochemistry, 1987, 26, 675-681. | 1.2 | 21 |
| 33 | Is there a spaceâ€“time continuum in olfaction?. Cellular and Molecular Life Sciences, 2009, 66, 2135-2150. | 2.4 | 20 |
| 34 | Synaptophysin-like immunoreactivity in the rat olfactory bulb during postnatal development and after restricted early olfactory experience. Developmental Brain Research, 1996, 92, 24-30. | 2.1 | 19 |
| 35 | Differential responses to branched and unsaturated aliphatic hydrocarbons in the rat olfactory system. Journal of Comparative Neurology, 2006, 499, 519-532. | 0.9 | 19 |
| 36 | Chemotopic representations of aromatic odorants in the rat olfactory bulb. Journal of Comparative Neurology, 2006, 497, 350-366. | 0.9 | 18 |

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|---|---|---|---|
| 37 | Identification and Topography of Substrates for Protein Carboxyl Methyltransferase in Synaptic Membrane and Myelin-Enriched Fractions of Bovine and Rat Brain. Journal of Neurochemistry, 1985, 45, 1119-1127. | 2.1 | 17 |
| 38 | Cluster Analysis of Rat Olfactory Bulb Responses to Diverse Odorants. Chemical Senses, 2012, 37, 639-653. | 1.1 | 15 |
| 39 | Photonics meets connectomics: case of diffuse, long-range horizontal projections in rat cortex. Neurophotonics, 2015, 2, 041403. | 1.7 | 13 |
| 40 | Amplification and detection of substrates for protein carboxyl methyltransferases in PC12 cells. Analytical Biochemistry, 1991, 197, 412-420. | 1.1 | 12 |
| 41 | Differential specificity in the glomerular response profiles for alicyclic, bicyclic, and heterocyclic odorants. Journal of Comparative Neurology, 2006, 499, 1-16. | 0.9 | 12 |
| 42 | Effects of double and triple bonds on the spatial representations of odorants in the rat olfactory bulb. Journal of Comparative Neurology, 2007, 500, 720-733. | 0.9 | 12 |
| 43 | Spatiotemporal distribution of the insulin-like growth factor receptor in the rat olfactory bulb. Neurochemical Research, 2003, 28, 29-43. | 1.6 | 10 |
| 44 | Modification of Isoaspartyl Peptides and Proteins by Protein Carboxyl Methyltransferase from Bovine Brain. , 1988, 231, 247-259. | | 10 |
| 45 | Long-Range, Border-Crossing, Horizontal Axon Radiations Are a Common Feature of Rat Neocortical Regions That Differ in Cytoarchitecture. Frontiers in Neuroanatomy, 2018, 12, 50. | 0.9 | 6 |
| 46 | Prolonged stimulus exposure reveals prolonged neurobehavioral response patterns. Journal of Comparative Neurology, 2010, 518, 1617-1629. | 0.9 | 1 |
| 47 | Spatial Coding in the Olfactory System. Handbook of Behavioral Neurobiology, 2001, , 53-80. | 0.3 | 0 |
| 48 | A8-A17 Cell Groups (Dopaminergic Cell Groups). , 2008, , 2-2. | | 0 |