# Jeffrey S Diamond

List of Publications by Year
in descending order



| 61 | 5,719 | 94433 37 | 133252 59 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 87 | 87 | 87 | 4863 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Dendro-somatic synaptic inputs to ganglion cells contradict receptive field and connectivity conventions in the mammalian retina. Current Biology, 2022, 32, 315-328.e4. | 3.9 | 8 |
| 2 | A High-Density Narrow-Field Inhibitory Retinal Interneuron with Direct Coupling to MÃ¼ller Glia. Journal of Neuroscience, 2021, 41, 6018-6037. | 3.6 | 11 |
| 3 | Structure, Function, and Pharmacology of Glutamate Receptor Ion Channels. Pharmacological Reviews, 2021, 73, 1469-1658. | 16.0 | 237 |
| 4 | A17 Amacrine Cells and Olfactory Granule Cells: Parallel Processors of Early Sensory Information. Frontiers in Cellular Neuroscience, 2020, 14, 600537. | 3.7 | 2 |
| 5 | Effects of fluorescent glutamate indicators on neurotransmitter diffusion and uptake. ELife, 2020, 9, . | 6.0 | 59 |
| 6 | Ganglion Cells in Primate Retina Use Fuzzy Logic to Encode Complex Visual Receptive Fields. Neuron, 2019, 103, 549-551. | 8.1 | 2 |
| 7 | Synaptic inhibition tunes contrast computation in the retina. Visual Neuroscience, 2019, 36, E006. | 1.0 | 9 |
| 8 | Functional Compartmentalization within Starburst Amacrine Cell Dendrites in the Retina. Cell Reports, 2018, 22, 2898-2908. | 6.4 | 57 |
| 9 | Synaptic Transfer between Rod and Cone Pathways Mediated by AII Amacrine Cells in the Mouse Retina. Current Biology, 2018, 28, 2739-2751.e3. | 3.9 | 41 |
| 10 | How we see the forest and the trees. ELife, 2018, 7, . | 6.0 | 3 |
| 11 | Inhibitory Interneurons in the Retina: Types, Circuitry, and Function. Annual Review of Vision Science, 2017, 3, 1-24. | 4.4 | 144 |
| 12 | Retinal Circuitry Balances Contrast Tuning of Excitation and Inhibition to Enable Reliable Computation of Direction Selectivity. Journal of Neuroscience, 2016, 36, 5861-5876. | 3.6 | 42 |
| 13 | Requirement for Microglia for the Maintenance of Synaptic Function and Integrity in the Mature Retina. Journal of Neuroscience, 2016, 36, 2827-2842. | 3.6 | 179 |
| 14 | High-Resolution Quantitative Immunogold Analysis of Membrane Receptors at Retinal Ribbon Synapses. Journal of Visualized Experiments, 2016, , 53547. | 0.3 | 7 |
| 15 | Species-specific wiring for direction selectivity in the mammalian retina. Nature, 2016, 535, 105-110. | 27.8 | 185 |
| 16 | NMDA Receptors Multiplicatively Scale Visual Signals and Enhance Directional Motion Discrimination in Retinal Ganglion Cells. Neuron, 2016, 89, 1277-1290. | 8.1 | 36 |
| 17 | Complex inhibitory microcircuitry regulates retinal signaling near visual threshold. Journal of Neurophysiology, 2015, 114, 341-353. | 1.8 | 34 |
| 18 | Differentiation of human ESCs to retinal ganglion cells using a CRISPR engineered reporter cell line. Scientific Reports, 2015, 5, 16595. | 3.3 | 142 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Specialized Postsynaptic Morphology Enhances Neurotransmitter Dilution and High-Frequency Signaling at an Auditory Synapse. Journal of Neuroscience, 2014, 34, 8358-8372. | 3.6 | 25 |
| 20 | CaMKII phosphorylation of neuroligin-1 regulates excitatory synapses. Nature Neuroscience, 2014, 17, 56-64. | 14.8 | 83 |
| 21 | Distributed Parallel Processing in Retinal Amacrine Cells. Springer Series in Computational Neuroscience, 2014, , 191-204. | 0.3 | 3 |
| 22 | Passive Diffusion as a Mechanism Underlying Ribbon Synapse Vesicle Release and Resupply. Journal of Neuroscience, 2014, 34, 8948-8962. | 3.6 | 34 |
| 23 | Deriving the Time Course of Glutamate Clearance with a Deconvolution Analysis of Astrocytic Transporter Currents. Journal of Visualized Experiments, 2013, , . | 0.3 | 9 |
| 24 | Amyloid-Î²<sub>1â€“42</sub>Slows Clearance of Synaptically Released Glutamate by Mislocalizing Astrocytic GLT-1. Journal of Neuroscience, 2013, 33, 5312-5318. | 3.6 | 143 |
| 25 | The Gospel of John, revised - The Retina: An Approachable Part of the Brain, Revised Edition. By John E. Dowling. 2012. The Belknap Press of Harvard University Press, Cambridge, MA.. Visual Neuroscience, 2012, 29, 263-264. | 1.0 | 0 |
| 26 | Amacrine cells: Seeing the forest and the trees. Visual Neuroscience, 2012, 29, 1-2. | 1.0 | 6 |
| 27 | The Number and Organization of Ca<sup>2+</sup>Channels in the Active Zone Shapes Neurotransmitter Release from Schaffer Collateral Synapses. Journal of Neuroscience, 2012, 32, 18157-18176. | 3.6 | 67 |
| 28 | Grilled RIBEYE stakes a claim for synaptic ribbons. Nature Neuroscience, 2011, 14, 1097-1098. | 14.8 | 0 |
| 29 | Calcium-Permeable AMPA Receptors in the Retina. Frontiers in Molecular Neuroscience, 2011, 4, 27. | 2.9 | 21 |
| 30 | Imperfect Space Clamp Permits Electrotonic Interactions between Inhibitory and Excitatory Synaptic Conductances, Distorting Voltage Clamp Recordings. PLoS ONE, 2011, 6, e19463. | 2.5 | 68 |
| 31 | Illuminating synapses and circuitry in the retina. Current Opinion in Neurobiology, 2011, 21, 238-244. | 4.2 | 16 |
| 32 | Genetic targeting and physiological features of VGLUT3+ amacrine cells. Visual Neuroscience, 2011, 28, 381-392. | 1.0 | 89 |
| 33 | The Relative Roles of Diffusion and Uptake in Clearing Synaptically Released Glutamate Change during Early Postnatal Development. Journal of Neuroscience, 2011, 31, 4743-4754. | 3.6 | 63 |
| 34 | Ribbon synapses compute temporal contrast and encode luminance in retinal rod bipolar cells. Nature Neuroscience, 2011, 14, 1555-1561. | 14.8 | 97 |
| 35 | Probing potassium channel function in vivo by intracellular delivery of antibodies in a rat model of retinal neurodegeneration. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12710-12715. | 7.1 | 28 |
| 36 | Mechanisms Underlying Lateral GABAergic Feedback onto Rod Bipolar Cells in Rat Retina. Journal of Neuroscience, 2010, 30, 2330-2339. | 3.6 | 82 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Retinal Parallel Processors: More than 100 Independent Microcircuits Operate within a Single Interneuron. Neuron, 2010, 65, 873-885. | 8.1 | 148 |
| 38 | Neuronal Transporters Regulate Glutamate Clearance, NMDA Receptor Activation, and Synaptic Plasticity in the Hippocampus. Journal of Neuroscience, 2009, 29, 14581-14595. | 3.6 | 154 |
| 39 | Coagonist Release Modulates NMDA Receptor Subtype Contributions at Synaptic Inputs to Retinal Ganglion Cells. Journal of Neuroscience, 2009, 29, 1469-1479. | 3.6 | 67 |
| 40 | Subunit- and Pathway-Specific Localization of NMDA Receptors and Scaffolding Proteins at Ganglion Cell Synapses in Rat Retina. Journal of Neuroscience, 2009, 29, 4274-4286. | 3.6 | 86 |
| 41 | BK channels modulate pre- and postsynaptic signaling at reciprocal synapses in retina. Nature Neuroscience, 2009, 12, 585-592. | 14.8 | 79 |
| 42 | Diverse Mechanisms Underlie Glycinergic Feedback Transmission onto Rod Bipolar Cells in Rat Retina. Journal of Neuroscience, 2008, 28, 7919-7928. | 3.6 | 33 |
| 43 | A light switch controlling Ca2+-permeable AMPA receptors in the retina. Journal of Physiology, 2007, 582, 3-3. | 2.9 | 3 |
| 44 | Astrocytes Put down the Broom and Pick up the Baton. Cell, 2006, 125, 639-641. | 28.9 | 9 |
| 45 | Vesicle Depletion and Synaptic Depression at a Mammalian Ribbon Synapse. Journal of Neurophysiology, 2006, 95, 3191-3198. | 1.8 | 141 |
| 46 | Fast neurotransmitter release triggered by Ca influx through AMPA-type glutamate receptors. Nature, 2006, 443, 705-708. | 27.8 | 153 |
| 47 | Distinct perisynaptic and synaptic localization of NMDA and AMPA receptors on ganglion cells in rat retina. Journal of Comparative Neurology, 2006, 498, 810-820. | 1.6 | 74 |
| 48 | Deriving the Glutamate Clearance Time Course from Transporter Currents in CA1 Hippocampal Astrocytes: Transmitter Uptake Gets Faster during Development. Journal of Neuroscience, 2005, 25, 2906-2916. | 3.6 | 149 |
| 49 | Coordinated multivesicular release at a mammalian ribbon synapse. Nature Neuroscience, 2004, 7, 826-833. | 14.8 | 199 |
| 50 | Invulnerability of retinal ganglion cells to NMDA excitotoxicity. Molecular and Cellular Neurosciences, 2004, 26, 544-557. | 2.2 | 129 |
| 51 | Sustained Ca<sup>2+</sup>Entry Elicits Transient Postsynaptic Currents at a Retinal Ribbon Synapse. Journal of Neuroscience, 2003, 23, 10923-10933. | 3.6 | 194 |
| 52 | Neuronal Glutamate Uptake Contributes to GABA Synthesis and Inhibitory Synaptic Strength. Journal of Neuroscience, 2003, 23, 2040-2048. | 3.6 | 184 |
| 53 | A broad view of glutamate spillover. Nature Neuroscience, 2002, 5, 291-292. | 14.8 | 63 |
| 54 | Synaptically Released Glutamate Activates Extrasynaptic NMDA Receptors on Cells in the Ganglion Cell Layer of Rat Retina. Journal of Neuroscience, 2002, 22, 2165-2173. | 3.6 | 163 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Neuronal Glutamate Transporters Limit Activation of NMDA Receptors by Neurotransmitter Spillover on CA1 Pyramidal Cells. Journal of Neuroscience, 2001, 21, 8328-8338. | 3.6 | 231 |
| 56 | Synaptically Released Glutamate Does Not Overwhelm Transporters on Hippocampal Astrocytes During High-Frequency Stimulation. Journal of Neurophysiology, 2000, 83, 2835-2843. | 1.8 | 141 |
| 57 | Clearance of glutamate inside the synapse and beyond. Current Opinion in Neurobiology, 1999, 9, 293-298. | 4.2 | 317 |
| 58 | Glutamate Release Monitored with Astrocyte Transporter Currents during LTP. Neuron, 1998, 21, 425-433. | 8.1 | 141 |
| 59 | Transporters Buffer Synaptically Released Glutamate on a Submillisecond Time Scale. Journal of Neuroscience, 1997, 17, 4672-4687. | 3.6 | 438 |
| 60 | Asynchronous release of synaptic vesicles determines the time course of the AMPA receptor-mediated EPSC. Neuron, 1995, 15, 1097-1107. | 8.1 | 284 |
| 61 | The contribution of NMDA and Non-NMDA receptors to the light-evoked input-output characteristics of retinal ganglion cells. Neuron, 1993, 11, 725-738. | 8.1 | 102 |