# Kazuo Kitamura

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 52 papers | 4,628 citations | 147801 31 h-index | 182427 51 g-index |
| 58 all docs | 58 docs citations | 58 times ranked | 5093 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A single myosin head moves along an actin filament with regular steps of 5.3 nanometres. Nature, 1999, 397, 129-134. | 27.8 | 543 |
| 2 | Targeted patch-clamp recordings and single-cell electroporation of unlabeled neurons in vivo. Nature Methods, 2008, 5, 61-67. | 19.0 | 332 |
| 3 | Single Molecule Imaging of Fluorophores and Enzymatic Reactions Achieved by Objective-Type Total Internal Reflection Fluorescence Microscopy. Biochemical and Biophysical Research Communications, 1997, 235, 47-53. | 2.1 | 309 |
| 4 | Bistability of cerebellar Purkinje cells modulated by sensory stimulation. Nature Neuroscience, 2005, 8, 202-211. | 14.8 | 292 |
| 5 | Locally Synchronized Synaptic Inputs. Science, 2012, 335, 353-356. | 12.6 | 280 |
| 6 | Rational design of a high-affinity, fast, red calcium indicator R-CaMP2. Nature Methods, 2015, 12, 64-70. | 19.0 | 234 |
| 7 | Rational Engineering of XCaMPs, a Multicolor GECI Suite for InÂVivo Imaging of Complex Brain Circuit Dynamics. Cell, 2019, 177, 1346-1360.e24. | 28.9 | 199 |
| 8 | Functional labeling of neurons and their projections using the synthetic activityâ€"dependent promoter E-SARE. Nature Methods, 2013, 10, 889-895. | 19.0 | 166 |
| 9 | Translocation of a â€œWinnerâ€•Climbing Fiber to the Purkinje Cell Dendrite and Subsequent Elimination of â€œLosersâ€•from the Soma in Developing Cerebellum. Neuron, 2009, 63, 106-118. | 8.1 | 161 |
| 10 | <i>In vivo</i> twoâ€photon uncaging of glutamate revealing the structureâ€"function relationships of dendritic spines in the neocortex of adult mice. Journal of Physiology, 2011, 589, 2447-2457. | 2.9 | 157 |
| 11 | Two distinct layer-specific dynamics of cortical ensembles during learning of a motor task. Nature Neuroscience, 2014, 17, 987-994. | 14.8 | 139 |
| 12 | Targeted single-cell electroporation of mammalian neurons in vivo. Nature Protocols, 2009, 4, 862-869. | 12.0 | 131 |
| 13 | Spatial Pattern Coding of Sensory Information by Climbing Fiber-Evoked Calcium Signals in Networks of Neighboring Cerebellar Purkinje Cells. Journal of Neuroscience, 2009, 29, 8005-8015. | 3.6 | 125 |
| 14 | A highly sensitive fluorescent indicator dye for calcium imaging of neural activity <i>in vitro</i> and <i>in vivo</i>. European Journal of Neuroscience, 2014, 39, 1720-1728. | 2.6 | 120 |
| 15 | Postsynaptic P/Q-type Ca <sup>2+</sup> channel in Purkinje cell mediates synaptic competition and elimination in developing cerebellum. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9987-9992. | 7.1 | 103 |
| 16 | Dendritic Calcium Signaling Triggered by Spontaneous and Sensory-Evoked Climbing Fiber Input to Cerebellar Purkinje Cells In Vivo. Journal of Neuroscience, 2011, 31, 10847-10858. | 3.6 | 99 |
| 17 | GABAergic Inhibition Regulates Developmental Synapse Elimination in the Cerebellum. Neuron, 2012, 74, 384-396. | 8.1 | 90 |
| 18 | Spatiotemporal Dynamics of Functional Clusters of Neurons in the Mouse Motor Cortex during a Voluntary Movement. Journal of Neuroscience, 2013, 33, 1377-1390. | 3.6 | 86 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Nonlinear Decoding and Asymmetric Representation of Neuronal Input Information by CaMKIIÎ± and Calcineurin. Cell Reports, 2013, 3, 978-987. | 6.4 | 85 |
| 20 | Patchwork-Type Spontaneous Activity in Neonatal Barrel Cortex Layer 4 Transmitted via Thalamocortical Projections. Cell Reports, 2018, 22, 123-135. | 6.4 | 74 |
| 21 | Single molecule analysis of the actomyosin motor. Current Opinion in Cell Biology, 2000, 12, 20-25. | 5.4 | 69 |
| 22 | Structureâ€"Function Relationships between Aldolase C/Zebrin II Expression and Complex Spike Synchrony in the Cerebellum. Journal of Neuroscience, 2015, 35, 843-852. | 3.6 | 66 |
| 23 | Serotonin rebalances cortical tuning and behavior linked to autism symptoms in 15q11-13 CNV mice. Science Advances, 2017, 3, e1603001. | 10.3 | 64 |
| 24 | A database and deep learning toolbox for noise-optimized, generalized spike inference from calcium imaging. Nature Neuroscience, 2021, 24, 1324-1337. | 14.8 | 57 |
| 25 | Mechanism of muscle contraction based on stochastic properties of single actomyosin motors observed in vitro. Biophysics (Nagoya-shi, Japan), 2005, 1, 1-19. | 0.4 | 49 |
| 26 | Reinforcing operandum: rapid and reliable learning of skilled forelimb movements by head-fixed rodents. Journal of Neurophysiology, 2012, 108, 1781-1792. | 1.8 | 48 |
| 27 | Myosin Subfragment-1 Is Fully Equipped with Factors Essential for Motor Function. Biochemical and Biophysical Research Communications, 1997, 230, 76-80. | 2.1 | 47 |
| 28 | Subpiconewton Intermolecular Force Microscopy. Biochemical and Biophysical Research Communications, 1997, 231, 566-569. | 2.1 | 45 |
| 29 | Singleâ€"motor mechanics and models of the myosin motor. Philosophical Transactions of the Royal Society B: Biological Sciences, 2000, 355, 441-447. | 4.0 | 45 |
| 30 | Role of Multiple Bonds Between the Single Cell Adhesion Molecules, Nectin and Cadherin, Revealed by High Sensitive Force Measurements. Journal of Molecular Biology, 2007, 367, 996-1006. | 4.2 | 44 |
| 31 | Modular organization of cerebellar climbing fiber inputs during goal-directed behavior. ELife, 2019, 8, . | 6.0 | 40 |
| 32 | Dendritic calcium signaling in cerebellar Purkinje cell. Neural Networks, 2013, 47, 11-17. | 5.9 | 35 |
| 33 | Spike timing-dependent selective strengthening of single climbing fibre inputs to Purkinje cells during cerebellar development. Nature Communications, 2013, 4, 2732. | 12.8 | 35 |
| 34 | Non-contact scanning probe microscopy with sub-piconewton force sensitivity. Ultramicroscopy, 1997, 70, 45-55. | 1.9 | 32 |
| 35 | The diffusive search mechanism of processive myosin class-V motor involves directional steps along actin subunits. Biochemical and Biophysical Research Communications, 2007, 354, 379-384. | 2.1 | 31 |
| 36 | Relationship between the Local Structure of Orientation Map and the Strength of Orientation Tuning of Neurons in Monkey V1: A 2-Photon Calcium Imaging Study. Journal of Neuroscience, 2013, 33, 16818-16827. | 3.6 | 26 |

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|---|---|---|---|
| 37 | Stochastic properties of actomyosin motor. BioSystems, 2003, 71, 101-110. | 2.0 | 22 |
| 38 | Dendritic Spikes in Sensory Perception. Frontiers in Cellular Neuroscience, 2017, 11, 29. | 3.7 | 21 |
| 39 | Disruption of cerebellar microzonal organization in GluD2 (GluRÎ´2) knockout mouse. Frontiers in Neural Circuits, 2013, 7, 130. | 2.8 | 20 |
| 40 | Maturation of Cerebellar Purkinje Cell Population Activity during Postnatal Refinement of Climbing Fiber Network. Cell Reports, 2017, 21, 2066-2073. | 6.4 | 19 |
| 41 | Calciumâ€dependent regulation of climbing fibre synapse elimination during postnatal cerebellar development. Journal of Physiology, 2013, 591, 3151-3158. | 2.9 | 16 |
| 42 | Improved hyperacuity estimation of spike timing from calcium imaging. Scientific Reports, 2020, 10, 17844. | 3.3 | 15 |
| 43 | mGluR1 in cerebellar Purkinje cells is essential for the formation but not expression of associative eyeblink memory. Scientific Reports, 2019, 9, 7353. | 3.3 | 10 |
| 44 | A Flp-dependent G-CaMP9a transgenic mouse for neuronal imaging inÂvivo. Cell Reports Methods, 2022, 2, 100168. | 2.9 | 9 |
| 45 | Purkinje cells in awake behaving animals operate in stable upstate membrane potential. Nature Neuroscience, 2006, 9, 461-461. | 14.8 | 8 |
| 46 | [12] Molecular motors and single-molecule enzymology. Methods in Enzymology, 2003, 361, 228-245. | 1.0 | 6 |
| 47 | Imaging And Nano-Manipulation Of Single Actomyosin Motors At Work. Clinical and Experimental Pharmacology and Physiology, 2000, 27, 229-237. | 1.9 | 3 |
| 48 | Activation of the reward system ameliorates passive cutaneous anaphylactic reaction in mice. Allergy: European Journal of Allergy and Clinical Immunology, 2020, 75, 3275-3279. | 5.7 | 2 |
| 49 | A Single Myosin Head Moves along an Actin Filament with Regular Steps during One Biochemical Cycle of ATP Hydrolysis. Seibutsu Butsuri, 2000, 40, 89-93. | 0.1 | 1 |
| 50 | 2SH-05 Two-photon imaging of the mouse motor cortex during voluntary skilled movement(2SH Star) Tj ETQq0 0 0 rgBT /Overlock 10 T | 0.1 | 0 |
| 51 | ã,¢ã,¯ãƒˆãƒŸã,ªã,·ãƒ³å^†åãƒ¢ãƒ¼ã,¿ãƒ¼ã®1å^†åé‹å‹•è§£æž. Journal of the Society of Biomechanisms, 2003, 27, 60-66. | 0.0 | 0 |
| 52 | Two-Photon Targeted Patch-Clamp Recordings In Vivo. Springer Protocols, 2012, , 183-193. | 0.3 | 0 |