

# Pavel Belan

## List of Publications by Year in descending order

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54  
papers

1,034  
citations

430442

18  
h-index

433756

31  
g-index

54  
all docs

54  
docs citations

54  
times ranked

921  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Segmental and descending control of primary afferent input to the spinal lamina X. <i>Pain</i> , 2022, 163, 2014-2020.  | 2.0 | 4         |
| 2  | Precision spinal gene delivery-induced functional switch in nociceptive neurons reverses neuropathic pain. <i>Molecular Therapy</i> , 2022, 30, 2722-2745.  | 3.7 | 5         |
| 3  | Peripheral Inflammation Results in Increased Excitability of Capsaicin-Insensitive Nociceptive DRG Neurons Mediated by Upregulation of ASICs and Voltage-Gated Ion Channels. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 723295.    | 1.8 | 7         |
| 4  | Hippocalcin Distribution between the Cytosol and Plasma Membrane of Living Cells. <i>Neurophysiology</i> , 2020, 52, 2-13.  | 0.2 | 1         |
| 5  | Perturbed Ca <sup>2+</sup> -dependent signaling of DYT2 hippocalin mutant as mechanism of autosomal recessive dystonia. <i>Neurobiology of Disease</i> , 2019, 132, 104529.   | 2.1 | 5         |
| 6  | Role of T-Type Ca <sup>2+</sup> Channels in Painful Diabetic Neuropathy. <i>Neurophysiology</i> , 2019, 51, 455-461.  | 0.2 | 1         |
| 7  | High-threshold primary afferent supply of spinal lamina X neurons. <i>Pain</i> , 2019, 160, 1982-1988.  | 2.0 | 10        |
| 8  | Distinct mechanisms of signal processing by lamina I spino-parabrachial neurons. <i>Scientific Reports</i> , 2019, 9, 19231.  | 1.6 | 10        |
| 9  | Measurement of intracellular concentration of fluorescently-labeled targets in living cells. <i>PLoS ONE</i> , 2018, 13, e0194031.  | 1.1 | 13        |
| 10 | Functional Characterization of Lamina X Neurons in ex-Vivo Spinal Cord Preparation. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 342.  | 1.8 | 13        |
| 11 | HIF-1 $\alpha$ -mediated upregulation of SERCA2b: The endogenous mechanism for alleviating the ischemia-induced intracellular Ca <sup>2+</sup> store dysfunction in CA1 and CA3 hippocampal neurons. <i>Cell Calcium</i> , 2016, 59, 251-261. | 1.1 | 14        |
| 12 | Upregulation of T-Type Ca <sup>2+</sup> Channels in Long-Term Diabetes Determines Increased Excitability of a Specific Type of Capsaicin-Insensitive DRG Neurons. <i>Molecular Pain</i> , 2015, 11, s12990-015-0028.                          | 1.0 | 31        |
| 13 | Inflammatory-induced changes in synaptic drive and postsynaptic AMPARs in lamina II dorsal horn neurons are cell-type specific. <i>Pain</i> , 2015, 156, 428-438.   | 2.0 | 30        |
| 14 | Maximum likelihood estimation of biophysical parameters of synaptic receptors from macroscopic currents. <i>Frontiers in Cellular Neuroscience</i> , 2014, 8, 303.  | 1.8 | 6         |
| 15 | Nociceptive Neurons Differentially Express Fast and Slow T-Type Ca <sup>2+</sup> Currents in Different Types of Diabetic Neuropathy. <i>Neural Plasticity</i> , 2014, 2014, 1-12.   | 1.0 | 7         |
| 16 | Different pools of postsynaptic GABA <sub>A</sub> receptors mediate inhibition evoked by low- and high-frequency presynaptic stimulation at hippocampal synapses. <i>Synapse</i> , 2014, 68, 344-354.   | 0.6 | 1         |
| 17 | Activity-Dependent Potentiation of an Asynchronous Component of GABA-ergic Synaptic Currents in Cultured Hippocampal Neurons. <i>Neurophysiology</i> , 2014, 46, 10-15.   | 0.2 | 0         |
| 18 | A Model for the Fast Synchronous Oscillations of Firing Rate in Rat Suprachiasmatic Nucleus Neurons Cultured in a Multielectrode Array Dish. <i>PLoS ONE</i> , 2014, 9, e106152.  | 1.1 | 3         |

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|----|--|-----|-----------|
| 19 | Local Signalization in Dendrites and Mechanisms of Short-Term Memory. <i>Neurophysiology</i> , 2013, 45, 359-367.  | 0.2 | 2         |
| 20 | PKC $\zeta$ Is Required for Inflammation-Induced Trafficking of Extrasynaptic AMPA Receptors in Tonicly Firing Lamina II Dorsal Horn Neurons During the Maintenance of Persistent Inflammatory Pain. <i>Journal of Pain</i> , 2013, 14, 182-192. | 0.7 | 28        |
| 21 | Specific functioning of Cav3.2 T-type calcium and TRPV1 channels under different types of STZ-diabetic neuropathy. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2013, 1832, 636-649.                                      | 1.8 | 56        |
| 22 | Development of inflammation-induced hyperalgesia and allodynia is associated with the upregulation of extrasynaptic AMPA receptors in tonically firing lamina II dorsal horn neurons. <i>Frontiers in Physiology</i> , 2012, 3, 391.             | 1.3 | 24        |
| 23 | Endocytic adaptor protein intersectin 1 forms a complex with microtubule stabilizer STOP in neurons. <i>Gene</i> , 2012, 505, 360-364.   | 1.0 | 18        |
| 24 | Inflammation alters trafficking of extrasynaptic AMPA receptors in tonically firing lamina II neurons of the rat spinal dorsal horn. <i>Pain</i> , 2011, 152, 912-923.   | 2.0 | 59        |
| 25 | Efficient Maximum Likelihood Estimation of Kinetic Rate Constants from Macroscopic Currents. <i>PLoS ONE</i> , 2011, 6, e29731.  | 1.1 | 7         |
| 26 | Decoding glutamate receptor activation by the Ca <sup>2+</sup> sensor protein hippocalcin in rat hippocampal neurons. <i>European Journal of Neuroscience</i> , 2010, 32, 347-358.   | 1.2 | 17        |
| 27 | Hippocalcin signaling via site-specific translocation in hippocampal neurons. <i>Neuroscience Letters</i> , 2008, 442, 152-157.  | 1.0 | 23        |
| 28 | The Effect of Nimodipine on Calcium Homeostasis and Pain Sensitivity in Diabetic Rats. <i>Cellular and Molecular Neurobiology</i> , 2006, 26, 1539-1555.   | 1.7 | 20        |
| 29 | Applicability of Peak-Scaled Nonstationary Fluctuation Analysis to the Study of Inhibitory Synaptic Transmission in Hippocampal Cultures. <i>Neurophysiology</i> , 2005, 37, 333-343.  | 0.2 | 2         |
| 30 | Differential properties of GABAergic synaptic connections in rat hippocampal cell cultures. <i>Synapse</i> , 2004, 53, 122-130.  | 0.6 | 10        |
| 31 | Post-tetanic depression of GABAergic synaptic transmission in rat hippocampal cell cultures. <i>Neuroscience Letters</i> , 2002, 323, 5-8.   | 1.0 | 18        |
| 32 | Glutamate-receptor-induced modulation of GABAergic synaptic transmission in the hippocampus. <i>Pflugers Archiv European Journal of Physiology</i> , 2002, 444, 26-37.   | 1.3 | 24        |
| 33 | Title is missing!. <i>Neurophysiology</i> , 2002, 34, 239-242.   | 0.2 | 1         |
| 34 | Postsynaptic mechanism may contribute to inhibitory acetylcholine effect on GABAergic synaptic transmission in hippocampal cell cultures. <i>Synapse</i> , 2001, 41, 65-70.  | 0.6 | 7         |
| 35 | Measuring Ca <sup>2+</sup> Extrusion from Single Cells. , 2001, , 251-266.   |     | 0         |
| 36 | Distributions of interevent intervals for miniature inhibitory and excitatory postsynaptic currents in cultured hippocampal neurons. <i>Neurophysiology</i> , 2000, 32, 158-160.   | 0.2 | 0         |

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|----|--|------|-----------|
| 37 | Rat hippocampal neurons maintain their own GABAergic synaptic transmission in culture. <i>Neuroscience Letters</i> , 1999, 262, 151-154.   | 1.0  | 15        |
| 38 | Glutamate-induced suppression of inhibitory synaptic transmission in cultivated hippocampal neurons. <i>Neurophysiology</i> , 1998, 30, 279-284.   | 0.2  | 1         |
| 39 | Isoproterenol Evokes Extracellular Ca <sup>2+</sup> Spikes Due to Secretory Events in Salivary Gland Cells. <i>Journal of Biological Chemistry</i> , 1998, 273, 4106.  | 1.6  | 29        |
| 40 | Isoproterenol evokes extracellular Ca <sup>2+</sup> spikes due to secretory events in salivary gland cells. <i>Journal of Biological Chemistry</i> , 1998, 273, 4106-11.   | 1.6  | 7         |
| 41 | Distribution of Ca <sup>2+</sup> extrusion sites on the mouse pancreatic acinar cell surface. <i>Cell Calcium</i> , 1997, 22, 5-10.  | 1.1  | 32        |
| 42 | Nonuniformity of calcium efflux from pancreatic acinar cells and its analysis by mathematical model of calcium diffusion and buffering in extracellular solution. <i>Neurophysiology</i> , 1997, 29, 40-44.  | 0.2  | 1         |
| 43 | Inositol Trisphosphate and Cyclic ADP-Ribose Mediated Release of Ca <sup>2+</sup> from Single Isolated Pancreatic Zymogen Granules. <i>Cell</i> , 1996, 84, 473-480.   | 13.5 | 233       |
| 44 | Mathematical model of Ca <sup>2+</sup> diffusion and buffering in extracellular solution after Ca <sup>2+</sup> extrusion from a spherical cell. <i>Neurophysiology</i> , 1996, 28, 187-192.   | 0.2  | 0         |
| 45 | A new technique for assessing the microscopic distribution of cellular calcium exit sites. <i>Pflugers Archiv European Journal of Physiology</i> , 1996, 433, 200-208.   | 1.3  | 18        |
| 46 | Localization of Ca <sup>2+</sup> Extrusion Sites in Pancreatic Acinar Cells. <i>Journal of Biological Chemistry</i> , 1996, 271, 7615-7619.  | 1.6  | 78        |
| 47 | The effect of acetylcholine and serotonin on calcium transient and calcium currents in identified <i>Helix pomatia</i> L. neurons. <i>Cellular Signalling</i> , 1994, 6, 551-559.  | 1.7  | 1         |
| 48 | Calcium clamp in single nerve cells. <i>Cell Calcium</i> , 1993, 14, 419-425.  | 1.1  | 9         |
| 49 | Calcium clamp in isolated neurones of the snail <i>Helix pomatia</i> .. <i>Journal of Physiology</i> , 1993, 462, 47-58.   | 1.3  | 25        |
| 50 | Blocking effect of La <sup>3+</sup> ions on transmembrane ionic current evoked by intracellular cyclic AMP injection in identified <i>Helix pomatia</i> neurons. <i>Neuroscience Letters</i> , 1991, 124, 137-139.                                       | 1.0  | 6         |
| 51 | Extrusion of calcium from a single isolated neuron of the snail <i>Helix pomatia</i> . <i>Journal of Membrane Biology</i> , 1991, 123, 43-47.  | 1.0  | 22        |
| 52 | Free calcium transients and oscillations in nerve cells. <i>Experimental Brain Research</i> , 1991, 83, 459-64.  | 0.7  | 25        |
| 53 | Inositol-1,4,5-trisphosphate and non-hydrolysable GTP analogue induced calcium release from intracellular stores of the <i>Helix pomatia</i> neurons. <i>Comparative Biochemistry and Physiology Part C: Comparative Pharmacology</i> , 1990, 96, 45-47. | 0.2  | 4         |
| 54 | Cytoplasmic free Ca in isolated snail neurons as revealed by fluorescent probe fura-2: Mechanisms of Ca recovery after Ca load and Ca release from intracellular stores. <i>Journal of Membrane Biology</i> , 1989, 110, 11-18.                          | 1.0  | 51        |