# Hongzhen Hu

List of Publications by Year
in descending order



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|---|---|---|---|
| 84 papers | 4,009 citations | 172457 29 h-index | 128289 60 g-index |
| 92 all docs | 92 docs citations | 92 times ranked | 5169 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Sensory Neurons Co-opt Classical Immune Signaling Pathways to Mediate Chronic Itch. Cell, 2017, 171, 217-228.e13. | 28.9 | 692 |
| 2 | Enteric nervous system: sensory transduction, neural circuits and gastrointestinal motility. Nature Reviews Gastroenterology and Hepatology, 2020, 17, 338-351. | 17.8 | 292 |
| 3 | Membrane potential modulates plasma membrane phospholipid dynamics and K-Ras signaling. Science, 2015, 349, 873-876. | 12.6 | 243 |
| 4 | Zinc activates damage-sensing TRPA1 ion channels. Nature Chemical Biology, 2009, 5, 183-190. | 8.0 | 204 |
| 5 | Caenorhabditis elegans TRPA-1 functions in mechanosensation. Nature Neuroscience, 2007, 10, 568-577. | 14.8 | 202 |
| 6 | Pore region of TRPV3 ion channel is specifically required for heat activation. Nature Neuroscience, 2008, 11, 1007-1013. | 14.8 | 161 |
| 7 | Piezo2 channelâ€"Merkel cell signaling modulates the conversion of touch to itch. Science, 2018, 360, 530-533. | 12.6 | 144 |
| 8 | A basophil-neuronal axis promotes itch. Cell, 2021, 184, 422-440.e17. | 28.9 | 130 |
| 9 | Zika Virus Targets Glioblastoma Stem Cells through a SOX2-Integrin Î±vÎ²5 Axis. Cell Stem Cell, 2020, 26, 187-204.e10. | 11.1 | 126 |
| 10 | Activation of TRPA1 channels by fenamate nonsteroidal anti-inflammatory drugs. Pflugers Archiv European Journal of Physiology, 2010, 459, 579-592. | 2.8 | 110 |
| 11 | Sensory TRP channels contribute differentially to skin inflammation and persistent itch. Nature Communications, 2017, 8, 980. | 12.8 | 106 |
| 12 | Two amino acid residues determine 2-APB sensitivity of the ion channels TRPV3 and TRPV4. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1626-1631. | 7.1 | 103 |
| 13 | Transient receptor potential vanilloid 4â€"expressing macrophages and keratinocytes contribute differentially to allergic and nonallergic chronic itch. Journal of Allergy and Clinical Immunology, 2018, 141, 608-619.e7. | 2.9 | 85 |
| 14 | Resident cardiac macrophages mediate adaptive myocardial remodeling. Immunity, 2021, 54, 2072-2088.e7. | 14.3 | 76 |
| 15 | Molecular and cellular mechanisms that initiate pain and itch. Cellular and Molecular Life Sciences, 2015, 72, 3201-3223. | 5.4 | 74 |
| 16 | Identification of a Rhythmic Firing Pattern in the Enteric Nervous System That Generates Rhythmic Electrical Activity in Smooth Muscle. Journal of Neuroscience, 2018, 38, 5507-5522. | 3.6 | 68 |
| 17 | TRPV1 activity and substance P release are required for corneal cold nociception. Nature Communications, 2019, 10, 5678. | 12.8 | 64 |
| 18 | TRPV4 Channel Signaling in Macrophages Promotes Gastrointestinal Motility via Direct Effects on Smooth Muscle Cells. Immunity, 2018, 49, 107-119.e4. | 14.3 | 63 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | TRP Channels as Drug Targets to Relieve Itch. Pharmaceuticals, 2018, 11, 100. | 3.8 | 62 |
| 20 | Optogenetic Induction of Colonic Motility in Mice. Gastroenterology, 2018, 155, 514-528.e6. | 1.3 | 62 |
| 21 | Sustained Elevated Adenosine via ADORA2B Promotes Chronic Pain through Neuro-immune Interaction. Cell Reports, 2016, 16, 106-119. | 6.4 | 61 |
| 22 | Retinoids activate the irritant receptor TRPV1 and produce sensory hypersensitivity. Journal of Clinical Investigation, 2013, 123, 3941-3951. | 8.2 | 57 |
| 23 | Zinc Inhibits TRPV1 to Alleviate Chemotherapy-Induced Neuropathic Pain. Journal of Neuroscience, 2018, 38, 474-483. | 3.6 | 51 |
| 24 | Gating of human TRPV3 in a lipid bilayer. Nature Structural and Molecular Biology, 2020, 27, 635-644. | 8.2 | 46 |
| 25 | Thermally Activated TRPV3 Channels. Current Topics in Membranes, 2014, 74, 325-364. | 0.9 | 45 |
| 26 | IL-33 signaling in sensory neurons promotes dry skin itch. Journal of Allergy and Clinical Immunology, 2022, 149, 1473-1480.e6. | 2.9 | 44 |
| 27 | Scaffolding by A-Kinase Anchoring Protein Enhances Functional Coupling between Adenylyl Cyclase and TRPV1 Channel. Journal of Biological Chemistry, 2013, 288, 3929-3937. | 3.4 | 43 |
| 28 | Tonic Inhibition of TRPV3 by Mg2+ in Mouse Epidermal Keratinocytes. Journal of Investigative Dermatology, 2012, 132, 2158-2165. | 0.7 | 37 |
| 29 | Polymodal TRPV1 and TRPV4 Sensors Colocalize but Do Not Functionally Interact in a Subpopulation of Mouse Retinal Ganglion Cells. Frontiers in Cellular Neuroscience, 2018, 12, 353. | 3.7 | 37 |
| 30 | Mechanosensitive TRPV4 is required for crystal-induced inflammation. Annals of the Rheumatic Diseases, 2021, 80, 1604-1614. | 0.9 | 36 |
| 31 | Cryo-EM structure of a proton-activated chloride channel TMEM206. Science Advances, 2021, 7, . | 10.3 | 27 |
| 32 | Eact, a small molecule activator of TMEM16A, activates TRPV1 and elicits painâ€•and itchâ€•related behaviours. British Journal of Pharmacology, 2016, 173, 1208-1218. | 5.4 | 26 |
| 33 | Identification and characterization of two ankyrin-B isoforms in mammalian heart. Cardiovascular Research, 2015, 107, 466-477. | 3.8 | 23 |
| 34 | Differential expression of canonical (classical) transient receptor potential channels in guinea pig enteric nervous system. Journal of Comparative Neurology, 2008, 511, 847-862. | 1.6 | 22 |
| 35 | Synaptic activation of putative sensory neurons by hexamethonium-sensitive nerve pathways in mouse colon. American Journal of Physiology - Renal Physiology, 2018, 314, G53-G64. | 3.4 | 20 |
| 36 | Parathyroid Hormone-Related Peptide Elicits Peripheral TRPV1-dependent Mechanical Hypersensitivity. Frontiers in Cellular Neuroscience, 2018, 12, 38. | 3.7 | 20 |

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|---|---|---|---|
| 37 | Cell-based Calcium Assay for Medium to High Throughput Screening of TRP Channel Functions using FlexStation 3. Journal of Visualized Experiments, 2011, , . | 0.3 | 19 |
| 38 | Targeting Pain-evoking Transient Receptor Potential Channels for the Treatment of Pain. Current Neuropharmacology, 2013, 11, 652-663. | 2.9 | 17 |
| 39 | Potentiation of High Voltageâ€"Activated Calcium Channels by 4-Aminopyridine Depends on Subunit Composition. Molecular Pharmacology, 2014, 86, 760-772. | 2.3 | 16 |
| 40 | Activation of TRPV4 Regulates Respiration through Indirect Activation of Bronchopulmonary Sensory Neurons. Frontiers in Physiology, 2016, 7, 65. | 2.8 | 16 |
| 41 | Versatile cell ablation tools and their applications to study loss of cell functions. Cellular and Molecular Life Sciences, 2019, 76, 4725-4743. | 5.4 | 16 |
| 42 | Kir6.1- and SUR2-dependent KATP overactivity disrupts intestinal motility in murine models of CantÃº syndrome. JCI Insight, 2020, 5, . | 5.0 | 16 |
| 43 | Kv Channel S1-S2 Linker Working as a Binding Site of Human Î²-Defensin 2 for Channel Activation Modulation. Journal of Biological Chemistry, 2015, 290, 15487-15495. | 3.4 | 15 |
| 44 | A novel player in the field: Merkel disc in touch, itch and pain. Experimental Dermatology, 2019, 28, 1412-1415. | 2.9 | 15 |
| 45 | Inhalation anaesthetic isoflurane inhibits the muscarinic cation current and carbachol-induced gastrointestinal smooth muscle contractions. European Journal of Pharmacology, 2018, 820, 39-44. | 3.5 | 15 |
| 46 | Goblet cell LRRC26 regulates BK channel activation and protects against colitis in mice. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 14 |
| 47 | Anti-inflammatory dopamine- and serotonin-based endocannabinoid epoxides reciprocally regulate cannabinoid receptors and the TRPV1 channel. Nature Communications, 2021, 12, 926. | 12.8 | 14 |
| 48 | The Pore Loop Domain of TRPV1 Is Required for Its Activation by the Volatile Anesthetics Chloroform and Isoflurane. Molecular Pharmacology, 2015, 88, 131-138. | 2.3 | 13 |
| 49 | The antimicrobial peptide human beta-defensin 2 promotes itch through Toll-like receptor 4 signaling in mice. Journal of Allergy and Clinical Immunology, 2017, 140, 885-888.e6. | 2.9 | 13 |
| 50 | Miswiring of Merkel cell and pruriceptive C fiber drives the itch-scratch cycle. Science Translational Medicine, 2022, 14, . | 12.4 | 13 |
| 51 | Loureirin B, an essential component of Sanguis Draxonis, inhibits Kv1.3 channel and suppresses cytokine release from Jurkat T cells. Cell and Bioscience, 2014, 4, 78. | 4.8 | 11 |
| 52 | Enteric Nervous System Structure and Neurochemistry Related to Function and Neuropathology. , 2018, , 337-360. | | 11 |
| 53 | Diversity of neurogenic smooth muscle electrical rhythmicity in mouse proximal colon. American Journal of Physiology - Renal Physiology, 2020, 318, G244-G253. | 3.4 | 11 |
| 54 | <scp>LE135</scp>, a retinoid acid receptor antagonist, produces pain through direct activation of <scp>TRP</scp> channels. British Journal of Pharmacology, 2014, 171, 1510-1520. | 5.4 | 10 |

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|---|---|---|---|
| 55 | Loureirin B Exerts its Immunosuppressive Effects by Inhibiting STIM1/Orai1 and KV1.3 Channels. Frontiers in Pharmacology, 2021, 12, 685092. | 3.5 | 9 |
| 56 | Notch signaling in bone marrowâ€“derived FSP-1Âcells initiates neointima formation in arteriovenousÂfistulas. Kidney International, 2019, 95, 1347-1358. | 5.2 | 8 |
| 57 | Optogenetic control of the enteric nervous system and gastrointestinal transit. Expert Review of Gastroenterology and Hepatology, 2019, 13, 281-284. | 3.0 | 7 |
| 58 | Transmembrane protein TMEM184B is necessary for interleukin-31â€“induced itch. Pain, 2022, 163, e642-e653. | 4.2 | 7 |
| 59 | Long range synchronization within the enteric nervous system underlies propulsion along the large intestine in mice. Communications Biology, 2021, 4, 955. | 4.4 | 7 |
| 60 | CaMKII Is Essential for the Function of the Enteric Nervous System. PLoS ONE, 2012, 7, e44426. | 2.5 | 7 |
| 61 | Effects of optogenetic activation of the enteric nervous system on gastrointestinal motility in mouse small intestine. Autonomic Neuroscience: Basic and Clinical, 2020, 229, 102733. | 2.8 | 6 |
| 62 | Transient stimulation of TRPV4â€expressing keratinocytes promotes hair follicle regeneration in mice. British Journal of Pharmacology, 2020, 177, 4181-4192. | 5.4 | 6 |
| 63 | Modification of Neurogenic Colonic Motor Behaviours by Chemogenetic Ablation of Calretinin Neurons. Frontiers in Cellular Neuroscience, 2022, 16, 799717. | 3.7 | 6 |
| 64 | THE ROLE OF TRPV4 CATION CHANNELS IN THE REGULATION OF PHENYLEPHRINE-INDUCED CONTRACTION OF RAT PULMONARY ARTERY. Fiziologicheskii Zhurnal, 2016, 62, 79-86. | 0.2 | 4 |
| 65 | Estrogen metabolites increase nociceptor hyperactivity in a mouse model of uterine pain. JCI Insight, 2022, 7, . | 5.0 | 4 |
| 66 | Optogenetic Induction of Propagating Colonic Motor Complexes and Silencing of Colonic Motility Using Cre-Inducible Activation and Inactivation of Calretinin-Expressing Neurons. Gastroenterology, 2017, 152, S102. | 1.3 | 2 |
| 67 | Neuronal IL-4RÎ± and JAK1 signaling critically mediate atopic dermatitis-associated. Journal of Allergy and Clinical Immunology, 2018, 141, AB92. | 2.9 | 2 |
| 68 | Synthesis and Characterization of a Specific Iodineâ€125â€Labeled TRPC5 Radioligand. ChemMedChem, 2020, 15, 1854-1860. | 3.2 | 2 |
| 69 | Mechanisms of Broad-Band UVB Irradiationâ€'Induced Itch in Mice. Journal of Investigative Dermatology, 2021, 141, 2499-2508.e3. | 0.7 | 2 |
| 70 | A Basophil-Neuronal Axis Promotes Itch. SSRN Electronic Journal, 0, , . | 0.4 | 1 |
| 71 | Calcium Sensing Receptor in Rat Myenteric Plexus of Colon. Gastroenterology, 2011, 140, S-521. | 1.3 | 0 |
| 72 | Mo1693 Activation of Bone Marrow-Derived TRPV4-Expressing M2 Macrophages Promotes Intestinal Contraction. Gastroenterology, 2015, 148, S-687. | 1.3 | 0 |

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|---|---|---|---|
| 73 | Synthesis and in vitro evaluation of new TRPV4 ligands and biodistribution study of an 11C-labeled radiotracer in rodents. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 127573. | 2.2 | 0 |
| 74 | Structural Basis of TRPV3 Activation and Inactivation. Biophysical Journal, 2020, 118, 412a. | 0.5 | 0 |
| 75 | KATP Activity in Intestinal Smooth Muscle Regulates Motility. Biophysical Journal, 2020, 118, 589a. | 0.5 | 0 |
| 76 | Cutaneous mechanisms of itch signaling. Itch (Philadelphia, Pa ), 2021, 6, e50-e50. | 0.2 | 0 |
| 77 | Activation of TRPA1 channels by Fenamate NSAIDs. FASEB Journal, 2010, 24, 583.3. | 0.5 | 0 |
| 78 | Acid induces TRPV4â€mediated calcium influx in mouse esophageal keratinocytes. FASEB Journal, 2012, 26, 695.7. | 0.5 | 0 |
| 79 | TRPV4 Agonist GSK1016790A Regulates Respiration through Indirect Activation of Bronchopulmonary Sensory Neurons. FASEB Journal, 2015, 29, 860.2. | 0.5 | 0 |
| 80 | Sustained Elevation of Adenosine-ADORA2B Signaling Promotes Chronic Pain through Neuro-Immune Interaction in Sickle Cell Disease. Blood, 2015, 126, 974-974. | 1.4 | 0 |
| 81 | TRPV3 (Transient Receptor Potential Channel Subfamily V Member 3). , 2016, , 1-6. | | 0 |
| 82 | The Role of TRPV4 Cation Channels in Regulation of Phenylephrine-Induced Contraction of Rat Pulmonary Artery. International Journal of Physiology and Pathophysiology, 2017, 8, 121-130. | 0.1 | 0 |
| 83 | TRPV3 (Transient Receptor Potential Channel Subfamily V Member 3). , 2018, , 5749-5755. | | 0 |
| 84 | NPR1 inhibitors: new drugs for itch treatment?. Journal of Xiangya Medicine, 0, 4, 39-39. | 0.2 | 0 |