

# Franz Hofmann

## List of Publications by Year in descending order

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88  
papers

6,646  
citations

61984

43  
h-index

62596

80  
g-index

93  
all docs

93  
docs citations

93  
times ranked

6132  
citing authors

#	ARTICLE	IF	CITATIONS
1	Regulation of intracellular calcium by a signalling complex of IRAG, IP3 receptor and cGMP kinase I $\beta$ . Nature, 2000, 404, 197-201.	27.8	438
2	Role of Hippocampal Cav1.2 Ca <sup>2+</sup> Channels in NMDA Receptor-Independent Synaptic Plasticity and Spatial Memory. Journal of Neuroscience, 2005, 25, 9883-9892.	3.6	383
3	Soluble guanylate cyclase purified from bovine lung contains heme and copper. FEBS Letters, 1981, 132, 71-74.	2.8	304
4	Functional Embryonic Cardiomyocytes after Disruption of the L-type I $\beta$ 1C (Ca 1.2) Calcium Channel Gene in the Mouse. Journal of Biological Chemistry, 2000, 275, 39193-39199.	3.4	241
5	Mechanisms of NO/cGMP-Dependent Vasorelaxation. Circulation Research, 2000, 87, 825-830.	4.5	228
6	Increased Adhesion and Aggregation of Platelets Lacking Cyclic Guanosine 3',5'-Monophosphate Kinase I. Journal of Experimental Medicine, 1999, 189, 1255-1264.	8.5	222
7	The Biology of Cyclic GMP-dependent Protein Kinases. Journal of Biological Chemistry, 2005, 280, 1-4.	3.4	212
8	Regulation of cGMP-specific Phosphodiesterase (PDE5) Phosphorylation in Smooth Muscle Cells. Journal of Biological Chemistry, 2002, 277, 3310-3317.	3.4	199
9	cGMP-Dependent Protein Kinase I Mediates the Negative Inotropic Effect of cGMP in the Murine Myocardium. Circulation Research, 2002, 90, 18-20.	4.5	173
10	cGMP Regulated Protein Kinases (cGK). Handbook of Experimental Pharmacology, 2009, , 137-162.	1.8	162
11	The Large Conductance, Voltage-dependent, and Calcium-sensitive K <sup>+</sup> Channel, Hslo, Is a Target of cGMP-dependent Protein Kinase Phosphorylation in Vivo. Journal of Biological Chemistry, 1998, 273, 32950-32956.	3.4	159
12	Significance and therapeutic potential of the natriuretic peptides/cGMP/cGMP-dependent protein kinase pathway in vascular regeneration. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3404-3409.	7.1	152
13	Decreased cardiac L-type Ca <sup>2+</sup> channel activity induces hypertrophy and heart failure in mice. Journal of Clinical Investigation, 2012, 122, 280-290.	8.2	145
14	IRAG mediates NO/cGMP-dependent inhibition of platelet aggregation and thrombus formation. Blood, 2007, 109, 552-559.	1.4	139
15	Impairment of LTD and cerebellar learning by Purkinje cell-specific ablation of cGMP-dependent protein kinase I. Journal of Cell Biology, 2003, 163, 295-302.	5.2	136
16	Anemia and splenomegaly in cGKI-deficient mice. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6771-6776.	7.1	135
17	Differential role of cyclic GMP-dependent protein kinase II in ion transport in murine small intestine and colon. Gastroenterology, 2000, 118, 108-114.	1.3	126
18	Role of Cyclic GMP in the Regulation of Neuronal Calcium and Survival by Secreted Forms of I $\beta$ 28 Amyloid Precursor. Journal of Neurochemistry, 1995, 64, 2087-2096.	3.9	125

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19	Molecular Determinants of the Interaction between the Inositol 1,4,5-Trisphosphate Receptor-associated cGMP Kinase Substrate (IRAG) and cGMP Kinase $\text{I}\beta$ . <i>Journal of Biological Chemistry</i> , 2001, 276, 24153-24159.	3.4	124
20	Long-Term Potentiation in the Hippocampal CA1 Region of Mice Lacking cGMP-Dependent Kinases Is Normal and Susceptible to Inhibition of Nitric Oxide Synthase. <i>Journal of Neuroscience</i> , 1999, 19, 48-55.	3.6	123
21	Protein Phosphatase 2A Is Essential for the Activation of $\text{Ca}^{2+}$ -activated $\text{K}^+$ Currents by cGMP-dependent Protein Kinase in Tracheal Smooth Muscle and Chinese Hamster Ovary Cells. <i>Journal of Biological Chemistry</i> , 1996, 271, 19760-19767.	3.4	120
22	cGMP-mediated signaling via cGKI $\beta$ is required for the guidance and connectivity of sensory axons. <i>Journal of Cell Biology</i> , 2002, 159, 489-498.	5.2	116
23	Unchanged $\text{I}\beta$ -Adrenergic Stimulation of Cardiac L-type Calcium Channels in Cav1.2 Phosphorylation Site S1928A Mutant Mice. <i>Journal of Biological Chemistry</i> , 2008, 283, 34738-34744.	3.4	115
24	Reduced inflammatory hyperalgesia with preservation of acute thermal nociception in mice lacking cGMP-dependent protein kinase I. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 3253-3257.	7.1	105
25	A protein kinase activity from rat cerebellum stimulated by guanosine-3',5'-monophosphate. <i>Biochemical and Biophysical Research Communications</i> , 1972, 49, 1100-1107.	2.1	100
26	Rescue of cGMP Kinase I Knockout Mice by Smooth Muscle $\alpha$ -Specific Expression of Either Isozyme. <i>Circulation Research</i> , 2007, 101, 1096-1103.	4.5	98
27	Cardiac hypertrophy is not amplified by deletion of cGMP-dependent protein kinase I in cardiomyocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 5646-5651.	7.1	97
28	Demonstration of cGMP-dependent protein kinase and cGMP-dependent phosphorylation in cell-free extracts of platelets. <i>FEBS Journal</i> , 1986, 158, 203-210.	0.2	95
29	Identification of the Amino Acid Sequences Responsible for High Affinity Activation of cGMP Kinase $\text{I}\beta$ . <i>Journal of Biological Chemistry</i> , 1997, 272, 10522-10528.	3.4	92
30	Stress-dependent dilated cardiomyopathy in mice with cardiomyocyte-restricted inactivation of cyclic GMP-dependent protein kinase I. <i>European Heart Journal</i> , 2013, 34, 1233-1244.	2.2	92
31	Phosphorylation of Ser <sup>1928</sup> mediates the enhanced activity of the L-type $\text{Ca}^{2+}$ channel $\text{Ca}_v1.2$ by the $\text{I}\beta$ -adrenergic receptor in neurons. <i>Science Signaling</i> , 2017, 10, .	3.6	91
32	Ser <sup>1928</sup> phosphorylation by PKA stimulates the L-type $\text{Ca}^{2+}$ channel $\text{Ca}_v1.2$ and vasoconstriction during acute hyperglycemia and diabetes. <i>Science Signaling</i> , 2017, 10, .	3.6	85
33	Presynaptically Localized Cyclic GMP-Dependent Protein Kinase 1 Is a Key Determinant of Spinal Synaptic Potentiation and Pain Hypersensitivity. <i>PLoS Biology</i> , 2012, 10, e1001283.	5.6	82
34	cGMP-Dependent Protein Kinase II Modulates mPer1 and mPer2 Gene Induction and Influences Phase Shifts of the Circadian Clock. <i>Current Biology</i> , 2003, 13, 725-733.	3.9	81
35	cGMP-dependent Protein Kinase Type I Inhibits TAB1-p38 Mitogen-activated Protein Kinase Apoptosis Signaling in Cardiac Myocytes. <i>Journal of Biological Chemistry</i> , 2006, 281, 32831-32840.	3.4	79
36	Roles of cGMP-dependent protein kinase I (cGKI) and PDE5 in the regulation of Ang II-induced cardiac hypertrophy and fibrosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12925-12929.	7.1	62

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37	Phosphorylation of Ca <sub>v</sub> 1.2 on S1928 uncouples the L-type Ca <sup>2+</sup> channel from the Î² <sub>2</sub> adrenergic receptor. <i>EMBO Journal</i> , 2016, 35, 1330-1345.	7.8	61
38	Homeostatic Switch in Hebbian Plasticity and Fear Learning after Sustained Loss of Cav1.2 Calcium Channels. <i>Journal of Neuroscience</i> , 2010, 30, 8367-8375.	3.6	56
39	Phosphorylation of GSK-3Î² by cGMP-dependent protein kinase II promotes hypertrophic differentiation of murine chondrocytes. <i>Journal of Clinical Investigation</i> , 2008, 118, 2986-2986.	8.2	56
40	Turning on cGMP-dependent pathways to treat cardiac dysfunctions: boom, bust, and beyond. <i>Trends in Pharmacological Sciences</i> , 2014, 35, 404-413.	8.7	55
41	cGMP-Dependent Protein Kinases (cGK). <i>Methods in Molecular Biology</i> , 2013, 1020, 17-50.	0.9	53
42	Control of intestinal motility by the Ca <sub>v</sub> 1.2 L-type calcium channel in mice. <i>FASEB Journal</i> , 2006, 20, 1260-1262.	0.5	52
43	Protection through postconditioning or a mitochondria-targeted S-nitrosothiol is unaffected by cardiomyocyte-selective ablation of protein kinase G. <i>Basic Research in Cardiology</i> , 2013, 108, 337.	5.9	51
44	Deletion of the C-terminal Phosphorylation Sites in the Cardiac Î² <sub>2</sub> -Subunit Does Not Affect the Basic Î² <sub>2</sub> -Adrenergic Response of the Heart and the Cav1.2 Channel. <i>Journal of Biological Chemistry</i> , 2012, 287, 22584-22592.	3.4	43
45	The cGMP system: components and function. <i>Biological Chemistry</i> , 2020, 401, 447-469.	2.5	43
46	A Specific Role for the REV-ERBÎ±-Controlled L-Type Voltage-Gated Calcium Channel Ca <sub>v</sub> 1.2 in Resetting the Circadian Clock in the Late Night. <i>Journal of Biological Rhythms</i> , 2014, 29, 288-298.	2.6	41
47	Type 2 cGMP-dependent protein kinase regulates proliferation and differentiation in the colonic mucosa. <i>American Journal of Physiology - Renal Physiology</i> , 2012, 303, G209-G219.	3.4	39
48	Atrial Natriuretic Peptide-Mediated Inhibition of Microcirculatory Endothelial Ca <sup>2+</sup> and Permeability Response to Histamine Involves cGMP-Dependent Protein Kinase I and TRPC6 Channels. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 2121-2129.	2.4	39
49	Network compensation of cyclic GMP-dependent protein kinase II knockout in the hippocampus by Ca <sup>2+</sup> -permeable AMPA receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3122-3127.	7.1	39
50	A concise discussion of the regulatory role of cGMP kinase I in cardiac physiology and pathology. <i>Basic Research in Cardiology</i> , 2018, 113, 31.	5.9	35
51	Protein kinases G are essential downstream mediators of the antifibrotic effects of sGC stimulators. <i>Annals of the Rheumatic Diseases</i> , 2018, 77, 459-459.	0.9	33
52	Role of Smooth Muscle cGMP/cGKI Signaling in Murine Vascular Restenosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2008, 28, 1244-1250.	2.4	32
53	Academic self-regulation as a function of age: the mediating role of autonomy support and differentiation in school. <i>Social Psychology of Education</i> , 2016, 19, 729-748.	2.5	27
54	Inhibition of the TGFÎ² signalling pathway by cGMP and cGMP-dependent kinase I in renal fibrosis. <i>FEBS Open Bio</i> , 2017, 7, 550-561.	2.3	27

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55	cGMP signals mainly through cAMP kinase in permeabilized murine aorta. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 292, H237-H244.	3.2	26
56	Mutation of the Calmodulin Binding Motif IQ of the L-type Cav1.2 Ca <sup>2+</sup> Channel to EQ Induces Dilated Cardiomyopathy and Death. <i>Journal of Biological Chemistry</i> , 2012, 287, 22616-22625.	3.4	26
57	cGMP-Dependent Protein Kinase I Is Crucial for Angiogenesis and Postnatal Vasculogenesis. <i>PLoS ONE</i> , 2009, 4, e4879.	2.5	24
58	Cyclic GMP Kinase I Modulates Glucagon Release From Pancreatic Î±-Cells. <i>Diabetes</i> , 2011, 60, 148-156.	0.6	22
59	Spatial memory deficits and motor coordination facilitation in cGMP-dependent protein kinase type II-deficient mice. <i>Neurobiology of Learning and Memory</i> , 2013, 99, 32-37.	1.9	22
60	Emerging Alternative Functions for the Auxiliary Subunits of the Voltage-Gated Calcium Channels. <i>Current Molecular Pharmacology</i> , 2015, 8, 162-168.	1.5	21
61	The role of cGMP/cGKI signalling and Trpc channels in regulation of vascular tone. <i>Cardiovascular Research</i> , 2013, 100, 280-287.	3.8	20
62	Myoscape controls cardiac calcium cycling and contractility via regulation of L-type calcium channel surface expression. <i>Nature Communications</i> , 2016, 7, 11317.	12.8	20
63	Dihydropyridine enantiomers block recombinant L-type Ca <sup>2+</sup> -channels by two different mechanisms. <i>Journal of Physiology</i> , 1999, 521, 31-42.	2.9	19
64	cGMP-dependent protein kinase type II knockout mice exhibit working memory impairments, decreased repetitive behavior, and increased anxiety-like traits. <i>Neurobiology of Learning and Memory</i> , 2014, 114, 32-39.	1.9	19
65	Neuronal cGMP kinase I is essential for stimulation of duodenal bicarbonate secretion by luminal acid. <i>FASEB Journal</i> , 2012, 26, 1745-1754.	0.5	18
66	Neutrophil Dysfunction in Guanosine 3',5'-Cyclic Monophosphate-Dependent Protein Kinase I-Deficient Mice. <i>Journal of Immunology</i> , 2005, 175, 1919-1929.	0.8	16
67	Facilitation and Ca <sup>2+</sup> -dependent Inactivation Are Modified by Mutation of the Cav1.2 Channel IQ Motif. <i>Journal of Biological Chemistry</i> , 2011, 286, 26702-26707.	3.4	16
68	Thrombocytosis as a Response to High Interleukin-6 Levels in cGMP-Dependent Protein Kinase I Mutant Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 1820-1828.	2.4	16
69	Cyclic GMP-Dependent Protein Kinase and Smooth Muscle Relaxation. <i>Journal of Cardiovascular Pharmacology</i> , 1992, 20, S18-S22.	1.9	16
70	Involvement of Cyclic Guanosine Monophosphate-Dependent Protein Kinase I in Renal Antifibrotic Effects of Serelaxin. <i>Frontiers in Pharmacology</i> , 2016, 7, 195.	3.5	14
71	cGMP Signaling Increases Antioxidant Gene Expression by Activating Forkhead Box O3A in the Colon Epithelium. <i>American Journal of Pathology</i> , 2017, 187, 377-389.	3.8	13
72	Murine cardiac growth, TRPC channels, and cGMP kinase I. <i>Pflugers Archiv European Journal of Physiology</i> , 2015, 467, 2229-2234.	2.8	12

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73	Expression of cGMP-dependent protein kinase type I in mature white adipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2014, 452, 151-156.	2.1	11
74	Iron deficiency anemia in cyclic GMP kinase knockout mice. <i>Haematologica</i> , 2016, 101, e48-e51.	3.5	11
75	Beta-adrenergic regulation of the heart expressing the Ser1700A/Thr1704A mutated Cav1.2 channel. <i>Journal of Molecular and Cellular Cardiology</i> , 2017, 111, 10-16.	1.9	11
76	Protein Kinase G Is Involved in Acute but Not in Long-Term Regulation of Renin Secretion. <i>Frontiers in Pharmacology</i> , 2019, 10, 800.	3.5	11
77	Heart-Microcirculation Connection. <i>Hypertension</i> , 2020, 76, 1637-1648.	2.7	10
78	Contribution of D1R-expressing neurons of the dorsal dentate gyrus and Cav1.2 channels in extinction of cocaine conditioned place preference. <i>Neuropsychopharmacology</i> , 2020, 45, 1506-1517.	5.4	9
79	Preservice teachers' profiles of motivation for choosing teaching as a career and their effects on self-efficacy. <i>Zeitschrift für Bildungsforschung</i> , 2020, 10, 317-335.	1.1	7
80	Truncation of murine CaV1.2 at Asp 1904 increases CaV1.3 expression in embryonic atrial cardiomyocytes. <i>Pflügers Archiv European Journal of Physiology</i> , 2013, 465, 955-964.	2.8	5
81	PKC and calcium channel trafficking. <i>Channels</i> , 2018, 12, 15-16.	2.8	5
82	Altered Synaptic Membrane Retrieval after Strong Stimulation of Cerebellar Granule Neurons in Cyclic GMP-Dependent Protein Kinase II (cGKII) Knockout Mice. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2281.	4.1	4
83	cGMP kinase I, cardiac hypertrophy and PDE inhibition. <i>BMC Pharmacology</i> , 2011, 11, .	0.4	1
84	Differential effects of PDE5 inhibitors on cardiac dysfunction in the MDX mouse model of Duchenne muscular dystrophy. <i>BMC Pharmacology &amp; Toxicology</i> , 2013, 14, .	2.4	1
85	Anemia of cGKI deficient mice is caused by intestinal bleeding. <i>BMC Pharmacology &amp; Toxicology</i> , 2015, 16, .	2.4	0
86	Leadershipstile im Kontext von Schulentwicklungsprozessen. <i>Leadership Education Personality an Interdisciplinary Journal</i> , 2021, 3, 61-77.	0.5	0
87	Phospholipase D regulates vascular smooth muscle tone in mice. <i>FASEB Journal</i> , 2011, 25, 1115.11.	0.5	0
88	Anion and fluid secretory response of the murine jejunum to the heat-stable Escherichia coli enterotoxin (STa) analogue linaclotide: Involvement of NHE3, Slc26a6, CFTR, protein kinase GII (cGKII) and NHERF1. <i>FASEB Journal</i> , 2018, 32, 747.23.	0.5	0