Manuel F Navedo

List of Publications by Year
in descending order

81	3,306	136740 32	161609 54
papers	citations	h-index	g-index

93	93	93	2740
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Constitutively active L-type Ca2+ channels. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11112-11117.	3.3	185
2	Sympathetic Stimulation of Adult Cardiomyocytes Requires Association of AKAP5 With a Subpopulation of L-Type Calcium Channels. Circulation Research, 2010, 107, 747-756.	2.0	163
3	Increased Coupled Gating of L-Type Ca ²⁺ Channels During Hypertension and Timothy Syndrome. Circulation Research, 2010, 106, 748-756.	2.0	134
4	AKAP150 Is Required for Stuttering Persistent Ca ²⁺ Sparklets and Angiotensin IIâ€"Induced Hypertension. Circulation Research, 2008, 102, e1-e11.	2.0	120
5	Mechanisms Underlying Heterogeneous Ca2+ Sparklet Activity in Arterial Smooth Muscle. Journal of General Physiology, 2006, 127, 611-622.	0.9	108
6	Ca ²⁺ signaling amplification by oligomerization of L-type Ca _v 1.2 channels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1749-1754.	3.3	104
7	Graded Ca2+/calmodulin-dependent coupling of voltage-gated CaV1.2 channels. ELife, 2015, 4, .	2.8	97
8	The control of Ca ²⁺ influx and NFATc3 signaling in arterial smooth muscle during hypertension. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15623-15628.	3.3	94
9	Restoration of Normal L-Type Ca ²⁺ Channel Function During Timothy Syndrome by Ablation of an Anchoring Protein. Circulation Research, 2011, 109, 255-261.	2.0	93
10	NFATc3 Regulates Kv2.1 Expression in Arterial Smooth Muscle. Journal of Biological Chemistry, 2004, 279, 47326-47334.	1.6	92
11	Phosphorylation of Ser ¹⁹²⁸ mediates the enhanced activity of the L-type Ca ²⁺ channel Ca _v 1.2 by the Î² ₂ -adrenergic receptor in neurons. Science Signaling, 2017, 10, .	1.6	91
12	Calcium Dynamics in Vascular Smooth Muscle. Microcirculation, 2013, 20, 281-289.	1.0	88
13	AKAP150 Contributes to Enhanced Vascular Tone by Facilitating Large-Conductance Ca ²⁺ -Activated K ⁺ Channel Remodeling in Hyperglycemia and Diabetes Mellitus. Circulation Research, 2014, 114, 607-615.	2.0	86
14	Local control of TRPV4 channels by AKAP150-targeted PKC in arterial smooth muscle. Journal of General Physiology, 2014, 143, 559-575.	0.9	86
15	Calcium sparklets regulate local and global calcium in murine arterial smooth muscle. Journal of Physiology, 2007, 579, 187-201.	1.3	85
16	Ser ¹⁹²⁸ phosphorylation by PKA stimulates the L-type Ca ²⁺ channel Ca _V 1.2 and vasoconstriction during acute hyperglycemia and diabetes. Science Signaling, 2017, 10, .	1.6	85
17	Elevated Ca²⁺ sparklet activity during acute hyperglycemia and diabetes in cerebral arterial smooth muscle cells. American Journal of Physiology - Cell Physiology, 2010, 298, C211-C220.	2.1	80
18	Potassium channels in the heart: structure, function and regulation. Journal of Physiology, 2017, 595, 2209-2228.	1.3	79

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19	Calcium Channels in Vascular Smooth Muscle. Advances in Pharmacology, 2017, 78, 49-87.	1.2	74
20	Novel delta subunit mutation in slow-channel syndrome causes severe weakness by novel mechanisms. Annals of Neurology, 2002, 51, 102-112.	2.8	71
21	Knockout of Na⁺/Ca²⁺ exchanger in smooth muscle attenuates vasoconstriction and L-type Ca²⁺ channel current and lowers blood pressure. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H1472-H1483.	1.5	71
22	Anchored phosphatases modulate glucose homeostasis. EMBO Journal, 2012, 31, 3991-4004.	3.5	69
23	Phosphorylation of Ca _v 1.2 on S1928 uncouples the Lâ€type Ca ²⁺ channel from the Î² ₂ adrenergic receptor. EMBO Journal, 2016, 35, 1330-1345.	3.5	61
24	CaV1.2 sparklets in heart and vascular smooth muscle. Journal of Molecular and Cellular Cardiology, 2013, 58, 67-76.	0.9	51
25	Cav1.3 channels produce persistent calcium sparklets, but Cav1.2 channels are responsible for sparklets in mouse arterial smooth muscle. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1359-H1370.	1.5	50
26	Regulation of voltageâ€gated potassium channels in vascular smooth muscle during hypertension and metabolic disorders. Microcirculation, 2018, 25, e12423.	1.0	50
27	Mechanisms and physiological implications of cooperative gating of clustered ion channels. Physiological Reviews, 2022, 102, 1159-1210.	13.1	44
28	Hyperglycemia regulates cardiac K+ channels via O-GlcNAc-CaMKII and NOX2-ROS-PKC pathways. Basic Research in Cardiology, 2020, 115, 71.	2.5	43
29	Single nucleotide polymorphisms alter kinase anchoring and the subcellular targeting of A-kinase anchoring proteins. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11465-E11474.	3.3	41
30	Distance constraints on activation of TRPV4 channels by AKAP150-bound PKCÎ± in arterial myocytes. Journal of General Physiology, 2017, 149, 639-659.	0.9	40
31	Î²â€adrenergicâ€mediated dynamic augmentation of sarcolemmal Ca_V1.2 clustering and coâ€operativity in ventricular myocytes. Journal of Physiology, 2019, 597, 2139-2162.	1.3	38
32	Molecular and biophysical mechanisms of Ca2+ sparklets in smooth muscle. Journal of Molecular and Cellular Cardiology, 2009, 47, 436-444.	0.9	36
33	Adenylyl cyclase 5â€“generated cAMP controls cerebral vascular reactivity during diabetic hyperglycemia. Journal of Clinical Investigation, 2019, 129, 3140-3152.	3.9	35
34	A stochastic model of ion channel cluster formation in the plasma membrane. Journal of General Physiology, 2019, 151, 1116-1134.	0.9	34
35	A Gs-coupled purinergic receptor boosts Ca2+ influx and vascular contractility during diabetic hyperglycemia. ELife, 2019, 8, .	2.8	33
36	CALCIUM SPARKLETS IN ARTERIAL SMOOTH MUSCLE. Clinical and Experimental Pharmacology and Physiology, 2008, 35, 1121-1126.	0.9	32

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37	Impaired BKCa channel function in native vascular smooth muscle from humans with type 2 diabetes. Scientific Reports, 2017, 7, 14058.	1.6	31
38	Local Regulation of Lâ€Type Ca²⁺ Channel Sparklets in Arterial Smooth Muscle. Microcirculation, 2013, 20, 290-298.	1.0	30
39	Selective Down-regulation of KV2.1 Function Contributes to Enhanced Arterial Tone during Diabetes. Journal of Biological Chemistry, 2015, 290, 7918-7929.	1.6	30
40	Dynamic L-type CaV1.2 channel trafficking facilitates CaV1.2 clustering and cooperative gating. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 1341-1355.	1.9	29
41	Relationship between Ca²⁺sparklets and sarcoplasmic reticulum Ca²⁺load and release in rat cerebral arterial smooth muscle. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H2285-H2294.	1.5	28
42	Arterial Smooth Muscle Mitochondria Amplify Hydrogen Peroxide Microdomains Functionally Coupled to L-Type Calcium Channels. Circulation Research, 2015, 117, 1013-1023.	2.0	28
43	Functionally distinct and selectively phosphorylated GPCR subpopulations co-exist in a single cell. Nature Communications, 2018, 9, 1050.	5.8	28
44	Diabetic cornea wounds produce significantly weaker electric signals that may contribute to impaired healing. Scientific Reports, 2016, 6, 26525.	1.6	27
45	Cellular and molecular effects of hyperglycemia on ion channels in vascular smooth muscle. Cellular and Molecular Life Sciences, 2021, 78, 31-61.	2.4	25
46	AKAP150 participates in calcineurin/NFAT activation during the down-regulation of voltage-gated K+ currents in ventricular myocytes following myocardial infarction. Cellular Signalling, 2016, 28, 733-740.	1.7	23
47	AKAP5 complex facilitates purinergic modulation of vascular L-type Ca2+ channel CaV1.2. Nature Communications, 2020, 11, 5303.	5.8	22
48	Î²-Adrenergic control of sarcolemmal Ca _V 1.2 abundance by small GTPase Rab proteins. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	22
49	Î±â€Actininâ€1 promotes activity of the Lâ€type Ca ²⁺ channel Ca _v 1.2. EMBO Journal, 2020, 39, e102622.	3.5	20
50	Tryptophan Substitutions Reveal the Role of Nicotinic Acetylcholine Receptor Î±-TM3 Domain in Channel Gating:Â Differences betweenTorpedoand Muscle-Type AChRâ€. Biochemistry, 2004, 43, 78-84.	1.2	19
51	Coronary microvascular Kv1 channels as regulatory sensors of intracellular pyridine nucleotide redox potential. Microcirculation, 2018, 25, e12426.	1.0	19
52	A model for cooperative gating of L-type Ca2+ channels and its effects on cardiac alternans dynamics. PLoS Computational Biology, 2018, 14, e1005906.	1.5	19
53	Predominant contribution of L-type Cav1.2 channel stimulation to impaired intracellular calcium and cerebral artery vasoconstriction in diabetic hyperglycemia. Channels, 2017, 11, 340-346.	1.5	16
54	Regulation of L-type calcium channel sparklet activity by c-Src and PKC-Î±. American Journal of Physiology - Cell Physiology, 2013, 305, C568-C577.	2.1	15

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55	Purinergic Signaling During Hyperglycemia in Vascular Smooth Muscle Cells. Frontiers in Endocrinology, 2020, 11, 329.	1.5	14
56	Natural inequalities: why some L-type Ca2+ channels work harder than others. Journal of General Physiology, 2010, 136, 143-147.	0.9	13
57	Î²₂Adrenergic Receptor Complexes with the L-Type Ca²⁺Channel Ca_V1.2 and AMPA-Type Glutamate Receptors: Paradigms for Pharmacological Targeting of Protein Interactions. Annual Review of Pharmacology and Toxicology, 2020, 60, 155-174.	4.2	13
58	Î²-blockers augment L-type Ca2+ channel activity by targeting spatially restricted Î²2AR signaling in neurons. ELife, 2019, 8, .	2.8	12
59	Capturing single L-type Ca2+ channel function with optics. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 1657-1664.	1.9	11
60	Mission CaMKIIÎ³: Shuttle Calmodulin from Membrane to Nucleus. Cell, 2014, 159, 235-237.	13.5	10
61	Genetically engineered mice for combinatorial cardiovascular optobiology. ELife, 2021, 10, .	2.8	9
62	Regulation of microvascular function by voltageâ€gated potassium channels: New tricks for an â€œancientâ€•dog. Microcirculation, 2018, 25, e12435.	1.0	7
63	Novel Î² subunit mutation causes a slow-channel syndrome by enhancing activation and decreasing the rate of agonist dissociation. Molecular and Cellular Neurosciences, 2006, 32, 82-90.	1.0	5
64	AKAP5 Keeps L-type Channels and NFAT on Their Toes. Cell Reports, 2014, 7, 1341-1342.	2.9	4
65	Deciphering cellular signals in adult mouse sinoatrial node cells. IScience, 2022, 25, 103693.	1.9	4
66	Contribution of valine 7â€² of TMD2 to gating of neuronal Î±3 receptor subtypes. Journal of Neuroscience Research, 2006, 84, 1778-1788.	1.3	3
67	On the Loose: Uncaging Ca2+-induced Ca2+ Release in Smooth Muscle. Journal of General Physiology, 2006, 127, 221-223.	0.9	3
68	Total Internal Reflection Fluorescence Microscopy in Vascular Smooth Muscle. , 2018, , 87-103.		2
69	TRPML1ng on sparks. Science Signaling, 2020, 13, .	1.6	1
70	The role of TRPV4 in rat parenchymal arterioles. FASEB Journal, 2010, 24, .	0.2	1
71	Functional contribution of Î±3L8â€² to the neuronal nicotinic Î±3 receptor. Journal of Neuroscience Research, 2008, 86, 2884-2894.	1.3	0
72	Going with the flow: contextual fineâ€tuning of vascular reactivity. Journal of Physiology, 2018, 596, 1127-1128.	1.3	0

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73	Maladaptive response of arterial myocytes to chronic exposure to Ca2+channel blockers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18151-18153.	3.3	0
74	Ion Channels and Their Regulation in Vascular Smooth Muscle. , 2020, , .		0
75	Compartmentalized cAMP signaling in arterial myocytes. FASEB Journal, 2021, 35, .	0.2	0
76	S1928 Phosphorylation Tunes Vascular Lâ€type Channel Ca _V 1.2 and Arterial Function during Angiotensin II Signaling and Hypertension. FASEB Journal, 2021, 35, .	0.2	0
77	Roles of câ€Src and PKC in production of persistent calcium sparklet activity. FASEB Journal, 2009, 23, 1000.19.	0.2	0
78	AKAP150 is required for NFATc3â€induced vascular BKCa channel suppression during diabetic hypertension. FASEB Journal, 2012, 26, 872.26.	0.2	0
79	Local control of TRPV4 channels by AKAP150-targeted PKC in arterial smooth muscle. Journal of Cell Biology, 2014, 205, 2053OIA89.	2.3	0
80	Anchored G_sâ€coupled purinergic receptor regulation of Lâ€type Ca_V1.2 and vascular tone in diabetic hyperglycemia. FASEB Journal, 2018, 32, 569.10.	0.2	0
81	Dynamic Lâ€type Ca V 1.2 channel trafficking facilitates Ca V 1.2 clustering and cooperative gating. FASEB Journal, 2018, 32, 751.1.	0.2	0