

# Manuel F Navedo

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/892284/publications.pdf>

Version: 2024-02-01

81  
papers

3,306  
citations

136740

32  
h-index

161609

54  
g-index

93  
all docs

93  
docs citations

93  
times ranked

2740  
citing authors

#	ARTICLE	IF	CITATIONS
1	Deciphering cellular signals in adult mouse sinoatrial node cells. <i>IScience</i> , 2022, 25, 103693.	1.9	4
2	Mechanisms and physiological implications of cooperative gating of clustered ion channels. <i>Physiological Reviews</i> , 2022, 102, 1159-1210.	13.1	44
3	Cellular and molecular effects of hyperglycemia on ion channels in vascular smooth muscle. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 31-61.	2.4	25
4	$\beta$ -Adrenergic control of sarcolemmal $Ca_v1.2$ abundance by small GTPase Rab proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	22
5	Compartmentalized cAMP signaling in arterial myocytes. <i>FASEB Journal</i> , 2021, 35, .	0.2	0
6	S1928 Phosphorylation Tunes Vascular L-type Channel $Ca_v1.2$ and Arterial Function during Angiotensin II Signaling and Hypertension. <i>FASEB Journal</i> , 2021, 35, .	0.2	0
7	Genetically engineered mice for combinatorial cardiovascular optobiology. <i>ELife</i> , 2021, 10, .	2.8	9
8	$\beta_2$ -Adrenergic Receptor Complexes with the L-Type $Ca_v2+$ Channel $Ca_v1.2$ and AMPA-Type Glutamate Receptors: Paradigms for Pharmacological Targeting of Protein Interactions. <i>Annual Review of Pharmacology and Toxicology</i> , 2020, 60, 155-174.	4.2	13
9	AKAP5 complex facilitates purinergic modulation of vascular L-type $Ca^{2+}$ channel $Ca_v1.2$ . <i>Nature Communications</i> , 2020, 11, 5303.	5.8	22
10	Maladaptive response of arterial myocytes to chronic exposure to $Ca^{2+}$ -channel blockers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18151-18153.	3.3	0
11	Hyperglycemia regulates cardiac $K^+$ channels via O-GlcNAc-CaMKII and NOX2-ROS-PKC pathways. <i>Basic Research in Cardiology</i> , 2020, 115, 71.	2.5	43
12	Ion Channels and Their Regulation in Vascular Smooth Muscle. , 2020, , .		0
13	$\beta$ -Actinin1 promotes activity of the L-type $Ca_v2+$ channel $Ca_v1.2$ . <i>EMBO Journal</i> , 2020, 39, e102622.	3.5	20
14	TRPM1 on sparks. <i>Science Signaling</i> , 2020, 13, .	1.6	1
15	Purinergic Signaling During Hyperglycemia in Vascular Smooth Muscle Cells. <i>Frontiers in Endocrinology</i> , 2020, 11, 329.	1.5	14
16	A stochastic model of ion channel cluster formation in the plasma membrane. <i>Journal of General Physiology</i> , 2019, 151, 1116-1134.	0.9	34
17	$\beta$ -adrenergic-mediated dynamic augmentation of sarcolemmal $Ca_v1.2$ clustering and cooperativity in ventricular myocytes. <i>Journal of Physiology</i> , 2019, 597, 2139-2162.	1.3	38
18	Adenylyl cyclase 5-generated cAMP controls cerebral vascular reactivity during diabetic hyperglycemia. <i>Journal of Clinical Investigation</i> , 2019, 129, 3140-3152.	3.9	35

#	ARTICLE	IF	CITATIONS
19	A Gs-coupled purinergic receptor boosts Ca <sup>2+</sup> influx and vascular contractility during diabetic hyperglycemia. <i>ELife</i> , 2019, 8, .	2.8	33
20	Î <sup>2</sup> -blockers augment L-type Ca <sup>2+</sup> channel activity by targeting spatially restricted Î <sup>2</sup> AR signaling in neurons. <i>ELife</i> , 2019, 8, .	2.8	12
21	Going with the flow: contextual fine-tuning of vascular reactivity. <i>Journal of Physiology</i> , 2018, 596, 1127-1128.	1.3	0
22	Functionally distinct and selectively phosphorylated GPCR subpopulations co-exist in a single cell. <i>Nature Communications</i> , 2018, 9, 1050.	5.8	28
23	Regulation of voltage-gated potassium channels in vascular smooth muscle during hypertension and metabolic disorders. <i>Microcirculation</i> , 2018, 25, e12423.	1.0	50
24	Regulation of microvascular function by voltage-gated potassium channels: New tricks for an ancient dog. <i>Microcirculation</i> , 2018, 25, e12435.	1.0	7
25	Coronary microvascular Kv1 channels as regulatory sensors of intracellular pyridine nucleotide redox potential. <i>Microcirculation</i> , 2018, 25, e12426.	1.0	19
26	Single nucleotide polymorphisms alter kinase anchoring and the subcellular targeting of A-kinase anchoring proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E11465-E11474.	3.3	41
27	Dynamic L-type CaV1.2 channel trafficking facilitates CaV1.2 clustering and cooperative gating. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2018, 1865, 1341-1355.	1.9	29
28	A model for cooperative gating of L-type Ca <sup>2+</sup> channels and its effects on cardiac alternans dynamics. <i>PLoS Computational Biology</i> , 2018, 14, e1005906.	1.5	19
29	Anchored G <sub>s</sub> -coupled purinergic receptor regulation of L-type Ca <sub>v</sub> 1.2 and vascular tone in diabetic hyperglycemia. <i>FASEB Journal</i> , 2018, 32, 569.10.	0.2	0
30	Dynamic L-type Ca V 1.2 channel trafficking facilitates Ca V 1.2 clustering and cooperative gating. <i>FASEB Journal</i> , 2018, 32, 751.1.	0.2	0
31	Total Internal Reflection Fluorescence Microscopy in Vascular Smooth Muscle. , 2018, , 87-103.		2
32	Ser <sup>1928</sup> phosphorylation by PKA stimulates the L-type Ca <sup>2+</sup> channel Ca <sub>v</sub> 1.2 and vasoconstriction during acute hyperglycemia and diabetes. <i>Science Signaling</i> , 2017, 10, .	1.6	85
33	Predominant contribution of L-type Cav1.2 channel stimulation to impaired intracellular calcium and cerebral artery vasoconstriction in diabetic hyperglycemia. <i>Channels</i> , 2017, 11, 340-346.	1.5	16
34	Phosphorylation of Ser <sup>1928</sup> mediates the enhanced activity of the L-type Ca <sup>2+</sup> channel Ca <sub>v</sub> 1.2 by the Î <sup>2</sup> -adrenergic receptor in neurons. <i>Science Signaling</i> , 2017, 10, .	1.6	91
35	Distance constraints on activation of TRPV4 channels by AKAP150-bound PKC <sup>Î±</sup> in arterial myocytes. <i>Journal of General Physiology</i> , 2017, 149, 639-659.	0.9	40
36	Impaired BKCa channel function in native vascular smooth muscle from humans with type 2 diabetes. <i>Scientific Reports</i> , 2017, 7, 14058.	1.6	31

#	ARTICLE	IF	CITATIONS
37	Calcium Channels in Vascular Smooth Muscle. <i>Advances in Pharmacology</i> , 2017, 78, 49-87.	1.2	74
38	Potassium channels in the heart: structure, function and regulation. <i>Journal of Physiology</i> , 2017, 595, 2209-2228.	1.3	79
39	Phosphorylation of Ca <sub>v</sub> 1.2 on S1928 uncouples the L-type Ca <sup>2+</sup> channel from the I <sub>2</sub> adrenergic receptor. <i>EMBO Journal</i> , 2016, 35, 1330-1345.	3.5	61
40	AKAP150 participates in calcineurin/NFAT activation during the down-regulation of voltage-gated K <sup>+</sup> currents in ventricular myocytes following myocardial infarction. <i>Cellular Signalling</i> , 2016, 28, 733-740.	1.7	23
41	Diabetic cornea wounds produce significantly weaker electric signals that may contribute to impaired healing. <i>Scientific Reports</i> , 2016, 6, 26525.	1.6	27
42	Selective Down-regulation of KV2.1 Function Contributes to Enhanced Arterial Tone during Diabetes. <i>Journal of Biological Chemistry</i> , 2015, 290, 7918-7929.	1.6	30
43	Arterial Smooth Muscle Mitochondria Amplify Hydrogen Peroxide Microdomains Functionally Coupled to L-Type Calcium Channels. <i>Circulation Research</i> , 2015, 117, 1013-1023.	2.0	28
44	Graded Ca <sup>2+</sup> /calmodulin-dependent coupling of voltage-gated CaV1.2 channels. <i>ELife</i> , 2015, 4, .	2.8	97
45	AKAP150 Contributes to Enhanced Vascular Tone by Facilitating Large-Conductance Ca <sup>2+</sup> -Activated K <sup>+</sup> Channel Remodeling in Hyperglycemia and Diabetes Mellitus. <i>Circulation Research</i> , 2014, 114, 607-615.	2.0	86
46	Local control of TRPV4 channels by AKAP150-targeted PKC in arterial smooth muscle. <i>Journal of General Physiology</i> , 2014, 143, 559-575.	0.9	86
47	Mission CaMKII <sup>β</sup> : Shuttle Calmodulin from Membrane to Nucleus. <i>Cell</i> , 2014, 159, 235-237.	13.5	10
48	AKAP5 Keeps L-type Channels and NFAT on Their Toes. <i>Cell Reports</i> , 2014, 7, 1341-1342.	2.9	4
49	Local control of TRPV4 channels by AKAP150-targeted PKC in arterial smooth muscle. <i>Journal of Cell Biology</i> , 2014, 205, 2053-2059.	2.3	0
50	Local Regulation of L-type Ca <sup>2+</sup> Channel Sparklets in Arterial Smooth Muscle. <i>Microcirculation</i> , 2013, 20, 290-298.	1.0	30
51	CaV1.2 sparklets in heart and vascular smooth muscle. <i>Journal of Molecular and Cellular Cardiology</i> , 2013, 58, 67-76.	0.9	51
52	Calcium Dynamics in Vascular Smooth Muscle. <i>Microcirculation</i> , 2013, 20, 281-289.	1.0	88
53	Capturing single L-type Ca <sup>2+</sup> channel function with optics. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2013, 1833, 1657-1664.	1.9	11
54	Regulation of L-type calcium channel sparklet activity by c-Src and PKC- $\zeta$ . <i>American Journal of Physiology - Cell Physiology</i> , 2013, 305, C568-C577.	2.1	15

#	ARTICLE	IF	CITATIONS
55	Anchored phosphatases modulate glucose homeostasis. EMBO Journal, 2012, 31, 3991-4004.	3.5	69
56	Ca <sup>2+</sup> signaling amplification by oligomerization of L-type Ca <sub>v</sub> 1.2 channels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1749-1754.	3.3	104
57	AKAP150 is required for NFATc3-induced vascular BKCa channel suppression during diabetic hypertension. FASEB Journal, 2012, 26, 872.26.	0.2	0
58	Restoration of Normal L-Type Ca <sup>2+</sup> Channel Function During Timothy Syndrome by Ablation of an Anchoring Protein. Circulation Research, 2011, 109, 255-261.	2.0	93
59	Relationship between Ca <sup>2+</sup> sparklets and sarcoplasmic reticulum Ca <sup>2+</sup> load and release in rat cerebral arterial smooth muscle. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H2285-H2294.	1.5	28
60	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
61	Natural inequalities: why some L-type Ca <sup>2+</sup> channels work harder than others. Journal of General Physiology, 2010, 136, 143-147.	0.9	13
62	Increased Coupled Gating of L-Type Ca <sup>2+</sup> Channels During Hypertension and Timothy Syndrome. Circulation Research, 2010, 106, 748-756.	2.0	134
63	Elevated Ca <sup>2+</sup> 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
64	Knockout of Na <sup>+</sup> /Ca <sup>2+</sup> exchanger in smooth muscle attenuates vasoconstriction and L-type Ca <sup>2+</sup> channel current and lowers blood pressure. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H1472-H1483.	1.5	71
65	The role of TRPV4 in rat parenchymal arterioles. FASEB Journal, 2010, 24, .	0.2	1
66	Molecular and biophysical mechanisms of Ca <sup>2+</sup> sparklets in smooth muscle. Journal of Molecular and Cellular Cardiology, 2009, 47, 436-444.	0.9	36
67	Roles of Src and PKC in production of persistent calcium sparklet activity. FASEB Journal, 2009, 23, 1000.19.	0.2	0
68	Functional contribution of $\text{Ca}^{2+}$ to the neuronal nicotinic $\text{Ca}^{2+}$ receptor. Journal of Neuroscience Research, 2008, 86, 2884-2894.	1.3	0
69	CALCIUM SPARKLETS IN ARTERIAL SMOOTH MUSCLE. Clinical and Experimental Pharmacology and Physiology, 2008, 35, 1121-1126.	0.9	32
70	The control of Ca <sup>2+</sup> 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
71	AKAP150 Is Required for Stuttering Persistent Ca <sup>2+</sup> Sparklets and Angiotensin II-Induced Hypertension. Circulation Research, 2008, 102, e1-e11.	2.0	120
72	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

#	ARTICLE	IF	CITATIONS
73	Calcium sparklets regulate local and global calcium in murine arterial smooth muscle. <i>Journal of Physiology</i> , 2007, 579, 187-201.	1.3	85
74	Novel $\hat{1}^2$ subunit mutation causes a slow-channel syndrome by enhancing activation and decreasing the rate of agonist dissociation. <i>Molecular and Cellular Neurosciences</i> , 2006, 32, 82-90.	1.0	5
75	Contribution of valine $7\hat{a}^2$ of TMD2 to gating of neuronal $\hat{1}^3$ receptor subtypes. <i>Journal of Neuroscience Research</i> , 2006, 84, 1778-1788.	1.3	3
76	On the Loose: Uncaging $Ca^{2+}$ -induced $Ca^{2+}$ Release in Smooth Muscle. <i>Journal of General Physiology</i> , 2006, 127, 221-223.	0.9	3
77	Mechanisms Underlying Heterogeneous $Ca^{2+}$ Sparklet Activity in Arterial Smooth Muscle. <i>Journal of General Physiology</i> , 2006, 127, 611-622.	0.9	108
78	Constitutively active L-type $Ca^{2+}$ channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 11112-11117.	3.3	185
79	NFATc3 Regulates Kv2.1 Expression in Arterial Smooth Muscle. <i>Journal of Biological Chemistry</i> , 2004, 279, 47326-47334.	1.6	92
80	Tryptophan Substitutions Reveal the Role of Nicotinic Acetylcholine Receptor $\hat{1}^3$ -TM3 Domain in Channel Gating: Differences between Torpedo and Muscle-Type AChR. <i>Biochemistry</i> , 2004, 43, 78-84.	1.2	19
81	Novel delta subunit mutation in slow-channel syndrome causes severe weakness by novel mechanisms. <i>Annals of Neurology</i> , 2002, 51, 102-112.	2.8	71