Ana Maria Gomez

List of Publications by Year
in descending order

122	5,231	87888 38	85541 71
papers	citations	h-index	g-index

129	129	129	5441
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Defective Excitation-Contraction Coupling in Experimental Cardiac Hypertrophy and Heart Failure. Science, 1997, 276, 800-806.	12.6	715
2	Suppression of voltage-gated L-type Ca2+ currents by polyunsaturated fatty acids in adult and neonatal rat ventricular myocytes. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 4182-4187.	7.1	355
3	Mechanisms of [Ca2+]i Transient Decrease in Cardiomyopathy of db/db Type 2 Diabetic Mice. Diabetes, 2006, 55, 608-615.	0.6	224
4	Protein Kinase A Phosphorylation of the Cardiac Calcium Release Channel (Ryanodine Receptor) in Normal and Failing Hearts. Journal of Biological Chemistry, 2003, 278, 444-453.	3.4	188
5	Heart Failure After Myocardial Infarction. Circulation, 2001, 104, 688-693.	1.6	180
6	The cAMP binding protein Epac modulates Ca2+sparks by a Ca2+/calmodulin kinase signalling pathway in rat cardiac myocytes. Journal of Physiology, 2007, 583, 685-694.	2.9	179
7	Excitation-contraction coupling in heart: new insights from Ca2+ sparks. Cell Calcium, 1996, 20, 129-140.	2.4	176
8	Ca2+ Flux Through Promiscuous Cardiac Na+ Channels: Slip-Mode Conductance. Science, 1998, 279, 1027-1033.	12.6	164
9	L-type Ca2+ current in ventricular cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2010, 48, 26-36.	1.9	155
10	Increased Ca ²⁺ Sensitivity of the Ryanodine Receptor Mutant RyR2 ^{R4496C} Underlies Catecholaminergic Polymorphic Ventricular Tachycardia. Circulation Research, 2009, 104, 201-209.	4.5	137
11	Mineralocorticoid Receptor Antagonism Prevents the Electrical Remodeling That Precedes Cellular Hypertrophy After Myocardial Infarction. Circulation, 2004, 110, 776-783.	1.6	121
12	Sorcin Inhibits Calcium Release and Modulates Excitation-Contraction Coupling in the Heart. Journal of Biological Chemistry, 2003, 278, 34660-34666.	3.4	101
13	Effects of aldosterone on transient outward K + current density in rat ventricular myocytes. Journal of Physiology, 2001, 537, 151-160.	2.9	99
14	Mineralocorticoid Modulation of Cardiac Ryanodine Receptor Activity Is Associated With Downregulation of FK506-Binding Proteins. Circulation, 2009, 119, 2179-2187.	1.6	88
15	L-type Ca_v1.3 channels regulate ryanodine receptor-dependent Ca²⁺release during sino-atrial node pacemaker activity. Cardiovascular Research, 2016, 109, 451-461.	3.8	88
16	A cardiac mitochondrial cAMP signaling pathway regulates calcium accumulation, permeability transition and cell death. Cell Death and Disease, 2016, 7, e2198-e2198.	6.3	85
17	Paradoxical Effect of Increased Diastolic Ca ²⁺ Release and Decreased Sinoatrial Node Activity in a Mouse Model of Catecholaminergic Polymorphic Ventricular Tachycardia. Circulation, 2012, 126, 392-401.	1.6	77
18	Phosphoinositide 3-Kinase Î³ Protects Against Catecholamine-Induced Ventricular Arrhythmia Through Protein Kinase Aâ€“Mediated Regulation of Distinct Phosphodiesterases. Circulation, 2012, 126, 2073-2083.	1.6	74

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19	Bmpr2 Mutant Rats Develop Pulmonary and Cardiac Characteristics of Pulmonary Arterial Hypertension. Circulation, 2019, 139, 932-948.	1.6	74
20	Cardiomyocyte Overexpression of Neuronal Nitric Oxide Synthase Delays Transition Toward Heart Failure in Response to Pressure Overload by Preserving Calcium Cycling. Circulation, 2008, 117, 3187-3198.	1.6	73
21	Role of the cAMP-binding protein Epac in cardiovascular physiology and pathophysiology. Pflugers Archiv European Journal of Physiology, 2010, 459, 535-546.	2.8	71
22	Transient Receptor Potential Canonical (TRPC)/Orai1-dependent Store-operated Ca2+ Channels. Journal of Biological Chemistry, 2016, 291, 13394-13409.	3.4	69
23	Epac enhances excitationâ€“transcription coupling in cardiac myocytes. Journal of Molecular and Cellular Cardiology, 2012, 52, 283-291.	1.9	64
24	ROS regulation of microdomain Ca2+ signalling at the dyads. Cardiovascular Research, 2013, 98, 248-258.	3.8	61
25	Heparin binding EGF is necessary for vasospastic response to endothelin. FASEB Journal, 2006, 20, 1936-1938.	0.5	60
26	Calcium signaling in diabetic cardiomyocytes. Cell Calcium, 2014, 56, 372-380.	2.4	59
27	Ca2+ handling remodeling and STIM1L/Orai1/TRPC1/TRPC4 upregulation in monocrotaline-induced right ventricular hypertrophy. Journal of Molecular and Cellular Cardiology, 2018, 118, 208-224.	1.9	58
28	â€˜Ca2+-induced Ca2+ entryâ€™ or how the L-type Ca2+ channel remodels its own signalling pathway in cardiac cells. Progress in Biophysics and Molecular Biology, 2006, 90, 118-135.	2.9	57
29	Conditional FKBP12.6 Overexpression in Mouse Cardiac Myocytes Prevents Triggered Ventricular Tachycardia Through Specific Alterations in Excitation- Contraction Coupling. Circulation, 2008, 117, 1778-1786.	1.6	57
30	Microtubule Disruption by Colchicine Reversibly Enhances Calcium Signaling in Intact Rat Cardiac Myocytes. Circulation Research, 2001, 88, E59-65.	4.5	56
31	Neuropeptide Y rapidly enhances [Ca] transients and Ca sparks in adult rat ventricular myocytes through Y receptor and PLC activation. Journal of Molecular and Cellular Cardiology, 2005, 38, 205-212.	1.9	56
32	Increased Exchange Current but Normal Ca2+Transport via Na+-Ca2+Exchange During Cardiac Hypertrophy After Myocardial Infarction. Circulation Research, 2002, 91, 323-330.	4.5	54
33	FKBP12.6 overexpression decreases Ca2+ spark amplitude but enhances [Ca2+]i transient in rat cardiac myocytes. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H1987-H1993.	3.2	52
34	Epac in cardiac calcium signaling. Journal of Molecular and Cellular Cardiology, 2013, 58, 162-171.	1.9	50
35	Frequency-dependent Increase in Cardiac Ca2+Current is due to Reduced Ca2+Release by the Sarcoplasmic Reticulum. Journal of Molecular and Cellular Cardiology, 1999, 31, 1783-1793.	1.9	47
36	Proarrhythmic effect of sustained EPAC activation on TRPC3/4 in rat ventricular cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2015, 87, 74-78.	1.9	46

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37	Orai1 Channel Inhibition Preserves Left Ventricular Systolic Function and Normal Ca ²⁺ Handling After Pressure Overload. Circulation, 2020, 141, 199-216.	1.6	42
38	Ca2+ Fluxes Involvement in Gene Expression During Cardiac Hypertrophy. Current Vascular Pharmacology, 2013, 11, 497-506.	1.7	40
39	Altered communication between l-type calcium channels and ryanodine receptors in heart failure. Frontiers in Bioscience - Landmark, 2002, 7, e263.	3.0	38
40	Urocortin induces positive inotropic effect in rat heart. Cardiovascular Research, 2009, 83, 717-725.	3.8	37
41	Abnormal Ca2+ Spark/STOC Coupling in Cerebral Artery Smooth Muscle Cells of Obese Type 2 Diabetic Mice. PLoS ONE, 2013, 8, e53321.	2.5	34
42	Sarcoplasmic reticulum in heart failure: central player or bystander?. Cardiovascular Research, 1998, 37, 346-351.	3.8	33
43	Ca2+ handling alterations and vascular dysfunction in diabetes. Cell Calcium, 2014, 56, 397-407.	2.4	32
44	Robust antiâ€arrhythmic efficacy of verapamil and flunarizine against dofetilideâ€induced TdP arrhythmias is based upon a shared and a different mode of action. British Journal of Pharmacology, 2010, 161, 162-175.	5.4	31
45	RyR2 and Calcium Release in Heart Failure. Frontiers in Physiology, 2021, 12, 734210.	2.8	31
46	Complications of chemotherapy, a basic science update. Presse Medicale, 2013, 42, e352-e361.	1.9	30
47	Progression of excitation-contraction coupling defects in doxorubicin cardiotoxicity. Journal of Molecular and Cellular Cardiology, 2019, 126, 129-139.	1.9	30
48	QSOX1, a novel actor of cardiac protection upon acute stress in mice. Journal of Molecular and Cellular Cardiology, 2018, 119, 75-86.	1.9	29
49	Sustained Epac activation induces calmodulin dependent positive inotropic effect in adult cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2012, 53, 617-625.	1.9	28
50	Reconciling depressed Ca2+ sparks occurrence with enhanced RyR2 activity in failing mice cardiomyocytes. Journal of General Physiology, 2015, 146, 295-306.	1.9	28
51	Epac contributes to cardiac hypertrophy and amyloidosis induced by radiotherapy but not fibrosis. Radiotherapy and Oncology, 2014, 111, 63-71.	0.6	26
52	ESC working group on cardiac cellular electrophysiology position paper: relevance, opportunities, and limitations of experimental models for cardiac electrophysiology research. Europace, 2021, 23, 1795-1814.	1.7	24
53	RyR2R420Q catecholaminergic polymorphic ventricular tachycardia mutation induces bradycardia by disturbing the coupled clock pacemaker mechanism. JCI Insight, 2017, 2, .	5.0	24
54	The role of hyperglycaemia in the development of diabetic cardiomyopathy. Archives of Cardiovascular Diseases, 2021, 114, 748-760.	1.6	24

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55	The other side of cardiac Ca2+ signaling: transcriptional control. Frontiers in Physiology, 2012, 3, 452.	2.8	23
56	Cardiotrophin-1 induces sarcoplasmic reticulum Ca2+ leak and arrhythmogenesis in adult rat ventricular myocytes. Cardiovascular Research, 2012, 96, 81-89.	3.8	22
57	Urocortin-2 Prevents Dysregulation of Ca2+ Homeostasis and Improves Early Cardiac Remodeling After Ischemia and Reperfusion. Frontiers in Physiology, 2018, 9, 813.	2.8	21
58	Functional characterization of the cAMP-binding proteins Epac in cardiac myocytes. Pharmacological Reports, 2009, 61, 146-153.	3.3	19
59	Beneficial effects of leptin treatment in a setting of cardiac dysfunction induced by transverse aortic constriction in mouse. Journal of Physiology, 2017, 595, 4227-4243.	2.9	19
60	Impaired Binding to Junctophilin-2 and Nanostructural Alteration in CPVT Mutation. Circulation Research, 2021, 129, e35-e52.	4.5	19
61	Cardioprotective action of urocortin in postconditioning involves recovery of intracellular calcium handling. Cell Calcium, 2011, 50, 84-90.	2.4	18
62	Regulation of cardiac excitation-contraction coupling by sorcin, a novel modulator of ryanodine receptors. Biological Research, 2004, 37, 609-12.	3.4	17
63	Specific Activation of the Alternative Cardiac Promoter of Cacna1c by the Mineralocorticoid Receptor. Circulation Research, 2018, 122, e49-e61.	4.5	15
64	Altered communication between l-type calcium channels and ryanodine receptors in heart failure. Frontiers in Bioscience - Landmark, 2002, 7, e263-275.	3.0	13
65	Sorcin ablation plus Î²-adrenergic stimulation generate an arrhythmogenic substrate in mouse ventricular myocytes. Journal of Molecular and Cellular Cardiology, 2018, 114, 199-210.	1.9	13
66	CD38â€NADase is a new major contributor to Duchenne muscular dystrophic phenotype. EMBO Molecular Medicine, 2022, 14, e12860.	6.9	13
67	Autonomic regulation of calcium and potassium channels is oppositely modulated by microtubules in cardiac myocytes. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H2065-H2071.	3.2	12
68	RyRCa2+ Leak Limits Cardiac Ca2+ Window Current Overcoming the Tonic Effect of Calmodulin in Mice. PLoS ONE, 2011, 6, e20863.	2.5	11
69	Activation of sarcolipin expression and altered calcium cycling in LMNA cardiomyopathy. Biochemistry and Biophysics Reports, 2020, 22, 100767.	1.3	11
70	Ryanodol action on calcium sparks in ventricular myocytes. Pflugers Archiv European Journal of Physiology, 2010, 460, 767-776.	2.8	10
71	Non-ventricular, Clinical, and Functional Features of the RyR2R420Q Mutation Causing Catecholaminergic Polymorphic Ventricular Tachycardia. Revista Espanola De Cardiologia (English Ed) Tj ETQq1 1 0	7.8	10
72	Distinct mechanisms mediate pacemaker dysfunction associated with catecholaminergic polymorphic ventricular tachycardia mutations: Insights from computational modeling. Journal of Molecular and Cellular Cardiology, 2020, 143, 85-95.	1.9	10

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73	Mutant cardiac ryanodine receptors and ventricular arrhythmias: is ?gain-of-function? obligatory?. Cardiovascular Research, 2004, 64, 3-5.	3.8	8
74	EGF receptor activated by HB-EGF is required to calcium influx and vasoconstriction induced by endothelin-1. Journal of Hypertension, 2005, 23, A9.	0.5	8
75	Cardiac protection induced by urocortin-2 enables the regulation of apoptosis and fibrosis after ischemia and reperfusion involving miR-29a modulation. Molecular Therapy - Nucleic Acids, 2022, 27, 838-853.	5.1	8
76	Cardioprotective Effect of Ranolazine in the Process of Ischemia-reperfusion in Adult Rat Cardiomyocytes. Revista Espanola De Cardiologia (English Ed), 2016, 69, 45-53.	0.6	7
77	Targeting Orai1-Mediated Store-Operated Ca2+ Entry in Heart Failure. Frontiers in Cell and Developmental Biology, 2020, 8, 586109.	3.7	7
78	Aberrant sinus node firing during Î²â€adrenergic stimulation leads to cardiac arrhythmias in diabetic mice. Acta Physiologica, 2020, 229, e13444.	3.8	7
79	Local recovery of cardiac calciumâ€induced calcium release interrogated by ultraâ€effective, twoâ€photon uncaging of calcium. Journal of Physiology, 2021, 599, 3841-3852.	2.9	7
80	Heart failure in mice induces a dysfunction of the sinus node associated with reduced CaMKII signaling. Journal of General Physiology, 2022, 154, .	1.9	7
81	Unzipping RyR2 in adult cardiomyocytes: Getting closer to mechanisms of inherited ventricular arrhythmias?. Cardiovascular Research, 2006, 70, 407-409.	3.8	6
82	Efecto cardioprotector de la ranolazina en el proceso de isquemia-reperfusiÃ³n en cardiomiocitos de rata adultos. Revista Espanola De Cardiologia, 2016, 69, 45-53.	1.2	6
83	Specialized Proresolving Mediators Protect Against Experimental Autoimmune Myocarditis by Modulating Ca2+ Handling and NRF2 Activation. JACC Basic To Translational Science, 2022, 7, 544-560.	4.1	6
84	Cav1.3 L-Type Calcium Channels-Mediated Ryanodine Receptor Dependent Calcium Release Controls Heart Rate. Biophysical Journal, 2011, 100, 567a.	0.5	5
85	Arrhythmias precede cardiomyopathy and remodeling of Ca2+ handling proteins in a novel model of long QT syndrome. Journal of Molecular and Cellular Cardiology, 2018, 123, 13-25.	1.9	5
86	Gender-Dependent Alteration of Ca2+ and TNFÎ± Signaling in db/db Mice, an Obesity-Linked Type 2 Diabetic Model. Frontiers in Physiology, 2019, 10, 40.	2.8	5
87	Ryanodine Receptor Channelopathies: The New Kid in the Arrhythmia Neighborhood. , 0, , .		5
88	Uptake-leak balance of SR Ca2+ determines arrhythmogenic potential of RyR2R420Q+/â^' cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2022, , .	1.9	5
89	Is the Debate on the Flecainide Action on the RYR2 in CPVT Closed?. Circulation Research, 2021, 128, 332-334.	4.5	3
90	Mineralocorticoid Receptor in Calcium Handling of Vascular Smooth Muscle Cells. , 2018, , .		1

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91	SERCA Stimulation Triggers Arrhythmogenic Ca2+ Events in Mouse Cardiomyocytes Harboring the RyR2R420Q+/- Mutation. Biophysical Journal, 2020, 118, 254a.	0.5	1
92	SAN function is altered in a mice model of heart failure. Journal of Molecular and Cellular Cardiology, 2020, 140, 9.	1.9	1
93	A Type 2 Ryanodine Receptor Variant in the Helical Domain 2 Associated with an Impairment of the Adrenergic Response. Journal of Personalized Medicine, 2021, 11, 579.	2.5	1
94	Aldosterone-Induced Sarco/Endoplasmic Reticulum Ca2+ Pump Upregulation Counterbalances Cav1.2-Mediated Ca2+ Influx in Mesenteric Arteries. Frontiers in Physiology, 2022, 13, 834220.	2.8	1
95	03 Sorcin, a modulator of excitation contraction coupling in heart. Journal of Molecular and Cellular Cardiology, 2002, 34, A19.	1.9	0
96	Conditional Fkbp12.6 overexpression in mouse cardiac myocytes protects from triggered ventricular arrhythmia. Journal of Molecular and Cellular Cardiology, 2007, 42, S3-S4.	1.9	0
97	Cardiotrophin-1: Another â€œplayerâ€•in Cardiac Calcium Handling. Biophysical Journal, 2010, 98, 106a.	0.5	0
98	RyR(R4496C) Mutant Mice Model Reveals a New Paradigm on Local Ca2+ Control of ICaL. Biophysical Journal, 2011, 100, 571a.	0.5	0
99	RyR2(R4496C) Expression Induces Sinoatrial Node Dysfunction. Biophysical Journal, 2011, 100, 352a.	0.5	0
100	In Vitro Characterization of a Novel N-Terminal CPVT RyR Mutation. Biophysical Journal, 2012, 102, 308a.	0.5	0
101	Transcriptional Up-Regulation by Aldosterone of the Cardiac Cav1.2 Encoding Gene CACNA1C. Biophysical Journal, 2012, 102, 127a.	0.5	0
102	Epac Effects on Cardiac Ionic Currents. Biophysical Journal, 2013, 104, 282a.	0.5	0
103	Calcium Handling in Experimental Models of Doxorubicin and Radiation-Induced Cardiotoxicity. Biophysical Journal, 2014, 106, 113a.	0.5	0
104	Non-Hypertensive Dosis of Leptin Induce Cardiac Dysfunction and Altered Calcium Handling in Mice. Biophysical Journal, 2014, 106, 534a.	0.5	0
105	Loss of PI3K-Gamma Scaffold Function causes Severe Electrical Remodeling in Mice Ventricular Myocytes. Biophysical Journal, 2015, 108, 272a-273a.	0.5	0
106	Enhanced RyR2 Channel Activity but Reduced Ca2+ Spark Occurrence In Failing Mice Cardiomyocytes. Biophysical Journal, 2016, 110, 267a-268a.	0.5	0
107	Switchable Cardiac L Type Ca2+ Channel Transcript by Mineralocorticoid Pathway. Biophysical Journal, 2016, 110, 438a-439a.	0.5	0
108	0015 : Epac signalling in doxorubicin-induced cardiotoxicity: a novel implication in death pathways. Archives of Cardiovascular Diseases Supplements, 2016, 8, 240.	0.0	0

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109	0346 : Characterization of the calcium deregulation in cardiomyocytes from mdx mice, the main rodent model of the Duchenne muscular dystrophy. Archives of Cardiovascular Diseases Supplements, 2016, 8, 243.	0.0	0
110	Store Operated Calcium Channels, New Targets of Aldosterone in Cardiomyocytes. Biophysical Journal, 2016, 110, 611a.	0.5	0
111	Functional Effects of the RyR 2 R420Q Catecholaminergic Ventricular Polymorphic Tachycardia in Mouse Cardiomyocytes. Biophysical Journal, 2017, 112, 94a.	0.5	0
112	Mechanism of Sinoatrial Node Dysfunction in a RyR 2 R420Q Mouse Model Ofcatecholaminergic Polymorphic Ventricular Tachycardia. Biophysical Journal, 2017, 112, 541a.	0.5	0
113	Contribution of Orai1 to Sex-Based Differences in Cardiac Excitation-Contraction Coupling. Biophysical Journal, 2017, 112, 538a.	0.5	0
114	Regulation of Cardiac Pacemaker Activity by PDE4 Isoforms. Biophysical Journal, 2017, 112, 96a-97a.	0.5	0
115	TNF-Alpha Mediates Gender Specific Ca2+ Signalling Dysfunction in Type 2 Diabetes. Biophysical Journal, 2018, 114, 618a.	0.5	0
116	Cardiac CaV1.2 Signature Induced by Mineralocorticoid in Vessels. Biophysical Journal, 2018, 114, 627a.	0.5	0
117	The RyR2R420Q Mutation Triggers Catecholaminergic Polymorphic Ventricular Tachycardia in Mouse Cardiomyocytes via SR Calcium Loading. Biophysical Journal, 2018, 114, 116a.	0.5	0
118	Role of Epac2 in High Glucose-Induced SR Ca2+ Leak and Arrhythmia. Biophysical Journal, 2018, 114, 618a.	0.5	0
119	Comparison between hiPS-CM from RyR2-R420Q CPVT Patients and KI Mice Bearing the Same Mutation. Biophysical Journal, 2020, 118, 173a.	0.5	0
120	OUP accepted manuscript. Cardiovascular Research, 2021, , .	3.8	0
121	The ESC Working Group Cardiac Cellular Electrophysiology. European Heart Journal, 2020, 41, 4374-4376.	2.2	0
122	Commentary on structures of the junctophilin/voltage-gated calcium channel interface reveal hot spot for cardiomyopathy mutations. Cell Calcium, 2022, 104, 102592.	2.4	0