MattÃ©o Elia Mangoni

List of Publications by Year
in descending order

82 papers	5,102 citations	109321 35 h-index	91884 69 g-index
92 all docs	92 docs citations	92 times ranked	4619 citing authors

#	Article	IF	Citations
1	Genesis and Regulation of the Heart Automaticity. Physiological Reviews, 2008, 88, 919-982.	28.8	512
2	Functional role of L-type Ca _v 1.3 Ca ²⁺ channels in cardiac pacemaker activity. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5543-5548.	7.1	428
3	Specific pattern of ionic channel gene expression associated with pacemaker activity in the mouse heart. Journal of Physiology, 2005, 562, 223-234.	2.9	282
4	Bradycardia and Slowing of the Atrioventricular Conduction in Mice Lacking Ca V 3.1/Î± 1G T-Type Calcium Channels. Circulation Research, 2006, 98, 1422-1430.	4.5	275
5	Loss of Cav1.3 (CACNA1D) function in a human channelopathy with bradycardia and congenital deafness. Nature Neuroscience, 2011, 14, 77-84.	14.8	265
6	Properties of the hyperpolarization-activated current in rat hippocampal CA1 pyramidal cells. Journal of Neurophysiology, 1993, 69, 2129-2136.	1.8	235
7	Synthesis and Solution Structure of the Antimicrobial Peptide Protegrin-1. FEBS Journal, 1996, 237, 575-583.	0.2	175
8	Architectural and functional asymmetry of the Hisâ€"Purkinje system of the murine heart. Cardiovascular Research, 2004, 63, 77-86.	3.8	171
9	Modulation of single hyperpolarizationâ€activated channels (i(f)) by cAMP in the rabbit sinoâ€atrial node.. Journal of Physiology, 1994, 474, 473-482.	2.9	154
10	Properties of the hyperpolarization-activated current (If) in isolated mouse sino-atrial cells. Cardiovascular Research, 2001, 52, 51-64.	3.8	152
11	Change in membrane permeability induced by protegrin 1: implication of disulphide bridges for pore formation. FEBS Letters, 1996, 383, 93-98.	2.8	122
12	Piezo1 plays a role in erythrocyte volume homeostasis. Haematologica, 2014, 99, 70-75.	3.5	119
13	Functional Properties of a Newly Identified C-terminal Splice Variant of Cav1.3 L-type Ca2+ Channels. Journal of Biological Chemistry, 2011, 286, 42736-42748.	3.4	118
14	Functional role of voltage gated Ca2+ channels in heart automaticity. Frontiers in Physiology, 2015, 6, 19.	2.8	109
15	Control of heart rate by cAMP sensitivity of HCN channels. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12189-12194.	7.1	102
16	Voltage-dependent calcium channels and cardiac pacemaker activity: From ionic currents to genes. Progress in Biophysics and Molecular Biology, 2006, 90, 38-63.	2.9	99
17	Ion channel-kinase TRPM <i>7</i> is required for maintaining cardiac automaticity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3037-46.	7.1	99
18	Timing of Myocardial <i>Trpm7</i> Deletion During Cardiogenesis Variably Disrupts Adult Ventricular Function, Conduction, and Repolarization. Circulation, 2013, 128, 101-114.	1.6	94

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19	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
20	Functional roles of Ca_v1.3, Ca_v3.1 and HCN channels in automaticity of mouse atrioventricular cells. Channels, 2011, 5, 251-261.	2.8	80
21	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
22	<i>piezo2b</i>Regulates Vertebrate Light Touch Response. Journal of Neuroscience, 2013, 33, 17089-17094.	3.6	75
23	A rapidly activating delayed rectifier K+ current regulates pacemaker activity in adult mouse sinoatrial node cells. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1757-H1766.	3.2	74
24	Nkx2.5 cell-autonomous gene function is required for the postnatal formation of the peripheral ventricular conduction system. Developmental Biology, 2007, 303, 740-753.	2.0	70
25	Cardiac arrhythmia induced by genetic silencing of â€˜funnyâ€™ (f) channels is rescued by GIRK4 inactivation. Nature Communications, 2014, 5, 4664.	12.8	70
26	The G-proteinâ€"gated K+ channel, <i>IKACh</i>, is required for regulation of pacemaker activity and recovery of resting heart rate after sympathetic stimulation. Journal of General Physiology, 2013, 142, 113-126.	1.9	69
27	Inhibition of T-Type and L-Type Calcium Channels by Mibefradil: Physiologic and Pharmacologic Bases of Cardiovascular Effects. Journal of Cardiovascular Pharmacology, 2001, 37, 649-661.	1.9	56
28	Distinct localization and modulation of Ca_v1.2 and Ca_v1.3 Lâ€type Ca²⁺ channels in mouse sinoatrial node. Journal of Physiology, 2012, 590, 6327-6341.	2.9	55
29	T-type channels in the sino-atrial and atrioventricular pacemaker mechanism. Pflugers Archiv European Journal of Physiology, 2014, 466, 791-799.	2.8	48
30	G protein-gated <i>I</i> _{<i>KACh</i>} channels as therapeutic targets for treatment of sick sinus syndrome and heart block. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E932-41.	7.1	47
31	An isoform of the cGMP-gated retinal photoreceptor channel gene expressed in the sinoatrial node (pacemaker) region of rabbit heart. Biochemical Society Transactions, 1993, 21, 119S-119S.	3.4	46
32	A circadian clock in the sinus node mediates day-night rhythms in Hcn4 and heart rate. Heart Rhythm, 2021, 18, 801-810.	0.7	46
33	A synthetic peptide that prevents cAMP regulation in mammalian hyperpolarization-activated cyclic nucleotide-gated (HCN) channels. ELife, 2018, 7, .	6.0	43
34	Chronic heart rate reduction remodels ion channel transcripts in the mouse sinoatrial node but not in the ventricle. Physiological Genomics, 2006, 24, 4-12.	2.3	38
35	Connexin 30 is expressed in the mouse sino-atrial node and modulates heart rate. Cardiovascular Research, 2010, 85, 45-55.	3.8	38
36	Pacemaker activity and ionic currents in mouse atrioventricular node cells. Channels, 2011, 5, 241-250.	2.8	34

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37	Concomitant genetic ablation of L-type Cav1.3 (Î±1D) and T-type Cav3.1 (Î±1G) Ca2+ channels disrupts heart automaticity. Scientific Reports, 2020, 10, 18906.	3.3	33
38	Intracellular calcium does not directly modulate cardiac pacemaker (if) channels. Pflugers Archiv European Journal of Physiology, 1991, 419, 662-664.	2.8	32
39	CaV1.3 L-type Ca2+ channel contributes to the heartbeat by generating a dihydropyridine-sensitive persistent Na+ current. Scientific Reports, 2017, 7, 7869.	3.3	32
40	Facilitation of the L-type calcium current in rabbit sino-atrial cells: effect on cardiac automaticity. Cardiovascular Research, 2000, 48, 375-392.	3.8	29
41	Identification of Potential Pharmacological Targets by Analysis of the Comprehensive G Protein-Coupled Receptor Repertoire in the Four Cardiac Chambers. Molecular Pharmacology, 2009, 75, 1108-1116.	2.3	29
42	Pharmacologic Approach to Sinoatrial Node Dysfunction. Annual Review of Pharmacology and Toxicology, 2021, 61, 757-778.	9.4	29
43	Genetic Complexity of Sinoatrial Node Dysfunction. Frontiers in Genetics, 2021, 12, 654925.	2.3	25
44	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
45	RyR2R420Q catecholaminergic polymorphic ventricular tachycardia mutation induces bradycardia by disturbing the coupled clock pacemaker mechanism. JCI Insight, 2017, 2, .	5.0	24
46	Channelopathies of voltage-gated L-type Cav1.3/Î±1D and T-type Cav3.1/Î±1G Ca2+ channels in dysfunction of heart automaticity. Pflugers Archiv European Journal of Physiology, 2020, 472, 817-830.	2.8	23
47	Intrinsic Electrical Remodeling Underlies Atrioventricular Block in Athletes. Circulation Research, 2021, 129, e1-e20.	4.5	23
48	L-Type Cav1.3 Calcium Channels Are Required for Beta-Adrenergic Triggered Automaticity in Dormant Mouse Sinoatrial Pacemaker Cells. Cells, 2022, 11, 1114.	4.1	22
49	Rescuing cardiac automaticity in Lâ€type Cav1.3 channelopathies and beyond. Journal of Physiology, 2016, 594, 5869-5879.	2.9	20
50	Modulation of the Î±1A Ca2+channel by Î² subunits at physiological Ca2+concentration. FEBS Letters, 1996, 391, 232-237.	2.8	17
51	Cyclosporin A increases basal intracellular calcium and calcium responses to endothelin and vasopressin in human coronary myocytes. FEBS Letters, 2001, 493, 57-62.	2.8	17
52	Regulation of sinus node pacemaking and atrioventricular node conduction by HCN channels in health and disease. Progress in Biophysics and Molecular Biology, 2021, 166, 61-85.	2.9	16
53	Dissecting the functional role of different isoforms of the L-type Ca2+ channel. Journal of Clinical Investigation, 2004, 113, 1382-1384.	8.2	16
54	Block of the cardiac pacemaker current (If) in the rabbit sino-atrial node and in canine Purkinje fibres by 9-amino-1,2,3,4-tetrahydroacridine. Pflugers Archiv European Journal of Physiology, 1991, 417, 611-615.	2.8	14

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55	Clock-dependent and system-driven oscillators interact in the suprachiasmatic nuclei to pace mammalian circadian rhythms. PLoS ONE, 2017, 12, e0187001.	2.5	13
56	Inhibition of G protein-gated K+ channels by tertiapin-Q rescues sinus node dysfunction and atrioventricular conduction in mouse models of primary bradycardia. Scientific Reports, 2020, 10, 9835.	3.3	13
57	Physiological and Pharmacological Insights into the Role of Ionic Channels in Cardiac Pacemaker Activity. Cardiovascular & Hematological Disorders Drug Targets, 2006, 6, 169-190.	0.7	12
58	Dissecting the functional role of different isoforms of the L-type Ca2+ channel. Journal of Clinical Investigation, 2004, 113, 1382-1384.	8.2	11
59	Genetic Ablation of G Protein-Gated Inwardly Rectifying K+ Channels Prevents Training-Induced Sinus Bradycardia. Frontiers in Physiology, 2020, 11, 519382.	2.8	9
60	Electrophysiological and Molecular Mechanisms of Sinoatrial Node Mechanosensitivity. Frontiers in Cardiovascular Medicine, 2021, 8, 662410.	2.4	8
61	Adenosine receptors, heart rate, and cardioprotection. Cardiovascular Research, 2004, 62, 447-449.	3.8	7
62	I_f Current Inhibition: Cellular Basis and Physiology. , 2006, 43, 17-30.		7
63	The funny current in genetically modified mice. Progress in Biophysics and Molecular Biology, 2021, 166, 39-50.	2.9	7
64	Cav1.3 L-Type Calcium Channels-Mediated Ryanodine Receptor Dependent Calcium Release Controls Heart Rate. Biophysical Journal, 2011, 100, 567a.	0.5	5
65	Functional Impact of BeKm-1, a High-Affinity hERG Blocker, on Cardiomyocytes Derived from Human-Induced Pluripotent Stem Cells. International Journal of Molecular Sciences, 2020, 21, 7167.	4.1	5
66	Comment on: 'Homozygous knockout of the piezo1 gene in the zebrafish is not associated with anemia. Haematologica, 2016, 101, e38-e38.	3.5	4
67	Pacemaker Cells of the Atrioventricular Node are CaV1.3 Dependent Oscillators. Biophysical Journal, 2010, 98, 339a.	0.5	2
68	GÃ©nÃ©ration et rÃ©gulation du rythme cardiaque. Archives Des Maladies Du Coeur Et Des Vaisseaux - Pratique, 2012, 2012, 31-35.	0.0	2
69	Ionic channels underlying cardiac automaticity: new insights from genetically-modified mouse strains. Archives Des Maladies Du Coeur Et Des Vaisseaux, 2006, 99, 856-61.	0.3	2
70	Coexpression of the Î² 2 subunit does not induce voltage-dependent facilitation of the class C L-type Ca channel. Pflugers Archiv European Journal of Physiology, 1996, 431, 771-774.	2.8	1
71	Killing the primary heart pacemaker. Cardiovascular Research, 2011, 90, 3-4.	3.8	1
72	Evidence for tetrodotoxin-sensitive sodium currents in primary cultured myocytes from human, pig and rabbit arteries. Pflugers Archiv European Journal of Physiology, 2000, 440, 149.	2.8	1

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73	Biophysical Properties of a Human Disease-Causing Mutation in CaV1.3 L-Type Calcium Channels. Biophysical Journal, 2011, 100, 570a.	0.5	0
74	P118Cardiac arrhythmia induced by genetic silencing of funny (f) channels is rescued by Girk4 inactivation. Cardiovascular Research, 2014, 103, S20.5-S21.	3.8	0
75	P666Heart rate control protects against ischemia-reperfusion injury. Cardiovascular Research, 2014, 103, S121.5-S122.	3.8	0
76	0252: Bradycardia and arrhythmia caused by cardiac-specific suppression of the â€œfunnyâ€•(If) current are rescued by Girk. Archives of Cardiovascular Diseases Supplements, 2014, 6, 33.	0.0	0
77	Desmosomes and sino-atrial dysfunction. Cardiovascular Research, 2016, 111, 167-168.	3.8	0
78	Mechanism of Sinoatrial Node Dysfunction in a RyR 2 R420Q Mouse Model Ofcatecholaminergic Polymorphic Ventricular Tachycardia. Biophysical Journal, 2017, 112, 541a.	0.5	0
79	Cav1.3 Channels and Sino-Atrial Node Dysfunction. , 2014, , 239-254.		0
80	Calcium Channels in the Heart. , 2005, , 309-325.		0
81	Maurocalcin and its analog MCaE12A facilitate Ca2+ mobilization in cardiomyocytes. Biochemical Journal, 2020, 477, 3985-3999.	3.7	0
82	A Novel Computational Model of Pacemaker Activity in the Mouse Atrioventricular Node Cell. , 2021, , .		0