Livia C Hool

List of Publications by Year
in descending order

116 papers	2,796 citations	172457 29 h-index	223800 46 g-index
121 all docs	121 docs citations	121 times ranked	4176 citing authors

#	Article	IF	Citations
1	Redox Control of Calcium Channels: From Mechanisms to Therapeutic Opportunities. Antioxidants and Redox Signaling, 2007, 9, 409-435.	5.4	147
2	Transient Exposure to Hydrogen Peroxide Causes an Increase in Mitochondria-Derived Superoxide As a Result of Sustained Alteration in L-Type Ca ²⁺ Channel Function in the Absence of Apoptosis in Ventricular Myocytes. Circulation Research, 2007, 100, 1036-1044.	4.5	125
3	The interaction between electromagnetic fields at megahertz, gigahertz and terahertz frequencies with cells, tissues and organisms: risks and potential. Journal of the Royal Society Interface, 2017, 14, 20170585.	3.4	99
4	Cellular and Molecular Changes to Cortical Neurons Following Low Intensity Repetitive Magnetic Stimulation at Different Frequencies. Brain Stimulation, 2015, 8, 114-123.	1.6	95
5	Hypoxia Increases the Sensitivity of the L-Type Ca ²⁺ Current to Î2-Adrenergic Receptor Stimulation via a C2 Regionâ€"Containing Protein Kinase C Isoform. Circulation Research, 2000, 87, 1164-1171.	4.5	78
6	Secreted Frizzled-Related Protein 4. American Journal of Pathology, 2010, 176, 1505-1516.	3.8	78
7	Loss of the RNA-binding protein TACO1 causes late-onset mitochondrial dysfunction in mice. Nature Communications, 2016, 7, 11884.	12.8	73
8	Decreasing Cellular Hydrogen Peroxide With Catalase Mimics the Effects of Hypoxia on the Sensitivity of the L-Type Ca 2+ Channel to Î2-Adrenergic Receptor Stimulation in Cardiac Myocytes. Circulation Research, 2002, 91, 601-609.	4.5	70
9	REACTIVE OXYGEN SPECIES IN CARDIAC SIGNALLING: FROM MITOCHONDRIA TO PLASMA MEMBRANE ION CHANNELS. Clinical and Experimental Pharmacology and Physiology, 2006, 33, 146-151.	1.9	70
10	Nanoparticle-Mediated Dual Delivery of an Antioxidant and a Peptide against the L-Type Ca²⁺ Channel Enables Simultaneous Reduction of Cardiac Ischemia-Reperfusion Injury. ACS Nano, 2015, 9, 279-289.	14.6	64
11	Evidence for regulation of mitochondrial function by the L-type Ca2+ channel in ventricular myocytes. Journal of Molecular and Cellular Cardiology, 2009, 46, 1016-1026.	1.9	63
12	Regulator of G-Protein Signaling 5 Controls Blood Pressure Homeostasis and Vessel Wall Remodeling. Circulation Research, 2013, 112, 781-791.	4.5	61
13	Role of NAD(P)H oxidase in the regulation of cardiac L-type Ca channel function during acute hypoxia. Cardiovascular Research, 2005, 67, 624-635.	3.8	60
14	Concerted regulation of mitochondrial and nuclear nonâ€coding <scp>RNA</scp> s by a dualâ€targeted <scp>RN</scp> ase Z. EMBO Reports, 2018, 19, .	4.5	60
15	PTCD1 Is Required for 16S rRNA Maturation Complex Stability and Mitochondrial Ribosome Assembly. Cell Reports, 2018, 23, 127-142.	6.4	51
16	Genistein Increases the Sensitivity of Cardiac Ion Channels to Î2-Adrenergic Receptor Stimulation. Circulation Research, 1998, 83, 33-42.	4.5	50
17	EVIDENCE FOR THE REGULATION OF Lâ€TYPE Ca²⁺ CHANNELS IN THE HEART BY REACTIVE OXYGEN SPECIES: MECHANISM FOR MEDIATING PATHOLOGY. Clinical and Experimental Pharmacology and Physiology, 2008, 35, 229-234.	1.9	50
18	A platform for discovery of functional cell-penetrating peptides for efficient multi-cargo intracellular delivery. Scientific Reports, 2018, 8, 12538.	3.3	50

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19	Fidelity of translation initiation is required for coordinated respiratory complex assembly. Science Advances, 2019, 5, eaay2118.	10.3	47
20	Cav1.2 calcium channel is glutathionylated during oxidative stress in guinea pig and ischemic human heart. Free Radical Biology and Medicine, 2011, 51, 1501-1511.	2.9	46
21	Deranged sodium to sudden death. Journal of Physiology, 2015, 593, 1331-1345.	2.9	46
22	L-type Ca²⁺ channel contributes to alterations in mitochondrial calcium handling in the <i>mdx</i> ventricular myocyte. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H767-H775.	3.2	45
23	Myeloperoxidase-derived oxidants inhibit sarco/endoplasmic reticulum Ca2+-ATPase activity and perturb Ca2+ homeostasis in human coronary artery endothelial cells. Free Radical Biology and Medicine, 2012, 52, 951-961.	2.9	42
24	Impaired functional communication between the L-type calcium channel and mitochondria contributes to metabolic inhibition in the <i>mdx</i> heart. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2905-14.	7.1	42
25	Hypoxia Alters the Sensitivity of the L-Type Ca 2+ Channel to Î±-Adrenergic Receptor Stimulation in the Presence of Î²-Adrenergic Receptor Stimulation. Circulation Research, 2001, 88, 1036-1043.	4.5	38
26	Contributions of Ion Channel Currents to Ventricular Action Potential Changes and Induction of Early Afterdepolarizations During Acute Hypoxia. Circulation Research, 2009, 105, 1196-1203.	4.5	38
27	Adult-onset obesity is triggered by impaired mitochondrial gene expression. Science Advances, 2017, 3, e1700677.	10.3	36
28	Mutation in MRPS34 Compromises Protein Synthesis and Causes Mitochondrial Dysfunction. PLoS Genetics, 2015, 11, e1005089.	3.5	35
29	The L-type Ca2+ Channel as a Potential Mediator of Pathology During Alterations in Cellular Redox State. Heart Lung and Circulation, 2009, 18, 3-10.	0.4	31
30	The impact of non-severe burn injury on cardiac function and long-term cardiovascular pathology. Scientific Reports, 2016, 6, 34650.	3.3	29
31	Examining Efficacy of â€œTAT-lessâ€• Delivery of a Peptide against the L-Type Calcium Channel in Cardiac Ischemiaâ€"Reperfusion Injury. ACS Nano, 2013, 7, 2212-2220.	14.6	28
32	Mechanosensitive channel of large conductance. International Journal of Biochemistry and Cell Biology, 2008, 40, 164-169.	2.8	27
33	Qo site of mitochondrial complex III is the source of increased superoxide after transient exposure to hydrogen peroxide. Journal of Molecular and Cellular Cardiology, 2010, 49, 875-885.	1.9	27
34	Evidence of Altered Guinea Pig Ventricular Cardiomyocyte Protein Expression and Growth in Response to a 5 min in vitro Exposure to H₂O₂. Journal of Proteome Research, 2010, 9, 1985-1994.	3.7	26
35	The Role of the Cysteine-Rich Domain and Netrin-Like Domain of Secreted Frizzled-Related Protein 4 in Angiogenesis Inhibition In Vitro. Oncology Research, 2012, 20, 1-6.	1.5	26
36	Evidence for redox sensing by a human cardiac calcium channel. Scientific Reports, 2016, 6, 19067.	3.3	26

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37	Bone marrow stromal cells as replacement cells for Parkinsonâ€™s disease: generation of an anatomical but not functional neuronal phenotype. Translational Research, 2011, 157, 56-63.	5.0	25
38	Crossâ€talk between Lâ€type Ca²⁺ channels and mitochondria. Clinical and Experimental Pharmacology and Physiology, 2010, 37, 229-235.	1.9	24
39	Verapamil is Less Effective than Triamcinolone for Prevention of Keloid Scar Recurrence After Excision in a Randomized Controlled Trial. Acta Dermato-Venereologica, 2014, 96, 774-8.	1.3	24
40	Choline Kinase Î² Mutant Mice Exhibit Reduced Phosphocholine, Elevated Osteoclast Activity, and Low Bone Mass. Journal of Biological Chemistry, 2015, 290, 1729-1742.	3.4	24
41	Î± ₁ -Adrenergic Inhibition of the Î²-Adrenergically Activated Cl ^{âˆ’} Current in Guinea Pig Ventricular Myocytes. Circulation Research, 1996, 78, 1090-1099.	4.5	24
42	Role of Î²1- and Î²2-adrenergic receptors in regulation of Clâˆ’ and Ca2+ channels in guinea pig ventricular myocytes. American Journal of Physiology - Heart and Circulatory Physiology, 1997, 273, H1669-H1676.	3.2	23
43	The cardiac Lâ€type calcium channel alpha subunit is a target for direct redox modification during oxidative stressâ€”the role of cysteine residues in the alpha interacting domain. Clinical and Experimental Pharmacology and Physiology, 2017, 44, 46-54.	1.9	23
44	How Does Calcium Regulate Mitochondrial Energetics in the Heart? â€“ New Insights. Heart Lung and Circulation, 2014, 23, 602-609.	0.4	21
45	The potential for nanotechnology to improve delivery of therapy to the acute ischemic heart. Nanomedicine, 2016, 11, 817-832.	3.3	21
46	Real-Time Bioimpedance Sensing of Antifibrotic Drug Action in Primary Human Cells. ACS Sensors, 2017, 2, 1482-1490.	7.8	21
47	Stress signaling and cellular proliferation reverse the effects of mitochondrial mistranslation. EMBO Journal, 2019, 38, e102155.	7.8	21
48	Decreased Myocardial Injury and Improved Contractility After Administration of a Peptide Derived Against the Alphaâ€Interacting Domain of the Lâ€Type Calcium Channel. Journal of the American Heart Association, 2014, 3, e000961.	3.7	20
49	Differential regulation of the slow and rapid components of guinea-pig cardiac delayed rectifier K+channels by hypoxia. Journal of Physiology, 2004, 554, 743-754.	2.9	19
50	MscS, the bacterial mechanosensitive channel of small conductance. International Journal of Biochemistry and Cell Biology, 2008, 40, 581-585.	2.8	19
51	Glutathionylation of the L-type Ca2+ Channel in Oxidative Stress-Induced Pathology of the Heart. International Journal of Molecular Sciences, 2014, 15, 19203-19225.	4.1	19
52	The Lâ€type Ca²⁺ channel facilitates abnormal metabolic activity in the <i>cTnIâ€G203S</i> mouse model of hypertrophic cardiomyopathy. Journal of Physiology, 2016, 594, 4051-4070.	2.9	19
53	Frequency-specific effects of repetitive magnetic stimulation on primary astrocyte cultures. Restorative Neurology and Neuroscience, 2017, 35, 557-569.	0.7	19
54	AlGaN/GaN-based biosensor for label-free detection of biological activity. Sensors and Actuators B: Chemical, 2013, 177, 577-582.	7.8	18

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55	A Review of in vitro Platforms for Understanding Cardiomyocyte Mechanobiology. Frontiers in Bioengineering and Biotechnology, 2019, 7, 133.	4.1	18
56	Impaired calcium handling and mitochondrial metabolic dysfunction as early markers of hypertrophic cardiomyopathy. Archives of Biochemistry and Biophysics, 2019, 665, 166-174.	3.0	18
57	Role of G Proteins in Î±1-Adrenergic Inhibition of the Î²-Adrenergically Activated Chloride Current in Cardiac Myocytes. Molecular Pharmacology, 1997, 51, 853-860.	2.3	17
58	Acute hypoxia differentially regulates K+ channels. Implications with respect to cardiac arrhythmia. European Biophysics Journal, 2005, 34, 369-376.	2.2	17
59	Targeting Calcium and the Mitochondria in Prevention of Pathology in the Heart. Current Drug Targets, 2011, 12, 748-760.	2.1	17
60	Millimeter Wave Radiation Activates Leech Nociceptors via TRPV1-Like Receptor Sensitization. Biophysical Journal, 2019, 116, 2331-2345.	0.5	17
61	L-type Ca ²⁺ channelâ€“mediated Ca ²⁺ influx adjusts neuronal mitochondrial function to physiological and pathophysiological conditions. Science Signaling, 2020, 13, .	3.6	17
62	The L-Type Ca2+ Channel as a Therapeutic Target in Heart Disease. Current Medicinal Chemistry, 2009, 16, 3341-3358.	2.4	15
63	Dystrophic Cardiomyopathyâ€"Potential Role of Calcium in Pathogenesis, Treatment and Novel Therapies. Genes, 2017, 8, 108.	2.4	15
64	Identification of a novel cAMP dependent protein kinase A phosphorylation site on the human cardiac calcium channel. Scientific Reports, 2017, 7, 15118.	3.3	13
65	What Cardiologists Should Know About Calcium Ion Channels and Their Regulation by Reactive Oxygen Species. Heart Lung and Circulation, 2007, 16, 361-372.	0.4	12
66	Regenerating optic axons restore topography after incomplete optic nerve injury. Journal of Comparative Neurology, 2007, 505, 46-57.	1.6	12
67	Specific combinations of ion channel inhibitors reduce excessive Ca2+ influx as a consequence of oxidative stress and increase neuronal and glial cell viability in vitro. Neuroscience, 2016, 339, 450-462.	2.3	12
68	The Role of the L-Type Ca2+ Channel in Altered Metabolic Activity in a Murine Model of Hypertrophic Cardiomyopathy. JACC Basic To Translational Science, 2016, 1, 61-72.	4.1	12
69	Interrogating cardiac muscle cell mechanobiology on stiffness gradient hydrogels. Biomaterials Science, 2021, 9, 6795-6806.	5.4	12
70	The Effect of Acute Hypoxia on Excitability in the Heart and the L-Type Calcium Channel as a Therapeutic Target. Current Drug Discovery Technologies, 2008, 5, 302-311.	1.2	12
71	L-type calcium channel: Clarifying the â€œoxygen sensing hypothesisâ€• International Journal of Biochemistry and Cell Biology, 2017, 86, 32-36.	2.8	11
72	Myoglobinopathy is an adult-onset autosomal dominant myopathy with characteristic sarcoplasmic inclusions. Nature Communications, 2019, 10, 1396.	12.8	11

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73	Mitochondrial mistranslation modulated by metabolic stress causes cardiovascular disease and reduced lifespan. Aging Cell, 2021, 20, e13408.	6.7	11
74	Protein Kinase C Isozyme Selective Peptides - A Current View of What they Tell Us About Location and Function of Isozymes in the Heart. Current Pharmaceutical Design, 2005, 11, 549-559.	1.9	11
75	A novel antimicrobial agent reduces oxidative stress in cells. RSC Advances, 2013, 3, 7277-7281.	3.6	10
76	Prolonged glutamate excitotoxicity increases GluR1 immunoreactivity but decreases mRNA of GluR1 and associated regulatory proteins inÂdissociated rat retinae inÂvitro. Biochimie, 2015, 112, 160-171.	2.6	10
77	Fidelity and coordination of mitochondrial protein synthesis in health and disease. Journal of Physiology, 2020, 599, 3449-3462.	2.9	10
78	Lack of Strategic Funding and Long-Term Job Security Threaten to Have Profound Effects on Cardiovascular Researcher Retention in Australia. Heart Lung and Circulation, 2020, 29, 1588-1595.	0.4	10
79	Nanoparticle-mediated internalisation and release of a calcium channel blocker. RSC Advances, 2012, 2, 8587.	3.6	9
80	Changes in oxygen tension affect cardiac mitochondrial respiration rate via changes in the rate of mitochondrial hydrogen peroxide production. Journal of Molecular and Cellular Cardiology, 2009, 47, 49-56.	1.9	8
81	How Does the Heart Sense Changes in Oxygen Tension: A Role for Ion Channels?. Antioxidants and Redox Signaling, 2015, 22, 522-536.	5.4	8
82	The L-type Ca²⁺ channel: A mediator of hypertrophic cardiomyopathy. Channels, 2017, 11, 5-7.	2.8	8
83	TGFâ€Î²â€induced fibrotic stress increases Gâ€quadruplex formation in human fibroblasts. FEBS Letters, 2019, 593, 3149-3161.	2.8	8
84	Can Integrins Integrate Vascular Myogenic Responses?. Circulation Research, 2002, 90, 371-373.	4.5	7
85	Characterization and validation of a preventative therapy for hypertrophic cardiomyopathy in a murine model of the disease. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23113-23124.	7.1	7
86	Preventative therapeutic approaches for hypertrophic cardiomyopathy. Journal of Physiology, 2020, 599, 3495-3512.	2.9	6
87	A Morpholino Oligomer Therapy Regime That Restores Mitochondrial Function and Prevents mdx Cardiomyopathy. JACC Basic To Translational Science, 2018, 3, 391-402.	4.1	5
88	Mitochondria at the Crossroads of Survival and Demise. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-2.	4.0	5
89	Neuronal nitric oxide synthase regulation of calcium cycling in ventricular cardiomyocytes is independent of Cav1.2 channel modulation under basal conditions. Pflugers Archiv European Journal of Physiology, 2020, 472, 61-74.	2.8	5
90	Development of induced pluripotent stem cells from a patient with hypertrophic cardiomyopathy who carries the pathogenic myosin heavy chain 7 mutation p.Arg403Gln. Stem Cell Research, 2018, 33, 269-273.	0.7	4

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91	A common genetic variant of a mitochondrial RNA processing enzyme predisposes to insulin resistance. Science Advances, 2021, 7, eabi7514.	10.3	4
92	Auto-regulation in the powerhouse. ELife, 2017, 6, .	6.0	4
93	A new methodology for assessment of the performance of heartbeat classification systems. BMC Medical Informatics and Decision Making, 2008, 8, 7.	3.0	3
94	Evaluation of a biologically relevant level of MMW radiation absorption in neuronal tissue. , 2017, , .		3
95	Ex Vivo Effect of 60 GHz MMW radiation on Leech Neuron Intracellular Calcium Alteration. , 2020, , .		2
96	P.11.5 PMO-mediated dystrophin exon 23 skipping restores mitochondrial function in the mdx mouse heart. Neuromuscular Disorders, 2013, 23, 800.	0.6	1
97	The Design and Testing of Multifunctional Nanoparticles for Drug Delivery Applications. , 2016, , 1-60.		1
98	A dendronized polymer variant that facilitates safe delivery of a calcium channel antagonist to the heart. Nanomedicine: Nanotechnology, Biology, and Medicine, 2020, 29, 102264.	3.3	1
99	Unravelling the mysteries of mitochondria in health and disease. Journal of Physiology, 2021, 599, 3447-3448.	2.9	1
100	The Role of Calcium and the L-Type Calcium Channel in Pathological Remodeling of the Heart. Vascular Disease Prevention, 2008, 5, 104-115.	0.2	1
101	Calcium Channels. , 2007, , 241-299.		1
102	The Role of Calcium and the L-Type Calcium Channel in Pathological Remodeling of the Heart. Vascular Disease Prevention, 2008, 5, 104-115.	0.2	0
103	Identifying The Site Of The Source Of Reactive Oxygen Species Within The Mitochondria After Transient Exposure Of Cardiac Myocytes To Hydrogen Peroxide. Biophysical Journal, 2009, 96, 244a.	0.5	0
104	Editorial [Hot Topic: Calcium Regulatory Proteins as Therapeutic Targets (Guest Editor: Livia C. Hool)]. Current Drug Targets, 2011, 12, 707-708.	2.1	0
105	Myeloperoxidase-derived Oxidants Inhibit SERCA Activity and Perturb Ca2+ Homeostasis in Human Coronary Artery Endothelial Cells. Free Radical Biology and Medicine, 2011, 51, S27.	2.9	0
106	Evidence for Altered Communication Between the L-Type Ca2+ Channel and Mitochondria in a Model of Cardiomyopathy. Biophysical Journal, 2012, 102, 128a-129a.	0.5	0
107	Morpholino Oligomer Peptide Therapy Improves Mitochondrial Function in mdx Cardiomyopathy. Biophysical Journal, 2015, 108, 581a-582a.	0.5	0
108	Characterising the Effects of a Peptide Directed Against the L-Type Ca2+ Channel on Mitochondrial Function in Hypertrophic Cardiomyopathy. Biophysical Journal, 2016, 110, 450a.	0.5	0

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109	Manipulating L-Type Calcium Channel Activity Alters Mitochondrial Function and Prevents Hypertrophic Cardiomyopathy in a Troponin I Mutant Mouse Model. Biophysical Journal, 2017, 112, 243a.	0.5	0
110	Treatment of Adult mdx Mice with Phosphorodiamidate Morpholino Oligomer Restores Cardiac Mitochondrial Energetics and Prevents the Dystrophic Cardiomyopathy. Biophysical Journal, 2017, 112, 245a.	0.5	0
111	Elucidating the Molecular Mechanisms for Activation of the L-Type Calcium Channel in the Fight or Flight Response. Biophysical Journal, 2018, 114, 197a.	0.5	0
112	Comparing efficacy of 8% versus 17% fluorinated dendrimers as delivery vehicles for a peptide in cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2018, 120, 40-41.	1.9	0
113	Differences and Similarities Between Millimetre Wave and Thermal Heating Effect on Action Potential Triggering in Leech Interneuron. , 2019, , .		0
114	Evidence for significance of serine 1487 in Î²-adrenergic regulation of Cav1.2 channel protein function in genetically engineered mice. Journal of Molecular and Cellular Cardiology, 2020, 140, 50.	1.9	0
115	Arrhythmogenic Vulnerability is Associated with Alterations in Ion Channel Expression, Localization and Function in Hypertrophic Cardiomyopathy. Biophysical Journal, 2020, 118, 268a.	0.5	0
116	Assessing the effect of dendrimer concentration on cardiomyocyte uptake and clearance. Journal of Molecular and Cellular Cardiology, 2020, 140, 39-40.	1.9	0