

# Lothar A Blatter

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

88  
papers

5,401  
citations

43  
h-index

73  
g-index

89  
ext. papers

5,906  
ext. citations

5.2  
avg, IF

5.89  
L-index

#	Paper	IF	Citations
88	Redox regulation of cardiac calcium channels and transporters. <i>Cardiovascular Research</i> , <b>2006</b> , 71, 310-21	15.9	414
87	Endothelin-1-induced arrhythmogenic Ca <sup>2+</sup> signaling is abolished in atrial myocytes of inositol-1,4,5-trisphosphate(IP3)-receptor type 2-deficient mice. <i>Circulation Research</i> , <b>2005</b> , 96, 1274-81	15.7	261
86	Intracellular Ca <sup>2+</sup> release contributes to automaticity in cat atrial pacemaker cells. <i>Journal of Physiology</i> , <b>2000</b> , 524 Pt 2, 415-22	3.9	240
85	SparkMaster: automated calcium spark analysis with ImageJ. <i>American Journal of Physiology - Cell Physiology</i> , <b>2007</b> , 293, C1073-81	5.4	218
84	Fluctuations in mitochondrial membrane potential caused by repetitive gating of the permeability transition pore. <i>Biochemical Journal</i> , <b>1999</b> , 343, 311-317	3.8	206
83	Functional coupling between glycolysis and excitation-contraction coupling underlies alternans in cat heart cells. <i>Journal of Physiology</i> , <b>2000</b> , 524 Pt 3, 795-806	3.9	161
82	Inositol-1,4,5-trisphosphate-dependent Ca(2+) signalling in cat atrial excitation-contraction coupling and arrhythmias. <i>Journal of Physiology</i> , <b>2004</b> , 555, 607-15	3.9	156
81	Emerging roles of inositol 1,4,5-trisphosphate signaling in cardiac myocytes. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2008</b> , 45, 128-47	5.8	152
80	Cardiac alternans do not rely on diastolic sarcoplasmic reticulum calcium content fluctuations. <i>Circulation Research</i> , <b>2006</b> , 99, 740-8	15.7	138
79	Ca <sup>2+</sup> spark-dependent and -independent sarcoplasmic reticulum Ca <sup>2+</sup> leak in normal and failing rabbit ventricular myocytes. <i>Journal of Physiology</i> , <b>2010</b> , 588, 4743-57	3.9	133
78	Local calcium gradients during excitation-contraction coupling and alternans in atrial myocytes. <i>Journal of Physiology</i> , <b>2003</b> , 546, 19-31	3.9	129
77	Termination of cardiac Ca <sup>2+</sup> sparks: role of intra-SR [Ca <sup>2+</sup> ], release flux, and intra-SR Ca <sup>2+</sup> diffusion. <i>Circulation Research</i> , <b>2008</b> , 103, e105-15	15.7	125
76	Capacitative calcium entry is inhibited in vascular endothelial cells by disruption of cytoskeletal microfilaments. <i>FEBS Letters</i> , <b>1997</b> , 403, 191-6	3.8	113
75	Mitochondrial calcium uptake stimulates nitric oxide production in mitochondria of bovine vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>2004</b> , 286, C406-15	5.4	113
74	Distinct mPTP activation mechanisms in ischaemia-reperfusion: contributions of Ca <sup>2+</sup> , ROS, pH, and inorganic polyphosphate. <i>Cardiovascular Research</i> , <b>2015</b> , 106, 237-48	9.9	109
73	Nitric oxide inhibits capacitative Ca <sup>2+</sup> entry and enhances endoplasmic reticulum Ca <sup>2+</sup> uptake in bovine vascular endothelial cells. <i>Journal of Physiology</i> , <b>2002</b> , 539, 77-91	3.9	108
72	Activation and propagation of Ca(2+) release during excitation-contraction coupling in atrial myocytes. <i>Biophysical Journal</i> , <b>2001</b> , 81, 2590-605	2.9	105

71	IP3 receptor-dependent Ca <sup>2+</sup> release modulates excitation-contraction coupling in rabbit ventricular myocytes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2008</b> , 294, H596-604	5.2	92
70	Subcellular Ca <sup>2+</sup> alternans represents a novel mechanism for the generation of arrhythmogenic Ca <sup>2+</sup> waves in cat atrial myocytes. <i>Journal of Physiology</i> , <b>2002</b> , 545, 65-79	3.9	90
69	Simultaneous measurements of Ca <sup>2+</sup> and nitric oxide in bradykinin-stimulated vascular endothelial cells. <i>Circulation Research</i> , <b>1995</b> , 76, 922-4	15.7	85
68	IP3-dependent nuclear Ca <sup>2+</sup> signalling in the mammalian heart. <i>Journal of Physiology</i> , <b>2007</b> , 584, 601-11	3.9	84
67	Biosensors to measure inositol 1,4,5-trisphosphate concentration in living cells with spatiotemporal resolution. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 608-16	5.4	84
66	Measuring mitochondrial function in intact cardiac myocytes. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2012</b> , 52, 48-61	5.8	81
65	Mitochondrial Ca <sup>2+</sup> uptake: tortoise or hare?. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2009</b> , 46, 767-74	5.8	80
64	Effects of FK-506 on contraction and Ca <sup>2+</sup> transients in rat cardiac myocytes. <i>Circulation Research</i> , <b>1996</b> , 79, 1110-21	15.7	79
63	Dynamic calcium movement inside cardiac sarcoplasmic reticulum during release. <i>Circulation Research</i> , <b>2011</b> , 108, 847-56	15.7	74
62	Calcium signaling in cardiac mitochondria. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2013</b> , 58, 125-33	5.8	70
61	Modulation of sarcoplasmic reticulum Ca <sup>2+</sup> release by glycolysis in cat atrial myocytes. <i>Journal of Physiology</i> , <b>2005</b> , 564, 697-714	3.9	69
60	Time-dependent modulation of capacitative Ca <sup>2+</sup> entry signals by plasma membrane Ca <sup>2+</sup> pump in endothelium. <i>American Journal of Physiology - Cell Physiology</i> , <b>1998</b> , 274, C1117-28	5.4	68
59	Pyruvate modulates cardiac sarcoplasmic reticulum Ca <sup>2+</sup> release in rats via mitochondria-dependent and -independent mechanisms. <i>Journal of Physiology</i> , <b>2003</b> , 550, 765-83	3.9	67
58	Refractoriness of sarcoplasmic reticulum Ca <sup>2+</sup> release determines Ca <sup>2+</sup> alternans in atrial myocytes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2012</b> , 302, H2310-20	5.2	66
57	Dantrolene prevents arrhythmogenic Ca <sup>2+</sup> release in heart failure. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2012</b> , 302, H953-63	5.2	62
56	Alteration of sarcoplasmic reticulum Ca <sup>2+</sup> release termination by ryanodine receptor sensitization and in heart failure. <i>Journal of Physiology</i> , <b>2009</b> , 587, 5197-209	3.9	62
55	Mitochondrial calcium in heart cells: beat-to-beat oscillations or slow integration of cytosolic transients?. <i>Journal of Bioenergetics and Biomembranes</i> , <b>2000</b> , 32, 27-33	3.7	62
54	Mitochondria-mediated cardioprotection by trimetazidine in rabbit heart failure. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2013</b> , 59, 41-54	5.8	59

53	Regulation of junctional and non-junctional sarcoplasmic reticulum calcium release in excitation-contraction coupling in cat atrial myocytes. <i>Journal of Physiology</i> , <b>2003</b> , 546, 119-35	3.9	58
52	Cardiac alternans and intracellular calcium cycling. <i>Clinical and Experimental Pharmacology and Physiology</i> , <b>2014</b> , 41, 524-32	3	56
51	Elementary events of agonist-induced Ca <sup>2+</sup> release in vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>1997</b> , 273, C1775-82	5.4	56
50	Integration of rapid cytosolic Ca <sup>2+</sup> signals by mitochondria in cat ventricular myocytes. <i>American Journal of Physiology - Cell Physiology</i> , <b>2006</b> , 291, C840-50	5.4	56
49	The mechanisms of calcium cycling and action potential dynamics in cardiac alternans. <i>Circulation Research</i> , <b>2015</b> , 116, 846-56	15.7	54
48	Inositol-1,4,5-trisphosphate induced Ca <sup>2+</sup> release and excitation-contraction coupling in atrial myocytes from normal and failing hearts. <i>Journal of Physiology</i> , <b>2015</b> , 593, 1459-77	3.9	52
47	Partial inhibition of sarcoplasmic reticulum Ca release evokes long-lasting Ca release events in ventricular myocytes: role of luminal Ca in termination of Ca release. <i>Biophysical Journal</i> , <b>2008</b> , 94, 1867-79	7.9	51
46	Capacitative Ca <sup>2+</sup> entry is graded with degree of intracellular Ca <sup>2+</sup> store depletion in bovine vascular endothelial cells. <i>Journal of Physiology</i> , <b>2000</b> , 523 Pt 3, 549-59	3.9	50
45	Calcium and IP <sub>3</sub> dynamics in cardiac myocytes: experimental and computational perspectives and approaches. <i>Frontiers in Pharmacology</i> , <b>2014</b> , 5, 35	5.6	42
44	Modulation of mitochondrial Ca <sup>2+</sup> by nitric oxide in cultured bovine vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>2005</b> , 289, C836-45	5.4	42
43	Regulation of nuclear factor of activated T cells (NFAT) in vascular endothelial cells. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2009</b> , 47, 400-10	5.8	41
42	Regional differences in spontaneous Ca <sup>2+</sup> spark activity and regulation in cat atrial myocytes. <i>Journal of Physiology</i> , <b>2006</b> , 572, 799-809	3.9	35
41	p53-regulated autophagy is controlled by glycolysis and determines cell fate. <i>Oncotarget</i> , <b>2015</b> , 6, 23135-56	5.56	34
40	The role of mitochondria for the regulation of cardiac alternans. <i>Frontiers in Physiology</i> , <b>2010</b> , 1, 141	4.6	34
39	Intracellular sodium modulates mitochondrial calcium signaling in vascular endothelial cells. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 35402-7	5.4	30
38	Modulation of intracellular Ca <sup>2+</sup> release and capacitative Ca <sup>2+</sup> entry by CaMKII inhibitors in bovine vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>2005</b> , 289, C1426-36	5.4	29
37	Facilitation of cytosolic calcium wave propagation by local calcium uptake into the sarcoplasmic reticulum in cardiac myocytes. <i>Journal of Physiology</i> , <b>2012</b> , 590, 6037-45	3.9	27
36	Effects of mitochondrial uncoupling on Ca <sup>2+</sup> signaling during excitation-contraction coupling in atrial myocytes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2013</b> , 304, H983-93	5.2	27

35	Regulation of cardiac alternans by $\beta$ -adrenergic signaling pathways. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2012</b> , 303, H1047-56	5.2	27
34	The effect of oxidative stress on Ca <sup>2+</sup> release and capacitative Ca <sup>2+</sup> entry in vascular endothelial cells. <i>Cell Calcium</i> , <b>2008</b> , 43, 405-15	4	27
33	The effect of PKA-mediated phosphorylation of ryanodine receptor on SR Ca leak in ventricular myocytes. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2017</b> , 104, 9-16	5.8	26
32	Membrane potential determines calcium alternans through modulation of SR Ca load and L-type Ca current. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2017</b> , 105, 49-58	5.8	23
31	Cytosolic and nuclear calcium signaling in atrial myocytes: IP <sub>3</sub> -mediated calcium release and the role of mitochondria. <i>Channels</i> , <b>2015</b> , 9, 129-38	3	22
30	Urocortin 2 stimulates nitric oxide production in ventricular myocytes via Akt- and PKA-mediated phosphorylation of eNOS at serine 1177. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2014</b> , 307, H689-700	5.2	20
29	Role of glycolytically generated ATP for CaMKII-mediated regulation of intracellular Ca <sup>2+</sup> signaling in bovine vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , <b>2007</b> , 293, C106-18	5.4	20
28	Focal agonist stimulation results in spatially restricted Ca <sup>2+</sup> release and capacitative Ca <sup>2+</sup> entry in bovine vascular endothelial cells. <i>Journal of Physiology</i> , <b>1999</b> , 514 ( Pt 1), 101-9	3.9	18
27	A novel mechanism of tandem activation of ryanodine receptors by cytosolic and SR luminal Ca during excitation-contraction coupling in atrial myocytes. <i>Journal of Physiology</i> , <b>2017</b> , 595, 3835-3845	3.9	17
26	Activation of NFATc1 is directly mediated by IP <sub>3</sub> in adult cardiac myocytes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2010</b> , 299, H1701-7	5.2	17
25	p53 promotes AKT and SP1-dependent metabolism through the pentose phosphate pathway that inhibits apoptosis in response to Nutlin-3a. <i>Journal of Molecular Cell Biology</i> , <b>2018</b> , 10, 331-340	6.3	16
24	The intricacies of atrial calcium cycling during excitation-contraction coupling. <i>Journal of General Physiology</i> , <b>2017</b> , 149, 857-865	3.4	16
23	Tissue Specificity: SOCE: Implications for Ca Handling in Endothelial Cells. <i>Advances in Experimental Medicine and Biology</i> , <b>2017</b> , 993, 343-361	3.6	14
22	Alternans in atria: Mechanisms and clinical relevance. <i>Medicina (Lithuania)</i> , <b>2017</b> , 53, 139-149	3.1	14
21	Spatially defined InsP <sub>3</sub> -mediated signaling in embryonic stem cell-derived cardiomyocytes. <i>PLoS ONE</i> , <b>2014</b> , 9, e83715	3.7	14
20	Calcium-activated chloride current determines action potential morphology during calcium alternans in atrial myocytes. <i>Journal of Physiology</i> , <b>2016</b> , 594, 699-714	3.9	13
19	The role of fibroblast - Cardiomyocyte interaction for atrial dysfunction in HFpEF and hypertensive heart disease. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2019</b> , 131, 53-65	5.8	10
18	$\beta$ -Adrenergic stimulation increases the intra-sarcoplasmic reticulum Ca <sup>2+</sup> threshold for Ca <sup>2+</sup> wave generation. <i>Journal of Physiology</i> , <b>2012</b> , 590, 6093-108	3.9	10

17	Ca(2+) release events in cardiac myocytes up close: insights from fast confocal imaging. <i>PLoS ONE</i> , <b>2013</b> , 8, e61525	3.7	10
16	Mitochondrial calcium uniporter complex activation protects against calcium alternans in atrial myocytes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2020</b> , 319, H873-H881	5.2	10
15	Harnessing the Power of Integrated Mitochondrial Biology and Physiology: A Special Report on the NHLBI Mitochondria in Heart Diseases Initiative. <i>Circulation Research</i> , <b>2015</b> , 117, 234-8	15.7	9
14	Action potential shortening rescues atrial calcium alternans. <i>Journal of Physiology</i> , <b>2019</b> , 597, 723-740	3.9	9
13	A fluorescence-based assay to monitor transcriptional activity of NFAT in living cells. <i>Journal of Physiology</i> , <b>2010</b> , 588, 3211-6	3.9	8
12	Variations in local calcium signaling in adjacent cardiac myocytes of the intact mouse heart detected with two-dimensional confocal microscopy. <i>Frontiers in Physiology</i> , <b>2014</b> , 5, 517	4.6	7
11	A novel method for spatially complex diffraction-limited photoactivation and photobleaching in living cells. <i>Journal of Physiology</i> , <b>2012</b> , 590, 1093-100	3.9	7
10	Changes in intra-luminal calcium during spontaneous calcium waves following sensitization of ryanodine receptor channels. <i>Channels</i> , <b>2010</b> , 4, 87-92	3	7
9	Effect of carvedilol on atrial excitation-contraction coupling, Ca release, and arrhythmogenicity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2020</b> , 318, H1245-H1255	5.2	6
8	Ca(2+)-activated chloride channel activity during Ca(2+) alternans in ventricular myocytes. <i>Channels</i> , <b>2016</b> , 10, 507-17	3	5
7	β-adrenergic stimulation increases the intra-SR Ca termination threshold for spontaneous Ca waves in cardiac myocytes. <i>Channels</i> , <b>2013</b> , 7, 206-10	3	3
6	Fatty acid oxidation and autophagy promote endoxifen resistance and counter the effect of AKT inhibition in ER-positive breast cancer cells. <i>Journal of Molecular Cell Biology</i> , <b>2021</b> , 13, 433-444	6.3	3
5	Triggered Ca Waves Induce Depolarization of Maximum Diastolic Potential and Action Potential Prolongation in Dog Atrial Myocytes. <i>Circulation: Arrhythmia and Electrophysiology</i> , <b>2020</b> , 13, e008179	6.4	2
4	Inositol 1,4,5-trisphosphate receptor - reactive oxygen signaling domain regulates excitation-contraction coupling in atrial myocytes. <i>Journal of Molecular and Cellular Cardiology</i> , <b>2021</b> , 163, 147-155	5.8	1
3	L-type Ca channel recovery from inactivation in rabbit atrial myocytes.. <i>Physiological Reports</i> , <b>2022</b> , 10, e15222	2.6	1
2	Mechanism of carvedilol induced action potential and calcium alternans.. <i>Channels</i> , <b>2022</b> , 16, 97-112	3	0
1	AP and Ca alternans: An inseparable couple. <i>Channels</i> , <b>2017</b> , 11, 368-369	3	