Karin R Sipido

List of Publications by Year in Descending Order

128 papers	5,710 citations	44 h-index	72 g-index
164 ext. papers	6,432 ext. citations	8.4 avg, IF	5.28 L-index

#	Paper	IF	Citations
128	Human iPSC model reveals a central role for NOX4 and oxidative stress in Duchenne cardiomyopathy.. *Stem Cell Reports*, **2022**,	8	2
127	Animal models and animal-free innovations for cardiovascular research: current status and routes to be explored. Consensus document of the ESC working group on myocardial function and the ESC Working Group on Cellular Biology of the Heart.. *Cardiovascular Research*, **2022**,	9.9	3
126	Incomplete Assembly of the Dystrophin-Associated Protein Complex in 2D and 3D-Cultured Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 737840	5.7	1
125	Cx43 hemichannel microdomain signaling at the intercalated disc enhances cardiac excitability. *Journal of Clinical Investigation*, **2021**, 131,	15.9	13
124	Ca2+ release via InsP3Rs enhances RyR recruitment during Ca2+ transients by increasing dyadic [Ca2+] in cardiomyocytes. *Journal of Cell Science*, **2021**, 134,	5.3	2
123	Discrete sites of frequent premature ventricular complexes cluster within the infarct border zone and coincide with high frequency of delayed afterdepolarizations under adrenergic stimulation. *Heart Rhythm*, **2021**, 18, 1976-1987	6.7	2
122	Edward Carmeliet: his contributions and scientific legacy. *Journal of Physiology*, **2021**, 599, 4727-4729	3.9	
121	Health research and knowledge translation for achieving the sustainable development goals: tackling the hurdles. *European Journal of Public Health*, **2020**, 30, i36-i40	2.1	3
120	Overcoming fragmentation of health research in Europe: lessons from COVID-19. *Lancet, The*, **2020**, 395, 1970-1971	40	8
119	Altered adrenergic response in myocytes bordering a chronic myocardial infarction underlies in vivo triggered activity and repolarization instability. *Journal of Physiology*, **2020**, 598, 2875-2895	3.9	4
118	Calcium Signaling in Cardiomyocyte Function. *Cold Spring Harbor Perspectives in Biology*, **2020**, 12,	10.2	26
117	Myofibroblast modulation of cardiac myocyte structure and function. *Scientific Reports*, **2019**, 9, 8879	4.9	24
116	Hot topics and trends in cardiovascular research. *European Heart Journal*, **2019**, 40, 2363-2374	9.5	23
115	Myofibroblast Phenotype and Reversibility of Fibrosis in Patients With End-Stage Heart Failure. *Journal of the American College of Cardiology*, **2019**, 73, 2267-2282	15.1	61
114	Extracellular SPARC increases cardiomyocyte contraction during health and disease. *PLoS ONE*, **2019**, 14, e0209534	3.7	12
113	The Cardiovascular Research community calls for action to address the growing burden of cardiovascular disease. *Cardiovascular Research*, **2019**, 115, e96-e98	9.9	4
112	Irreproducible results in preclinical cardiovascular research: opportunities in times of need. *Cardiovascular Research*, **2019**, 115, e34-e36	9.9	2

111	RNA-sequencing reveals that STRN, ZNF484 and WNK1 add to the value of mitochondrial MT-COI and COX10 as markers of unstable coronary artery disease. *PLoS ONE*, **2019**, 14, e0225621	3.7	3
110	Contractile responses to endothelin-1 are regulated by PKC phosphorylation of cardiac myosin binding protein-C in rat ventricular myocytes. *Journal of Molecular and Cellular Cardiology*, **2018**, 117, 1-18	5.8	14
109	Hyperactive ryanodine receptors in human heart failure and ischaemic cardiomyopathy reside outside of couplons. *Cardiovascular Research*, **2018**, 114, 1512-1524	9.9	24
108	A Changing Landscape in Cardiovascular Research Publication Output: Bridging the Translational Gap. *Journal of the American College of Cardiology*, **2018**, 71, 1584-1589	15.1	6
107	Low-flow support of the chronic pressure-overloaded right ventricle induces reversed remodeling. *Journal of Heart and Lung Transplantation*, **2018**, 37, 151-160	5.8	11
106	CardioScape mapping the cardiovascular funding landscape in Europe. *European Heart Journal*, **2018**, 39, 2423-2430	9.5	4
105	Myocyte Remodeling Due to Fibro-Fatty Infiltrations Influences Arrhythmogenicity. *Frontiers in Physiology*, **2018**, 9, 1381	4.6	7
104	Improving public health by improving clinical trial guidelines and their application. *European Heart Journal*, **2017**, 38, 1632-1637	9.5	15
103	Global fibroblast activation throughout the left ventricle but localized fibrosis after myocardial infarction. *Scientific Reports*, **2017**, 7, 10801	4.9	34
102	Impaired calcium homeostasis is associated with sudden cardiac death and arrhythmias in a genetic equivalent mouse model of the human HRC-Ser96Ala variant. *Cardiovascular Research*, **2017**, 113, 1403-1417	9.9	10
101	Cardiovascular Research turns the spotlight onto the right ventricle. *Cardiovascular Research*, **2017**, 113, e45-e46	9.9	1
100	Editorial highlights from Cardiovascular Research. *Cardiovascular Research*, **2017**, 113, e64-e68	9.9	0
99	Activin A Modulates CRIPTO-1/HNF4 Cells to Guide Cardiac Differentiation from Human Embryonic Stem Cells. *Stem Cells International*, **2017**, 2017, 4651238	5	7
98	Mapping cross-border collaboration and communication in cardiovascular research from 1992 to 2012. *European Heart Journal*, **2017**, 38, 1249-1258	9.5	24
97	Scientific Panel for Health: better research for better health. *Lancet, The*, **2016**, 388, 865-6	40	4
96	Reduced mitochondrial respiration in the ischemic as well as in the remote nonischemic region in postmyocardial infarction remodeling. *American Journal of Physiology - Heart and Circulatory Physiology*, **2016**, 311, H1075-H1090	5.2	16
95	Letter by Sipido and Gl□zel Regarding Article, "Poorly Cited Articles in Peer-Reviewed Cardiovascular Journals from 1997 to 2007: Analysis of 5-Year Citation Rates". *Circulation*, **2016**, 133, e22	16.7	
94	Calcium/calmodulin-dependent kinase II and nitric oxide synthase 1-dependent modulation of ryanodine receptors during □-adrenergic stimulation is restricted to the dyadic cleft. *Journal of Physiology*, **2016**, 594, 5923-5939	3.9	21

93	Na+/Ca2+ exchange and Na+/K+-ATPase in the heart. *Journal of Physiology*, **2015**, 593, 1361-82	3.9	114
92	A systematic approach for assessing Ca□+ handling in cardiac myocytes. *Cold Spring Harbor Protocols* , **2015**, 2015, 431-3	1.2	1
91	Measuring Ca□+ sparks in cardiac myocytes. *Cold Spring Harbor Protocols*, **2015**, 2015, 490-7	1.2	1
90	Further insights into blood pressure induced premature beats: Transient depolarizations are associated with fast myocardial deformation upon pressure decline. *Heart Rhythm*, **2015**, 12, 2305-15	6.7	6
89	Calcium release near L-type calcium channels promotes beat-to-beat variability in ventricular myocytes from the chronic AV block dog. *Journal of Molecular and Cellular Cardiology*, **2015**, 89, 326-34	5.8	16
88	Basic methods for monitoring intracellular Ca2+ in cardiac myocytes using Fluo-3. *Cold Spring Harbor Protocols*, **2015**, 2015, 392-7	1.2	9
87	Characterizing the trigger for sarcoplasmic reticulum Ca2+ release in cardiac myocytes. *Cold Spring Harbor Protocols*, **2015**, 2015, 398-402	1.2	3
86	Measuring sarcoplasmic reticulum Ca2+ content, fractional release, and Ca2+ buffering in cardiac myocytes. *Cold Spring Harbor Protocols*, **2015**, 2015, 403-7	1.2	4
85	Assessing Ca□+-removal pathways in cardiac myocytes. *Cold Spring Harbor Protocols*, **2015**, 2015, 498-503	1.2	3
84	Ryanodine receptor cluster fragmentation and redistribution in persistent atrial fibrillation enhance calcium release. *Cardiovascular Research*, **2015**, 108, 387-98	9.9	58
83	Melusin protects from cardiac rupture and improves functional remodelling after myocardial infarction. *Cardiovascular Research*, **2014**, 101, 97-107	9.9	33
82	Reversible and irreversible differentiation of cardiac fibroblasts. *Cardiovascular Research*, **2014**, 101, 411-22	9.9	60
81	The continuum of personalized cardiovascular medicine: a position paper of the European Society of Cardiology. *European Heart Journal*, **2014**, 35, 3250-7	9.5	66
80	FKBP12.6 overexpression does not protect against remodelling after myocardial infarction. *Experimental Physiology*, **2013**, 98, 134-48	2.4	4
79	Role of nitric oxide and oxidative stress in a sheep model of persistent atrial fibrillation. *Europace*, **2013**, 15, 754-60	3.9	33
78	Intracellular dyssynchrony of diastolic cytosolic [Ca□+] decay in ventricular cardiomyocytes in cardiac remodeling and human heart failure. *Circulation Research*, **2013**, 113, 527-38	15.7	44
77	Selective inhibition of Cx43 hemichannels by Gap19 and its impact on myocardial ischemia/reperfusion injury. *Basic Research in Cardiology*, **2013**, 108, 309	11.8	172
76	Combined Na(+)/Ca(2+) exchanger and L-type calcium channel block as a potential strategy to suppress arrhythmias and maintain ventricular function. *Circulation: Arrhythmia and Electrophysiology*, **2013**, 6, 371-9	6.4	39

75	Selective modulation of coupled ryanodine receptors during microdomain activation of calcium/calmodulin-dependent kinase II in the dyadic cleft. *Circulation Research*, **2013**, 113, 1242-52	15.7	30
74	Can body surface microvolt T-wave alternans distinguish concordant and discordant intracardiac alternans?. *PACE - Pacing and Clinical Electrophysiology*, **2013**, 36, 1007-16	1.6	6
73	Alternative strategies in arrhythmia therapy: evaluation of Na/Ca exchange as an anti-arrhythmic target. *Pharmacology & Therapeutics*, **2012**, 134, 26-42	13.9	41
72	Data-based theoretical identification of subcellular calcium compartments and estimation of calcium dynamics in cardiac myocytes. *Journal of Physiology*, **2012**, 590, 4423-46	3.9	9
71	Histological correlate of a cardiac magnetic resonance imaged microvascular obstruction in a porcine model of ischemia-reperfusion. *Cardiovascular Pathology*, **2012**, 21, 129-31	3.8	23
70	Transcriptome characterization of estrogen-treated human myocardium identifies myosin regulatory light chain interacting protein as a sex-specific element influencing contractile function. *Journal of the American College of Cardiology*, **2012**, 59, 410-7	15.1	72
69	Connexin mimetic peptides inhibit Cx43 hemichannel opening triggered by voltage and intracellular Ca2+ elevation. *Basic Research in Cardiology*, **2012**, 107, 304	11.8	111
68	Microvolt T-wave alternans and beat-to-beat variability of repolarization during early postischemic remodeling in a pig heart. *Heart Rhythm*, **2011**, 8, 1050-7	6.7	8
67	Dyssynchrony of Ca2+ release from the sarcoplasmic reticulum as subcellular mechanism of cardiac contractile dysfunction. *Journal of Molecular and Cellular Cardiology*, **2011**, 50, 390-400	5.8	52
66	Exercise training does not improve cardiac function in compensated or decompensated left ventricular hypertrophy induced by aortic stenosis. *Journal of Molecular and Cellular Cardiology*, **2011**, 50, 1017-25	5.8	36
65	Subcellular heterogeneity of ryanodine receptor properties in ventricular myocytes with low T-tubule density. *PLoS ONE*, **2011**, 6, e25100	3.7	43
64	Pharmacological modulation of connexin-formed channels in cardiac pathophysiology. *British Journal of Pharmacology*, **2011**, 163, 469-83	8.6	66
63	Microdomain [Ca□+] near ryanodine receptors as reported by L-type Ca□+ and Na+/Ca□+ exchange currents. *Journal of Physiology*, **2011**, 589, 2569-83	3.9	54
62	Alliance for biomedical research in Europe. *EMBO Molecular Medicine*, **2011**, 3, 505-6	12	
61	Blink and you₨l see it: how to detect Ca2+ quarks. *Circulation Research*, **2011**, 108, 154-6	15.7	0
60	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. *Cardiovascular Research*, **2011**, 89, 166-74	9.9	12
59	Nitric oxide delays atrial tachycardia-induced electrical remodelling in a sheep model. *Europace*, **2011**, 13, 747-54	3.9	6
58	Sudden death of a young adult associated with Bacillus cereus food poisoning. *Journal of Clinical Microbiology*, **2011**, 49, 4379-81	9.7	134

57	Sex-specific regulation of contractile function by 17β-estradiol in mouse cardiomyocytes. *FASEB Journal*, **2011**, 25, 1060.6	0.9	
56	Targeting sarcoplasmic reticulum Ca2+ uptake to improve heart failure: hit or miss. *Circulation Research*, **2010**, 106, 230-3	15.7	14
55	Early exercise training after myocardial infarction prevents contractile but not electrical remodelling or hypertrophy. *Cardiovascular Research*, **2010**, 86, 72-81	9.9	19
54	Inhibition of the calcium-activated chloride current in cardiac ventricular myocytes by N-(p-amylcinnamoyl)anthranilic acid (ACA). *Biochemical and Biophysical Research Communications*, **2010**, 402, 531-6	3.4	10
53	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. *International Journal of Cardiovascular Imaging*, **2010**, 26, 299-308	2.5	10
52	Ventricular phosphodiesterase-5 expression is increased in patients with advanced heart failure and contributes to adverse ventricular remodeling after myocardial infarction in mice. *Circulation*, **2009**, 119, 408-16	16.7	146
51	Ultrastructural and functional remodeling of the coupling between Ca2+ influx and sarcoplasmic reticulum Ca2+ release in right atrial myocytes from experimental persistent atrial fibrillation. *Circulation Research*, **2009**, 105, 876-85	15.7	130
50	Targeting Na+/Ca2+ Exchange as an Antiarrhythmic Strategy **2009**, 313-338		
49	Remodeling of T-tubules and reduced synchrony of Ca2+ release in myocytes from chronically ischemic myocardium. *Circulation Research*, **2008**, 102, 338-46	15.7	187
48	Targeting calcium handling in arrhythmias. *Europace*, **2008**, 10, 1364-9	3.9	28
47	Pharmacological inhibition of na/ca exchange results in increased cellular Ca2+ load attributable to the predominance of forward mode block. *Circulation Research*, **2008**, 102, 1398-405	15.7	71
46	Crosstalk between L-type Ca2+ channels and the sarcoplasmic reticulum: alterations during cardiac remodelling. *Cardiovascular Research*, **2008**, 77, 315-24	9.9	55
45	Mechanisms of postsystolic thickening in ischemic myocardium: mathematical modelling and comparison with experimental ischemic substrates. *Ultrasound in Medicine and Biology*, **2007**, 33, 1963-70	2.5	55
44	Window Ca2+ current and its modulation by Ca2+ release in hypertrophied cardiac myocytes from dogs with chronic atrioventricular block. *Journal of Physiology*, **2007**, 579, 147-60	3.9	49
43	Cellular basis for triggered ventricular arrhythmias that occur in the setting of compensated hypertrophy and heart failure: considerations for diagnosis and treatment. *Journal of Electrocardiology*, **2007**, 40, S8-14	1.4	34
42	Na/Ca exchange and cardiac ventricular arrhythmias. *Annals of the New York Academy of Sciences*, **2007**, 1099, 339-48	6.5	53
41	Early exercise training normalizes myofilament function and attenuates left ventricular pump dysfunction in mice with a large myocardial infarction. *Circulation Research*, **2007**, 100, 1079-88	15.7	99
40	Reduced force generating capacity in myocytes from chronically ischemic, hibernating myocardium. *Circulation Research*, **2007**, 100, 229-37	15.7	26

39	CaM or cAMP: linking beta-adrenergic stimulation to RleakyRRyRs. *Circulation Research*, **2007**, 100, 296-8	15.7	18
38	Inactivation of Smad5 in endothelial cells and smooth muscle cells demonstrates that Smad5 is required for cardiac homeostasis. *American Journal of Pathology*, **2007**, 170, 1460-72	5.8	36
37	Temporal patterns of electrical remodeling in canine ventricular hypertrophy: focus on IKs downregulation and blunted beta-adrenergic activation. *Cardiovascular Research*, **2006**, 72, 90-100	9.9	46
36	The amiodarone derivative KB130015 [2-methyl-3-(3,5-diiodo-4-carboxymethoxybenzyl)benzofuran] induces an Na+-dependent increase of [Ca2+] in ventricular myocytes. *Journal of Pharmacology and Experimental Therapeutics*, **2006**, 316, 162-8	4.7	7
35	Calcium overload, spontaneous calcium release, and ventricular arrhythmias. *Heart Rhythm*, **2006**, 3, 977-9	4.7	36
34	Increased phospholamban phosphorylation limits the force-frequency response in the MLP-/- mouse with heart failure. *Journal of Molecular and Cellular Cardiology*, **2006**, 40, 350-60	5.8	17
33	A SERCA2 pump with an increased Ca2+ affinity can lead to severe cardiac hypertrophy, stress intolerance and reduced life span. *Journal of Molecular and Cellular Cardiology*, **2006**, 41, 308-17	5.8	50
32	Myocardial hibernation: a double-edged sword. *Circulation Research*, **2004**, 94, 1005-7	15.7	11
31	Cellular mechanisms of contractile dysfunction in hibernating myocardium. *Circulation Research*, **2004**, 94, 794-801	15.7	58
30	Understanding cardiac alternans: the answer lies in the Ca2+ store. *Circulation Research*, **2004**, 94, 570-2	15.7	21
29	Reduced synchrony of Ca2+ release with loss of T-tubules-a comparison to Ca2+ release in human failing cardiomyocytes. *Cardiovascular Research*, **2004**, 62, 63-73	9.9	223
28	Magnesium-inhibited, TRPM6/7-like channel in cardiac myocytes: permeation of divalent cations and pH-mediated regulation. *Journal of Physiology*, **2004**, 559, 761-76	3.9	71
27	[Na(+)] in the subsarcolemmal RfuzzyRspace and modulation of [Ca(2+)](i) and contraction in cardiac myocytes. *Cell Calcium*, **2004**, 35, 603-12	4	46
26	Nonexcitatory stimulation as a novel treatment for heart failure: cause for excitement?. *European Heart Journal*, **2004**, 25, 626-8	9.5	
25	Probing the contribution of IKs to canine ventricular repolarization: key role for beta-adrenergic receptor stimulation. *Circulation*, **2003**, 107, 2753-60	16.7	206
24	Increased Na+ concentration and altered Na/K pump activity in hypertrophied canine ventricular cells. *Cardiovascular Research*, **2003**, 57, 1035-43	9.9	62
23	Intracellular Na in animal models of hypertrophy and heart failure: contractile function and arrhythmogenesis. *Cardiovascular Research*, **2003**, 57, 887-96	9.9	113
22	Ca2+ transport ATPase isoforms SERCA2a and SERCA2b are targeted to the same sites in the murine heart. *Cell Calcium*, **2003**, 34, 457-64	4	37

21	Intracellular Na+ and altered Na+ transport mechanisms in cardiac hypertrophy and failure. *Journal of Molecular and Cellular Cardiology*, **2003**, 35, 5-25	5.8	59
20	Triggering controversy in cardiac excitation-contraction coupling. *Journal of Molecular and Cellular Cardiology*, **2003**, 35, 133-5	5.8	2
19	Ca2+ uptake by the sarcoplasmic reticulum in ventricular myocytes of the SERCA2b/b mouse is impaired at higher Ca2+ loads only. *Circulation Research*, **2003**, 92, 881-7	15.7	24
18	Accumulation of slowly activating delayed rectifier potassium current (IKs) in canine ventricular myocytes. *Journal of Physiology*, **2003**, 551, 777-86	3.9	82
17	Role of the Na/Ca exchanger in arrhythmias in compensated hypertrophy. *Annals of the New York Academy of Sciences*, **2002**, 976, 438-45	6.5	17
16	Mind the model: effect of instrumentation on inducibility of atrial fibrillation in a sheep model. *Journal of Cardiovascular Electrophysiology*, **2002**, 13, 62-7	2.7	7
15	Mechanisms underlying the frequency dependence of contraction and [Ca(2+)](i) transients in mouse ventricular myocytes. *Journal of Physiology*, **2002**, 543, 889-98	3.9	95
14	Altered Na/Ca exchange activity in cardiac hypertrophy and heart failure: a new target for therapy?. *Cardiovascular Research*, **2002**, 53, 782-805	9.9	154
13	Spatial and temporal inhomogeneities during Ca2+ release from the sarcoplasmic reticulum in pig ventricular myocytes. *Circulation Research*, **2002**, 91, 1023-30	15.7	91
12	Different patterns of angiotensin II and atrial natriuretic peptide secretion in a sheep model of atrial fibrillation. *Journal of Cardiovascular Electrophysiology*, **2001**, 12, 1387-92	2.7	40
11	Replacement of the muscle-specific sarcoplasmic reticulum Ca(2+)-ATPase isoform SERCA2a by the nonmuscle SERCA2b homologue causes mild concentric hypertrophy and impairs contraction-relaxation of the heart. *Circulation Research*, **2001**, 89, 838-46	15.7	88
10	Enhanced Ca(2+) release and Na/Ca exchange activity in hypertrophied canine ventricular myocytes: potential link between contractile adaptation and arrhythmogenesis. *Circulation*, **2000**, 102, 2137-44	16.7	223
9	Repolarizing K+ currents ITO1 and IKs are larger in right than left canine ventricular midmyocardium. *Circulation*, **1999**, 99, 206-10	16.7	178
8	Downregulation of delayed rectifier K(+) currents in dogs with chronic complete atrioventricular block and acquired torsades de pointes. *Circulation*, **1999**, 100, 2455-61	16.7	204
7	T-type Ca2+ current as a trigger for Ca2+ release from the sarcoplasmic reticulum in guinea-pig ventricular myocytes. *Journal of Physiology*, **1998**, 508 (Pt 2), 439-51	3.9	87
6	Efficiency of L-type Ca2+ current compared to reverse mode Na/Ca exchange or T-type Ca2+ current as trigger for Ca2+ release from the sarcoplasmic reticulum. *Annals of the New York Academy of Sciences*, **1998**, 853, 357-60	6.5	14
5	Cellular basis of biventricular hypertrophy and arrhythmogenesis in dogs with chronic complete atrioventricular block and acquired torsade de pointes. *Circulation*, **1998**, 98, 1136-47	16.7	142
4	Monensin-induced reversal of positive force-frequency relationship in cardiac muscle: role of intracellular sodium in rest-dependent potentiation of contraction. *Journal of Molecular and Cellular Cardiology*, **1997**, 29, 977-89	5.8	36

3	Low efficiency of Ca2+ entry through the Na(+)-Ca2+ exchanger as trigger for Ca2+ release from the sarcoplasmic reticulum. A comparison between L-type Ca2+ current and reverse-mode Na(+)-Ca2+ exchange. *Circulation Research*, **1997**, 81, 1034-44	15.7	130
2	[Ca2+]i-dependent membrane currents in guinea-pig ventricular cells in the absence of Na/Ca exchange. *Pflugers Archiv European Journal of Physiology*, **1995**, 430, 871-8	4.6	23
1	Inhibition and rapid recovery of Ca2+ current during Ca2+ release from sarcoplasmic reticulum in guinea pig ventricular myocytes. *Circulation Research*, **1995**, 76, 102-9	15.7	99