Peter J Mohler

List of Publications by Year
in descending order

121 papers	5,181 citations	101384 36 h-index	98622 67 g-index
123 all docs	123 docs citations	123 times ranked	6958 citing authors

#	Article	IF	Citations
1	New mechanistic insights to PLOD1-mediated human vascular disease. Translational Research, 2022, 239, 1-17.	2.2	8
2	Altered Expression of Zonula occludens-1 Affects Cardiac Na+ Channels and Increases Susceptibility to Ventricular Arrhythmias. Cells, 2022, 11, 665.	1.8	3
3	Î²IV-spectrin as a stalk cell-intrinsic regulator of VEGF signaling. Nature Communications, 2022, 13, 1326.	5.8	11
4	Genetic and non-genetic risk factors associated with atrial fibrillation. Life Sciences, 2022, 299, 120529.	2.0	9
5	Neutralization of SARS-CoV-2 Omicron sub-lineages BA.1, BA.1.1, and BA.2. Cell Host and Microbe, 2022, 30, 1093-1102.e3.	5.1	114
6	Microfibrillar-Associated Protein 4 Regulates Stress-Induced Cardiac Remodeling. Circulation Research, 2021, 128, 723-737.	2.0	16
7	MicroRNA Biophysically Modulates Cardiac Action Potential by Direct Binding to Ion Channel. Circulation, 2021, 143, 1597-1613.	1.6	33
8	Loss of CASK Accelerates Heart Failure Development. Circulation Research, 2021, 128, 1139-1155.	2.0	11
9	Impact of etiology on force and kinetics of left ventricular end-stage failing human myocardium. Journal of Molecular and Cellular Cardiology, 2021, 156, 7-19.	0.9	14
10	Fibroblast-Specific Proteotranscriptomes Reveal Distinct Fibrotic Signatures of Human Sinoatrial Node in Nonfailing and Failing Hearts. Circulation, 2021, 144, 126-143.	1.6	22
11	Inherited Variants in SCARB1 Cause Severe Early-Onset Coronary Artery Disease. Circulation Research, 2021, 129, 296-307.	2.0	12
12	Ca2+/calmodulin kinase IIâ€“dependent regulation of Î²IV-spectrin modulates cardiac fibroblast gene expression, proliferation, and contractility. Journal of Biological Chemistry, 2021, 297, 100893.	1.6	7
13	Altered microRNA and mRNA profiles during heart failure in the human sinoatrial node. Scientific Reports, 2021, 11, 19328.	1.6	12
14	Giant ankyrin-G regulates cardiac function. Journal of Biological Chemistry, 2021, 296, 100507.	1.6	4
15	Viral transport media for COVID-19 testing. MethodsX, 2021, 8, 101433.	0.7	4
16	Cardiovascular risk of electronic cigarettes: a review of preclinical and clinical studies. Cardiovascular Research, 2020, 116, 40-50.	1.8	95
17	Stretching single titin molecules from failing human hearts reveals titinâ€™s role in blunting cardiac kinetic reserve. Cardiovascular Research, 2020, 116, 127-137.	1.8	1
18	Calmodulin kinase II regulates atrial myocyte late sodium current, calcium handling, and atrial arrhythmia. Heart Rhythm, 2020, 17, 503-511.	0.3	34

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19	Chronic heart failure increases negative chronotropic effects of adenosine in canine sinoatrial cells via A1R stimulation and GIRK-mediated IKado. Life Sciences, 2020, 240, 117068.	2.0	14
20	Unmasking Arrhythmogenic Hubs of Reentry Driving Persistent Atrial Fibrillation for Patientâ€Specific Treatment. Journal of the American Heart Association, 2020, 9, e017789.	1.6	18
21	Silencing miR-370-3p rescues funny current and sinus node function in heart failure. Scientific Reports, 2020, 10, 11279.	1.6	30
22	Rhythm dynamics of the aging heart: an experimental study using conscious, restrained mice. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H893-H905.	1.5	10
23	Optical Mapping-Validated Machine Learning Improves Atrial Fibrillation Driver Detection by Multi-Electrode Mapping. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008249.	2.1	21
24	Abnormal myocardial expression of SAP97 is associated with arrhythmogenic risk. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H1357-H1370.	1.5	13
25	Mechanisms and Alterations of Cardiac Ion Channels Leading to Disease: Role of Ankyrin-B in Cardiac Function. Biomolecules, 2020, 10, 211.	1.8	19
26	Fibroblast growth factor-inducible 14 mediates macrophage infiltration in heart to promote pressure overload-induced cardiac dysfunction. Life Sciences, 2020, 247, 117440.	2.0	23
27	Aberrant Expression of a Non-muscle RBFOX2 Isoform Triggers Cardiac Conduction Defects in Myotonic Dystrophy. Developmental Cell, 2020, 52, 748-763.e6.	3.1	31
28	Impaired neuronal sodium channels cause intranodal conduction failure and reentrant arrhythmias in human sinoatrial node. Nature Communications, 2020, 11, 512.	5.8	39
29	microRNA overexpression in slow transit constipation leads to reduced Na_V1.5 current and altered smooth muscle contractility. Gut, 2020, 69, 868-876.	6.1	18
30	Nodal Î² spectrins are required to maintain Na+ channel clustering and axon integrity. ELife, 2020, 9, .	2.8	20
31	Î² spectrin-dependent and domain specific mechanisms for Na+ channel clustering. ELife, 2020, 9, .	2.8	17
32	Abstract 15963: Microrna Biophysically Modulates Cardiac Physiology via Directly Binding to Ion Channel. Circulation, 2020, 142, .	1.6	0
33	Plakophilin-2 Haploinsufficiency Causes Calcium Handling Deficits and Modulates the Cardiac Response Towards Stress. International Journal of Molecular Sciences, 2019, 20, 4076.	1.8	36
34	Response by El Refaey et al to Letter Regarding Article, â€œProtein Phosphatase 2A Regulates Cardiac Na ⁺ Channelsâ€• Circulation Research, 2019, 124, e60-e61.	2.0	0
35	Protein Phosphatase 2A Regulates Cardiac Na ⁺ Channels. Circulation Research, 2019, 124, 737-746.	2.0	34
36	Potential use of ivabradine for treatment of atrial fibrillation. Journal of Cardiovascular Electrophysiology, 2019, 30, 253-254.	0.8	1

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37	Î²IV-Spectrin/STAT3 complex regulates fibroblast phenotype, fibrosis, and cardiac function. JCI Insight, 2019, 4, .	2.3	19
38	Ankyrin-B dysfunction predisposes to arrhythmogenic cardiomyopathy and is amenable to therapy. Journal of Clinical Investigation, 2019, 129, 3171-3184.	3.9	42
39	Microtubular remodeling and decreased expression of Nav1.5 with enhanced EHD4 in cells from the infarcted heart. Life Sciences, 2018, 201, 72-80.	2.0	8
40	Defining the molecular signatures of human right heart failure. Life Sciences, 2018, 196, 118-126.	2.0	23
41	Increased cross-bridge recruitment contributes to transient increase in force generation beyond maximal capacity in human myocardium. Journal of Molecular and Cellular Cardiology, 2018, 114, 116-123.	0.9	3
42	Altered regulation of cardiac ankyrin repeat protein in heart failure. Heliyon, 2018, 4, e00514.	1.4	10
43	The role of Î²II spectrin in cardiac health and disease. Life Sciences, 2018, 192, 278-285.	2.0	24
44	Arrhythmogenic Substrates for Atrial Fibrillation in Obesity. Frontiers in Physiology, 2018, 9, 1482.	1.3	17
45	Novel Mechanistic Roles for Ankyrin-G in Cardiac Remodeling and Heart Failure. JACC Basic To Translational Science, 2018, 3, 675-689.	1.9	13
46	Assessment of PKA and PKC inhibitors on force and kinetics of non-failing and failing human myocardium. Life Sciences, 2018, 215, 119-127.	2.0	9
47	First In Vivo Use of High-Resolution Near-Infrared Optical Mapping to Assess Atrial Activation During Sinus Rhythm and Atrial Fibrillation in a Large Animal Model. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e006870.	2.1	11
48	Ankyrin-B Q1283H Variant Linked to Arrhythmias Via Loss of Local Protein Phosphatase 2A Activity Causes Ryanodine Receptor Hyperphosphorylation. Circulation, 2018, 138, 2682-2697.	1.6	16
49	Human Atrial Fibrillation Drivers ResolvedÂWith Integrated Functional andÂStructural Imaging to Benefit ClinicalÂMapping. JACC: Clinical Electrophysiology, 2018, 4, 1501-1515.	1.3	51
50	CaMKII-dependent late Na⁺current increases electrical dispersion and arrhythmia in ischemia-reperfusion. American Journal of Physiology - Heart and Circulatory Physiology, 2018, 315, H794-H801.	1.5	29
51	Etiology-dependent impairment of relaxation kinetics in right ventricular end-stage failing human myocardium. Journal of Molecular and Cellular Cardiology, 2018, 121, 81-93.	0.9	28
52	Oxidative stress creates a unique, CaMKII-mediated substrate for atrial fibrillation in heart failure. JCI Insight, 2018, 3, .	2.3	50
53	Î²IV-Spectrin regulates STAT3 targeting to tune cardiac response to pressure overload. Journal of Clinical Investigation, 2018, 128, 5561-5572.	3.9	36
54	Antiarrhythmic Activity of NMDA Receptor Antagonists in Humans Versus Animal Models. FASEB Journal, 2018, 32, 901.16.	0.2	0

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55	Forceâ€frequency Relationship and Early Relaxation Kinetics Are Preserved Upon SR Blockade in Human Myocardium. FASEB Journal, 2018, 32, 903.15.	0.2	0
56	Stretching Single Titin Molecules from Failing Human Hearts at Cardiac Cycle Reveals Titin's Role in Cardiac Kinetic Reserve. FASEB Journal, 2018, 32, 903.6.	0.2	0
57	Novel application of 3D contrast-enhanced CMR to define fibrotic structure of the human sinoatrial node in vivo. European Heart Journal Cardiovascular Imaging, 2017, 18, 862-869.	0.5	35
58	Treat the Patient, Not Just the Cell!. Circulation Research, 2017, 120, 1390-1392.	2.0	2
59	Effects of zacopride, a moderate IK1 channel agonist, on triggered arrhythmia and contractility in human ventricular myocardium. Pharmacological Research, 2017, 115, 309-318.	3.1	16
60	Advancements in the use of gene therapy for cardiac arrhythmia. Heart Rhythm, 2017, 14, 1061-1062.	0.3	2
61	Novel Pathways for Regulation of Sinoatrial Node Plasticity and Heart Rate. Circulation Research, 2017, 121, 1027-1028.	2.0	2
62	Redundant and diverse intranodal pacemakers and conduction pathways protect the human sinoatrial node from failure. Science Translational Medicine, 2017, 9, .	5.8	76
63	Threeâ€dimensional Integrated Functional, Structural, and Computational Mapping to Define the Structural â€œFingerprintsâ€•of Heartâ€Specific Atrial Fibrillation Drivers in Human Heart Ex Vivo. Journal of the American Heart Association, 2017, 6, .	1.6	120
64	The evolving role of ankyrin-B in cardiovascular disease. Heart Rhythm, 2017, 14, 1884-1889.	0.3	33
65	In Vivo Genome Editing Restores Dystrophin Expression and Cardiac Function in Dystrophic Mice. Circulation Research, 2017, 121, 923-929.	2.0	123
66	The Davis Heart and Lung Research Institute. Circulation Research, 2017, 120, 1068-1071.	2.0	1
67	Ankyrins and Spectrins in Cardiovascular Biology and Disease. Frontiers in Physiology, 2017, 8, 852.	1.3	40
68	Twoâ€Pore K + Channel TREKâ€1 Regulates Sinoatrial Node Membrane Excitability. Journal of the American Heart Association, 2016, 5, e002865.	1.6	52
69	Elevated local [Ca²⁺] and CaMKII promote spontaneous Ca²⁺release in ankyrin-B-deficient hearts. Cardiovascular Research, 2016, 111, 287-294.	1.8	30
70	Common human ANK2 variant confers in vivo arrhythmia phenotypes. Heart Rhythm, 2016, 13, 1932-1940.	0.3	9
71	Insights into length-dependent regulation of cardiac cross-bridge cycling kinetics in human myocardium. Archives of Biochemistry and Biophysics, 2016, 601, 48-55.	1.4	10
72	Neuronal Na+ Channels Are Integral Components of Pro-Arrhythmic Na+/Ca2+ Signaling Nanodomain That Promotes Cardiac Arrhythmias During Î²-Adrenergic Stimulation. JACC Basic To Translational Science, 2016, 1, 251-266.	1.9	31

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73	Adenosine-Induced Atrial Fibrillation. Circulation, 2016, 134, 486-498.	1.6	85
74	Roles and regulation of protein phosphatase 2A (PP2A) in the heart. Journal of Molecular and Cellular Cardiology, 2016, 101, 127-133.	0.9	69
75	Strategies for Risk Analysis and Disease Classification in Atrial Fibrillation. Journal of Cardiovascular Electrophysiology, 2016, 27, 1271-1273.	0.8	0
76	Cardiac Electrical and Structural Changes During Bacterial Infection: An Instructive Model to Study Cardiac Dysfunction in Sepsis. Journal of the American Heart Association, 2016, 5, .	1.6	31
77	Dysfunction of the Î²₂-spectrin-based pathway in human heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1583-H1591.	1.5	23
78	Complexity of cardiac ion channel macromolecular complexes. Cardiovascular Research, 2016, 110, 163-164.	1.8	3
79	Human sinoatrial node structure: 3D microanatomy of sinoatrial conduction pathways. Progress in Biophysics and Molecular Biology, 2016, 120, 164-178.	1.4	81
80	Quantifying Drug-Induced Nanomechanics and Mechanical Effects to Single Cardiomyocytes for Optimal Drug Administration To Minimize Cardiotoxicity. Langmuir, 2016, 32, 1909-1919.	1.6	16
81	Whole Exome Sequencing in Atrial Fibrillation. PLoS Genetics, 2016, 12, e1006284.	1.5	35
82	The Effect of Sorafenib, Tadalafil and Macitentan Treatments on Thyroxin-Induced Hemodynamic Changes and Cardiac Abnormalities. PLoS ONE, 2016, 11, e0153694.	1.1	5
83	Defining the Links Between Oxidative Stressâ€"Based Biomarkers andÂPostoperative Atrial Fibrillation. Journal of the American Heart Association, 2015, 4, .	1.6	7
84	Identification of General and Heart-Specific miRNAs in Sheep (Ovis aries). PLoS ONE, 2015, 10, e0143313.	1.1	13
85	Role of Oxidative Stress in Thyroid Hormone-Induced Cardiomyocyte Hypertrophy and Associated Cardiac Dysfunction: An Undisclosed Story. Oxidative Medicine and Cellular Longevity, 2015, 2015, 1-16.	1.9	44
86	Atrial fibrillation driven by micro-anatomic intramural re-entry revealed by simultaneous sub-epicardial and sub-endocardial optical mapping in explanted human hearts. European Heart Journal, 2015, 36, 2390-2401.	1.0	347
87	Exercise training-induced bradycardia: evidence for enhanced parasympathetic regulation without changes in intrinsic sinoatrial node function. Journal of Applied Physiology, 2015, 118, 1344-1355.	1.2	62
88	Integration of High-Resolution Optical Mapping and 3-Dimensional Micro-Computed Tomographic Imaging to Resolve the Structural Basis of Atrial Conduction in the Human Heart. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1514-1517.	2.1	51
89	The Frank-Starling mechanism involves deceleration of cross-bridge kinetics and is preserved in failing human right ventricular myocardium. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H2077-H2086.	1.5	32
90	Use of Whole Exome Sequencing for the Identification of I _{to} â€Based Arrhythmia Mechanism and Therapy. Journal of the American Heart Association, 2015, 4, .	1.6	16

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91	Neuronal Na+ channel blockade suppresses arrhythmogenic diastolic Ca2+ release. Cardiovascular Research, 2015, 106, 143-152.	1.8	38
92	Heart failure duration progressively modulates the arrhythmia substrate through structural and electrical remodeling. Life Sciences, 2015, 123, 61-71.	2.0	24
93	Dysfunction in the Î²II Spectrinâ€“Dependent Cytoskeleton Underlies Human Arrhythmia. Circulation, 2015, 131, 695-708.	1.6	56
94	Claudin-5 levels are reduced from multiple cell types in human failing hearts and are associated with mislocalization of ephrin-B1. Cardiovascular Pathology, 2015, 24, 160-167.	0.7	17
95	Voltage-Gated Sodium Channel Phosphorylation at Ser571 Regulates Late Current, Arrhythmia, and Cardiac Function In Vivo. Circulation, 2015, 132, 567-577.	1.6	99
96	Protein phosphatase 2A regulatory subunit B56Î± limits phosphatase activity in the heart. Science Signaling, 2015, 8, ra72.	1.6	45
97	Role of CaMKII in cardiac arrhythmias. Trends in Cardiovascular Medicine, 2015, 25, 392-397.	2.3	49
98	Endosome-based protein trafficking and Ca2+ homeostasis in the heart. Frontiers in Physiology, 2015, 6, 34.	1.3	9
99	Differential involvement of various sources of reactive oxygen species in thyroxin-induced hemodynamic changes and contractile dysfunction of the heart and diaphragm muscles. Free Radical Biology and Medicine, 2015, 83, 252-261.	1.3	21
100	MG53-mediated cell membrane repair protects against acute kidney injury. Science Translational Medicine, 2015, 7, 279ra36.	5.8	103
101	Eps15 Homology Domain-containing Protein 3 Regulates Cardiac T-type Ca2+ Channel Targeting and Function in the Atria. Journal of Biological Chemistry, 2015, 290, 12210-12221.	1.6	14
102	SCN5A variant that blocks fibroblast growth factor homologous factor regulation causes human arrhythmia. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12528-12533.	3.3	51
103	Molecular Mapping of Sinoatrial Node HCN Channel Expression in the Human Heart. Circulation: Arrhythmia and Electrophysiology, 2015, 8, 1219-1227.	2.1	72
104	Calsequestrin 2 deletion causes sinoatrial node dysfunction and atrial arrhythmias associated with altered sarcoplasmic reticulum calcium cycling and degenerative fibrosis within the mouse atrial pacemaker complex1. European Heart Journal, 2015, 36, 686-697.	1.0	110
105	Abstract 18171: HCN Channel Distribution in the Human Sinoatrial Node and Latent Atrial Pacemakers (Best of Basic Science Abstract). Circulation, 2015, 132, .	1.6	0
106	Assembly of the Cardiac Intercalated Disk during Pre- and Postnatal Development of the Human Heart. PLoS ONE, 2014, 9, e94722.	1.1	98
107	A Module of Human Peripheral Blood Mononuclear Cell Transcriptional Network Containing Primitive and Differentiation Markers Is Related to Specific Cardiovascular Health Variables. PLoS ONE, 2014, 9, e95124.	1.1	5
108	EHD3-Dependent Endosome Pathway Regulates Cardiac Membrane Excitability and Physiology. Circulation Research, 2014, 115, 68-78.	2.0	32

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109	Tubulin polymerization disrupts cardiac Î²-adrenergic regulation of late INa. Cardiovascular Research, 2014, 103, 168-177.	1.8	45
110	Glial ankyrins facilitate paranodal axoglial junction assembly. Nature Neuroscience, 2014, 17, 1673-1681.	7.1	82
111	Joiner et al. reply. Nature, 2014, 513, E3-E3.	13.7	9
112	Defective interactions of protein partner with ion channels and transporters as alternative mechanisms of membrane channelopathies. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 723-730.	1.4	10
113	Ankyrin-G Directly Binds to Kinesin-1 to Transport Voltage-Gated Na+ Channels into Axons. Developmental Cell, 2014, 28, 117-131.	3.1	80
114	Upregulation of Adenosine A1 Receptors Facilitates Sinoatrial Node Dysfunction in Chronic Canine Heart Failure by Exacerbating Nodal Conduction Abnormalities Revealed by Novel Dual-Sided Intramural Optical Mapping. Circulation, 2014, 130, 315-324.	1.6	70
115	Ankyrin-G Coordinates Intercalated Disc Signaling Platform to Regulate Cardiac Excitability In Vivo. Circulation Research, 2014, 115, 929-938.	2.0	114
116	Nitric Oxide-Dependent Activation of CaMKII Increases Diastolic Sarcoplasmic Reticulum Calcium Release in Cardiac Myocytes in Response to Adrenergic Stimulation. PLoS ONE, 2014, 9, e87495.	1.1	63
117	SAP97 and Cortactin Remodeling in Arrhythmogenic Purkinje Cells. PLoS ONE, 2014, 9, e106830.	1.1	4
118	Calcium-Activated Potassium Current Modulates Ventricular Repolarization in Chronic Heart Failure. PLoS ONE, 2014, 9, e108824.	1.1	62
119	Role of late sodium current as a potential arrhythmogenic mechanism in the progression of pressure-induced heart disease. Journal of Molecular and Cellular Cardiology, 2013, 61, 111-122.	0.9	89
120	Ca _V 1.2 Î²-subunit coordinates CaMKII-triggered cardiomyocyte death and afterdepolarizations. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4996-5000.	3.3	114
121	A Dynamic Pathway for Calcium-Independent Activation of CaMKII by Methionine Oxidation. Cell, 2008, 133, 462-474.	13.5	951