Mark E Anderson

List of Publications by Year
in descending order

107 papers	9,493 citations	38742 50 h-index	38395 95 g-index
111 all docs	111 docs citations	111 times ranked	9173 citing authors

#	Article	IF	Citations
1	A Dynamic Pathway for Calcium-Independent Activation of CaMKII by Methionine Oxidation. Cell, 2008, 133, 462-474.	28.9	951
2	Calmodulin kinase II inhibition protects against structural heart disease. Nature Medicine, 2005, 11, 409-417.	30.7	526
3	CaMKII in myocardial hypertrophy and heart failure. Journal of Molecular and Cellular Cardiology, 2011, 51, 468-473.	1.9	383
4	Calcium/calmodulin-dependent protein kinase II links ER stress with Fas and mitochondrial apoptosis pathways. Journal of Clinical Investigation, 2009, 119, 2925-2941.	8.2	367
5	CaMKII determines mitochondrial stress responses in heart. Nature, 2012, 491, 269-273.	27.8	340
6	Calmodulin kinase IIâ€“mediated sarcoplasmic reticulum Ca2+ leak promotes atrial fibrillation in mice. Journal of Clinical Investigation, 2009, 119, 1940-51.	8.2	338
7	Mechanisms of Altered Ca ²⁺ Handling in Heart Failure. Circulation Research, 2013, 113, 690-708.	4.5	291
8	Reactive Oxygen Speciesâ€“Activated Ca/Calmodulin Kinase IIÎ´ Is Required for Late <i>I</i> _{Na} Augmentation Leading to Cellular Na and Ca Overload. Circulation Research, 2011, 108, 555-565.	4.5	256
9	Oxidized Ca ²⁺ /Calmodulin-Dependent Protein Kinase II Triggers Atrial Fibrillation. Circulation, 2013, 128, 1748-1757.	1.6	256
10	Calmodulin-Dependent Protein Kinase II: Linking Heart Failure and Arrhythmias. Circulation Research, 2012, 110, 1661-1677.	4.5	242
11	Calmodulin Kinase II and Arrhythmias in a Mouse Model of Cardiac Hypertrophy. Circulation, 2002, 106, 1288-1293.	1.6	240
12	A Î²IV-spectrin/CaMKII signaling complex is essential for membrane excitability in mice. Journal of Clinical Investigation, 2010, 120, 3508-3519.	8.2	227
13	Oxidation of CaMKII determines the cardiotoxic effects of aldosterone. Nature Medicine, 2011, 17, 1610-1618.	30.7	220
14	Diabetes increases mortality after myocardial infarction by oxidizing CaMKII. Journal of Clinical Investigation, 2013, 123, 1262-1274.	8.2	203
15	Oxidized CaMKII causes cardiac sinus node dysfunction in mice. Journal of Clinical Investigation, 2011, 121, 3277-3288.	8.2	193
16	Cardiac repolarization: Current knowledge, critical gaps, and new approaches to drug development and patient management. American Heart Journal, 2002, 144, 769-781.	2.7	143
17	Inhibition of MCU forces extramitochondrial adaptations governing physiological and pathological stress responses in heart. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9129-9134.	7.1	140
18	Calmodulin kinase II is required for fight or flight sinoatrial node physiology. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5972-5977.	7.1	130

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19	The mitochondrial uniporter controls fight or flight heart rate increases. Nature Communications, 2015, 6, 6081.	12.8	126
20	CaMKII oxidative activation and the pathogenesis of cardiac disease. Journal of Molecular and Cellular Cardiology, 2014, 73, 112-116.	1.9	122
21	Calmodulin kinase II inhibition protects against myocardial cell apoptosis in vivo. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H3065-H3075.	3.2	121
22	Calmodulin kinase signaling in heart: an intriguing candidate target for therapy of myocardial dysfunction and arrhythmias. , 2005, 106, 39-55.		117
23	Ca _{<i>V</i>} 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.	7.1	114
24	Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current. Circulation Research, 1999, 84, 906-912.	4.5	109
25	CaMKII-dependent SR Ca leak contributes to doxorubicin-induced impaired Ca handling in isolated cardiac myocytes. Journal of Molecular and Cellular Cardiology, 2011, 51, 749-759.	1.9	107
26	Death, Cardiac Dysfunction, and Arrhythmias Are Increased by Calmodulin Kinase II in Calcineurin Cardiomyopathy. Circulation, 2006, 114, 1352-1359.	1.6	104
27	New Therapeutic Targets in Cardiology. Circulation, 2012, 126, 2125-2139.	1.6	104
28	MyD88 mediated inflammatory signaling leads to CaMKII oxidation, cardiac hypertrophy and death after myocardial infarction. Journal of Molecular and Cellular Cardiology, 2012, 52, 1135-1144.	1.9	103
29	Defects in Ankyrin-Based Membrane Protein Targeting Pathways Underlie Atrial Fibrillation. Circulation, 2011, 124, 1212-1222.	1.6	102
30	Ca2+/calmodulin-dependent kinase II triggers cell membrane injury by inducing complement factor B gene expression in the mouse heart. Journal of Clinical Investigation, 2009, 119, 986-96.	8.2	92
31	CaM kinase augments cardiac L-type Ca²⁺current: a cellular mechanism for long Q-T arrhythmias. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H2168-H2178.	3.2	91
32	Systemic Administration of Calmodulin Antagonist W-7 or Protein Kinase A Inhibitor H-8 Prevents Torsade de Pointes in Rabbits. Circulation, 1999, 100, 2437-2442.	1.6	89
33	Oxidant stress promotes disease by activating CaMKII. Journal of Molecular and Cellular Cardiology, 2015, 89, 160-167.	1.9	86
34	CaMKII is a nodal signal for multiple programmed cell death pathways in heart. Journal of Molecular and Cellular Cardiology, 2017, 103, 102-109.	1.9	86
35	Molecular and cellular neurocardiology: development, and cellular and molecular adaptations to heart disease. Journal of Physiology, 2016, 594, 3853-3875.	2.9	85
36	Proarrhythmic Defects in Timothy Syndrome Require Calmodulin Kinase II. Circulation, 2008, 118, 2225-2234.	1.6	82

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37	Ca 2+ /Calmodulin-Dependent Kinase IIÎ´ Causes Heart Failure by Accumulation of p53 in Dilated Cardiomyopathy. Circulation, 2010, 122, 891-899.	1.6	81
38	E-C coupling structural protein junctophilin-2 encodes a stress-adaptive transcription regulator. Science, 2018, 362, .	12.6	78
39	CaMKII regulates contraction- but not insulin-induced glucose uptake in mouse skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E1150-E1160.	3.5	76
40	Mitochondrial-Targeted Antioxidant Therapy Decreases Transforming Growth Factor-Î²â€"Mediated Collagen Production in a Murine Asthma Model. American Journal of Respiratory Cell and Molecular Biology, 2015, 52, 106-115.	2.9	76
41	Calmodulin Kinase II Inhibition Shortens Action Potential Duration by Upregulation of K + Currents. Circulation Research, 2006, 99, 1092-1099.	4.5	74
42	Calmodulin kinase II is required for angiotensin II-mediated vascular smooth muscle hypertrophy. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H688-H698.	3.2	70
43	Mitochondrial Calcium Uniporter Activity Is Dispensable for MDA-MB-231 Breast Carcinoma Cell Survival. PLoS ONE, 2014, 9, e96866.	2.5	70
44	Calmodulin Kinase and L-Type Calcium ChannelsA Recipe for Arrhythmias?. Trends in Cardiovascular Medicine, 2004, 14, 152-161.	4.9	66
45	Multiple downstream proarrhythmic targets for calmodulin kinase II: Moving beyond an ion channel-centric focus. Cardiovascular Research, 2007, 73, 657-666.	3.8	66
46	Excessive <i>O</i> -GlcNAcylation Causes Heart Failure and Sudden Death. Circulation, 2021, 143, 1687-1703.	1.6	65
47	Oxidized Calmodulin Kinase II Regulates Conduction Following Myocardial Infarction: A Computational Analysis. PLoS Computational Biology, 2009, 5, e1000583.	3.2	64
48	Atrial remodelling in atrial fibrillation: CaMKII as a nodal proarrhythmic signal. Cardiovascular Research, 2016, 109, 542-557.	3.8	61
49	Reduced repolarization reserve in ventricular myocytes from female mice. Cardiovascular Research, 2002, 53, 763-769.	3.8	58
50	BK channels regulate sinoatrial node firing rate and cardiac pacing in vivo. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1327-H1338.	3.2	56
51	CaMKII Is Essential for the Proasthmatic Effects of Oxidation. Science Translational Medicine, 2013, 5, 195ra97.	12.4	54
52	Mitochondrial CaMKII causes adverse metabolic reprogramming and dilated cardiomyopathy. Nature Communications, 2020, 11, 4416.	12.8	54
53	The Multifunctional Ca2+/Calmodulin-dependent Kinase II Î´ (CaMKIIÎ´) Controls Neointima Formation after Carotid Ligation and Vascular Smooth Muscle Cell Proliferation through Cell Cycle Regulation by p21. Journal of Biological Chemistry, 2011, 286, 7990-7999.	3.4	53
54	Exercise-induced expression of cardiac ATP-sensitive potassium channels promotes action potential shortening and energy conservation. Journal of Molecular and Cellular Cardiology, 2011, 51, 72-81.	1.9	52

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55	Twoâ€Pore K + Channel TREKâ€1 Regulates Sinoatrial Node Membrane Excitability. Journal of the American Heart Association, 2016, 5, e002865.	3.7	52
56	Intracellular Na+ overload causes oxidation of CaMKII and leads to Ca2+ mishandling in isolated ventricular myocytes. Journal of Molecular and Cellular Cardiology, 2014, 76, 247-256.	1.9	49
57	Embryonic Stem Cellâ€"Derived Cardiac Myocytes Are Not Ready for Human Trials. Circulation Research, 2014, 115, 335-338.	4.5	47
58	CaMKII in sinoatrial node physiology and dysfunction. Frontiers in Pharmacology, 2014, 5, 48.	3.5	43
59	CaMKII inhibition rescues proarrhythmic phenotypes in the model of human ankyrin-B syndrome. Heart Rhythm, 2012, 9, 2034-2041.	0.7	42
60	Ryanodine receptor phosphorylation by oxidized CaMKII contributes to the cardiotoxic effects of cardiac glycosides. Cardiovascular Research, 2014, 101, 165-174.	3.8	41
61	Oxidized CaMKII and O-GlcNAcylation cause increased atrial fibrillation in diabetic mice by distinct mechanisms. Journal of Clinical Investigation, 2021, 131, .	8.2	40
62	Oxidized CaMKII (Ca ²⁺ /Calmodulin-Dependent Protein Kinase II) Is Essential for Ventricular Arrhythmia in a Mouse Model of Duchenne Muscular Dystrophy. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005682.	4.8	39
63	Chronic Calmodulin-Kinase II Activation Drives Disease Progression in Mutation-Specific Hypertrophic Cardiomyopathy. Circulation, 2019, 139, 1517-1529.	1.6	39
64	Ionizing radiation regulates cardiac Ca handling via increased ROS and activated CaMKII. Basic Research in Cardiology, 2013, 108, 385.	5.9	36
65	Oxidized CaMKII promotes asthma through the activation of mast cells. JCI Insight, 2017, 2, e90139.	5.0	33
66	Oxidative activation of the Ca2+/calmodulin-dependent protein kinase II (CaMKII) regulates vascular smooth muscle migration and apoptosis. Vascular Pharmacology, 2014, 60, 75-83.	2.1	32
67	Calcium/calmodulin-dependent protein kinase II causes atrial structural remodeling associated with atrial fibrillation and heart failure. Heart Rhythm, 2019, 16, 1080-1088.	0.7	31
68	Calmodulin Kinase II Inhibition Enhances Ischemic Preconditioning by Augmenting ATP-Sensitive K⁺Current. Channels, 2007, 1, 387-394.	2.8	28
69	Ca2+/calmodulin-dependent protein kinase II in heart failure. Drug Discovery Today Disease Mechanisms, 2010, 7, e117-e122.	0.8	27
70	Î² _{IV} -Spectrin and CaMKII facilitate Kir6.2 regulation in pancreatic beta cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17576-17581.	7.1	27
71	Calmodulin and the Philosopher's Stone: Changing Ca2+ into Arrhythmias. Journal of Cardiovascular Electrophysiology, 2002, 13, 195-197.	1.7	26
72	Functional role of kynurenine and aryl hydrocarbon receptor axis in chronic rhinosinusitis with nasal polyps. Journal of Allergy and Clinical Immunology, 2018, 141, 586-600.e6.	2.9	24

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73	Myocardial death and dysfunction after ischemia-reperfusion injury require CaMKIIÎ´ oxidation. Scientific Reports, 2019, 9, 9291.	3.3	23
74	Calmodulin/CaMKII inhibition improves intercellular communication and impulse propagation in the heart and is antiarrhythmic under conditions when fibrosis is absent. Cardiovascular Research, 2016, 111, 410-421.	3.8	23
75	MICAL1 constrains cardiac stress responses and protects against disease by oxidizing CaMKII. Journal of Clinical Investigation, 2020, 130, 4663-4678.	8.2	23
76	Cationic CaMKII Inhibiting Nanoparticles Prevent Allergic Asthma. Molecular Pharmaceutics, 2017, 14, 2166-2175.	4.6	22
77	Regulation of Cardiac ATP-sensitive Potassium Channel Surface Expression by Calcium/Calmodulin-dependent Protein Kinase II. Journal of Biological Chemistry, 2013, 288, 1568-1581.	3.4	20
78	The Multifunctional Ca2+/Calmodulin-Dependent Kinase IIÎ´ (CaMKIIÎ´) Regulates Arteriogenesis in a Mouse Model of Flow-Mediated Remodeling. PLoS ONE, 2013, 8, e71550.	2.5	20
79	CaMKII oxidation is a critical performance/disease trade-off acquired at the dawn of vertebrate evolution. Nature Communications, 2021, 12, 3175.	12.8	19
80	Exercise training prevents ventricular tachycardia in CPVT1 due to reduced CaMKII-dependent arrhythmogenic Ca2+release. Cardiovascular Research, 2016, 111, 295-306.	3.8	14
81	Essentiality of Regulator of G Protein Signaling 6 and Oxidized Ca ²⁺ /Calmodulinâ€Dependent Protein Kinase II in Notch Signaling andÂCardiovascular Development. Journal of the American Heart Association, 2017, 6, .	3.7	14
82	International Exchange and American Medicine. New England Journal of Medicine, 2017, 376, e40.	27.0	13
83	Rescuing a failing heart: think globally, treat locally. Nature Medicine, 2009, 15, 25-26.	30.7	11
84	Loss of CASK Accelerates Heart Failure Development. Circulation Research, 2021, 128, 1139-1155.	4.5	11
85	Joiner et al. reply. Nature, 2014, 513, E3-E3.	27.8	9
86	Functional Similarity Between Electrograms Recorded from an Implantable Cardioverter Defibrillator Emulator and the Surface Electrocardiogram. PACE - Pacing and Clinical Electrophysiology, 2001, 24, 34-40.	1.2	8
87	Will Secretoneurin Be the Next Big Thing?. Journal of the American College of Cardiology, 2015, 65, 352-354.	2.8	8
88	A Single Protein Kinase A or Calmodulin Kinase II Site Does Not Control the Cardiac Pacemaker Ca 2+ Clock. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e003180.	4.8	8
89	PDE1 Inhibition Modulates Ca _v 1.2 Channel to Stimulate Cardiomyocyte Contraction. Circulation Research, 2021, 129, 872-886.	4.5	8
90	Loss of ATP-Sensitive Potassium Channel Surface Expression in Heart Failure Underlies Dysregulation of Action Potential Duration and Myocardial Vulnerability to Injury. PLoS ONE, 2016, 11, e0151337.	2.5	7

#	Article	IF	Citations
91	To Be or Not to Be a CaMKII Inhibitor?. JAMA Cardiology, 2021, 6, 769.	6.1	6
92	Inhibition of CaMKII Does Not Attenuate Cardiac Hypertrophy in Mice with Dysfunctional Ryanodine Receptor. PLoS ONE, 2014, 9, e104338.	2.5	6
93	Why Has It Taken So Long to Learn What We Still Donâ€™t Know?. Circulation Research, 2013, 113, 840-842.	4.5	3
94	Heart Failure and Atrial Fibrillationâ€"Chicken or Egg?. Circulation Research, 2022, 130, 1011-1013.	4.5	3
95	Is Digoxin an Antiarrhythmic Drug?. Journal of Interventional Cardiac Electrophysiology, 2000, 4, 313-316.	1.0	2
96	A Department of Medicine Infrastructure for Patient Safety and Clinical Quality Improvement. American Journal of Medical Quality, 2018, 33, 413-419.	0.5	2
97	Building Leadership Capacity for Mission Execution in a Large Academic Department of Medicine. American Journal of Medicine, 2019, 132, 535-543.	1.5	2
98	Mechanisms underlying heart failure. Drug Discovery Today Disease Mechanisms, 2010, 7, e83-e85.	0.8	1
99	Totally Rad? The Long and Winding Road to Understanding Ca V 1.2 Regulation. Circulation Research, 2021, 128, 89-91.	4.5	1
100	Voices for Social Justice and Against Racism: An AAIM Perspective. American Journal of Medicine, 2021, 134, 930-934.	1.5	1
101	The oxidationâ€resistant CaMKIIâ€MM281/282VV mutation does not prevent arrhythmias in CPVT1. Physiological Reports, 2021, 9, e15030.	1.7	1
102	Itâ€™s 10 pm ; Do You Know Where Your Data Are?. Circulation Research, 2017, 120, 1551-1554.	4.5	0
103	Boost US federal funding for international trainees. Nature, 2021, 594, 26-26.	27.8	0
104	Role of calmodulin kinase II in inotropic effect of Î± 1 â€adrenergic stimulation in the heart. FASEB Journal, 2008, 22, 970.18.	0.5	0
105	CaMKII mediates Angâ€II induced vascular smooth muscle cell hypertrophy by a pathway involving HDAC4/MEF2. FASEB Journal, 2009, 23, 637.8.	0.5	0
106	CaMKII inhibition in vascular smooth muscle improves angiotensin IIâ€"hypertension. FASEB Journal, 2012, 26, lb599.	0.5	0
107	Regulator of G protein signaling 6 (RGS6) mediates doxorubicinâ€induced myocardial cell apoptosis and cardiomyopathy. FASEB Journal, 2013, 27, 1031.7.	0.5	0