

## List of Publications by Year in descending order

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90  
papers

4,434  
citations

159358

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106150

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91  
all docs

91  
docs citations

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times ranked

4135  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of Adenosine on Wavefront Propagation in Persistent Atrial Fibrillation: Insights From Global Noncontact Charge Density Mapping of the Left Atrium. <i>Journal of the American Heart Association</i> , 2022, 11, .	1.6	2
2	Bi-atrial high-density mapping reveals inhibition of wavefront turning and reduction of complex propagation patterns as main antiarrhythmic mechanisms of vernakalant. <i>Europace</i> , 2021, 23, 1114-1123.	0.7	2
3	Electrophysiological and Structural Remodeling of the Atria in a Mouse Model of Troponin-I Mutation Linked Hypertrophic Cardiomyopathy: Implications for Atrial Fibrillation. <i>International Journal of Molecular Sciences</i> , 2021, 22, 6941.	1.8	9
4	Spatial concentration and distribution of phase singularities in human atrial fibrillation: Insights for the AF mechanism. <i>Journal of Arrhythmia</i> , 2021, 37, 922-930.	0.5	3
5	A novel algorithm for 3-D visualization of electrogram duration for substrate-mapping in patients with ischemic heart disease and ventricular tachycardia. <i>PLoS ONE</i> , 2021, 16, e0254683.	1.1	8
6	Spatial and temporal variability of rotational, focal, and irregular activity: Practical implications for mapping of atrial fibrillation. <i>Journal of Cardiovascular Electrophysiology</i> , 2021, 32, 2393-2403.	0.8	13
7	Respiratory sinus arrhythmia is reduced after pulmonary vein isolation in patients with paroxysmal atrial fibrillation. <i>Archives of Medical Science</i> , 2020, 16, 1022-1030.	0.4	5
8	M/M/Infinity Birth-Death Processes – A Quantitative Representational Framework to Summarize and Explain Phase Singularity and Wavelet Dynamics in Atrial Fibrillation. <i>Frontiers in Physiology</i> , 2020, 11, 616866.	1.3	14
9	Editorial: Recent Advances in Understanding the Basic Mechanisms of Atrial Fibrillation Using Novel Computational Approaches. <i>Frontiers in Physiology</i> , 2019, 10, 1065.	1.3	5
10	Cardiac glial cells release neurotrophic S100B upon catheter-based treatment of atrial fibrillation. <i>Science Translational Medicine</i> , 2019, 11, .	5.8	57
11	High-Density Mapping and Ablation of Primary Nonfocal Left Atrial Tachycardia. <i>JACC: Clinical Electrophysiology</i> , 2019, 5, 417-426.	1.3	17
12	Kolmogorov Complexity of Coronary Sinus Atrial Electrograms before Ablation Predicts Termination of Atrial Fibrillation after Pulmonary Vein Isolation. <i>Entropy</i> , 2019, 21, 970.	1.1	1
13	Renewal Theory as a Universal Quantitative Framework to Characterize Phase Singularity Regeneration in Mammalian Cardiac Fibrillation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2019, 12, e007569.	2.1	35
14	Temporal stability and specificity of high bipolar electrogram entropy regions in sustained atrial fibrillation: Implications for mapping. <i>Journal of Electrocardiology</i> , 2019, 53, 18-27.	0.4	6
15	Differential pacing from two sites to diagnose risk of ventricular arrhythmia and death. <i>PACE - Pacing and Clinical Electrophysiology</i> , 2019, 42, 189-200.	0.5	1
16	Contact force facilitates the achievement of an unexcitable ablation line during pulmonary vein isolation. <i>Clinical Research in Cardiology</i> , 2018, 107, 632-641.	1.5	9
17	Electrophysiologic features of protected channels in late postinfarction patients with and without spontaneous ventricular tachycardia. <i>Journal of Interventional Cardiac Electrophysiology</i> , 2018, 51, 13-24.	0.6	9
18	Absence of rotational activity detected using 2-dimensional phase mapping in the corresponding 3-dimensional phase maps in human persistent atrial fibrillation. <i>Heart Rhythm</i> , 2018, 15, 182-192.	0.3	20

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19	Transient Rotor Activity During Prolonged 3-Dimensional Phase Mapping in Human Persistent Atrial Fibrillation. <i>JACC: Clinical Electrophysiology</i> , 2018, 4, 72-83.	1.3	15
20	Rotors Detected by Phase Analysis of Filtered, Epicardial Atrial Fibrillation Electrograms Colocalize With Regions of Conduction Block. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2018, 11, e005858.	2.1	51
21	Sympathetic and Parasympathetic Coactivation Induces Perturbed Heart Rate Dynamics in Patients with Paroxysmal Atrial Fibrillation. <i>Medical Science Monitor</i> , 2018, 24, 2164-2172.	0.5	12
22	Impact of Intracardiac Neurons on Cardiac Electrophysiology and Arrhythmogenesis in an Ex Vivo Langendorff System. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	4
23	Information Theory and Atrial Fibrillation (AF): A Review. <i>Frontiers in Physiology</i> , 2018, 9, 957.	1.3	23
24	How disruption of endo-epicardial electrical connections enhances endo-epicardial conduction during atrial fibrillation. <i>Europace</i> , 2017, 19, euv445.	0.7	21
25	Identification of Rotors during Human Atrial Fibrillation Using Contact Mapping and Phase Singularity Detection: Technical Considerations. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 310-318.	2.5	100
26	Disruption of cardiac cholinergic neurons enhances susceptibility to ventricular arrhythmias. <i>Nature Communications</i> , 2017, 8, 14155.	5.8	77
27	Substrate characterization and catheter ablation in patients with scar-related ventricular tachycardia using ultra high-density mapping. <i>Journal of Cardiovascular Electrophysiology</i> , 2017, 28, 1058-1067.	0.8	29
28	Spatiotemporal characteristics of atrial fibrillation electrograms: A novel marker for arrhythmia stability and termination. <i>Journal of Arrhythmia</i> , 2017, 33, 40-48.	0.5	6
29	Local Electrical Dyssynchrony during Atrial Fibrillation: Theoretical Considerations and Initial Catheter Ablation Results. <i>PLoS ONE</i> , 2016, 11, e0164236.	1.1	9
30	Characterization, Mapping, and Ablation of Complex Atrial Tachycardia: Initial Experience With a Novel Method of Ultra High-Density 3D Mapping. <i>Journal of Cardiovascular Electrophysiology</i> , 2016, 27, 1139-1150.	0.8	54
31	Development of nonfibrotic left ventricular hypertrophy in an ANG II-induced chronic ovine hypertension model. <i>Physiological Reports</i> , 2016, 4, e12897.	0.7	10
32	Development of Time- and Voltage-Domain Mapping (V-T-Mapping) to Localize Ventricular Tachycardia Channels During Sinus Rhythm. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, .	2.1	13
33	Simultaneous conduction mapping and intracellular membrane potential recording in isolated atria. <i>Canadian Journal of Physiology and Pharmacology</i> , 2016, 94, 563-569.	0.7	2
34	Slowed atrial and atrioventricular conduction and depressed HRV in a murine model of hypertrophic cardiomyopathy. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2016, 43, 95-101.	0.9	4
35	Atrial Fibrillation Complexity Parameters Derived From Surface ECGs Predict Procedural Outcome and Long-Term Follow-Up of Stepwise Catheter Ablation for Atrial Fibrillation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2016, 9, e003354.	2.1	44
36	Mismatch Between Cardiac Perfusion, Sympathetic Innervation, and Left Ventricular Electroanatomical Map in a Patient with Recurrent Ventricular Tachycardia. <i>American Journal of Case Reports</i> , 2016, 17, 280-282.	0.3	5

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37	Causality in Atrial Fibrillation determined by transfer entropy. , 2015, , .		1
38	Far-field effect in unipolar electrograms recorded from epicardial and endocardial surface: Quantification of epi-endo dissociation during atrial Fibrillation in Humans. , 2015, , .		0
39	Towards application of complexity measures of atrial electrograms to predict outcome of the ablation procedure. , 2015, , .		0
40	Loss of Pace Capture on the Ablation Line During Pulmonary Vein Isolation versus "Dormant Conduction" Is Adenosine Expendable?. Journal of Cardiovascular Electrophysiology, 2015, 26, 1075-1080.	0.8	30
41	Far-field effect in unipolar electrograms revisited: High-density mapping of atrial fibrillation in humans. , 2015, 2015, 5680-3.		5
42	Indices of bipolar complex fractionated atrial electrograms correlate poorly with each other and atrial fibrillation substrate complexity. Heart Rhythm, 2015, 12, 1415-1423.	0.3	52
43	High-density mapping of atrial fibrillation in a chronic substrate: Evidence for distinct modes of repetitive wavefront propagation. International Journal of Cardiology, 2015, 199, 407-414.	0.8	14
44	Reduction of Radiation Exposure in Atrial Fibrillation Ablation Using a New Image Integration Module: A Prospective Randomized Trial in Patients Undergoing Pulmonary Vein Isolation. Journal of Cardiovascular Electrophysiology, 2015, 26, 747-753.	0.8	18
45	Reconstruction of Instantaneous Phase of Unipolar Atrial Contact Electrogram Using a Concept of Sinusoidal Recomposition and Hilbert Transform. IEEE Transactions on Biomedical Engineering, 2015, 62, 296-302.	2.5	144
46	Origin and Characteristics of High Shannon Entropy at the Pivot of Locally Stable Rotors: Insights from Computational Simulation. PLoS ONE, 2014, 9, e110662.	1.1	12
47	Quantitative description of the 3D regional mechanics of the left atrium using cardiac magnetic resonance imaging. Physiological Measurement, 2014, 35, 763-775.	1.2	5
48	High-Density Mapping of Ventricular Scar. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 90-98.	2.1	56
49	Application of phase coherence in assessment of spatial alignment of electrodes during simultaneous endocardial-epicardial direct contact mapping of atrial fibrillation. Europace, 2014, 16, iv135-iv140.	0.7	3
50	Cardiovascular magnetic resonance of total and atrial pericardial adipose tissue: a validation study and development of a 3 dimensional pericardial adipose tissue model. Journal of Cardiovascular Magnetic Resonance, 2013, 15, 73.	1.6	37
51	Attraction and repulsion of spiral waves by inhomogeneity of conduction anisotropy—a model of spiral wave interaction with electrical remodeling of heart tissue. Journal of Biological Physics, 2013, 39, 67-80.	0.7	6
52	Obesity results in progressive atrial structural and electrical remodeling: Implications for atrial fibrillation. Heart Rhythm, 2013, 10, 90-100.	0.3	314
53	Long-term Outcomes of Catheter Ablation of Atrial Fibrillation: A Systematic Review and Meta-analysis. Journal of the American Heart Association, 2013, 2, e004549.	1.6	622
54	Myocardial Infarction and Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 738-745.	2.1	70

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55	Bipolar Electrogram Shannon Entropy at Sites of Rotational Activation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2013, 6, 48-57.	2.1	107
56	Atrial Arrhythmia in Ageing Spontaneously Hypertensive Rats: Unraveling the Substrate in Hypertension and Ageing. <i>PLoS ONE</i> , 2013, 8, e72416.	1.1	81
57	Catheter Ablation Targeting Complex Fractionated Atrial Electrogram in Atrial Fibrillation. <i>Journal of Atrial Fibrillation</i> , 2013, 6, 907.	0.5	8
58	Direction-dependent conduction abnormalities in the chronically stretched atria. <i>Europace</i> , 2012, 14, 954-961.	0.7	20
59	Characteristics of ectopic triggers associated with paroxysmal and persistent atrial fibrillation: Evidence for a changing role. <i>Heart Rhythm</i> , 2012, 9, 1367-1374.	0.3	13
60	Complex activity patterns in arterial wall: Results from a model of calcium dynamics. <i>Computers in Biology and Medicine</i> , 2012, 42, 267-275.	3.9	1
61	Atrial remodeling in obstructive sleep apnea: Implications for atrial fibrillation. <i>Heart Rhythm</i> , 2012, 9, 321-327.	0.3	280
62	Atrial protective effects of n-3 polyunsaturated fatty acids: A long-term study in ovine chronic heart failure. <i>Heart Rhythm</i> , 2011, 8, 575-582.	0.3	27
63	Characterization of Atrial Remodeling Studied Remote from Episodes of Typical Atrial Flutter. <i>American Journal of Cardiology</i> , 2010, 106, 528-534.	0.7	23
64	Role of spiral wave pinning in inhomogeneous active media in the termination of atrial fibrillation by electrical cardioversion. <i>Computers in Biology and Medicine</i> , 2010, 40, 363-372.	3.9	3
65	Spiral wave breakup in excitable media with an inhomogeneity of conduction anisotropy. <i>Computers in Biology and Medicine</i> , 2010, 40, 775-780.	3.9	8
66	High-Density Mapping of the Sinus Node in Humans: Role of Preferential Pathways and the Effect of Remodeling. <i>Journal of Cardiovascular Electrophysiology</i> , 2010, 21, 532-539.	0.8	38
67	Atrial Remodeling in an Ovine Model of Anthracycline-Induced Nonischemic Cardiomyopathy: Remodeling of the Same Sort. <i>Journal of Cardiovascular Electrophysiology</i> , 2010, 22, no-no.	0.8	32
68	Feasibility of high-density electrophysiological study using multiple-electrode array in isolated small animal atria. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2010, 37, 1023-1027.	0.9	4
69	Quantitative description of the regional mechanics of the left atria by electroanatomical mapping. <i>Physiological Measurement</i> , 2010, 31, 555-564.	1.2	3
70	Hypertension and atrial fibrillation: Evidence of progressive atrial remodeling with electrostructural correlate in a conscious chronically instrumented ovine model. <i>Heart Rhythm</i> , 2010, 7, 1282-1290.	0.3	168
71	Direction-dependent conduction in lone atrial fibrillation. <i>Heart Rhythm</i> , 2010, 7, 1192-1199.	0.3	34
72	Short-term hypertension is associated with the development of atrial fibrillation substrate: A study in an ovine hypertensive model. <i>Heart Rhythm</i> , 2010, 7, 396-404.	0.3	90

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73	Outcomes of long-standing persistent atrial fibrillation ablation: A systematic review. Heart Rhythm, 2010, 7, 835-846.	0.3	438
74	Reverse Remodeling of the Atria After Treatment of Chronic Stretch in Humans. Journal of the American College of Cardiology, 2010, 55, 1217-1226.	1.2	96
75	Concealed conduction effects in the atrium. IEEE Engineering in Medicine and Biology Magazine, 2009, 28, 24-29.	1.1	2
76	Integration of the data from electroanatomical mapping system and CT imaging modality. International Journal of Cardiovascular Imaging, 2009, 25, 425-432.	0.7	4
77	Clinical Validation and Comparison of Alternative Methods for Evaluation of Entrainment Mapping. Journal of Cardiovascular Electrophysiology, 2009, 20, 741-748.	0.8	13
78	Paroxysmal Lone Atrial Fibrillation Is Associated With an Abnormal Atrial Substrate. Journal of the American College of Cardiology, 2009, 53, 1182-1191.	1.2	307
79	Frequency mapping: Hype or hope?. Heart Rhythm, 2009, 6, 41-43.	0.3	28
80	Left atrial remodeling in patients with atrial septal defects. Heart Rhythm, 2009, 6, 1000-1006.	0.3	90
81	The Effect of Electrogram Duration on Quantification of Complex Fractionated Atrial Electrograms and Dominant Frequency. Journal of Cardiovascular Electrophysiology, 2008, 19, 252-258.	0.8	66
82	High-Density Mapping of Atrial Fibrillation in Humans: Relationship Between High-Frequency Activation and Electrogram Fractionation. Journal of Cardiovascular Electrophysiology, 2008, 19, 1245-1253.	0.8	71
83	Image integration using NavX fusion: Initial experience and validation. Heart Rhythm, 2008, 5, 526-535.	0.3	76
84	Electrical remodelling of the left and right atria due to rheumatic mitral stenosis. European Heart Journal, 2008, 29, 2234-2243.	1.0	135
85	Nonlinear oscillator model reproducing various phenomena in the dynamics of the conduction system of the heart. Chaos, 2007, 17, 015121.	1.0	50
86	Motion Estimation of Vortical Blood Flow Within the Right Atrium in a Patient with Atrial Septal Defect. , 2007, , .		3
87	Blood flow assessment in a heart with septal defect based on optical flow analysis of magnetic resonance images. , 2006, , .		1
88	Reentry wave formation in excitable media with stochastically generated inhomogeneities. Chaos, 2005, 15, 033301.	1.0	14
89	The reconstruction, from a set of points, and analysis of the interior surface of the heart chamber. Physiological Measurement, 2004, 25, 617-627.	1.2	16
90	Analysis of Panoramic Propagation Patterns Mapped from Patients With Persistent Atrial Fibrillation. , 0, , .		0