PaweŕKuklik

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1648584/publications.pdf

Version: 2024-02-01

90 papers

4,434 citations

30 h-index 65 g-index

91 all docs 91 docs citations

times ranked

91

4135 citing authors

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Longâ€term Outcomes of Catheter Ablation of Atrial Fibrillation: A Systematic Review and Metaâ€analysis. Journal of the American Heart Association, 2013, 2, e004549. | 1.6 | 622 |
| 2 | Outcomes of long-standing persistent atrial fibrillation ablation: A systematic review. Heart Rhythm, 2010, 7, 835-846. | 0.3 | 438 |
| 3 | Obesity results in progressive atrial structural and electrical remodeling: Implications for atrial fibrillation. Heart Rhythm, 2013, 10, 90-100. | 0.3 | 314 |
| 4 | 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 |
| 5 | Atrial remodeling in obstructive sleep apnea: Implications for atrial fibrillation. Heart Rhythm, 2012, 9, 321-327. | 0.3 | 280 |
| 6 | Hypertension and atrial fibrillation: Evidence of progressive atrial remodeling with electrostructural correlate in a conscious chronically instrumented ovine model. Heart Rhythm, 2010, 7, 1282-1290. | 0.3 | 168 |
| 7 | 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 |
| 8 | Electrical remodelling of the left and right atria due to rheumatic mitral stenosis. European Heart Journal, 2008, 29, 2234-2243. | 1.0 | 135 |
| 9 | Bipolar Electrogram Shannon Entropy at Sites of Rotational Activation. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 48-57. | 2.1 | 107 |
| 10 | Identification of Rotors during Human Atrial Fibrillation Using Contact Mapping and Phase Singularity Detection: Technical Considerations. IEEE Transactions on Biomedical Engineering, 2017, 64, 310-318. | 2.5 | 100 |
| 11 | 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 |
| 12 | Left atrial remodeling in patients with atrial septal defects. Heart Rhythm, 2009, 6, 1000-1006. | 0.3 | 90 |
| 13 | Short-term hypertension is associated with the development of atrial fibrillation substrate: A study in an ovine hypertensive model. Heart Rhythm, 2010, 7, 396-404. | 0.3 | 90 |
| 14 | Atrial Arrhythmia in Ageing Spontaneously Hypertensive Rats: Unraveling the Substrate in Hypertension and Ageing. PLoS ONE, 2013, 8, e72416. | 1.1 | 81 |
| 15 | Disruption of cardiac cholinergic neurons enhances susceptibility to ventricular arrhythmias. Nature Communications, 2017, 8, 14155. | 5.8 | 77 |
| 16 | Image integration using NavX fusion: Initial experience and validation. Heart Rhythm, 2008, 5, 526-535. | 0.3 | 76 |
| 17 | Highâ€Density Mapping of Atrial Fibrillation in Humans: Relationship Between Highâ€Frequency Activation and Electrogram Fractionation. Journal of Cardiovascular Electrophysiology, 2008, 19, 1245-1253. | 0.8 | 71 |
| 18 | Myocardial Infarction and Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2013, 6, 738-745. | 2.1 | 70 |

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|----|--|-----|-----------|
| 19 | 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 |
| 20 | Cardiac glial cells release neurotrophic S100B upon catheter-based treatment of atrial fibrillation. Science Translational Medicine, 2019, 11 , . | 5.8 | 57 |
| 21 | High-Density Mapping of Ventricular Scar. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 90-98. | 2.1 | 56 |
| 22 | Characterization, Mapping, and Ablation of Complex Atrial Tachycardia: Initial Experience With a Novel Method of Ultra Highâ€Density 3D Mapping. Journal of Cardiovascular Electrophysiology, 2016, 27, 1139-1150. | 0.8 | 54 |
| 23 | 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 |
| 24 | Rotors Detected by Phase Analysis of Filtered, Epicardial Atrial Fibrillation Electrograms Colocalize With Regions of Conduction Block. Circulation: Arrhythmia and Electrophysiology, 2018, 11, e005858. | 2.1 | 51 |
| 25 | Nonlinear oscillator model reproducing various phenomena in the dynamics of the conduction system of the heart. Chaos, 2007, 17, 015121. | 1.0 | 50 |
| 26 | Atrial Fibrillation Complexity Parameters Derived From Surface ECGs Predict Procedural Outcome and Long-Term Follow-Up of Stepwise Catheter Ablation for Atrial Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e003354. | 2.1 | 44 |
| 27 | Highâ€Density Mapping of the Sinus Node in Humans: Role of Preferential Pathways and the Effect of Remodeling. Journal of Cardiovascular Electrophysiology, 2010, 21, 532-539. | 0.8 | 38 |
| 28 | 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 |
| 29 | Renewal Theory as a Universal Quantitative Framework to Characterize Phase Singularity Regeneration in Mammalian Cardiac Fibrillation. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007569. | 2.1 | 35 |
| 30 | Direction-dependent conduction in lone atrial fibrillation. Heart Rhythm, 2010, 7, 1192-1199. | 0.3 | 34 |
| 31 | Atrial Remodeling in an Ovine Model of Anthracycline-Induced Nonischemic Cardiomyopathy: Remodeling of the Same Sort. Journal of Cardiovascular Electrophysiology, 2010, 22, no-no. | 0.8 | 32 |
| 32 | 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 |
| 33 | Substrate characterization and catheter ablation in patients with scarâ€related ventricular tachycardia using ultra highâ€density 3â€D mapping. Journal of Cardiovascular Electrophysiology, 2017, 28, 1058-1067. | 0.8 | 29 |
| 34 | Frequency mapping: Hype or hope?. Heart Rhythm, 2009, 6, 41-43. | 0.3 | 28 |
| 35 | Atrial protective effects of n-3 polyunsaturated fatty acids: A long-term study in ovine chronic heart failure. Heart Rhythm, 2011, 8, 575-582. | 0.3 | 27 |
| 36 | Characterization of Atrial Remodeling Studied Remote from Episodes of Typical Atrial Flutter. American Journal of Cardiology, 2010, 106, 528-534. | 0.7 | 23 |

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|----|---|-----|-----------|
| 37 | Information Theory and Atrial Fibrillation (AF): A Review. Frontiers in Physiology, 2018, 9, 957. | 1.3 | 23 |
| 38 | How disruption of endo-epicardial electrical connections enhances endo-epicardial conduction during atrial fibrillation. Europace, 2017, 19, euv445. | 0.7 | 21 |
| 39 | Direction-dependent conduction abnormalities in the chronically stretched atria. Europace, 2012, 14, 954-961. | 0.7 | 20 |
| 40 | Absence of rotational activity detected using 2-dimensional phase mapping in the corresponding 3-dimensional phase maps in human persistent atrial fibrillation. Heart Rhythm, 2018, 15, 182-192. | 0.3 | 20 |
| 41 | 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 |
| 42 | High-Density Mapping and Ablation of Primary Nonfocal Left Atrial Tachycardia. JACC: Clinical Electrophysiology, 2019, 5, 417-426. | 1.3 | 17 |
| 43 | 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 |
| 44 | Transient Rotor Activity During ProlongedÂ3-Dimensional PhaseÂMapping in Human Persistent AtrialÂFibrillation. JACC: Clinical Electrophysiology, 2018, 4, 72-83. | 1.3 | 15 |
| 45 | Reentry wave formation in excitable media with stochastically generated inhomogeneities. Chaos, 2005, 15, 033301. | 1.0 | 14 |
| 46 | 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 |
| 47 | M/M/Infinity Birth-Death Processes – A Quantitative Representational Framework to Summarize and Explain Phase Singularity and Wavelet Dynamics in Atrial Fibrillation. Frontiers in Physiology, 2020, 11, 616866. | 1.3 | 14 |
| 48 | Clinical Validation and Comparison of Alternative Methods for Evaluation of Entrainment Mapping. Journal of Cardiovascular Electrophysiology, 2009, 20, 741-748. | 0.8 | 13 |
| 49 | Characteristics of ectopic triggers associated with paroxysmal and persistent atrial fibrillation: Evidence for a changing role. Heart Rhythm, 2012, 9, 1367-1374. | 0.3 | 13 |
| 50 | Development of Time- and Voltage-Domain Mapping (V-T-Mapping) to Localize Ventricular Tachycardia Channels During Sinus Rhythm. Circulation: Arrhythmia and Electrophysiology, 2016, 9, . | 2.1 | 13 |
| 51 | Spatial and temporal variability of rotational, focal, and irregular activity: Practical implications for mapping of atrial fibrillation. Journal of Cardiovascular Electrophysiology, 2021, 32, 2393-2403. | 0.8 | 13 |
| 52 | 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 |
| 53 | Sympathetic and Parasympathetic Coactivation Induces Perturbed Heart Rate Dynamics in Patients with Paroxysmal Atrial Fibrillation. Medical Science Monitor, 2018, 24, 2164-2172. | 0.5 | 12 |
| 54 | Development of nonfibrotic left ventricular hypertrophy in an ANG II-induced chronic ovine hypertension model. Physiological Reports, 2016, 4, e12897. | 0.7 | 10 |

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|----|--|-----|-----------|
| 55 | Local Electrical Dyssynchrony during Atrial Fibrillation: Theoretical Considerations and Initial Catheter Ablation Results. PLoS ONE, 2016, 11, e0164236. | 1.1 | 9 |
| 56 | Contact force facilitates the achievement of an unexcitable ablation line during pulmonary vein isolation. Clinical Research in Cardiology, 2018, 107, 632-641. | 1.5 | 9 |
| 57 | Electrophysiologic features of protected channels in late postinfarction patients with and without spontaneous ventricular tachycardia. Journal of Interventional Cardiac Electrophysiology, 2018, 51, 13-24. | 0.6 | 9 |
| 58 | Electrophysiological and Structural Remodeling of the Atria in a Mouse Model of Troponin-I Mutation Linked Hypertrophic Cardiomyopathy: Implications for Atrial Fibrillation. International Journal of Molecular Sciences, 2021, 22, 6941. | 1.8 | 9 |
| 59 | Spiral wave breakup in excitable media with an inhomogeneity of conduction anisotropy. Computers in Biology and Medicine, 2010, 40, 775-780. | 3.9 | 8 |
| 60 | A novel algorithm for 3-D visualization of electrogram duration for substrate-mapping in patients with ischemic heart disease and ventricular tachycardia. PLoS ONE, 2021, 16, e0254683. | 1.1 | 8 |
| 61 | Catheter Ablation Targeting Complex Fractionated Atrial Electrogram in Atrial Fibrillation. Journal of Atrial Fibrillation, 2013, 6, 907. | 0.5 | 8 |
| 62 | 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 |
| 63 | Spatiotemporal characteristics of atrial fibrillation electrograms: A novel marker for arrhythmia stability and termination. Journal of Arrhythmia, 2017, 33, 40-48. | 0.5 | 6 |
| 64 | Temporal stability and specificity of high bipolar electrogram entropy regions in sustained atrial fibrillation: Implications for mapping. Journal of Electrocardiology, 2019, 53, 18-27. | 0.4 | 6 |
| 65 | 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 |
| 66 | Far-field effect in unipolar electrograms revisited: High-density mapping of atrial fibrillation in humans., 2015, 2015, 5680-3. | | 5 |
| 67 | Editorial: Recent Advances in Understanding the Basic Mechanisms of Atrial Fibrillation Using Novel Computational Approaches. Frontiers in Physiology, 2019, 10, 1065. | 1.3 | 5 |
| 68 | Respiratory sinus arrhythmia is reduced after pulmonary vein isolation in patients with paroxysmal atrial fibrillation. Archives of Medical Science, 2020, 16, 1022-1030. | 0.4 | 5 |
| 69 | Mismatch Between Cardiac Perfusion, Sympathetic Innervation, and Left Ventricular Electroanatomical Map in a Patient with Recurrent Ventricular Tachycardia. American Journal of Case Reports, 2016, 17, 280-282. | 0.3 | 5 |
| 70 | Integration of the data from electroanatomical mapping system and CT imaging modality. International Journal of Cardiovascular Imaging, 2009, 25, 425-432. | 0.7 | 4 |
| 71 | Feasibility of highâ€density electrophysiological study using multipleâ€electrode array in isolated small animal atria. Clinical and Experimental Pharmacology and Physiology, 2010, 37, 1023-1027. | 0.9 | 4 |
| 72 | Slowed atrial and atrioventricular conduction and depressed <scp>HRV</scp> in a murine model of hypertrophic cardiomyopathy. Clinical and Experimental Pharmacology and Physiology, 2016, 43, 95-101. | 0.9 | 4 |

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| 73 | Impact of Intracardiac Neurons on Cardiac Electrophysiology and Arrhythmogenesis in an Ex Vivo Langendorff System. Journal of Visualized Experiments, 2018, , . | 0.2 | 4 |
| 74 | Motion Estimation of Vortical Blood Flow Within the Right Atrium in a Patient with Atrial Septal Defect. , 2007 , , . | | 3 |
| 75 | Role of spiral wave pinning in inhomogeneous active media in the termination of atrial fibrillation by electrical cardioversion. Computers in Biology and Medicine, 2010, 40, 363-372. | 3.9 | 3 |
| 76 | Quantitative description of the regional mechanics of the left atria by electroanatomical mapping. Physiological Measurement, 2010, 31, 555-564. | 1.2 | 3 |
| 77 | 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 |
| 78 | Spatial concentration and distribution of phase singularities in human atrial fibrillation: Insights for the AF mechanism. Journal of Arrhythmia, 2021, 37, 922-930. | 0.5 | 3 |
| 79 | Concealed conduction effects in the atrium. IEEE Engineering in Medicine and Biology Magazine, 2009, 28, 24-29. | 1.1 | 2 |
| 80 | Simultaneous conduction mapping and intracellular membrane potential recording in isolated atria. Canadian Journal of Physiology and Pharmacology, 2016, 94, 563-569. | 0.7 | 2 |
| 81 | Bi-atrial high-density mapping reveals inhibition of wavefront turning and reduction of complex propagation patterns as main antiarrhythmic mechanisms of vernakalant. Europace, 2021, 23, 1114-1123. | 0.7 | 2 |
| 82 | Impact of Adenosine on Wavefront Propagation in Persistent Atrial Fibrillation: Insights From Global Noncontact Charge Density Mapping of the Left Atrium. Journal of the American Heart Association, 2022, 11, . | 1.6 | 2 |
| 83 | Blood flow assessment in a heart with septal defect based on optical flow analysis of magnetic resonance images. , 2006, , . | | 1 |
| 84 | Complex activity patterns in arterial wall: Results from a model of calcium dynamics. Computers in Biology and Medicine, 2012, 42, 267-275. | 3.9 | 1 |
| 85 | Causality in Atrial Fibrillation determined by transfer entropy. , 2015, , . | | 1 |
| 86 | Kolmogorov Complexity of Coronary Sinus Atrial Electrograms before Ablation Predicts Termination of Atrial Fibrillation after Pulmonary Vein Isolation. Entropy, 2019, 21, 970. | 1.1 | 1 |
| 87 | Differential pacing from two sites to diagnose risk of ventricular arrhythmia and death. PACE - Pacing and Clinical Electrophysiology, 2019, 42, 189-200. | 0.5 | 1 |
| 88 | Far-field effect in unipolar electrograms recorded from epicardial and endocardial surface: Quantification of epi-endo dissociation during atrial Fibrillation in Humans., 2015,,. | | 0 |
| 89 | Towards application of complexity measures of atrial electrograms to predict outcome of the ablation procedure. , 2015, , . | | 0 |
| 90 | Analysis of Panoramic Propagation Patterns Mapped from Patients With Persistent Atrial Fibrillation. , $0, , .$ | | 0 |