Steffen Schuler

List of Publications by Year
in descending order

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33	300	1040056	996975
papers	citations	9	15
		h-index	g-index

35	35	35	225
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electro-Mechanical Whole-Heart Digital Twins: A Fully Coupled Multi-Physics Approach. Mathematics, 2021, 9, 1247.	2.2	49
2	Machine learning enables noninvasive prediction of atrial fibrillation driver location and acute pulmonary vein ablation success using the 12-lead ECG. Cardiovascular Digital Health Journal, 2021, 2, 126-136.	1.3	30
3	Non-Invasive and Quantitative Estimation of Left Atrial Fibrosis Based on P Waves of the 12-Lead ECGâ€"A Large-Scale Computational Study Covering Anatomical Variability. Journal of Clinical Medicine, 2021, 10, 1797.	2.4	23
4	A bi-atrial statistical shape model for large-scale in silico studies of human atria: Model development and application to ECG simulations. Medical Image Analysis, 2021, 74, 102210.	11.6	21
5	Comparison of Unipolar and Bipolar Voltage Mapping for Localization of Left Atrial Arrhythmogenic Substrate in Patients With Atrial Fibrillation. Frontiers in Physiology, 2020, 11, 575846.	2.8	20
6	Non-Invasive Characterization of Atrial Flutter Mechanisms Using Recurrence Quantification Analysis on the ECG: A Computational Study. IEEE Transactions on Biomedical Engineering, 2021, 68, 914-925.	4.2	19
7	A Reproducible Protocol to Assess Arrhythmia Vulnerability in silico: Pacing at the End of the Effective Refractory Period. Frontiers in Physiology, 2021, 12, 656411.	2.8	18
8	Characterization of Radiofrequency Ablation Lesion Development Based on Simulated and Measured Intracardiac Electrograms. IEEE Transactions on Biomedical Engineering, 2014, 61, 2467-2478.	4.2	17
9	Cobiveco: Consistent biventricular coordinates for precise and intuitive description of position in the heart â€“ with MATLAB implementation. Medical Image Analysis, 2021, 74, 102247.	11.6	16
10	A Fully-Coupled Electro-Mechanical Whole-Heart Computational Model: Influence of Cardiac Contraction on the ECG. Frontiers in Physiology, 2021, 12, 778872.	2.8	10
11	Influence of Catheter Orientation, Tissue Thickness and Conduction Velocity on the Intracardiac Electrogram. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.8	9
12	Reducing Line-of-Block Artifacts in Cardiac Activation Maps Estimated Using ECG Imaging: A Comparison of Source Models and Estimation Methods. IEEE Transactions on Biomedical Engineering, 2022, 69, 2041-2052.	4.2	8
13	In silico validation of electrocardiographic imaging to reconstruct the endocardial and epicardial repolarization pattern using the equivalent dipole layer source model. Medical and Biological Engineering and Computing, 2020, 58, 1739-1749.	2.8	6
14	Causes of altered ventricular mechanics in hypertrophic cardiomyopathy: an in-silico study. BioMedical Engineering OnLine, 2021, 20, 69.	2.7	6
15	Spatial Downsampling of Surface Sources in the Forward Problem of Electrocardiography. Lecture Notes in Computer Science, 2019, , 29-36.	1.3	6
16	Optimization Framework to Identify Constitutive Law Parameters of the Human Heart. Current Directions in Biomedical Engineering, 2020, 6, 95-98.	0.4	6
17	Electrocardiographic Imaging Using a Spatio-Temporal Basis of Body Surface Potentialsâ€"Application to Atrial Ectopic Activity. Frontiers in Physiology, 2018, 9, 1126.	2.8	5
18	Automatic ECG-based Discrimination of 20 Atrial Flutter Mechanisms: Influence of Atrial and Torso Geometries. , 0, , .		5

#	Article	IF	Citations
19	Correcting Undersampled Cardiac Sources in Equivalent Double Layer Forward Simulations. Lecture Notes in Computer Science, 2019, 11504, 147-155.	1.3	4
20	Comparison of simulated and clinical intracardiac electrograms. , 2013, 2013, 6858-61.		3
21	ECG Imaging of Simulated Atrial Fibrillation: Imposing Epi-Endocardial Similarity Facilitates the Reconstruction of Transmembrane Voltages. , 0, , .		3
22	Consequences of Using an Orthotropic Stress Tensor for Left Ventricular Systole. , 0, , .		3
23	Comparison of Activation Times Estimation for Potential-Based ECG Imaging. , 2019, 46, .		3
24	Simulation of intracardiac electrograms around acute ablation lesions. Current Directions in Biomedical Engineering, 2016, 2, 607-610.	0.4	2
25	Effects of local activation times on the tension development of human cardiomyocytes in a computational model. Current Directions in Biomedical Engineering, 2018, 4, 247-250.	0.4	1
26	Using a Spatio-Temporal Basis for ECG Imaging of Ventricular Pacings: Insights From Simulations and First Application to Clinical Data. , 2019, 2019, 1559-1562.		1
27	Delay-Based Regularization for ECG Imaging of Transmembrane Voltages. , 0, , .		1
28	Semi-Supervised vs. Supervised Learning for Discriminating Atrial Flutter Mechanisms Using the 12-lead ECG. , 2021, , .		1
29	Evaluating Changes in Electrogram Morphology during Radiofrequency Ablation of Cardiac Arrhythmias. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.8	0
30	Effects of local activation times on the tension development of human cardiomyocytes in a computational model. Current Directions in Biomedical Engineering, 2018, 4, 101-104.	0.4	0
31	Influence of Geometrical Properties for the Calculation of a Pressure-Free Whole Heart Geometry. , 0, , .		0
32	B-PO05-151 AUTOMATIC CLASSIFICATION OF MACRO-REENTRANT ATRIAL TACHYCARDIA MECHANISMS USING 12-LEAD ECG. Heart Rhythm, 2021, 18, S433-S434.	0.7	0
33	Forcing Transmembrane Voltages to Decrease Slowly: A Temporal Regularization for ECG Imaging. , 0, , .		0