Matthijs J M Cluitmans

List of Publications by Year
in descending order

39	523	759233 12	713466 21
papers	citations	h-index	g-index

41	41	41	522
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	InÂVivo Validation of ElectrocardiographicÂImaging. JACC: Clinical Electrophysiology, 2017, 3, 232-242.	3.2	93
2	Validation and Opportunities of Electrocardiographic Imaging: From Technical Achievements to Clinical Applications. Frontiers in Physiology, 2018, 9, 1305.	2.8	89
3	Noninvasive reconstruction of cardiac electrical activity: update on current methods, applications and challenges. Netherlands Heart Journal, 2015, 23, 301-311.	0.8	53
4	Acute effects of alcohol on cardiac electrophysiology and arrhythmogenesis: Insights from multiscale in silico analyses. Journal of Molecular and Cellular Cardiology, 2020, 146, 69-83.	1.9	33
5	Physiology-based regularization of the electrocardiographic inverse problem. Medical and Biological Engineering and Computing, 2017, 55, 1353-1365.	2.8	31
6	Advantages and pitfalls of noninvasive electrocardiographic imaging. Journal of Electrocardiology, 2019, 57, S15-S20.	0.9	23
7	Wavelet-promoted sparsity for non-invasive reconstruction of electrical activity of the heart. Medical and Biological Engineering and Computing, 2018, 56, 2039-2050.	2.8	21
8	Electrocardiographic Imaging for Atrial Fibrillation: A Perspective From Computer Models and Animal Experiments to Clinical Value. Frontiers in Physiology, 2021, 12, 653013.	2.8	20
9	Critical repolarization gradients determine the induction of reentry-based torsades de pointes arrhythmia in models of long QT syndrome. Heart Rhythm, 2021, 18, 278-287.	0.7	18
10	Electrocardiographic Imaging of Repolarization Abnormalities. Journal of the American Heart Association, 2021, 10, e020153.	3.7	17
11	Integration of cardiac magnetic resonance imaging, electrocardiographic imaging, and coronary venous computed tomography angiography for guidance of left ventricular lead positioning. Europace, 2019, 21, 626-635.	1.7	16
12	Visualisation of coronary venous anatomy by computed tomography angiography prior to cardiac resynchronisation therapy implantation. Netherlands Heart Journal, 2018, 26, 433-444.	0.8	14
13	Noninvasive detection of spatiotemporal activation-repolarization interactions that prime idiopathic ventricular fibrillation. Science Translational Medicine, 2021, 13, eabi9317.	12.4	14
14	ESC Working Group on e-Cardiology Position Paper: accuracy and reliability of electrocardiogram monitoring in the detection of atrial fibrillation in cryptogenic stroke patients. European Heart Journal Digital Health, 2022, 3, 341-358.	1.7	13
15	Body Surface Mapping of Ventricular Repolarization Heterogeneity: An Ex-vivo Multiparameter Study. Frontiers in Physiology, 2020, 11, 933.	2.8	8
16	Why Ablation of Sites With Purkinje Activation Is Antiarrhythmic: The Interplay Between Fast Activation and Arrhythmogenesis. Frontiers in Physiology, 2021, 12, 648396.	2.8	8
17	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
18	Influence of Body-Surface Geometry Accuracy on Noninvasive Reconstruction of Electrical Activation and Recovery in Electrocardiographic Imaging. , 2017, , .		6

#	Article	IF	Citations
19	Novel use of repolarization parameters in electrocardiographic imaging to uncover arrhythmogenic substrate. Journal of Electrocardiology, 2020, 59, 116-121.	0.9	6
20	3-Dimensional ventricular electrical activation pattern assessed from a novel high-frequency electrocardiographic imaging technique: principles and clinical importance. Scientific Reports, 2021, 11, 11469.	3.3	6
21	Spatiotemporal approximation of cardiac activation and recovery isochrones. Journal of Electrocardiology, 2022, 71, 1-9.	0.9	5
22	In-vivo evaluation of reduced-lead-systems in noninvasive reconstruction and localization of cardiac electrical activity. , 2015, , .		4
23	Influence of image artifacts on image-based computer simulations of the cardiac electrophysiology. Computers in Biology and Medicine, 2021, 137, 104773.	7.0	4
24	Realistic training data improve noninvasive reconstruction of heart-surface potentials. , 2012, 2012, 6373-6.		3
25	Comparison of Activation Times Estimation for Potential-Based ECG Imaging. , 2019, 46, .		3
26	Wavelet-sparsity based regularization over time in the inverse problem of electrocardiography. , 2013, 2013, 3781-4.		2
27	To the Editorâ€" Interpretation of electrograms is key to understand the clinical potential of ECGI. Heart Rhythm, 2019, 16, e51-e52.	0.7	1
28	The Influence of Using a Static Diastolic Geometry in ECG Imaging. , 0, , .		1
29	Spatiotemporal Activation Time Estimation Improves Noninvasive Localization of Cardiac Electrical Activity. , 0, , .		1
30	An Open-Source Algorithm for Standardized Bullseye Visualization of High-Resolution Cardiac Ventricular Data: UNISYS. , 0, , .		1
31	CT-Scan Free Neural Network-Based Reconstruction of Heart Surface Potentials From ECG Recordings. , 0, , .		1
32	Integration of Electrical, Structural, and Anatomical Imaging for the Guidance of Cardiac Resynchronization Therapy. , 2017, , .		0
33	Reply to the letter from Bhagirath etÂal.: Imaging for cardiac resynchronisation therapy requires cardiac magnetic resonance. Netherlands Heart Journal, 2018, 26, 641-642.	0.8	0
34	Adriaan van Oosterom, PhD. Heart Rhythm, 2019, 16, e299.	0.7	0
35	Personalized Computational Framework to Study Arrhythmia Mechanisms on Top of ECG Image-Detected Substrate. , 0, , .		0
36	Personalized Ventricular Arrhythmia Simulation Framework to Study Vulnerable Trigger Locations on Top of Scar Substrate. , 0, , .		0

#	Article	IF	Citations
37	Relation of surface T-wave to vulnerability to ventricular fibrillation in explanted structurally normal hearts. , 0, , .		0
38	Variability of Electrocardiographic Imaging Within and Between Leadsets. , 0, , .		0
39	Dynamics of Ventricular Electrophysiology Are Unmasked Through Noninvasive Electrocardiographic Imaging. , 2021, , .		0