Thom F Oostendorp

List of Publications by Year
in descending order

59 papers	2,315 citations	394421 19 h-index	223800 46 g-index
59 all docs	59 docs citations	59 times ranked	2377 citing authors

#	Article	IF	Citations
1	The conductivity of the human skull: results of in vivo and in vitro measurements. IEEE Transactions on Biomedical Engineering, 2000, 47, 1487-1492.	4.2	399
2	Validating the boundary element method for forward and inverse EEG computations in the presence of a hole in the skull. Human Brain Mapping, 2002, 17, 179-192.	3.6	304
3	Source parameter estimation in inhomogeneous volume conductors of arbitrary shape. IEEE Transactions on Biomedical Engineering, 1989, 36, 382-391.	4.2	205
4	Simulating Transcranial Direct Current Stimulation With a Detailed Anisotropic Human Head Model. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 441-452.	4.9	172
5	Non-Invasive Imaging of Cardiac Activation and Recovery. Annals of Biomedical Engineering, 2009, 37, 1739-1756.	2.5	141
6	Interpolation on a triangulated 3D surface. Journal of Computational Physics, 1989, 80, 331-343.	3.8	125
7	The coil orientation dependency of the electric field induced by TMS for M1 and other brain areas. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 47.	4.6	107
8	The surface Laplacian of the potential: theory and application. IEEE Transactions on Biomedical Engineering, 1996, 43, 394-405.	4.2	96
9	Connecting Mean Field Models of Neural Activity to EEG and fMRI Data. Brain Topography, 2010, 23, 139-149.	1.8	93
10	The magnetocardiogram as derived from electrocardiographic data.. Circulation Research, 1990, 67, 1503-1509.	4.5	44
11	The effect of local anatomy on the electric field induced by TMS: evaluation at 14 different target sites. Medical and Biological Engineering and Computing, 2014, 52, 873-883.	2.8	43
12	The potential distribution generated by surface electrodes in inhomogeneous volume conductors of arbitrary shape. IEEE Transactions on Biomedical Engineering, 1991, 38, 409-417.	4.2	42
13	Application of the fastest route algorithm in the interactive simulation of the effect of local ischemia on the ECG. Medical and Biological Engineering and Computing, 2009, 47, 11-20.	2.8	42
14	Towards a model-based integration of co-registered electroencephalography/functional magnetic resonance imaging data with realistic neural population meshes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3785-3801.	3.4	41
15	Electrical properties of tissues involved in the conduction of foetal ECG. Medical and Biological Engineering and Computing, 1989, 27, 322-324.	2.8	39
16	Cochlear Implant Generated Surface Potentials. Ear and Hearing, 1994, 15, 339-345.	2.1	28
17	The fetal ECG throughout the second half of gestation. Clinical Physics and Physiological Measurement: an Official Journal of the Hospital Physicists' Association, Deutsche Gesellschaft Fur Medizinische Physik and the European Federation of Organisations for Medical Physics, 1989, 10, 147-160.	0.5	25
18	Experimental Validation of Noninvasive Epicardial and Endocardial Activation Imaging. Circulation: Arrhythmia and Electrophysiology, 2016, 9, e004104.	4.8	25

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19	Interictal spike localization using a standard realistic head model: simulations and analysis of clinical data. Clinical Neurophysiology, 1999, 110, 846-855.	1.5	22
20	Identifying Electrode Failures with Cochlear Implant Generated Surfaces Potentials. Ear and Hearing, 1994, 15, 330-338.	2.1	20
21	Mathematical model of erythrocytes as point-like sources. Mathematical Biosciences, 1995, 125, 165-189.	1.9	20
22	Modeling transcranial DC stimulation. , 2008, 2008, 4226-9.		19
23	Single-Layer Skull Approximations Perform Well in Transcranial Direct Current Stimulation Modeling. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 346-353.	4.9	19
24	Assessment of the equivalent dipole layer source model in the reconstruction of cardiac activation times on the basis of BSPMs produced by an anisotropic model of the heart. Medical and Biological Engineering and Computing, 2018, 56, 1013-1025.	2.8	18
25	Applicability of the Single Equivalent Moving Dipole Model in an Infinite Homogeneous Medium to Identify Cardiac Electrical Sources: A Computer Simulation Study in a Realistic Anatomic Geometry Torso Model. IEEE Transactions on Biomedical Engineering, 2006, 53, 2436-2444.	4.2	17
26	The potential distribution generated by the fetal heart at the maternal abdomen. Journal of Perinatal Medicine, 1986, 14, 435-444.	1.4	16
27	Potential applications of the new ECGSIM. Journal of Electrocardiology, 2011, 44, 577-583.	0.9	16
28	Reconsidering the Effect of Local Plasma Convection in a Classical Model of Oxygen Transport in Capillaries. Microvascular Research, 1996, 51, 39-50.	2.5	14
29	Modelling surface potentials from intracochlear electrical stimulation. Scandinavian Audiology, 1999, 28, 249-255.	0.5	14
30	Noninvasive determination of the activation sequence of the heart: Application to patients with previous myocardial infarctions. Journal of Electrocardiology, 2002, 35, 75-80.	0.9	13
31	Ventricular fibrillation waveform characteristics differ according to the presence of a previous myocardial infarction: A surface ECG study in ICD-patients. Resuscitation, 2015, 96, 239-245.	3.0	13
32	Lead system transformation for pooling of body surface map data: a surface laplacian approach. Journal of Electrocardiology, 1995, 28, 344-345.	0.9	12
33	ASH: an Automatic pipeline to generate realistic and individualized chronic Stroke volume conduction Head models. Journal of Neural Engineering, 2021, 18, 044001.	3.5	12
34	FEMfuns: A Volume Conduction Modeling Pipeline that Includes Resistive, Capacitive or Dispersive Tissue and Electrodes. Neuroinformatics, 2020, 18, 569-580.	2.8	11
35	Method for guiding the ablation catheter to the ablation site: a simulation and experimental study. Medical and Biological Engineering and Computing, 2009, 47, 267-278.	2.8	8
36	Electrical Impedance of the Cochlear Implant Lubricants Hyaluronic Acid, Oxycellulose, and Glycerin. Annals of Otology, Rhinology and Laryngology, 1997, 106, 653-656.	1.1	7

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37	Noninvasive detection of epicardial and endocardial activity of the heart. Netherlands Heart Journal, 2011, 19, 488-491.	0.8	7
38	Characteristics of ventricular fibrillation in relation to cardiac aetiology and shock success: A waveform analysis study in ICD-patients. Resuscitation, 2015, 86, 95-99.	3.0	7
39	Comparing Non-invasive Inverse Electrocardiography With Invasive Endocardial and Epicardial Electroanatomical Mapping During Sinus Rhythm. Frontiers in Physiology, 2021, 12, 730736.	2.8	7
40	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
41	Spatial Downsampling of Surface Sources in the Forward Problem of Electrocardiography. Lecture Notes in Computer Science, 2019, , 29-36.	1.3	6
42	Modeling the His-Purkinje Effect in Non-invasive Estimation of Endocardial and Epicardial Ventricular Activation. Annals of Biomedical Engineering, 2022, 50, 343-359.	2.5	6
43	A Method to Experimentally Estimate the Conductivity of Chronic Stroke Lesions: A Tool to Individualize Transcranial Electric Stimulation. Frontiers in Human Neuroscience, 2021, 15, 738200.	2.0	5
44	The effect of separate red blood cells on capillary tissue oxygenation calculated with a numerical model. Mathematical Medicine and Biology, 1996, 13, 259-274.	1.2	4
45	ECGSIM: an Interactive Tool for the Study of the Relation between the Electric Activity of the Heart and the QRST Waveforms at the Body Surface. , 2004, 2004, 3559-62.		4
46	Correcting Undersampled Cardiac Sources in Equivalent Double Layer Forward Simulations. Lecture Notes in Computer Science, 2019, 11504, 147-155.	1.3	4
47	The effect of blood flow on oxygen extraction pressures calculated in a model of pointlike erythrocyte sources for rat heart. Mathematical Biosciences, 1996, 131, 23-49.	1.9	3
48	Realistic mean field forward predictions for the integration of co-registered EEG/fMRI. BMC Neuroscience, 2009, 10, .	1.9	2
49	On handling the layered structure of the skull in transcranial direct current stimulation models. , 2011, 2011, 1989-92.		2
50	Multimodal Source Imaging: Basic Methods, Signal Processing Techniques, and Applications. IEEE Transactions on Biomedical Engineering, 2016, 63, 2550-2551.	4.2	2
51	Modeling the Accumulation of Degradable Polymer Drug Carriers in the Brain. ChemMedChem, 2018, 13, 1308-1310.	3.2	2
52	Research in Action—Students' Perspectives on the Integration of Research Activities in Undergraduate Biomedical Curricula. Medical Science Educator, 2021, 31, 371-374.	1.5	2
53	Ex vivo Validation of Noninvasive Epicardial and Endocardial Repolarization Mapping. Frontiers in Physiology, 2021, 12, 737609.	2.8	2
54	Correction to "The Surface Laplacian of the Potential: Theory and Application". IEEE Transactions on Biomedical Engineering, 1996, 43, 866.	4.2	1

#	Article	IF	Citations
55	Model-based inferences for clinical applications of the ECG. Journal of Electrocardiology, 2007, 40, S17-S18.	0.9	1
56	Adriaan van Oosterom, PhD. Heart Rhythm, 2019, 16, e299.	0.7	0
57	A generic model of overall heart geometry for model based studies of electrical, mechanical, and ion-kinetics aspects of the heart. IFMBE Proceedings, 2009, , 2548-2551.	0.3	0
58	Plasma Mixing is Likely to Affect Capillary Oxygen Transport in Hard Working Rat Heart. Advances in Experimental Medicine and Biology, 1996, 388, 155-160.	1.6	0
59	Impaired Body Surface Electrode Contact Reduces Accuracy of Non-Invasive Electrocardiographic Imaging. , 0, , .		0