Uwe Steinhoff

List of Publications by Year in Descending Order

79 papers	1,410 citations	21 h-index	35 g-index
106 ext. papers	1,591 ext. citations	2.2 avg, IF	4.12 L-index

#	Paper	IF	Citations
79	Challenges and recommendations for magnetic hyperthermia characterization measurements. *International Journal of Hyperthermia*, **2021**, 38, 447-460	3.7	14
78	Whither Magnetic Hyperthermia? A Tentative Roadmap. *Materials*, **2021**, 14,	3.5	39
77	European Research on Magnetic Nanoparticles for Biomedical Applications: Standardisation Aspects. *Advances in Intelligent Systems and Computing*, **2020**, 316-326	0.4	3
76	Optimizing Excitation Coil Currents for Advanced Magnetorelaxometry Imaging. *Journal of Mathematical Imaging and Vision*, **2020**, 62, 238-252	1.6	5
75	Probing particle-matrix interactions during magnetic particle spectroscopy. *Journal of Magnetism and Magnetic Materials*, **2019**, 475, 421-428	2.8	7
74	Towards quantitative magnetic particle imaging: A comparison with magnetic particle spectroscopy. *AIP Advances*, **2018**, 8, 056712	1.5	13
73	A model for uncertainty influences on static magnetisation measurements on magnetic nanoparticles. *Journal of Physics: Conference Series*, **2018**, 1065, 072030	0.3	
72	Improved sensitivity and limit-of-detection using a receive-only coil in magnetic particle imaging. *Physics in Medicine and Biology*, **2018**, 63, 13NT02	3.8	21
71	The complementarity and similarity of magnetorelaxometry and thermal magnetic noise spectroscopy for magnetic nanoparticle characterization. *Journal Physics D: Applied Physics*, **2017**, 50, 085004	3	7
70	Multi-color magnetic nanoparticle imaging using magnetorelaxometry. *Physics in Medicine and Biology*, **2017**, 62, 3139-3157	3.8	16
69	Nonlinear Spectroscopic Characterization and Volterra Series Inspired Modeling of Magnetic Nanoparticles. *IEEE Transactions on Magnetics*, **2017**, 53, 1-12	2	1
68	Interpreting the magnetorelaxometry signal of suspended magnetic nanoparticles with Kaczmarz algorithm. *Journal Physics D: Applied Physics*, **2017**, 50, 195002	3	9
67	How shape and internal structure affect the magnetic properties of anisometric magnetite nanoparticles. *Acta Materialia*, **2017**, 125, 416-424	8.4	29
66	Standardisation of magnetic nanoparticles in liquid suspension. *Journal Physics D: Applied Physics*, **2017**, 50, 383003	3	47
65	Finding the magnetic size distribution of magnetic nanoparticles from magnetization measurements via the iterative Kaczmarz algorithm. *Journal of Magnetism and Magnetic Materials*, **2017**, 431, 33-37	2.8	11
64	Size analysis of single-core magnetic nanoparticles. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 19-24	2.8	19
63	Magnetorelaxometry procedures for quantitative imaging and characterization of magnetic nanoparticles in biomedical applications. *Biomedizinische Technik*, **2015**, 60, 427-43	1.3	19

62	Thermal magnetic noise spectra of nanoparticle ensembles. *Applied Physics Letters*, **2015**, 107, 222401	3.4	12
61	Quantitative and binding-specific imaging of magnetic nanoparticle distributions **2015**,		2
60	Classification of Magnetic Nanoparticle Systems--Synthesis, Standardization and Analysis Methods in the NanoMag Project. *International Journal of Molecular Sciences*, **2015**, 16, 20308-25	6.3	51
59	Fetal magnetocardiography measurements with an array of microfabricated optically pumped magnetometers. *Physics in Medicine and Biology*, **2015**, 60, 4797-811	3.8	85
58	A Phenomenological Description of the MPS Signal Using a Model for the Field Dependence of the Effective Relaxation Time. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	2
57	Parameterization of the harmonic content of the complex MPI signal of magnetic tracers using a set of polynomial coefficients. *Journal of Magnetism and Magnetic Materials*, **2015**, 380, 276-279	2.8	
56	Uncertainty of reconstructions of spatially distributed magnetic nanoparticles under realistic noise conditions. *Journal of Applied Physics*, **2014**, 115, 17B509	2.5	7
55	Track j: magnetic methods in medicine. *Biomedizinische Technik*, **2014**, 59 Suppl 1, s649-99	1.3	1
54	Magnetic, Structural, and Particle Size Analysis of Single- and Multi-Core Magnetic Nanoparticles. *IEEE Transactions on Magnetics*, **2014**, 50, 1-4	2	11
53	Quantitative imaging of magnetic nanoparticles by magnetorelaxometry with multiple excitation coils. *Physics in Medicine and Biology*, **2014**, 59, 6607-20	3.8	30
52	Characterization of magnetic nanoparticle systems with respect to their magnetic particle imaging performance. *Biomedizinische Technik*, **2013**, 58, 535-45	1.3	47
51	Quantitative reconstruction of a magnetic nanoparticle distribution using a non-negativity constraint. *Biomedizinische Technik*, **2013**, 58 Suppl 1,	1.3	6
50	Advancements in Magnetic Nanoparticle Reconstruction Using Sequential Activation of Excitation Coil Arrays Using Magnetorelaxometry. *IEEE Transactions on Magnetics*, **2012**, 48, 1313-1316	2	29
49	Magnetorelaxometry assisting biomedical applications of magnetic nanoparticles. *Pharmaceutical Research*, **2012**, 29, 1189-202	4.5	99
48	Potential of Improving MPI Performance by Magnetic Separation. *Springer Proceedings in Physics*, **2012**, 73-78	0.2	6
47	Spatially Resolved Measurement of Magnetic Nanoparticles Using Inhomogeneous Excitation Fields in the Linear Susceptibility Range (. *Springer Proceedings in Physics*, **2012**, 295-300	0.2	5
46	Magnetorelaxometry for In-Vivo Quantification of Magnetic Nanoparticle Distributions after Magnetic Drug Targeting in a Rabbit Carcinoma Model. *Springer Proceedings in Physics*, **2012**, 301-305	0.2	8
45	Magnetorelaxometry for localization and quantification of magnetic nanoparticles for thermal ablation studies. *Physics in Medicine and Biology*, **2010**, 55, 623-33	3.8	53

44	Ein Algorithmus zur Quantifizierung der Fragmentation des MKGs im QRS-Komplex. *Biomedizinische Technik*, **2009**, 279-280	1.3	1
43	Abschätzung der derzeit erreichbaren Auflösung im Oberflächen-EKG und MKG. *Biomedizinische Technik*, **2009**, 207-208	1.3	
42	Quantification of drug-loaded magnetic nanoparticles in rabbit liver and tumor after in vivo administration. *Journal of Magnetism and Magnetic Materials*, **2009**, 321, 1465-1468	2.8	39
41	Specific binding of magnetic nanoparticle probes to platelets in whole blood detected by magnetorelaxometry. *Journal of Magnetism and Magnetic Materials*, **2009**, 321, 1617-1620	2.8	32
40	Quantification of biomolecule agglutination by magnetorelaxometry. *Applied Physics Letters*, **2009**, 95, 213701	3.4	14
39	AC susceptometry and magnetorelaxometry for magnetic nanoparticle based biomolecule detection. *IFMBE Proceedings*, **2009**, 2317-2321	0.2	2
38	Quantification of magnetic nanoparticle concentration in pig lung tissue after magnetic aerosol drug targeting by magnetorelaxometry. *IFMBE Proceedings*, **2009**, 2326-2329	0.2	7
37	Localization of a magnetic nanoparticle spot from features of the magnetic field pattern and comparison to a magnetic dipole fit. *IFMBE Proceedings*, **2009**, 2347-2351	0.2	2
36	A physical phantom modeling extended magnetic nanoparticle distributions in biological systems. *IFMBE Proceedings*, **2009**, 293-296	0.2	3
35	Magnetic nanoparticle imaging by means of minimum norm estimates from remanence measurements. *Medical and Biological Engineering and Computing*, **2008**, 46, 1177-85	3.1	29
34	Quantification of specific bindings of biomolecules by magnetorelaxometry. *Journal of Nanobiotechnology*, **2008**, 6, 4	9.4	35
33	Safety pharmacology and prolongation of the QT interval. *Journal of Electrocardiology*, **2007**, 40, S58-S61	1.4	4
32	Multichannel SQUID System With Integrated Magnetic Shielding for Magnetocardiography of Mice. *IEEE Transactions on Applied Superconductivity*, **2007**, 17, 827-830	1.8	12
31	Comparison of magnetocardiography and electrocardiography. *Anatolian Journal of Cardiology*, **2007**, 7 Suppl 1, 20-2		
30	Comparison of magnetocardiography and electrocardiography: a study of automatic measurement of dispersion of ventricular repolarization. *Europace*, **2006**, 8, 887-93	3.9	21
29	Aggregation behaviour of magnetic nanoparticle suspensions investigated by magnetorelaxometry. *Journal of Physics Condensed Matter*, **2006**, 18, S2829-S2846	1.8	114
28	Quantification of magnetic nanoparticles by magnetorelaxometry and comparison to histology after magnetic drug targeting. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 3222-5	1.3	56
27	Pseudo current density maps of electrophysiological heart, nerve or brain function and their physical basis. *Biomagnetic Research and Technology*, **2006**, 4, 5		15

26	Binding kinetics of magnetic nanoparticles on latex beads and yeast cells studied by magnetorelaxometry. *Journal of Magnetism and Magnetic Materials*, **2005**, 289, 435-438	2.8	27
25	Complex narrow band-pass filters for QRS detection in contactless magnetocardiograms of small animals **2005**,		2
24	MCG to ECG source differences: measurements and a two-dimensional computer model study. *Journal of Electrocardiology*, **2004**, 37 Suppl, 123-7	1.4	12
23	Magnetocardiography for pharmacology safety studies requiring high patient throughput and reliability. *Journal of Electrocardiology*, **2004**, 37 Suppl, 187-92	1.4	19
22	Binding kinetics of magnetic nanoparticles on latex beads studied by magnetorelaxometry. *Applied Organometallic Chemistry*, **2004**, 18, 542-547	3.1	17
21	Spatial distribution of cardiac magnetic vector fields acquired from 3120 SQUID positions. *Neurology, Neurophysiology and Neuroscience*, **2004**, 2004, 59		4
20	A sensor configuration for a 304 SQUID vector magnetometer. *Neurology, Neurophysiology and Neuroscience*, **2004**, 2004, 70		6
19	COMPARISON OF CARDIAC MAGNETIC FIELD DISTRIBUTIONS DURING DEPOLARIZATION AND REPOLARIZATION. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering* , **2003**, 13, 3783-3789	2	4
18	Comparison of automatic repolarization measurement techniques in the normal magnetocardiogram. *PACE - Pacing and Clinical Electrophysiology*, **2003**, 26, 2096-102	1.6	4
17	Analysis of spatial variation in the atrial fibrillation frequency from the multi-channel magnetocardiogram **2003**,		1
16	Errors in repolarization measurement using magnetocardiography. *PACE - Pacing and Clinical Electrophysiology*, **2002**, 25, 1223-9	1.6	8
15	Imaging characteristics of different multichannel magnetocardiographic systems. *Biomedizinische Technik*, **2002**, 47 Suppl 1 Pt 1, 445-8	1.3	1
14	Magnetocardiographic mapping of QRS fragmentation in patients with a history of malignant tachyarrhythmias. *Clinical Cardiology*, **2001**, 24, 682-8	3.3	5
13	Localization of Curved Current Sources in Magnetocardiography. *Biomedizinische Technik*, **2001**, 46, 141-143	1.3	2
12	Identification of post-myocardial infarction patients with ventricular tachycardia by time-domain intra-QRS analysis of signal-averaged electrocardiogram and magnetocardiogram. *Medical and Biological Engineering and Computing*, **2000**, 38, 659-65	3.1	7
11	Magnetocardiographic analysis of the two-dimensional distribution of intra-QRS fractionated activation. *Physics in Medicine and Biology*, **1999**, 44, 105-20	3.8	24
10	Magnetocardiography using HTS rf SQUIDs with coplanar resonators. *Applied Superconductivity*, **1999**, 6, 705-710		
9	Value of magnetocardiographic QRST integral maps in the identification of patients at risk of ventricular arrhythmias. *PACE - Pacing and Clinical Electrophysiology*, **1999**, 22, 1292-304	1.6	12

8	Magnetocardiographic turbulence analysis in patients with the long QT syndrome. *Journal of Electrocardiology*, **1998**, 30 Suppl, 105-13	1.4	4
7	Fragmentation of bandpass-filtered QRS-complex of patients prone to malignant arrhythmia. *Medical and Biological Engineering and Computing*, **1998**, 36, 723-8	3.1	15
6	Comparability of measurement results obtained with multi-SQUID-systems of different sensor configurations. *IEEE Transactions on Applied Superconductivity*, **1997**, 7, 3465-3468	1.8	15
5	Der Einflu□der Sensorkonfiguration auf biomagnetische Me□ignale. *Biomedizinische Technik*, **1996**, 41, 302-303	1.3	
4	Magnetometry of evoked fields from human peripheral nerve, brachial plexus and primary somatosensory cortex using a liquid nitrogen cooled superconducting quantum interference device. *Neuroscience Letters*, **1996**, 206, 204-6	3.3	7
3	Robuste Parameter zur Beschreibung von magnetokardiografischen Feldern. *Biomedizinische Technik*, **1996**, 41, 296-297	1.3	1
2	Integrated YBa2Cu3O7□ magnetometer for biomagnetic measurements. *Applied Physics Letters*, **1996**, 68, 1421-1423	3.4	106
1	Relation between spatial properties of repolarisation interval and T-wave amplitude using magnetocardiography		1