

Thorsten M Buzug

List of Publications by Year in descending order

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234
papers

4,342
citations

147566

31
h-index

138251

58
g-index

261
all docs

261
docs citations

261
times ranked

2554
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent developments in magnetic particle imaging. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 550, 169037.	1.0	12
2	Bimodal Interventional Instrument Markers for Magnetic Particle Imaging and Magnetic Resonance Imaging – A Proof-of-Concept Study. <i>Nanomaterials</i> , 2022, 12, 1758.	1.9	1
3	Magnetic Particle Imaging: In vitro Signal Analysis and Lumen Quantification of 21 Endovascular Stents. <i>International Journal of Nanomedicine</i> , 2021, Volume 16, 213-221.	3.3	7
4	Heating of an Aortic Stent for Coarctation Treatment During Magnetic Particle Imaging and Magnetic Resonance Imaging – A Comparative In Vitro Study. <i>CardioVascular and Interventional Radiology</i> , 2021, 44, 1109-1115.	0.9	7
5	Navigation of a magnetic micro-robot through a cerebral aneurysm phantom with magnetic particle imaging. <i>Scientific Reports</i> , 2021, 11, 14082.	1.6	31
6	Selective Actuation and Tomographic Imaging of Swarming Magnetite Nanoparticles. <i>ACS Applied Nano Materials</i> , 2021, 4, 6752-6759.	2.4	16
7	Magnetic Particle Imaging: Artifact-Free Metallic Stent Lumen Imaging in a Phantom Study. <i>CardioVascular and Interventional Radiology</i> , 2020, 43, 331-338.	0.9	12
8	Efficient hybrid 3D system calibration for magnetic particle imaging systems using a dedicated device. <i>Scientific Reports</i> , 2020, 10, 18432.	1.6	12
9	Actuation of a magnetically coated swimmer in viscous media with a magnetic particle imaging scanner. <i>Current Directions in Biomedical Engineering</i> , 2020, 6, 349-352.	0.2	0
10	Tracking the Growth of Superparamagnetic Nanoparticles with an In-Situ Magnetic Particle Spectrometer (INSPECT). <i>Scientific Reports</i> , 2019, 9, 10538.	1.6	10
11	Magnetic Particle Imaging meets Computed Tomography: first simultaneous imaging. <i>Scientific Reports</i> , 2019, 9, 12627.	1.6	38
12	MRI flow measurements with a flexible stenosis phantom. <i>Current Directions in Biomedical Engineering</i> , 2019, 5, 565-568.	0.2	0
13	A New Phantom for Individual Verification of the Dose Distribution in Precision Radiotherapy for Head-and-Neck Cancer. <i>Anticancer Research</i> , 2019, 39, 6931-6938.	0.5	8
14	Actuation and visualization of a magnetically coated swimmer with magnetic particle imaging. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 473, 495-500.	1.0	22
15	First heating measurements of endovascular stents in magnetic particle imaging. <i>Physics in Medicine and Biology</i> , 2018, 63, 045005.	1.6	20
16	Residual U-Net Convolutional Neural Network Architecture for Low-Dose CT Denoising. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 297-300.	0.2	43
17	Magnetic particle imaging in vascular medicine. <i>Innovative Surgical Sciences</i> , 2018, 3, 179-192.	0.4	26
18	A Summing Configuration based Low Noise Amplifier for MPI and MPS. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 83-86.	0.2	1

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19	Improvement of dose calculation in radiation therapy due to metal artifact correction using the augmented likelihood image reconstruction. Journal of Applied Clinical Medical Physics, 2018, 19, 227-233.	0.8	9
20	Mathematical analysis of the 1D model and reconstruction schemes for magnetic particle imaging. Inverse Problems, 2018, 34, 055012.	1.0	8
21	Take a Deep Breath - Monitoring of Inhaled Nanoparticles with Magnetic Particle Imaging. Theranostics, 2018, 8, 3691-3692.	4.6	7
22	Influence of Excitation Signal Coupling on Reconstructed Images in Magnetic Particle Imaging. Informatik Aktuell, 2018, , 92-97.	0.4	1
23	Moving table magnetic particle imaging: a stepwise approach preserving high spatio-temporal resolution. Journal of Medical Imaging, 2018, 5, 1.	0.8	7
24	Two dimensional magnetic particle spectrometry. Physics in Medicine and Biology, 2017, 62, 3378-3391.	1.6	17
25	Recent progress in magnetic particle imaging: from hardware to preclinical applications. Physics in Medicine and Biology, 2017, 62, E4-E7.	1.6	11
26	Hybrid system calibration for multidimensional magnetic particle imaging. Physics in Medicine and Biology, 2017, 62, 3392-3406.	1.6	33
27	Towards Picogram Detection of Superparamagnetic Iron-Oxide Particles Using a Gradiometric Receive Coil. Scientific Reports, 2017, 7, 6872.	1.6	95
28	Session 31: Imaging and image processing III – Nanoparticle imaging and MRI. Biomedizinische Technik, 2017, 62, .	0.9	0
29	PET image reconstruction using the Origin Ensemble algorithm and geometric constraints. Current Directions in Biomedical Engineering, 2017, 3, 549-553.	0.2	2
30	Op-amp based low noise amplifier for magnetic particle spectroscopy. Current Directions in Biomedical Engineering, 2017, 3, 599-602.	0.2	0
31	Effects of replacing the nasal cavity with a simple pipe like structure in CFD simulations of the airflow within the upper airways of OSA patients with patient individual flow rates. Current Directions in Biomedical Engineering, 2017, 3, 795-798.	0.2	1
32	The effects of metal artifact reduction on the retrieval of $\hat{\mu}$ attenuation values. Journal of Applied Clinical Medical Physics, 2017, 18, 243-250.	0.8	2
33	The effects of metal artifact reduction on the retrieval of $\hat{\mu}$ attenuation values. Journal of Applied Clinical Medical Physics, 2017, 18, 243-250.	0.8	4
34	Polychromatic Iterative Statistical Material Image Reconstruction for Photon-Counting Computed Tomography. International Journal of Biomedical Imaging, 2016, 2016, 1-15.	3.0	30
35	Artifact free reconstruction with the system matrix approach by overscanning the field-free-point trajectory in magnetic particle imaging. Physics in Medicine and Biology, 2016, 61, 475-487.	1.6	43
36	Non-Equispaced System Matrix Acquisition for Magnetic Particle Imaging Based on Lissajous Node Points. IEEE Transactions on Medical Imaging, 2016, 35, 2476-2485.	5.4	26

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37	Using data redundancy gained by patch overlaps to reduce truncation artifacts in magnetic particle imaging. <i>Physics in Medicine and Biology</i> , 2016, 61, 4583-4598.	1.6	18
38	Bivariate Lagrange interpolation at the node points of non-degenerate Lissajous curves. <i>Numerische Mathematik</i> , 2016, 133, 685-705.	0.9	21
39	2D Images Recorded With a Single-Sided Magnetic Particle Imaging Scanner. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 1056-1065.	5.4	46
40	Steering of Magnetic Devices With a Magnetic Particle Imaging System. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 2286-2293.	2.5	40
41	Trajectory dependent particle response for anisotropic mono domain particles in magnetic particle imaging. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 045007.	1.3	14
42	Augmented Likelihood Image Reconstruction. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 158-173.	5.4	20
43	Contribution of brownian rotation and particle assembly polarisation to the particle response in magnetic particle spectrometry. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 298-301.	0.2	1
44	Experimental evaluation of different weighting schemes in magnetic particle imaging reconstruction. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 206-209.	0.2	3
45	Introducing a frequency-tunable magnetic particle spectrometer. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 249-253.	0.2	5
46	A device for measuring the trajectory dependent magnetic particle performance for MPI. , 2015, , .		2
47	Sequences for real-time magnetic particle imaging. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 353-355.	0.2	0
48	Magnetic particle imaging: current developments and future directions. <i>International Journal of Nanomedicine</i> , 2015, 10, 3097.	3.3	217
49	Performance of Shielded Electromagnet-Evaluation Under Low-Frequency Excitation. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	3
50	Trajectory Analysis Using Static Patches for Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	5
51	Asymmetric Scanner Design for Interventional Scenarios in Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	7
52	Implementation of a High-Precision 2-D Receiving Coil Set for Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	2
53	Reconstruction Enhancement by Denoising the Magnetic Particle Imaging System Matrix Using Frequency Domain Filter. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-5.	1.2	9
54	Coil Design for Magnetic Particle Imaging: Application for a Preclinical Scanner. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-8.	1.2	14

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55	MPI with a mechanically rotated FFL. , 2015, , .		3
56	Performance and safety evaluation of a human sized FFL imager concept. , 2015, , .		3
57	Sensitivity study for an MPI FFL scanner. , 2015, , .		0
58	Toroidal variometer for a magnetic particle imaging device. , 2015, , .		0
59	Concept of a rabbit-sized FFL-scanner. , 2015, , .		4
60	Artifacts in field free line magnetic particle imaging. , 2015, , .		1
61	Induced electrical fields on a human body by various magnetic field topologies in the light of peripheral nerve stimulation thresholds. , 2015, , .		2
62	High resolution magnetic particle imaging with low density trajectory. , 2015, , .		0
63	Message From the IWMPI 2014 Conference Chairs. IEEE Transactions on Magnetics, 2015, 51, 1-1.	1.2	0
64	Electronic Field Free Line Rotation and Relaxation Deconvolution in Magnetic Particle Imaging. IEEE Transactions on Medical Imaging, 2015, 34, 644-651.	5.4	50
65	Dynamic single-domain particle model for magnetite particles with combined crystalline and shape anisotropy. Journal Physics D: Applied Physics, 2015, 48, 275001.	1.3	17
66	Axially Elongated Field-Free Point Data Acquisition in Magnetic Particle Imaging. IEEE Transactions on Medical Imaging, 2015, 34, 381-387.	5.4	7
67	Simultaneous Reconstruction and Resolution Enhancement for Magnetic Particle Imaging. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	2
68	Compressed Sensing of the System Matrix and Sparse Reconstruction of the Particle Concentration in Magnetic Particle Imaging. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	9
69	System Matrix Recording and Phantom Measurements with a Single-Sided Magnetic Particle Imaging Device. IEEE Transactions on Magnetics, 2015, 51, 1-3.	1.2	7
70	SPIO Detection and Distribution in Biological Tissue—A Murine MPI-SLNB Breast Cancer Model. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	6
71	Undersampling the system matrix of a single sided MPI-scanner. , 2015, , .		0
72	Magnetic particle imaging: kinetics of the intravascular signal in vivo. International Journal of Nanomedicine, 2014, 9, 4203.	3.3	28

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73	Safety Measurements for Heating of Instruments for Cardiovascular Interventions in Magnetic Particle Imaging (MPI) - First Experiences. Journal of Healthcare Engineering, 2014, 5, 79-94.	1.1	26
74	11. Magnetic Particle Imaging. , 2014, , 425-440.		0
75	11 Bildgebung. , 2014, , 271-328.		0
76	16. Medizinische Infrarot-Bildgebung. , 2014, , 519-532.		0
77	Identification of Crucial Parameters in a Mathematical Multiscale Model of Glioblastoma Growth. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-14.	0.7	4
78	Efficient gradient field generation providing a multi-dimensional arbitrary shifted field-free point for magnetic particle imaging. Journal of Applied Physics, 2014, 115, .	1.1	11
79	Toward the Optimization of D-Shaped Coils for the Use in an Open Magnetic Particle Imaging Scanner. IEEE Transactions on Magnetics, 2014, 50, 1-7.	1.2	5
80	Using image segmentation for evaluating 3D statistical shape models built with groupwise correspondence optimization. Computer Vision and Image Understanding, 2014, 125, 283-303.	3.0	10
81	Reduction of Blind-Spot and Stripe Artifacts in 3D Digital Tomosynthesis. Informatik Aktuell, 2014, , 36-41.	0.4	0
82	3. Computertomographie. , 2014, , 59-112.		0
83	Toward cardiovascular interventions guided by magnetic particle imaging: First instrument characterization. Magnetic Resonance in Medicine, 2013, 69, 1761-1767.	1.9	42
84	Weighted simultaneous algebraic reconstruction technique for tomosynthesis imaging of objects with high attenuation features. Medical Physics, 2013, 40, 031106.	1.6	18
85	Magnetic Particle Imaging " from particle science to imaging technology. Biomedizinische Technik, 2013, 58, 489-91.	0.9	3
86	Receive coil optimization for an open magnetic particle imaging scanner. , 2013, , .		1
87	A high power driving and selection field coil for an open MPI scanner. , 2013, , .		8
88	Analog receive signal processing for magnetic particle imaging. Medical Physics, 2013, 40, 042303.	1.6	50
89	Fundamentals and Potential of Magnetic Particle Imaging. Current Cardiovascular Imaging Reports, 2013, 6, 390-398.	0.4	5
90	Improved field free line magnetic particle imaging using saddle coils. Biomedizinische Technik, 2013, 58, 577-82.	0.9	2

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91	Influence of metal segmentation on the quality of metal artifact reduction methods. Proceedings of SPIE, 2013, , .	0.8	11
92	A dual-axis tilt acquisition geometry for digital musculoskeletal tomosynthesis. Physics in Medicine and Biology, 2013, 58, 4827-4848.	1.6	4
93	Simulation of the magnetization dynamics of diluted ferrofluids in medical applications. Biomedizinische Technik, 2013, 58, 601-9.	0.9	22
94	Modelling of glioblastoma growth by linking a molecular interaction network with an agent-based model. Mathematical and Computer Modelling of Dynamical Systems, 2013, 19, 417-433.	1.4	7
95	Comparison of Open Scanner Designs for Interventional Magnetic Particle Imaging. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	4
96	Scanner Construction for a Dynamic Field Free Line in Magnetic Particle Imaging. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	4
97	Simulation Study of a Single-Sided Magnetic Particle Imaging Device. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	0
98	Precision of an MPI Scanner Construction: Registration of Measured and Simulated Magnetic Fields. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	2
99	On the formulation of the image reconstruction problem in magnetic particle imaging. Biomedizinische Technik, 2013, 58, 583-91.	0.9	53
100	High Homogeneous Saddle Drive Field Coil for Magnetic Particle Spectroscopy. Biomedizinische Technik, 2013, 58 Suppl 1, .	0.9	0
101	Greedy Projection Access Order for SART Simultaneous Algebraic Reconstruction Technique. Informatik Aktuell, 2013, , 93-98.	0.4	1
102	Experimental Validation of an Assembly of Optimized Curved Rectangular Coils for the Use in Dynamic Field Free Line Magnetic Particle Imaging. Current Medical Imaging, 2013, 9, 89-95.	0.4	7
103	Relaxed Statistical Shape Models for 3D Image Segmentation – Application to Mandible Bone in Cone-beam CT Data. Current Medical Imaging, 2013, 9, 129-137.	0.4	2
104	A Validated Mathematical Model of Tumour-Immune Interactions for Glioblastoma. Current Medical Imaging, 2013, 9, 145-153.	0.4	5
105	Untersuchung der Normalverteilungsannahme bei der statistischen Formmodellierung. Informatik Aktuell, 2013, , 265-270.	0.4	0
106	Personalisierte Modellierung der Progression primärer Hirntumoren als Optimierungsproblem mit Differentialgleichungsnebenbedingung. Informatik Aktuell, 2013, , 57-62.	0.4	0
107	Multi-object active shape model construction for abdomen segmentation: Preliminary results. , 2012, 2012, 3990-3.		3
108	Signal separation in magnetic particle imaging. , 2012, , .		2

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109	A computational multiscale model of glioblastoma growth: Regulation of cell migration and proliferation via microRNA-451, LKB1 and AMPK. , 2012, 2012, 6620-3.		6
110	Enhancing the efficiency of a field free line scanning device for magnetic particle imaging. , 2012, , .		3
111	A Novel Method for Simulating the Extracellular Matrix in Models of Tumour Growth. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-11.	0.7	13
112	Adaptive spatially dependent weighting scheme for tomosynthesis reconstruction. Proceedings of SPIE, 2012, , .	0.8	1
113	Quality evaluation for metal influenced CT data. Proceedings of SPIE, 2012, , .	0.8	0
114	Modelling the Progression of Brain Metastases. Biomedizinische Technik, 2012, 57, .	0.9	0
115	A Novel Acquisition Scheme for Higher Axial Resolution and Improved Image Quality in Digital Tomosynthesis. Biomedizinische Technik, 2012, 57, .	0.9	1
116	Biophysical modeling of brain tumor progression: From unconditionally stable explicit time integration to an inverse problem with parabolic PDE constraints for model calibration. Medical Physics, 2012, 39, 4444-4459.	1.6	26
117	Extended Field of View in Magnetic Particle Imaging. Biomedizinische Technik, 2012, 57, .	0.9	0
118	A Method for Validation and Evaluation of Digital Tomosynthesis Reconstruction. Biomedizinische Technik, 2012, 57, .	0.9	0
119	Determining Noise Distribution in Computed Tomography – A Simple Phantom Based Approach. Biomedizinische Technik, 2012, 57, .	0.9	0
120	Towards Segmentation of the Upper Abdomen using a Multi-Object Active Shape Model. Biomedizinische Technik, 2012, 57, .	0.9	0
121	Detection and distribution of superparamagnetic nanoparticles in lymphatic tissue in a breast cancer model for magnetic particle imaging. Biomedizinische Technik, 2012, 57, .	0.9	4
122	An Application Scenario for Single-Sided Magnetic Particle Imaging. Biomedizinische Technik, 2012, 57, .	0.9	3
123	Calculation of Reconstruction Kernels in Computed Tomography. Biomedizinische Technik, 2012, 57, .	0.9	0
124	From Data to Images: Reconstruction. , 2012, , 127-148.		0
125	Magnetic particle imaging: Introduction to imaging and hardware realization. Zeitschrift Fur Medizinische Physik, 2012, 22, 323-334.	0.6	73
126	Commercialization of a magnetic particle spectrometer. , 2012, , .		1

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127	Magnetic Particle Imaging: Visualization of Instruments for Cardiovascular Intervention. Radiology, 2012, 265, 933-938.	3.6	110
128	Fully automatic shape constrained mandible segmentation from cone-beam CT data. , 2012, , .		21
129	A fully 3D approach for metal artifact reduction in computed tomography. Medical Physics, 2012, 39, 7042-7054.	1.6	27
130	Magnetic Particle Imaging. , 2012, , .		96
131	A Mathematical Model to Simulate Glioma Growth and Radiotherapy at the Microscopic Level. Biomedizinische Technik, 2012, 57, .	0.9	1
132	A Generic Framework for Modeling Brain Deformation as a Constrained Parametric Optimization Problem to Aid Non-diffeomorphic Image Registration in Brain Tumor Imaging. Methods of Information in Medicine, 2012, 51, 429-440.	0.7	10
133	Fast Explicit Variational Diffusion Registration. Biomedizinische Technik, 2012, 57, .	0.9	0
134	Triangulating Quadrilaterals on the Sphere: Application to Shape Analysis. Biomedizinische Technik, 2012, 57, .	0.9	0
135	How Magnetic Particle Imaging Works. , 2012, , 11-70.		0
136	Prior to Reconstruction " The System Function. , 2012, , 97-125.		1
137	How to Build an MPI Scanner. , 2012, , 71-95.		1
138	Putting MPI to Use: Applications. , 2012, , 171-176.		0
139	Efficient Magnetic Gradient Field Generation With Arbitrary Axial Displacement for Magnetic Particle Imaging. IEEE Magnetics Letters, 2012, 3, 6500104-6500104.	0.6	11
140	Determination of System Functions for Magnetic Particle Imaging. Springer Proceedings in Physics, 2012, , 59-64.	0.1	3
141	Distribution of Superparamagnetic Nanoparticles in Lymphatic Tissue for Sentinel Lymph Node Detection in Breast Cancer by Magnetic Particle Imaging. Springer Proceedings in Physics, 2012, , 187-191.	0.1	6
142	Magnetic-Particle-Imaging for Sentinel Lymph Node Biopsy in Breast Cancer. Springer Proceedings in Physics, 2012, , 237-241.	0.1	10
143	System Calibration Unit for Magnetic Particle Imaging: Focus Field Based System Function. Springer Proceedings in Physics, 2012, , 27-31.	0.1	16
144	Formmodellbasierte Segmentierung des Unterkiefers aus Dental-CT-Aufnahmen. Informatik Aktuell, 2012, , 15-20.	0.4	0

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145	Special System Topologies. , 2012, , 149-170.		0
146	Modified Eulers Elastica Inpainting for Metal Artifact Reduction in CT. Informatik Aktuell, 2012, , 310-315.	0.4	0
147	In-silico Modellierung der Immunantwort auf Hirntumorwachstum. Informatik Aktuell, 2012, , 123-128.	0.4	0
148	L1-Regularisierung für die Computertomographie mit begrenztem Aufnahmewinkel. Informatik Aktuell, 2012, , 147-152.	0.4	0
149	Optimization of Circular Current Distributions for Magnetic Field Generation in MPI: A Comparison of the Selection Field Coil and the Drive Field Coil Geometry. Springer Proceedings in Physics, 2012, , 313-318.	0.1	1
150	Influence of Orientation Fields of Fingerprints to Matching Performance. Communications in Computer and Information Science, 2012, , 192-195.	0.4	0
151	Experimentelle Realisierungen einer vollständigen Trajektorie für die magnetische Partikel-Bildgebung mit einer feldfreien Linie. Informatik Aktuell, 2012, , 358-362.	0.4	0
152	Fingerprint segmentation and quality map using a combined frequency model. , 2011, , .		1
153	Magnetic Particle Imaging. , 2011, , 461-476.		11
154	Medical Infrared Imaging. , 2011, , 369-378.		0
155	Prediction of the Spatial Resolution of Magnetic Particle Imaging Using the Modulation Transfer Function of the Imaging Process. IEEE Transactions on Medical Imaging, 2011, 30, 1284-1292.	5.4	80
156	A Fourier slice theorem for magnetic particle imaging using a field-free line. Inverse Problems, 2011, 27, 095004.	1.0	33
157	Simulation of ultra low-dose scans in quantum counting clinical CT. , 2011, , .		2
158	Receive coil array for magnetic particle imaging. , 2011, , .		0
159	A model of tumour induced brain deformation as bio-physical prior for non-rigid image registration. , 2011, , .		3
160	Reference-free ground truth metric for metal artifact evaluation in CT images. Medical Physics, 2011, 38, 4321-4328.	1.6	16
161	Experimental generation of an arbitrarily rotated field-free line for the use in magnetic particle imaging. Medical Physics, 2011, 38, 5200-5207.	1.6	31
162	Modellierung tumorinduzierter Gewebedeformation als Optimierungsproblem mit weicher Nebenbedingung. Informatik Aktuell, 2011, , 294-298.	0.4	3

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163	Optimal Initialization for 3D Correspondence Optimization: An Evaluation Study. Lecture Notes in Computer Science, 2011, 22, 308-319.	1.0	5
164	Computertomographie (CT). , 2011, , 317-337.		0
165	Experimentelle Validierung des Konzeptes einer feldfreie Linie für Magnetic-Particle-Imaging anhand von Magnetfeldmessungen. Informatik Aktuell, 2011, , 334-338.	0.4	0
166	Weighted iterative reconstruction for magnetic particle imaging. Physics in Medicine and Biology, 2010, 55, 2427-2427.	1.6	1
167	2D model-based reconstruction for magnetic particle imaging. Medical Physics, 2010, 37, 485-491.	1.6	82
168	SUPERPARAMAGNETIC IRON OXIDE NANOPARTICLES FOR MAGNETIC PARTICLE IMAGING. , 2010, , .		1
169	SENTINEL LYMPHNODE DETECTION IN BREAST CANCER BY MAGNETIC PARTICLE IMAGING USING SUPERPARAMAGNETIC NANOPARTICLES. , 2010, , .		3
170	A SPECTROMETER TO MEASURE THE USABILITY OF NANOPARTICLES FOR MAGNETIC PARTICLE IMAGING. , 2010, , .		3
171	In-silico oncology: an approximate model of brain tumor mass effect based on directly manipulated free form deformation. International Journal of Computer Assisted Radiology and Surgery, 2010, 5, 607-622.	1.7	11
172	Model-Based Reconstruction for Magnetic Particle Imaging. IEEE Transactions on Medical Imaging, 2010, 29, 12-18.	5.4	133
173	Efficient generation of a magnetic field-free line. Medical Physics, 2010, 37, 3538-3540.	1.6	42
174	Coupling tumor growth with brain deformation: a constrained parametric non-rigid registration problem. , 2010, , .		4
175	The impact of dual energy CT on pseudo enhancement of kidney lesions. , 2010, , .		2
176	Weighted iterative reconstruction for magnetic particle imaging. Physics in Medicine and Biology, 2010, 55, 1577-1589.	1.6	142
177	Generation of a static magnetic field-free line using two Maxwell coil pairs. Applied Physics Letters, 2010, 97, 092505.	1.5	26
178	Approximating tumor induced brain deformation using directly manipulated free form deformation. , 2010, , .		1
179	Two-step metal artifact reduction using 2D-NFFT and spherically symmetric basis functions. , 2010, , .		0
180	Monitoring of wound healing by millimetre wave imaging. , 2010, , .		6

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181	Field-free line formation in a magnetic field. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 012002.	0.7	40
182	A method for quantitative evaluation of statistical shape models using morphometry. , 2010, , .		4
183	RESOLUTION DISTRIBUTION IN SINGLE-SIDED MAGNETIC PARTICLE IMAGING. , 2010, , .		4
184	EFFICIENT FIELD-FREE LINE GENERATION FOR MAGNETIC PARTICLE IMAGING. , 2010, , .		0
185	CURRENT IRON OXIDE NANOPARTICLES: IMPACT ON MRI AND MPI. , 2010, , .		0
186	A SURVEILLANCE UNIT FOR MAGNETIC PARTICLE IMAGING SYSTEMS. , 2010, , .		0
187	Metal artifact reduction in computed tomography using nonequispaced fourier transform. , 2009, , .		11
188	Preparation and Characterization of Dextran-Covered Fe ₃ O ₄ Nanoparticles for Magnetic Particle Imaging. IFMBE Proceedings, 2009, , 2343-2346.	0.2	12
189	Single-sided device for magnetic particle imaging. Journal Physics D: Applied Physics, 2009, 42, 022001.	1.3	116
190	Trajectory analysis for magnetic particle imaging. Physics in Medicine and Biology, 2009, 54, 385-397.	1.6	147
191	Magnetization response spectroscopy of superparamagnetic nanoparticles for magnetic particle imaging. Journal Physics D: Applied Physics, 2009, 42, 205007.	1.3	197
192	Trajektorienrichte bei Magnetic Particle Imaging. Informatik Aktuell, 2009, , 71-75.	0.4	0
193	Consistency of parametric registration in serial MRI studies of brain tumor progression. International Journal of Computer Assisted Radiology and Surgery, 2008, 3, 201-211.	1.7	15
194	Evaluation of surrogate data quality in sinogram-based CT metal-artifact reduction. Proceedings of SPIE, 2008, , .	0.8	9
195	Singular value analysis for Magnetic Particle Imaging. , 2008, , .		21
196	Intersection Line Length Normalization in CT Projection Data. Informatik Aktuell, 2008, , 77-81.	0.4	3
197	Registration Algorithm for Statistical Bone Shape Reconstruction from Radiographs - An Accuracy Study. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6376-9.	0.5	2
198	Image reconstruction in positron emission tomography (PET): the 90th anniversary of Radon's solution / Bildrekonstruktion in der Positronen-Emissions-Tomographie (PET): zum 90. Jahrestag von Radons LÖsung. Biomedizinische Technik, 2007, 52, 361-364.	0.9	0

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199	Statistical Image Reconstruction for Inconsistent CT Projection Data. <i>Methods of Information in Medicine</i> , 2007, 46, 261-269.	0.7	64
200	Modelling Tumour Growth Patterns with Non-Rigid Image Registration. , 2007, , 139-144.		3
201	CCD-Video Endoscope Subjected to X-Ray. <i>Springer Proceedings in Physics</i> , 2007, , 87-92.	0.1	0
202	Functional Infrared Imaging for Skin-Cancer Screening. , 2006, 2006, 2766-9.		43
203	Modified MLEM Algorithm for Artifact Suppression in CT. , 2006, , .		10
204	Material Scanner Using mmW-Radiation. , 2006, , .		0
205	Special Issue on Computer-Assisted Craniofacial Reconstruction and Modeling. <i>Journal of Computing and Information Technology</i> , 2006, 14, 1.	0.2	5
206	Maximum-Likelihood-Ansatz zur Metallartefaktreduktion bei der Computertomographie. , 2006, , 36-40.		0
207	Clatter Reduction for Electronic Artificial Larynx. <i>International Journal of Speech Technology</i> , 2005, 8, 271-281.	1.4	1
208	Development of a Radiation Therapy Open-Source Platform. , 2005, 2005, 1887-92.		0
209	3D Reconstruction of dental specimens from 2D histological images and 1/4CT-Scans. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005, 8, 167-176.	0.9	26
210	Einführung in die Computertomographie. , 2004, , .		32
211	Historie der Computertomographie. , 2004, , 41-61.		5
212	Zweidimensionale Rekonstruktionsverfahren. , 2004, , 107-188.		0
213	Elementare Methoden der Signalverarbeitung. , 2004, , 62-106.		0
214	Beurteilung der Bildqualität. , 2004, , 345-400.		0
215	Dreidimensionale Rekonstruktionsverfahren. , 2004, , 249-344.		0
216	Praktische Aspekte der Computertomographie. , 2004, , 401-409.		0

#	ARTICLE	IF	CITATIONS
217	Landmark-based elastic registration using approximating thin-plate splines. IEEE Transactions on Medical Imaging, 2001, 20, 526-534.	5.4	338
218	Rauschrobuste Verbesserung schwacher Strukturen in digitalen Radiographien durch nichtlineare Multiskalen-Filterung. Informatik Aktuell, 1999, , 21-25.	0.4	0
219	Image registration for DSA quality enhancement. Computerized Medical Imaging and Graphics, 1998, 22, 103-113.	3.5	30
220	Image registration: Convex weighting functions for histogram-based similarity measures. Lecture Notes in Computer Science, 1997, , 203-212.	1.0	22
221	Improvement of vessel segmentation by elastically compensated patient motion in digital subtraction angiography images. Lecture Notes in Computer Science, 1997, , 106-113.	1.0	4
222	Histogram-based image registration for digital subtraction angiography. Lecture Notes in Computer Science, 1997, , 380-387.	1.0	3
223	Characterising experimental time series using local intrinsic dimension. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 202, 183-190.	0.9	7
224	Mutual information and global strange attractors in Taylor-Couette flow. Physica D: Nonlinear Phenomena, 1994, 72, 343-350.	1.3	27
225	Frequency locking in axisymmetric Taylor-Couette flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 194, 173-178.	0.9	8
226	Axisymmetric time-dependent flow in the Taylor-Couette system. Physical Review E, 1994, 49, 4019-4026.	0.8	18
227	Noise reduction on chaotic attractors. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 175, 178-186.	0.9	13
228	Nonlinear noise reduction: A case study on experimental data. Physical Review E, 1993, 48, 1529-1538.	0.8	72
229	Characterization of period-doubling scenarios in Taylor-Couette flow. Physical Review E, 1993, 47, 1054-1065.	0.8	20
230	Optimal delay time and embedding dimension for delay-time coordinates by analysis of the global static and local dynamical behavior of strange attractors. Physical Review A, 1992, 45, 7073-7084.	1.0	140
231	Fractal dimensions of strange attractors obtained from the Taylor-Couette experiment. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 559-563.	1.2	21
232	Characterization of experimental time series from Taylor-Couette flow. Physica D: Nonlinear Phenomena, 1992, 58, 441-454.	1.3	20
233	Comparison of algorithms calculating optimal embedding parameters for delay time coordinates. Physica D: Nonlinear Phenomena, 1992, 58, 127-137.	1.3	93
234	Optimal Reconstruction of Strange Attractors from Purely Geometrical Arguments. Europhysics Letters, 1990, 13, 605-610.	0.7	53