Christoph Kolbitsch

List of Publications by Year
in descending order

52 papers	1,110 citations	471061 17 h-index	414034 32 g-index
52 all docs	52 docs citations	52 times ranked	1561 citing authors

#	Article	IF	Citations
1	Motion corrected compressed sensing for freeâ€breathing dynamic cardiac MRI. Magnetic Resonance in Medicine, 2013, 70, 504-516.	1.9	142
2	Cardiac magnetic resonance and electroanatomical mapping of acute and chronic atrial ablation injury: a histological validation study. European Heart Journal, 2014, 35, 1486-1495.	1.0	123
3	Precise Thickness Measurements of Bowman's Layer, Epithelium, and Tear Film. Optometry and Vision Science, 2012, 89, E795-E802.	0.6	67
4	Spatio-Temporal Deep Learning-Based Undersampling Artefact Reduction for 2D Radial Cine MRI With Limited Training Data. IEEE Transactions on Medical Imaging, 2020, 39, 703-717.	5.4	61
5	Cardiac and Respiratory Motion Correction for Simultaneous Cardiac PET/MR. Journal of Nuclear Medicine, 2017, 58, 846-852.	2.8	60
6	MR-Based Cardiac and Respiratory Motion-Compensation Techniques for PET-MR Imaging. PET Clinics, 2016, 11, 179-191.	1.5	40
7	Novel MRI Technique Enables Non-Invasive Measurement of Atrial Wall Thickness. IEEE Transactions on Medical Imaging, 2017, 36, 1607-1614.	5.4	37
8	High-resolution dynamic MR imaging of the thorax for respiratory motion correction of PET using groupwise manifold alignment. Medical Image Analysis, 2014, 18, 939-952.	7.0	36
9	Manifold learning based ECGâ€free freeâ€breathing cardiac CINE MRI. Journal of Magnetic Resonance Imaging, 2015, 41, 1521-1527.	1.9	35
10	SIRF: Synergistic Image Reconstruction Framework. Computer Physics Communications, 2020, 249, 107087.	3.0	35
11	A 3D MRâ€acquisition scheme for nonrigid bulk motion correction in simultaneous PETâ€MR. Medical Physics, 2014, 41, 082304.	1.6	33
12	Retrospective Rigid Motion Correction in k-Space for Segmented Radial MRI. IEEE Transactions on Medical Imaging, 2014, 33, 1-10.	5.4	32
13	Neural networks-based regularization for large-scale medical image reconstruction. Physics in Medicine and Biology, 2020, 65, 135003.	1.6	26
14	Autoadaptive motion modelling for MR-based respiratory motion estimation. Medical Image Analysis, 2017, 35, 83-100.	7.0	25
15	Joint cardiac and respiratory motion estimation for motion-corrected cardiac PET-MR. Physics in Medicine and Biology, 2019, 64, 015007.	1.6	24
16	Simultaneous highâ€resolution cardiac T₁ mapping and cine imaging using modelâ€based iterative image reconstruction. Magnetic Resonance in Medicine, 2019, 81, 1080-1091.	1.9	22
17	3D Freeâ€breathing multichannel absolute Mapping in the human body at 7T. Magnetic Resonance in Medicine, 2021, 85, 2552-2567.	1.9	22
18	Pilot toneâ€“based motion correction for prospective respiratory compensated cardiac cine MRI. Magnetic Resonance in Medicine, 2021, 85, 2403-2416.	1.9	20

#	Article	IF	Citations
19	An endâ€toâ€endâ€trainable iterative network architecture for accelerated radial multiâ€coil 2D cine MR image reconstruction. Medical Physics, 2021, 48, 2412-2425.	1.6	19
20	Fast myocardial T 1 mapping using cardiac motion correction. Magnetic Resonance in Medicine, 2020, 83, 438-451.	1.9	18
21	Highly efficient wholeâ€heart imaging using radial phase encodingâ€phase ordering with automatic window selection. Magnetic Resonance in Medicine, 2011, 66, 1008-1018.	1.9	16
22	Respiratory-resolved MR-based attenuation correction for motion-compensated cardiac PET-MR. Physics in Medicine and Biology, 2018, 63, 135008.	1.6	16
23	Respiratory motion corrected 4D flow using golden radial phase encoding. Magnetic Resonance in Medicine, 2020, 83, 635-644.	1.9	16
24	A novel Bayesian respiratory motion model to estimate and resolve uncertainty in image-guided cardiac interventions. Medical Image Analysis, 2013, 17, 488-502.	7.0	15
25	Cardiac functional assessment without electrocardiogram using physiological selfâ€navigation. Magnetic Resonance in Medicine, 2014, 71, 942-954.	1.9	14
26	3D nonrigid motion correction for quantitative assessment of hepatic lesions in DCEâ€MRI. Magnetic Resonance in Medicine, 2019, 82, 1753-1766.	1.9	14
27	Fully integrated 3D highâ€resolution multicontrast abdominal PETâ€MR with high scan efficiency. Magnetic Resonance in Medicine, 2018, 79, 900-911.	1.9	13
28	Groupwise Simultaneous Manifold Alignment for High-Resolution Dynamic MR Imaging of Respiratory Motion. Lecture Notes in Computer Science, 2013, 23, 232-243.	1.0	13
29	Prospective highâ€resolution respiratoryâ€resolved wholeâ€heart MRI for imageâ€guided cardiovascular interventions. Magnetic Resonance in Medicine, 2012, 68, 205-213.	1.9	11
30	Respiratory motion correction of PET using MR-constrained PET-PET registration. BioMedical Engineering OnLine, 2015, 14, 85.	1.3	11
31	Self-Aligning Manifolds for Matching Disparate Medical Image Datasets. Lecture Notes in Computer Science, 2015, 24, 363-374.	1.0	11
32	Shearlet-based compressed sensing for fast 3D cardiac MR imaging using iterative reweighting. Physics in Medicine and Biology, 2018, 63, 235004.	1.6	9
33	3D high-resolution atrial wall thickness maps using black-blood PSIR. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P239.	1.6	8
34	Respiratory motion correction for enhanced quantification of hepatic lesions in simultaneous PET and DCE-MR imaging. Physics in Medicine and Biology, 2021, 66, 095012.	1.6	8
35	Motion estimation and correction for simultaneous PET/MR using SIRF and CIL. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200208.	1.6	8
36	Imaging coronary plaques using 3D motion-compensated [18F]NaF PET/MR. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 2455-2465.	3.3	7

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37	Pixel-wise quantification of myocardial perfusion using spatial Tikhonov regularization. Physics in Medicine and Biology, 2018, 63, 215017.	1.6	6
38	Adaptive sparsity level and dictionary size estimation for image reconstruction in accelerated 2D radial cine MRI. Medical Physics, 2021, 48, 178-192.	1.6	6
39	Personalising population-based respiratory motion models of the heart using neighbourhood approximation based on learnt anatomical features. Medical Image Analysis, 2014, 18, 1015-1025.	7.0	5
40	Comparison of imageâ€based and reconstructionâ€based respiratory motion correction for golden radial phase encoding coronary MR angiography. Journal of Magnetic Resonance Imaging, 2015, 42, 964-971.	1.9	5
41	Evaluation of synergistic image registration for motion-corrected coronary NaF-PET-MR. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200202.	1.6	5
42	Large-Scale Bayesian Spatial-Temporal Regression with Application to Cardiac MR-Perfusion Imaging. SIAM Journal on Imaging Sciences, 2019, 12, 2035-2062.	1.3	4
43	Motionâ€compensated fatâ€water imaging for 3D cardiac MRI at ultraâ€high fields. Magnetic Resonance in Medicine, 2022, 87, 2621-2636.	1.9	4
44	Flexible numerical simulation framework for dynamic PET-MR data. Physics in Medicine and Biology, 2020, 65, 145003.	1.6	3
45	A 3D MR-acquisition scheme for non-rigid bulk motion correction in simultaneous PET-MR. EJNMMI Physics, 2014, 1, A37.	1.3	2
46	Synergistic tomographic image reconstruction: part 1. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200189.	1.6	2
47	<scp>Cardioâ€respiratory motionâ€corrected 3D</scp> cardiac <scp>waterâ€fat MRI</scp> using <scp>modelâ€based</scp> image reconstruction. Magnetic Resonance in Medicine, 2022, 88, 1561-1574.	1.9	1
48	Hybrid Phase ordering with Automatic Window Selection (HybridPAWS) improves respiratory-navigator efficiency during 3D late-gadolinium enhancement CMR in patients with chronic heart failure and irregular respiratory pattern. Journal of Cardiovascular Magnetic Resonance, 2012, 14, .	1.6	0
49	Simulation study on factors affecting the detectability of coronary artery plaques in NaF PET imaging. , 2015, , .		0
50	Coupled motion and activity estimation from PET and MR data with motion model-based parameter reduction. , 2015, , .		0
51	Acceleration Strategies for Data Sampling in MRI. , 2018, , 167-186.		0
52	Synergistic tomographic image reconstruction: part 2. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20210111.	1.6	0