Volker C Behr

List of Publications by Year
in descending order

53	838	471509 17	526287 27
papers	citations	h-index	g-index

56	56	56	714
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Traveling Wave Magnetic Particle Imaging. IEEE Transactions on Medical Imaging, 2014, 33, 400-407.	8.9	73
2	MRI Meets MPI: A Bimodal MPI-MRI Tomograph. IEEE Transactions on Medical Imaging, 2014, 33, 1954-1959.	8.9	57
3	Firstin vivotraveling wave magnetic particle imaging of a beating mouse heart. Physics in Medicine and Biology, 2016, 61, 6620-6634.	3.0	48
4	Enhanced cortical reperfusion protects coagulation factor XII-deficient mice from ischemic stroke as revealed by high-field MRI. NeuroImage, 2010, 49, 2907-2914.	4.2	46
5	Nonlinear split-ring metamaterial slabs for magnetic resonance imaging. Applied Physics Letters, 2011, 98, .	3.3	45
6	Magnetic Particle Imaging meets Computed Tomography: first simultaneous imaging. Scientific Reports, 2019, 9, 12627.	3.3	38
7	Magnetic Particle Imaging Guided Real-Time Percutaneous Transluminal Angioplasty in a Phantom Model. CardioVascular and Interventional Radiology, 2018, 41, 1100-1105.	2.0	35
8	Magnetic Particle Imagingâ€“Guided Stenting. Journal of Endovascular Therapy, 2019, 26, 512-519.	1.5	34
9	Analysis of the resolution of split-ring metamaterial lenses with application in parallel magnetic resonance imaging. Applied Physics Letters, 2011, 98, .	3.3	30
10	Magnetic Particle Imaging for Quantification of Vascular Stenoses: A Phantom Study. IEEE Transactions on Medical Imaging, 2018, 37, 61-67.	8.9	30
11	High-resolution MR imaging of the rat spinal cord in vivo in a wide-bore magnet at 17.6 Tesla. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2004, 17, 353-358.	2.0	28
12	Micro-Traveling Wave Magnetic Particle Imagingâ€”Sub-Millimeter Resolution With Optimized Tracer LS-008. IEEE Transactions on Magnetics, 2019, 55, 1-7.	2.1	28
13	Volume of rat lungs measured throughout the respiratory cycle using19F NMR of the inert gas SF6. Magnetic Resonance in Medicine, 2002, 48, 547-549.	3.0	27
14	Superspeed Bolus Visualization for Vascular Magnetic Particle Imaging. IEEE Transactions on Medical Imaging, 2020, 39, 2133-2139.	8.9	25
15	Metamaterial magnetoinductive lens performance as a function of field strength. Journal of Magnetic Resonance, 2014, 247, 9-14.	2.1	24
16	Transmit-receive coil-arrays at 17.6T, configurations for1H,23Na, and31P MRI. Concepts in Magnetic Resonance Part B, 2006, 29B, 20-27.	0.7	19
17	Inert fluorinated gas T1 calculator. Journal of Magnetic Resonance, 2005, 177, 212-220.	2.1	18
18	Shortâ€echo spectroscopic imaging combined with lactate editing in a single scan. NMR in Biomedicine, 2008, 21, 1076-1086.	2.8	18

#	Article	IF	Citations
19	Superspeed Traveling Wave Magnetic Particle Imaging. IEEE Transactions on Magnetics, 2015, 51, 1-3.	2.1	16
20	A comparative study of dewatering of Pinus radiata sapwood using supercritical CO₂ and conventional forced air-drying via in situ magnetic resonance microimaging (MRI). Holzforschung, 2015, 69, 1137-1142.	1.9	16
21	Proton magnetic resonance imaging used to investigate dewatering of green sapwood by cycling carbon dioxide between supercritical fluid and gas phase. Journal of Supercritical Fluids, 2016, 111, 36-42.	3.2	15
22	Rotating Slice Scanning Mode for Traveling Wave MPI. IEEE Transactions on Magnetics, 2015, 51, 1-3.	2.1	14
23	Carbon-13 NMR chemical-shift imaging study of dewatering of green sapwood by cycling carbon dioxide between the supercritical fluid and gas phases. Journal of Supercritical Fluids, 2014, 95, 535-540.	3.2	13
24	RF flux guides for excitation and reception in31P spectroscopic and imaging experiments at 2 Tesla. Concepts in Magnetic Resonance, 2004, 23B, 44-49.	1.3	11
25	Dynamic Linear Gradient Array for Traveling Wave Magnetic Particle Imaging. IEEE Transactions on Magnetics, 2018, 54, 1-9.	2.1	11
26	Sensitive Jâ€coupled metabolite mapping using Selâ€MQC with selective multiâ€spinâ€echo readout. Magnetic Resonance in Medicine, 2009, 62, 880-887.	3.0	10
27	$mu $ MPIâ€”Initial Experiments With an Ultrahigh Resolution MPI. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	10
28	Self diffusion coefficients of organic solvents and their binary mixtures with CO2 in silica alcogels at pressures up to 6MPa derived by NMR pulsed gradient spin echo. Journal of Supercritical Fluids, 2015, 106, 50-56.	3.2	10
29	Uncovering supercritical CO2 wood dewatering via interleaved 1H-imaging and 13C-spectroscopy with real-time reconstruction. Journal of Supercritical Fluids, 2019, 144, 56-62.	3.2	10
30	An advanced, integrated largeâ€volume highâ€pressure autoclave and 1h/13c doubleâ€tuned resonator for chemistry and materials nuclear magnetic resonance spectroscopy and microscopy investigations. Concepts in Magnetic Resonance Part B, 2013, 43, 49-58.	0.7	7
31	Near real-time magnetic particle imaging for visual assessment of vascular stenosis in a phantom model. Physica Medica, 2021, 81, 210-214.	0.7	7
32	Analysis of the Noise Correlation in MRI Coil Arrays Loaded With Metamaterial Magnetoinductive Lenses. IEEE Transactions on Medical Imaging, 2015, 34, 1148-1154.	8.9	6
33	Bimodal TWMPI-MRI Hybrid Scannerâ€”Coil Setup and Electronics. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	6
34	Adjustable Hardware Lens for Traveling Wave Magnetic Particle Imaging. IEEE Transactions on Magnetics, 2020, 56, 1-6.	2.1	6
35	Numerically efficient estimation of relaxation effects in magnetic particle imaging. Biomedizinische Technik, 2013, 58, 593-600.	0.8	5
36	Dewatering Green Sapwood Using Carbon Dioxide Undergoing Cyclical Phase Change between Supercritical Fluid and Gas. Molecules, 2020, 25, 5367.	3.8	5

#	Article	IF	Citations
37	Crosslinked Coating Improves the Signalâ€toâ€Noise Ratio of Iron Oxide Nanoparticles in Magnetic Particle Imaging (MPI). ChemNanoMat, 2020, 6, 755-758.	2.8	5
38	Parallel magnetic particle imaging. Review of Scientific Instruments, 2020, 91, 045117.	1.3	5
39	Magnetic particle imaging for artifact-free imaging of intracranial flow diverter stents: A phantom study. Physica Medica, 2021, 88, 65-70.	0.7	4
40	Rotational Drift Spectroscopy for Magnetic Particle Ensembles. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
41	Wall shear stress analysis using 17.6 Tesla MRI: A longitudinal study in ApoE-/- mice with histological analysis. PLoS ONE, 2020, 15, e0238112.	2.5	3
42	INVESTIGATION OF THE MAGNETIC PARTICLE IMAGING SIGNAL'S DEPENDENCY ON FERROFLUID CONCENTRATION. , 2010, , .		3
43	Slice scanning mode for traveling wave MPI. , 2013, , .		2
44	A novel modular probe base design. Concepts in Magnetic Resonance Part B, 2008, 33B, 55-61.	0.7	1
45	Simulating the Signal Generation of Rotational Drift Spectroscopy. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
46	Bimodal TWMPI-MRI hybrid scanner — First NMR results. , 2015, , .		1
47	A dynamic bolus phantom for the evaluation of the spatio-temporal resolution of MPI scanners. Journal of Magnetism and Magnetic Materials, 2021, 519, 167446.	2.3	1
48	Zero dead time rotational drift spectroscopy for magnetic particle ensembles. , 2015, , .		0
49	Magnetic Particle Imaging. Zeitschrift Fur Medizinische Physik, 2015, 25, 1-2.	1.5	0
50	Traveling wave MPI goes pre-clinical application. , 2015, , .		0
51	Poster session 1. Imaging and image processing I. Biomedizinische Technik, 2017, 62, .	0.8	0
52	Novel Fabrication Method for Nested Saddle Coils. IEEE Transactions on Magnetics, 2020, 56, 1-6.	2.1	0
53	Scanner Components. Methods in Molecular Biology, 2011, 771, 69-88.	0.9	0