

# Volker C Behr

## List of Publications by Year in descending order

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Version: 2024-02-01

53  
papers

838  
citations

471509

17  
h-index

526287

27  
g-index

56  
all docs

56  
docs citations

56  
times ranked

714  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | A dynamic bolus phantom for the evaluation of the spatio-temporal resolution of MPI scanners. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 519, 167446.                              | 2.3 | 1         |
| 2  | Near real-time magnetic particle imaging for visual assessment of vascular stenosis in a phantom model. <i>Physica Medica</i> , 2021, 81, 210-214.   | 0.7 | 7         |
| 3  | Magnetic particle imaging for artifact-free imaging of intracranial flow diverter stents: A phantom study. <i>Physica Medica</i> , 2021, 88, 65-70.  | 0.7 | 4         |
| 4  | Adjustable Hardware Lens for Traveling Wave Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-6.  | 2.1 | 6         |
| 5  | Novel Fabrication Method for Nested Saddle Coils. <i>IEEE Transactions on Magnetics</i> , 2020, 56, 1-6.   | 2.1 | 0         |
| 6  | Dewatering Green Sapwood Using Carbon Dioxide Undergoing Cyclical Phase Change between Supercritical Fluid and Gas. <i>Molecules</i> , 2020, 25, 5367.   | 3.8 | 5         |
| 7  | Wall shear stress analysis using 17.6 Tesla MRI: A longitudinal study in ApoE <sup>-/-</sup> mice with histological analysis. <i>PLoS ONE</i> , 2020, 15, e0238112.                                | 2.5 | 3         |
| 8  | Crosslinked Coating Improves the Signal-to-Noise Ratio of Iron Oxide Nanoparticles in Magnetic Particle Imaging (MPI). <i>ChemNanoMat</i> , 2020, 6, 755-758.                                      | 2.8 | 5         |
| 9  | Superspeed Bolus Visualization for Vascular Magnetic Particle Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 2133-2139.  | 8.9 | 25        |
| 10 | Parallel magnetic particle imaging. <i>Review of Scientific Instruments</i> , 2020, 91, 045117.  | 1.3 | 5         |
| 11 | Micro-Traveling Wave Magnetic Particle Imaging's Sub-Millimeter Resolution With Optimized Tracer LS-008. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-7.                                    | 2.1 | 28        |
| 12 | Magnetic Particle Imaging meets Computed Tomography: first simultaneous imaging. <i>Scientific Reports</i> , 2019, 9, 12627.   | 3.3 | 38        |
| 13 | Magnetic Particle Imaging's Guided Stenting. <i>Journal of Endovascular Therapy</i> , 2019, 26, 512-519.   | 1.5 | 34        |
| 14 | Uncovering supercritical CO <sub>2</sub> wood dewatering via interleaved 1H-imaging and 13C-spectroscopy with real-time reconstruction. <i>Journal of Supercritical Fluids</i> , 2019, 144, 56-62. | 3.2 | 10        |
| 15 | Magnetic Particle Imaging Guided Real-Time Percutaneous Transluminal Angioplasty in a Phantom Model. <i>CardioVascular and Interventional Radiology</i> , 2018, 41, 1100-1105.                     | 2.0 | 35        |
| 16 | Dynamic Linear Gradient Array for Traveling Wave Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-9.   | 2.1 | 11        |
| 17 | Magnetic Particle Imaging for Quantification of Vascular Stenoses: A Phantom Study. <i>IEEE Transactions on Medical Imaging</i> , 2018, 37, 61-67.   | 8.9 | 30        |
| 18 | Poster session 1. Imaging and image processing I. <i>Biomedizinische Technik</i> , 2017, 62, .   | 0.8 | 0         |

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|----|--|-----|-----------|
| 19 | First <i>in vivo</i> traveling wave magnetic particle imaging of a beating mouse heart. <i>Physics in Medicine and Biology</i> , 2016, 61, 6620-6634.  | 3.0 | 48        |
| 20 | Proton magnetic resonance imaging used to investigate dewatering of green sapwood by cycling carbon dioxide between supercritical fluid and gas phase. <i>Journal of Supercritical Fluids</i> , 2016, 111, 36-42.                              | 3.2 | 15        |
| 21 | Analysis of the Noise Correlation in MRI Coil Arrays Loaded With Metamaterial Magnetoinductive Lenses. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 1148-1154.  | 8.9 | 6         |
| 22 | Bimodal TWMPPI-MRI Hybrid Scanner's Coil Setup and Electronics. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.   | 2.1 | 6         |
| 23 | Rotational Drift Spectroscopy for Magnetic Particle Ensembles. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.  | 2.1 | 3         |
| 24 | Simulating the Signal Generation of Rotational Drift Spectroscopy. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.  | 2.1 | 1         |
| 25 | Rotating Slice Scanning Mode for Traveling Wave MPI. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-3.  | 2.1 | 14        |
| 26 | Superspeed Traveling Wave Magnetic Particle Imaging. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-3.  | 2.1 | 16        |
| 27 | $\mu$ MPI's Initial Experiments With an Ultrahigh Resolution MPI. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.   | 2.1 | 10        |
| 28 | Zero dead time rotational drift spectroscopy for magnetic particle ensembles. , 2015, , .  |     | 0         |
| 29 | A comparative study of dewatering of <i>Pinus radiata</i> sapwood using supercritical CO <sub>2</sub> and conventional forced air-drying via <i>in situ</i> magnetic resonance microimaging (MRI). <i>Holzforschung</i> , 2015, 69, 1137-1142. | 1.9 | 16        |
| 30 | Magnetic Particle Imaging. <i>Zeitschrift Fur Medizinische Physik</i> , 2015, 25, 1-2.   | 1.5 | 0         |
| 31 | Bimodal TWMPPI-MRI hybrid scanner &#x2014; First NMR results. , 2015, , .  |     | 1         |
| 32 | Traveling wave MPI goes pre-clinical application. , 2015, , .  |     | 0         |
| 33 | Self diffusion coefficients of organic solvents and their binary mixtures with CO <sub>2</sub> in silica alcogels at pressures up to 6MPa derived by NMR pulsed gradient spin echo. <i>Journal of Supercritical Fluids</i> , 2015, 106, 50-56. | 3.2 | 10        |
| 34 | Carbon-13 NMR chemical-shift imaging study of dewatering of green sapwood by cycling carbon dioxide between the supercritical fluid and gas phases. <i>Journal of Supercritical Fluids</i> , 2014, 95, 535-540.                                | 3.2 | 13        |
| 35 | MRI Meets MPI: A Bimodal MPI-MRI Tomograph. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 1954-1959.   | 8.9 | 57        |
| 36 | Traveling Wave Magnetic Particle Imaging. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 400-407.   | 8.9 | 73        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Metamaterial magnetoinductive lens performance as a function of field strength. Journal of Magnetic Resonance, 2014, 247, 9-14.  | 2.1 | 24        |
| 38 | Slice scanning mode for traveling wave MPI. , 2013, , .  |     | 2         |
| 39 | An advanced, integrated large-volume high-pressure autoclave and <sup>1</sup> H/ <sup>13</sup> C double-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         |
| 40 | Numerically efficient estimation of relaxation effects in magnetic particle imaging. Biomedizinische Technik, 2013, 58, 593-600.   | 0.8 | 5         |
| 41 | Analysis of the resolution of split-ring metamaterial lenses with application in parallel magnetic resonance imaging. Applied Physics Letters, 2011, 98, .   | 3.3 | 30        |
| 42 | Nonlinear split-ring metamaterial slabs for magnetic resonance imaging. Applied Physics Letters, 2011, 98, .   | 3.3 | 45        |
| 43 | Scanner Components. Methods in Molecular Biology, 2011, 771, 69-88.  | 0.9 | 0         |
| 44 | 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        |
| 45 | INVESTIGATION OF THE MAGNETIC PARTICLE IMAGING SIGNAL'S DEPENDENCY ON FERROFLUID CONCENTRATION. , 2010, , .  |     | 3         |
| 46 | Sensitive J-coupled metabolite mapping using Sel-MQC with selective multi-spin-echo readout. Magnetic Resonance in Medicine, 2009, 62, 880-887.  | 3.0 | 10        |
| 47 | Short-echo spectroscopic imaging combined with lactate editing in a single scan. NMR in Biomedicine, 2008, 21, 1076-1086.  | 2.8 | 18        |
| 48 | A novel modular probe base design. Concepts in Magnetic Resonance Part B, 2008, 33B, 55-61.  | 0.7 | 1         |
| 49 | Transmit-receive coil-arrays at 17.6T, configurations for <sup>1</sup> H, <sup>23</sup> Na, and <sup>31</sup> P MRI. Concepts in Magnetic Resonance Part B, 2006, 29B, 20-27.  | 0.7 | 19        |
| 50 | Inert fluorinated gas T1 calculator. Journal of Magnetic Resonance, 2005, 177, 212-220.  | 2.1 | 18        |
| 51 | 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        |
| 52 | RF flux guides for excitation and reception in <sup>31</sup> P spectroscopic and imaging experiments at 2 Tesla. Concepts in Magnetic Resonance, 2004, 23B, 44-49.   | 1.3 | 11        |
| 53 | Volume of rat lungs measured throughout the respiratory cycle using <sup>19</sup> F NMR of the inert gas SF <sub>6</sub> . Magnetic Resonance in Medicine, 2002, 48, 547-549.  | 3.0 | 27        |