List of Accepted Contributions 2022

SUBMISSION	TITLE
343	Displacement measurement of magnetic particles by ultrasonic vibration Marco Maass, Christine Droigk, Mathias Eulers, Alfred Mertins
348	Boundary artifact reduction by extrapolating system matrices outside the field-of-view in joint multipatch MPI Konrad Scheffler, Marija Boberg, Tobias Knopp
349	VivoTrax+ improves the detection of cancer cells with magnetic particle imaging Julia Gevaert, Kyle Van Beek, Olivia Sehl, Paula Foster
350	Characterization of the Synomag®-D-PEG-OMe nanoparticles for the encapsulation in human and murine red blood cells Antonella Antonelli, Emanuele Salvatore Scarpa, Riccardo Di Corato, Florian Thieben, Cordula Grüttner, Tobias Knopp, Mauro Magnani
352	Separation and quantification of CD4+ T cells with functionalized magnetic nanoparticles Jing Zhong, Juhao Yang, Mangge Zou, Meinhard Schilling, Frank Ludwig
353	Averaging Randomized Kaczmarz for Magnetic Particle Imaging Yimeng Li, Peng Zhang, Hui Hui, Lin Yin, Jie Tan
354	Adaptive Permissible Region Strategy for Magnetic Particle Imaging Peng Zhang, Jie Liu, YiMeng Li, Lin Yin, Hui Hui, Jie Tian
357	A magnetic immunization method based on magnetic nanomarkers under the DC bias field Xinchao Cui
358	System matrix compression using Chebyshev polynomials of first and second kind Christine Droigk, Marco Maass, Alfred Mertins
359	Image Reconstruction in Magnetic Particle Imaging Based on Gaussian Weighted Laplace Prior Regularization Lin Yin, Peng Zhang, Yimeng Li, Hui Hui, Jie Tian
361	Influence of magnetic nanoparticles interactions on their magnetic particle imaging performance Silvio Dutz, Dustin Tauber, Anne Mattern, Olaf Kosch, Patricia Radon, Frank Wiekhorst
362	1D Imaging with a Single-Sided FFL Magnetic Particle Imaging Scanner Chris McDonough, Alexey Tonyushkin
364	MPI system using the mechanically movement of a three-dimensionally arranged permanent magnets Hyobong Hong, Jaechan Jong, Taeyi Kim, Beomsu Seo
365	Magnetic signal evaluation and imaging of magnetic nanoparticles in brain phantom Masaomi Washino, Kota Nomura, Kazuki Yamauchi, Tetsuya Matsuda, Yasuaki Susumu, Satoshi Seino, Takashi Nakagawa, Toshiyasu Sakane, Toshihiko Kiwa, Shun Tonooka

387	Fabian Mohn, Tobias Knopp, Matthias Graeser
388	Improvement study of Field-Free Line Generator for mechanically scanned-type MPI system Tae Yi Kim, JAECHAN JONG, JAECHAN JONG, Beom-Su Seo, Hyo Bong Hong
390	Two-Step Reconstruction with Spatially Adaptive Regularization for Increasing the Dynamic Range in MPI
	Marija Boberg, Tobias Knopp
391	Enhanced characterization of a Magnetic Particle Imaging tracer combining field-flow fractionation and Magnetic Particle Spectroscopy Amani Remmo, Norbert Löwa, Frank Wiekhorst, Julija Peter
	Amani Remino, Norbert Lowa, Frank Wiekhorst, Julija Petel
392	Lissajous trajectory magnetic particle imaging for image-guided hyperthermia therapy and monitoring
	James Wells, Olaf Kosch, Shailey Twamley, Antje Ludwig, Joran Paeye, Hendrik Paysen, Frank Wiekhorst
393	Optimizing magnetic particle image resolution using superferromagnetic nanoparticles modified through post-synthesis oxidation
	Jacob Bryan, Benjamin Fellows, K.L Barry Fung, Prashant Chandrasekharan, Steven Conolly
394	In vivo therapeutic cell tracking using magnetic particle imaging
	Renesmee Kuo, Prashant Chandrasekharan, Barry Fung, Steven Conolly
395	Non-radioactive imaging of bone marrow using antibody-conjugated nanoparticles in magnetic
	particle imaging Renesmee Kuo, Barry Fung, Prashant Chandrasekharan, Quincy Huynh, Chinmoy Saayujya, Jacob Bryan, Kim
	Hwang Yeo, Irati Rodrigo, Benjamin Fellows, Steven Conolly
396	Demonstration of the new detection limit for the single-sided FFL MPI scanner with a surface
	gradiometer receive coils Chris McDonough, Alexey Tonyushkin
397	Rapid in situ labelling and tracking of neutrophils and macrophages to inflammation using antibody- functionalized MPI tracers
	K. L. Barry Fung, Prashant Chandrasekharan, Xinyi Y. Zhou, Weiwen Cui, Lawrence Fong, Steven Conolly
398	Elucidating super-resolution Magnetic Particle Imaging: superferromagnetic remanence decay
	through MPI signal evolution informs super-resolution MPI scan strategies
	K. L. Barry Fung, Caylin Colson, Jacob Bryan, Benjamin D. Fellows, Chinmoy Saayujya, Prashant Chandrasekharan, Carlos Rinaldi, Steven Conolly
399	In vivo tracking of inhaled nanomagnetosol delivery to the lungs using magnetic particle imaging
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401	MNP Characterization and Signal Prediction using a Model-Based Dictionary
	Asli Alpman, Mustafa Utkur, Emine Ulku Saritas
402	Rapid TAURUS for Real-Time Color MPI A Feasibility Study Tunç Arslan, Emine Ulku Saritas
405	An iron-oxide nanoparticle with therapeutic capability in Magnetic Fluid Hyperthermia and diagnostic
	capability in MRI and MPI Fodorica Murro, Marco Gorosa, Alico Rusato, Matildo Muscilli, Emil Milan, Joff Gaudet, James Manefield, Patrick
	Federica Vurro, Marco Gerosa, Alice Busato, Matilde Muccilli, Emil Milan, Jeff Gaudet, James Mansfield, Patrick Goodwill, Enrico Forlin, Filippo Gherlinzoni, Michele Gottardi, Gianni Morana, Paolo Matteazzi, Max Wintermark, Adolfo Speghini, Pasquina Marz

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406	FMMD controller and software for MPI system based on mechanical FFL movement Jae-chan Jeong, Tae Yi Kim, Hyo Bong Hong, Beom-Su Seo
407	Shift coil assembly for a rotating permanent magnet FFL human-scale fMPI imager Alex Barksdale, Erica Mason, Eli Mattingly, Monika Sliwiak, John Drago, Lawrence Wald
408	Design of a more easily shimmable gradiometric coil using linear programming Quincy Huynh, Barry Fung, Chinmoy Saayujya, Irati Rodrigo, Steven Conolly
409	Response characteristics of magnetic particle spectroscopy under different excitation waveforms Bo Zhang, Haoran Zhang, Yanjun Liu, Jie He, Jing Zhong, Hui Hui, Jie Tian
410	Computational modeling of superferromagnetism in finite-length chains of superparamagnetic Iron Oxide tracers for use in super-resolution Magnetic Particle Imaging Chinmoy Saayujya, K. L. Barry Fung, Quincy Huynh, Caylin Colson, Benjamin Fellows, Prashant Chandrasekharan, Steven M. Conolly
412	Characterizing the performance of commercial magnetic particles for magnetic particle imaging Kim Hwang Yeo, Irati Rodrigo, Renesmee Kuo, Prashant Chandrasekharan, Benjamin Fellows, Steven Conolly
413	Influence of reaction parameters on the synthesis of silica-coated superparamagnetic iron oxide particles Timm Knickrehm, Kerstin Lüdtke-Buzug
414	Multi-Channel Current Control System for Coupled Multi-Coil Arrays Fynn Foerger, Jan-Philipp Scheel, Florian Thieben, Fabian Mohn, Tobias Knopp, Matthias Graeser
415	Data augmentation for training a neural network for image reconstruction in MPI Anselm von Gladiss, Ivanna Kramer, Nick Theisen, Raphael Memmesheimer, Anna C. Bakenecker, Thorsten M. Buzug, Dietrich Paulus
416	An apparatus for the continuous flow synthesis of SPIONs Ankit Malhotra, Kerstin Lüdtke-Buzug, Hendrik
417	Algorithmic Channel Decoupling for Misaligned Receive Coils in Magnetic Particle Imaging Florian Thieben, Fynn Foerger, Marija Boberg, Tom Liebing, Matthias Graeser, Martin Möddel, Tobias Knopp
418	A portable single-sided magnetic particle imaging concept using amplitude modulation for breast conserving sugery Sang Han Choi, Tuan-Anh Le, Boyoung Son, Jungwon Yoon
419	Validation of spatial selectivity enhancement for magnetic fluid hyperthermia by introducing ferromagnetic cores Kulthisa Sajjamark, Jochen Franke, Heinrich Lehr, Rainer Pietig, Holger Autz, Jorge Chacón Caldera
420	MPI of soft ferromagnetic needles Justin Ackers, Anna Bakenecker, Xin Chen, Thorsten Buzug, Matthias Graeser
421	The Synthesis of non-spherical doped iron oxide nanoparticles for MPI and MPI-MFH applications Stanley Harvell-Smith, Thithawat Trakoolwilaiwan, Tung Le, Thanh Nguyen
423	Increasing the efficiency of open-sided field free line scanning MPI system using silicon-steel core Damla ALPTEKIN SOYDAN, Sefa KARACA, Can Barış TOP
424	Dedicated Interventional Instruments for Magnetic Particle Imaging Mandy Ahlborg, Thomas Friedrich, Thorsten Göttsche, Vincent Scheitenberger, Reinhard Linemann, Maximilian Wattenberg, Anne Tjorven Buessen, Tobias Knopp, Patryk Szwargulski, Michael Kaul, Johannes Salamon, Thorsten M. Buzug, Jörg Barkhausen, Franz Wegner

448	Multiparametric rotational drift spectroscopy Martin Rückert, Patrick Vogel, Thomas Kampf, Volker Behr
449	A closed form solution of magnetic nanoparticles in Rotating drift spectroscopy Thomas Kampf, M.A. Rückert, A. Vilter, V.J.F. Sturm, Patrick Vogel, V.C. Behr
450	Highly Flexible Human Aneurysm Models for Realistic Flow Experiments with MPI and MRI Teresa Reichl, Patrick Winter, Kristina Andelovic, Wolfgang R. Bauer, Peter M. Jakob, Thorsten A. Bley, Volker Herold, Volker C. Behr, Stefan Herz, Patrick Vogel
451	MPI-based spatio-temporal estimation of a temperature profile induced by an IR laser Oliver Buchholz, Sébastien Bär, Kulthisa Sajjamark, Jorge Chacon-Caldera, Jochen Franke, Ulrich G. Hofman
452	A drive filter design for MPI with harmonic notching and selective damping Eli Mattingly, Monika Śliwiak, John Drago, Erica Mason, Matthias Graeser, Lawrence Wald
453	PNS Limits for Human Head-Size MPI Systems: Preliminary Results Ali Alper Ozaslan, Mustafa Utkur, Ugur Canpolat, Meryem Asli Tuncer, Kader Karli Oguz, Emine Ulku Saritas
454	An Arbitrary Waveform MPI Scanner Beril Alyüz, Musa Tunc Arslan, Mustafa Utkur, Emine Ulku Saritas
455	iMPI ,Äì interventional Magnetic Particle Imaging Patrick Vogel, Martin A. Rückert, Christoph Greiner, Teresa Reichl, Johanna Günther, Alexander von Böhn, Liana Mirzojan, Thomas Kampf, Thorsten A. Bley, Stefan Herz, Volker C. Behr
456	Rotation Unit for Permanent Magnet Based MPI Devices Eric Aderhold, Tom Liebing, Anna C. Bakenecker, Thorsten M. Buzug, Matthias Gräser
457	Flexible Software for Rigorous Simulations of Magnetic Particle Imaging Systems Klaus Natorf Quelhas, Mark-Alexander Henn, Thinh Q. Bui, Hunter R. Wages, Weston L. Tew, Solomon I. Woods
458	Image Time-Series Stability for MPI-Based Functional Neuroimaging John Drago, Erica Mason, Eli Mattingly, Monika Śliwiak, Lawrence Wald
459	Comparison of Reconstruction Methods for Measured FFL Data Jonas Schumacher, Mandy Ahlborg, Eric Aderhold, Pascal Stagge, Thorsten M. Buzug, Matthias Gräser
460	Drive and receive coil design for a human-scale MPI system Eli Mattingly, Erica Mason, Monika Sliwiak, Lawrence L Wald
461	Changing iron content and excitation field: Comparative study of Synomag® nanoparticles Lejla Alic, Kalthoum Riahi, Melissa M. Horstman – van de Loosdrecht, Max T. Rietberg, Javier Perez y Perez, Corné Dijkstra, Bennie ten Haken
462	Side Lobe Informed Center Extraction (SLICE): a projection-space forward model reconstruction for a 2D imaging system Erica Ellis Mason, Stephen F. Cauley, Eli Mattingly, Monika Sliwiak, Lawrence L. Wald
463	A Deblurring Model for X-space MPI Based on Coded Calibration Scenes Esen Ergun, Abdullah Ömer Arol, Emine Ulku Saritas, Tolga Çukur
464	Compensating model imperfections during image reconstruction via Resesop