Jaeseok Park *Ph.D., Prof.*

Medical Imaging and Signal Lab. (MISL)
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MAJOR REARCH INTERESTS

The objective of my research is to develop novel methodologies in signal processing for medical imaging (Particularly, magnetic resonance imaging). Research interests include: 1) signal processing for medical imaging, 2) image reconstruction, 3) machine learning particularly for deep learning, 4) clinical translations to cancer, stroke, demential, Alzheimer, and cardiac diseases.

EDUCATION

2001-2005	PhD in Biomedical Engineering (Signal Processing, Medical Imaging), Northwestern University, Dissertation: Magnetic Resonance Angiography using Parallel Data Acquisition (Advisor: Dr. Debiao Li)
1999-2001	MS in Mechanical Engineering (Fluid Dynamics), University of Michigan Dissertation: Numerical and Experimental Simulation of Low Velocity Sub-Cooled Micro-Gravity Two-Phase Flow in Earth Gravity (Advisor: Dr. William Schultz)
1992-1999	BS in Mechanical and Aerospace Engineering, Seoul National University, including Military Service (1993-1996)

PROFESSIONAL EXPERIENCES

2021-2022	Head, Department of Biomedical Engineering, Sungkyunkwan University
2020-Present	Director, Brain Korea 21 Project on Intelligent Precision Healthcare Convergence, Sungkyunkwan University
2015-Present	Professor, Associate Professor (Tenured), Department of Biomedical Engineering, Sungkyunkwan University, Republic of Korea
2011-2015	Assistant, Associate Professor, Department of Brain and Cognitive Engineering, Korea University, Seoul, Republic of Korea
2008-2011	Assistant Professor, Department of Radiology, Yonsei University, Seoul, Republic of Korea
2005-2008	Senior Scientist, Siemens Medical Solution, Erlangen, Germany

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

2022-Present	Editorial Board for Korean Journal of Radiology (KJR)
2016-Present	Editor-In-Chief for Investigative MRI (iMRI)
2012-Present	Associate Editor for Biomedical Engineering Letters (BMEL)
2005-Present	Ad hoc reviewers for IEEE Transactions on Medical Imaging, Neuroimage, Magnetic Resonance in Medicine (MRM), Journal of Magnetic Resonance Imaging (JMRI), Scientific Report, Physics in Medicine and Biology
2008-Present	Korean Society of Magnetic Resonance in Medicine (KSMRM)
2001-Present	International Society of Magnetic Resonance in Medicine (ISMRM)

RESEARCH GRANTS

2023-2027	National Research Foundation; Neurofluid imaging for Alzheimer's Disease Role: PI
2020-2027	Brain Korea 21 Project on Intelligent Precision Healthcare Convergence; Role: PI
2021-2025	Korea Medical Device Development Fund; Ultra high field brain dedicated MRI; Role: Co-PI
2021-2024	Korea Medical Device Development Fund; Ultrafast MRI using artificial intelligence; Role: Co-PI
2018-2022	National Research Foundation, Accurate quantification of neurodegenerative diseases; Role: PI
2017-2020	National Research Foundation, Development of novel MRI methods for ischemic stroke; Role: PI
2016-2021	National Research Foundation, Imaging-based characterization of small vessel diseases; Role: Co-PI
2016-2018	National Research Foundation, Technique Translation Program, Ultrafast Multiplexing MRI; Role: PI
2011-2014	National Research Foundation, Quantitative Oxygenation and pH Mapping in Brain Cancer; Role: PI
2008-2011	National Research Foundation, Quantitative Mapping of Human Brain Development in Children and Adolescents using Novel High-Resolution Magnetic Resonance Imaging Method; Role: Co-PI
2009-2011	National Research Foundation, Basic Science Research Program, High-Resolution 3D Contrast-Enhanced Whole-Brain MRI Method for Accurate Detection of Small Metastases; Role: PI
2009-2012	National Research Foundation, Basic Science Research Program, Novel Black-Blood Cerebral Vascular MRI Method and its Clinical Applications; Role: PI

TEACHING COURSES

Engineering Mathematics I & II, Linear Algebra, Signals and System, Probability and Random Process, Medical Imaging, Magnetic Resonance Imaging

LANGUAGES

Korean (mother tongue), English (fluent)

PUBLICATIONS

- E. J. Lim, T. Shin, J. Lee, and J. Park, "Generalized self-calibrating simultaneous multi-slice MR image reconstruction from 3D Fourier encoding perspective," Medical Image Analysis, 2022, vol. 82, p. 102621
- E. J. Lim, C.-H. Sohn, T. Shin, and J. Park, "FID-calibrated simultaneous multi-slice fast spin echo with long trains of hard pulses," Physics in Medicine & Biology, 2022, vol. 67, no. 3, p. 035002
- J. S. Park, S.-H. Choi, C.-H. Sohn, and J. Park, "Joint Reconstruction of Vascular Structure and Function Maps in Dynamic Contrast Enhanced MRI Using Vascular Heterogeneity Priors," IEEE Transactions on Medical Imaging, 2021, vol. 41, no. 1, pp. 52–62
- H.-S. Lee, S.-H. Hwang, J. Park, and S.-H. Park, "Single-shot pseudo-centric EPI for magnetization-prepared imaging," Magnetic Resonance in Medicine, 2021, vol. 86, no. 5, pp. 2656–2665
- J. S. Park, E. Lim, S.-H. Choi, C.-H. Sohn, J. Lee, and J. Park, "Model-Based High-Definition Dynamic Contrast Enhanced MRI for Concurrent Estimation of Perfusion and Microvascular Permeability," Medical Image Analysis, 2020, vol. 59, p. 101566
- H. Lee, J. J. Chung, J. Lee, S.-G. Kim, J.-H. Han, and J. Park, "Model-based chemical exchange saturation transfer MRI for robust z-spectrum analysis," IEEE Transactions on Medical Imaging, 2019, vol. 39, no. 2, pp. 283–293
- H. Kim, S. Park, E. Y. Kim, and J. Park, "Retrospective multi-phase non-contrast-enhanced magnetic resonance angiography (ROMANCE MRA) for robust angiogram separation in the presence of cardiac arrhythmia," Magnetic Resonance in Medicine, 2018
- H. Lee, E. Y. Kim, C.-h. Sohn, and J. Park, "Rapid whole-brain gray matter imaging using single-slab three-dimensional dual-echo fast spin echo: A feasibility study," Magnetic resonance in medicine, 2017, vol. 78, no. 5, pp. 1691–1699
- H. Kim, D.-h. Kim, C.-h. Sohn, and J. Park, "Rapid chemical shift encoding with single-acquisition single-slab 3d Grase," Magnetic resonance in medicine, 2017, vol. 78, no. 5, pp. 1852–1861
- S. Park and J. Park, "SMS-HSL: Simultaneous multislice aliasing separation exploiting hankel subspace learning," Magnetic resonance in medicine, 2017, vol. 78, no. 4, pp. 1392–1404
- S. Park, E. Y. Kim, C.-H. Sohn, and J. Park, "Dynamic Contrast-Enhanced MR Angiography Exploiting Subspace Projection for Robust Angiogram Separation," IEEE transactions on medical imaging, 2017, vol. 36, no. 2, pp. 584–595

- H. Lee, C.-H. Sohn, and J. Park, "Current-induced alternating reversed dual-echo-steady-state for joint estimation of tissue relaxation and electrical properties," Magnetic resonance in medicine, 2017, vol. 78, no. 1, pp. 107–120
- S. Park and J. Park, "Accelerated dynamic cardiac MRI exploiting sparse-Kalman-smoother self-calibration and reconstruction (k- t SPARKS)," Physics in medicine and biology, 2015, vol. 60, no. 9, p. 3655
- H. Lee, W. C. Jeong, H. J. Kim, E. J. Woo, and J. Park, "Alternating steady state free precession for estimation of current-induced magnetic flux density: A feasibility study," Magnetic resonance in medicine, 2016, vol. 75, no. 5, pp. 2009–2019
- H. Kim, D.-H. Kim, and J. Park, "Variable-flip-angle single-slab 3D GRASE imaging with phase-independent image reconstruction," Magnetic resonance in medicine, 2015, vol. 73, no. 3, pp. 1041–1052
- S. Park and J. Park, "Compressed sensing MRI exploiting complementary dual decomposition," Medical Image Analysis, 2014, vol. 18, no. 3, pp. 472–486
- S. Yang, Y. Nam, M.-O. Kim, E. Y. Kim, J. Park, and D.-H. Kim, "Computer-Aided Detection of Metastatic Brain Tumors Using Magnetic Resonance Black-Blood Imaging," Investigative Radiology, 2013, vol. 48, no. 2, pp. 113–119
- H. Lee and J. Park, "SNR-optimized phase-sensitive dual-acquisition turbo spin echo imaging: A fast alternative to FLAIR," Magnetic Resonance in Medicine, 2013, vol. 70, no. 1, pp. 106–116
- H. Lee, C.-H. Sohn, and J. Park, "Rapid hybrid encoding for high-resolution whole-brain fluid-attenuated imaging," NMR in Biomedicine, 2013, vol. 26, no. 12, pp. 1751–1761
- H.-J. Lee, J. Park, J. Hur, Y. J. Kim, J. E. Nam, B. W. Choi, and K. O. Choe, "The effect of pulmonary blood flow changes on oxygen-enhanced lung magnetic resonance imaging," Magnetic Resonance in Medicine, 2013, vol. 69, no. 6, pp. 1645–1649
- J.-M. Kim, K.-H. Jung, C.-H. Sohn, J. Park, J. Moon, M. H. Han, and J.-K. Roh, "High-resolution MR technique can distinguish moyamoya disease from atherosclerotic occlusion," Neurology, 2013, vol. 80, no. 8, pp. 775–776
- J. Park, J. Kim, E. Yoo, H. Lee, J.-H. Chang, and E. Y. Kim, "Detection of small metastatic brain tumors: comparison of 3D contrast-enhanced whole-brain black-blood imaging and MP-RAGE imaging," Investigative Radiology, 2012, vol. 47, no. 2, pp. 136–141
- S. Park and J. Park, "Adaptive self-calibrating iterative GRAPPA reconstruction," Magnetic Resonance in Medicine, 2012, vol. 67, no. 6, pp. 1721–1729
- H. Lee, E.-Y. Kim, K.-S. Yang, and J. Park, "Susceptibility-resistant variable-flip-angle turbo spin echo imaging for reliable estimation of cortical thickness: A feasibility study," Neuroimage, 2012, vol. 59, no. 1, pp. 377–388
- S.-Y. Zho, J. Park, J.-Y. Choi, and D.-H. Kim, "Respiratory motion compensated MR cholangiopancreatography at 3.0 Tesla," Journal of Magnetic Resonance Imaging, 2010, vol. 32, no. 3, pp. 726–732

- J. Park, S. Park, E. Yeop Kim, and J.-S. Suh, "Phase-sensitive, dual-acquisition, single-slab, 3D, turbo-spin-echo pulse sequence for simultaneous T2-weighted and fluid-attenuated whole-brain imaging," Magnetic Resonance in Medicine, 2010, vol. 63, no. 5, pp. 1422–1430
- J. Park and E. Y. Kim, "Contrast-enhanced, three-dimensional, whole-brain, black-blood imaging: Application to small brain metastases," Magnetic Resonance in Medicine, 2010, vol. 63, no. 3, pp. 553–561
- H. Kim, J. S. Lim, J. Y. Choi, J. Park, Y. E. Chung, M.-J. Kim, E. Choi, N. K. Kim, and K. W. Kim, "Rectal Cancer: Comparison of Accuracy of Local-Regional Staging with Two-and Three-dimensional Preoperative 3-T MR Imaging 1," Radiology, 2010, vol. 254, no. 2, pp. 485–492
- H. Jung, J. Park, J. Yoo, and J. C. Ye, "Radial k-t FOCUSS for high-resolution cardiac cine MRI," Magnetic Resonance in Medicine, 2010, vol. 63, no. 1, pp. 68–78
- J. Hur, J. Park, Y. J. Kim, H.-J. Lee, H. S. Shim, K. O. Choe, and B. W. Choi, "Use of contrast enhancement and high-resolution 3D black-blood MRI to identify inflammation in atherosclerosis," JACC: Cardiovascular Imaging, 2010, vol. 3, no. 11, pp. 1127–1135
- Y. E. Chung, M.-S. Park, M. S. Kim, E. Kim, J. Park, H.-T. Song, J. Y. Choi, M.-J. Kim, and K. W. Kim, "Quantification of superparamagnetic iron oxide-mediated signal intensity change in patients with liver cirrhosis using T2 and T2* mapping: A preliminary report," Journal of Magnetic Resonance Imaging, 2010, vol. 31, no. 6, pp. 1379–1386
- J. Park, J. P. Mugler, and T. Hughes, "Reduction of B1 sensitivity in selective single-slab 3d turbo spin echo imaging with very long echo trains," Magnetic Resonance in Medicine, 2009, vol. 62, no. 4, pp. 1060–1066
- M. Notohamiprodjo, A. Horng, M. F. Pietschmann, P. E. Müller, W. Horger, J. Park, A. Crispin, J. R. G. del Olmo, S. Weckbach, K. A. Herrmann *et al.*, "MRI of the knee at 3T: first clinical results with an isotropic PDfs-weighted 3D-TSE-sequence," Investigative Radiology, 2009, vol. 44, no. 9, pp. 585–597
- P. Lai, A. C. Larson, J. Park, J. C. Carr, and D. Li, "Respiratory self-gated four-dimensional coronary MR angiography: A feasibility study," Magnetic Resonance in Medicine, 2008, vol. 59, no. 6, pp. 1378–1385
- J. Park, J. P. Mugler, W. Horger, and B. Kiefer, "Optimized T1-weighted contrast for single-slab 3D turbo spin-echo imaging with long echo trains: Application to whole-brain imaging," Magnetic Resonance in Medicine, 2007, vol. 58, no. 5, pp. 982–992
- X. Bi, J. Park, V. Deshpande, O. Simonetti, G. Laub, and D. Li, "Reduction of flow- and eddy-currents-induced image artifacts in coronary magnetic resonance angiography using a linear centric-encoding SSFP sequence," Magnetic Resonance Imaging, 2007, vol. 25, no. 8, pp. 1138–1147
- J. Park, A. C. Larson, Q. Zhang, O. Simonetti, and D. Li, "4D radial coronary artery imaging within a single breath-hold: Cine angiography with phase-sensitive fat suppression (CAPS)," Magnetic Resonance in Medicine, 2005, vol. 54, no. 4, pp. 833–840

- J. Park, A. C. Larson, Q. Zhang, O. Simonetti, and D. Li, "High-resolution steady-state free precession coronary magnetic resonance angiography within a breath-hold: Parallel imaging with extended cardiac data acquisition," Magnetic Resonance in Medicine, 2005, vol. 54, no. 5, pp. 1100–1106
- J. Park, Q. Zhang, V. Jellus, O. Simonetti, and D. Li, "Artifact and noise suppression in GRAPPA imaging using improved k-space coil calibration and variable density sampling," Magnetic Resonance in Medicine, 2005, vol. 53, no. 1, pp. 186–193
- X. Bi, J. Park, A. C. Larson, Q. Zhang, O. Simonetti, and D. Li, "Contrast-enhanced 4D radial coronary artery imaging at 3.0 T within a single breath-hold," Magnetic Resonance in Medicine, 2005, vol. 54, no. 2, pp. 470–475
- J. Park, R. McCarthy, and D. Li, "Feasibility and performance of breath-hold 3D true-FISP coronary MRA using self-calibrating parallel acquisition," Magnetic Resonance in Medicine, 2004, vol. 52, no. 1, pp. 7–13
- H. Merte, J. Park, W. W. Shultz, and R. B. Keller, "Criteria for approximating certain microgravity flow boiling characteristics in earth gravity," Annals of the New York Academy of Sciences, 2002, vol. 974, no. 1, pp. 481–503

PATENTS

- J. Park, H. Maeng, System and method for multi-contrast magnetic resonance imaging, 2019, US20190355125A1
- J. Park, S. Park, Apparatus and method for magnetic resonance image processing, 2017, US9804244B2
- J. Park, H. Lee, Magnetic resonance imaging system and method for generating conductivity distribution image using magnetic resonance electrical impedance tomography, 2015, US10182739B2
- J. Park, H. Lee, Magnetic resonance imaging device and magnetic resonance imaging method using the same device, 2015, US10073152B2
- J. Park, H. Lee, Magnetic resonance imaging device and method for generating image using same, 2015, US20150137808A1
- J. Park, H. Lee, Magnetic resonance imaging apparatus capable of acquiring selective gray matter image, and magnetic resonance image using same, 2014, US20150190055A1
- J. Park, J. Hwang, S. Park, Method and apparatus for generating magnetic resonance image, 2013, US9196062B2
- J. Park, Magnetic resonance imaging method and apparatus with phase-sensitive fluid suppression, 2011, US8072212B2

Conference Abstracts

- H. Maeng, J. Park "High Resolution Diffusion Tensor Imaging using Rapid Single-Slab 3D EPI Encoding", 2023, ISMRM, Toronto, Canada

- E. Lim, J. Park "Self-Calibrating Aliasing-Controlled Simultaneous Multi-Slice Reconstruction for Diffusion MRI", 2023, ISMRM, Toronto, Canada
- N. Nguyen, J. Park "Vascular Heterogeneity Model Based Deep Learning Reconstruction for High-Definition DCE MRI", 2022, ISMRM, London, UK
- E. Lim, J. Park "Generalized Self-Calibrating Simultaneous Multislice MR Image Reconstruction from 3D Encoding Perspective", 2022, ISMRM, London, UK
- Y. Jung, J. Park, SG Kim, SH Park, "Diffusion-weighted Chemical Exchange Saturation Transfer Imaging at 7T Human MRI", 2021, ISMRM
- J.S. Park, SH Choi, CH Sohn, J. Park, "Functional Segmentation and Reconstruction for High-Definition DCE MRI Exploiting Vascular Heterogeneity priors", 2021, ISMRM
- HS Ahn, J. Park, CH Sohn, SH Park, "Quantification of blood-brain barrier water permeability and arterial blood volume with multi-slice multi-delay diffusion-weighted ASL", 2021, ISMRM
- SH Hwang, S Han, SG Kim , J. Park, Sung-Hong Park "Whole-brain Perfusion Mapping at 7T by SAR-efficient Non-segmented 3D EPI-pCASL", 2021, ISMRM
- E. Lim, G. Li, C. Wang, Z. Li, S. Yang, J. Park, "Robust Simultaneous Multi-Slice MRI Exploiting Hankel Subspace Learning with Self-Calibration and Self-Referencing Magnitude Prior", 2020, ISMRM
- HS Lee , SH Hwang , J. Park, SH Park, "Single-shot Pseudo-Centric EPI for Magnetization-Prepared Imaging", 2020, ISMRM
- H. Lee, SG Kim, J. Park "Novel Tumor-Selective Dual-Contrast 3D MRI Toward Zero False-Positiveness in Brain Metastases: A Feasibility Study", 2018, ISMRM
- H. Kim, S. Park, EY Kim, CH Sohn, J. Park,"Retrospective Multi-Phase Non-Contrast-Enhanced Magnetic Resonance Angiography (ROMANCE MRA) for Robust Angiogram Separation in the Presence of Cardiac Arrhythmia", 2018, ISMRM
- E. Lim, J. Park "Accelerated SMS-FSE with Long Hard Pulse Trains and Spatially Invariant FID Suppression", 2018, ISMRM
- E. Lim, J.S. Park, EY Kim, CH Sohn, J. Park "High SpatiotemporalResolution DCE MRA and Perfusion in a Single 4DAcquisition Exploiting KineticModel Based Signal Priors", 2018, ISMRM
- H. Maeng, S. Kim, S. Park, E. Lim, J. Park "Multi-Contrast 3D MR Image Reconstruction from Incomplete Measurements with Spatially Adaptive Priors", 2018, ISMRM
- X. Ma, X. Lou, H. Maeng, S. Kim, S. Park, G. Li, C. Wang, J. Park "Highly Accelerated Multi-Contrast 3D Isotropic MRI in 5 Minutes: A Feasibility Study for Multiple Sclerosis", 2018, ISMRM
- S. Kim, S. Park, J. Park, "Accelerated Parameter Mapping Exploiting Model-Based Simultaneous Multislice Reconstruction with Hankel Subspace Learning, 2017, ISMRM
- E. Lim, S. Park, SG Kim, J. Park "Slice-Accelerated Single-Shot Variable-Flip-Angle Fast Spin Echo with Very Long Echo Trains", 2017, ISMRM

- B. Hwang, H. Kim, SG Kim, J. Park "Unenhanced Peripheral MRA with Robust Background Suppression using Chemical-Shift-Encoded Single-Slab 3D GRASE: Decomposition of Angiogram and Fatty Backgrounds", 2017, ISMRM
- S. Park, S. Kim ,"Simultaneous Multi Spiral-CEST Encoding with Hankel Subspace Learning: ultrafast whole-brain z-spectrum acquisition", 2016, ISMRM.
- S. Park, EY Kim "Dynamic Contrast-Enhanced MRA with Robust Background Suppression Exploiting Motion Subspace Learning and spasity Priors", 2016, ISMRM
- S. Park, J. Park, "SMS-HSL : simultaneous Multi-Slice Aliasing Separation Exploiting Hankel Subspace Learning", 2016,ISMRM
- H. Kim, J. Park, "Rapid Water-Fat Separation using 3D VFA GRASE with phase-independent Reconstruction", 2016, ISMRM
- H. Lee, J. Park, "Model-based Extraction of z-spectrum Asymmetry using SYmmetric basis (EASY)", 2016, ISMRM.
- H. Lee, J. Park, "Model-based direct Extraction of z-spectrum Asymmetry from undersampled k-space using SYmmetric Basis (k-EASY)", 2016, ISMRM.
- S. Kim, J. Park, "Fast Whole-Brain Spiral-CEST Encoding with Spectral and Spatial B0 Correction", 2016, ISMRM.
- E. Lim, J. Park,"Concentration time-course Model-based Angiogram SEparation (MASE) for dynamic contrast-enhanced magnetic resonance angiography", 2016, ISMRM.
- H. Maeng, J. Park, "Dynamic Tagged Liver MRI Exploiting Tag-Constrained Sampling and Separation Assessment of Liver Stiffness", 2016, ISMRM.
- S. Park J. Park*, , "k-t SPARKS: Dynamic Parallel MRI Exploiting Sparse Kalman Smoother", 2015, ISMRM.
- S. Park, J. Park*, "Dual Projected Background Nulling Compressed Sensing for Robust Separation of Dynamic Contrast-Enhanced Angiograms", 2015, ISMRM.
- H. Lee, J. Park*, "Current-Controlled Alternating Reversed DESS MREIT for Joint Estimation of Tissue Relaxation and Electrical Properties", 2015, ISMRM.
- S. Kim, J. Park*, "Spiral-CEST Encoding with Spectral and Spatial B0 Correction", 2015, ISMRM
- H. Lee, J. Park*, "Rapid Propeller-CEST Encoding with Background Asymmetry Subtraction for Ultrafast Z-Spectrum Acquisition", 2014, ISMRM
- H. Lee, J. Park*, "Current-Controlled Alternating Steady State Free Precession for Rapid Conductivity Mapping", 2014, ISMRM
- S. Park, J. Park*,"Compressed Sensing MRI Exploiting Complementary Dual Decomposition", 2014, ISMRM
- S. Park, J. Park*, "Highly Accelerated dynamic Parallel MRI Exploiting Constrained State-Space Model with Low Rank and Sparsity", 2014, ISMRM
- H. Kim, D. Kim, J. Park*, "Robust Susceptibility Weighted Imaging using Single-Slab 3D GRASE with Removal of Background Phase Variation", 2013, ISMRM

- S. Park, J.Park*, "Multi-Scale Weighted Partially Parallel Imaging", 2013, ISMRM
- H. Lee, J. Park*, "Bz-SNR-Enhanced Echo-Shifted Incoherent Steady State Imaging for Electrical Conductivity Mapping", 2013, ISMRM
- H. Kim, D. Kim, J. Park*, "Highly Accelerated Single-Slab 3D GRASE with Phase-Independent Image Reconstruction", 2012, ISMRM
- S. Park, J. Park*, "Optimal Combination of High Frequency Sub-band Compressed Sensing and Parallel Imaging: Consideration of Local and Global Characteristics of k-space", 2012, ISMRM
- S. Park, J. Park*, " Generalized High-Pass-Filtered GRAPPA Reconstruction", 2012, ISMRM
- H. Lee, S. Park, J. Park*, "Dual-Echo Single-Slab 3D Turbo Spin Echo imaging for Highly Efficient Sub-Millimeter Whole-Brain Gray Matter Imaging", 2012, ISMRM
- S. Choi, H. Kim, J. Park*, "Image Denoising Exploiting Sparsity and Low Rank Approximation (DSLR) in Slide Encoding for Metal Artifact Correction", 2012, ISMRM
- H. Lee, J. Park*, "Rapid Combo Acquisitions for Sub-millimeter Isotropic Fluid-Attenuated Inversion Recovery Imaging (Combo-FLAIR)", 2012, ISMRM
- H. Kim, S. Park, D. Kim, J. Park, "Variable Flip Angle Single-Slab 3D GRASE with Phase-Independent Image Reconstruction", 2011, ISMRM
- S. Park, J. Park, "Adaptive Self-Calibrating in k-space Parallel Magnetic Resonance Imaging using the Kalman Filter", 2011, ISMRM
- H. Lee, J. Park, "SNR-Optimized, Accelerated, Phase-Sensitive, Dual-Acquisition, Single-Slab 3D Turbo Spin Echo Imaging", 2011, ISMRM
- H. Lee, EY Kim, J. Seo, J. Park, "Reliable Cortical Thickness Estimation with Reduction of Susceptiblility Included Signal Loss using Optimized T1-Weighted Single-Slab Turbo Spin Echo Pulse Sequence", 2010, ISMRM
- J. Park, EY Kim, "Contrast-Enhanced Three-Dimenstional Whole-Brain Black-Blood Imaging for Efficient Detection of Small Metastases", 2009, ISMRM
- J. Park, EY Kim, "Simultaneous Acquisition of High-Resolution T2-Weighted and Cerebro-Spinal-Fluid-Suppressed Images using Phase-Sensitive Dual-Acquistion Single-Slab Three-Dimensional Turbo Spin Echo Sequence", 2009, ISMRM
- J. Hong, J. Park, J. Ye, "Motion Estimated and Compensated Compressive Sensing Dynamic MRI under Field Inhomogeneity", 2009, ISMRM
- S. Zho, J. Park, D. Kim, "Simple Method for Free-Breathing Multi-Slice T2-Weighted TSE liver Imaging without PACE", 2009, ISMRM
- S. Zho, J. Park, D. Kim, "Regular Respiratory Motion Correction in 3D T2-Weighted TSE liver Imaging", 2009, ISMRM
- N. Mike, H. Annie, P. Matthias, H. Wilhelm, H. K. Anna, J. Park, D. Raya, J. Garcia, R. Maximilian F, G. Christian, "A Fat Saturated Proton Density Weighted 3D TSE Sequence for MRI of the Knee at 3 T-First Clinical Resultsm", 2009, ISMRM

- Xu, P. Weale, L.Gerhard, P. Schmitt, Jaeseok Park, B. Stoeckel, Q. Chen, R. P. Lim, A. Hardie, P. Storey, E. Hecht, K. Mcorty, and V.S. Lee, "A Novel Non-contrast MR Angiography Technique using Triggered Non-Selective Refocused SPACE for improved Spatial Resolution and Speed", 2008, ISMRM
- R. T. Seethamraju, Y. C. Chung, Jaeseok Park, G. C. Wiggins, M. G. Harisinghani, and D. Hinton-Yates, "High resolution non-contrast lymphangiography of the head and neck at 3 Tesla", 2008, ISMRM
- A. Priatna, Jaeseok Park, C-I. Chen, S. Mar, Y. Sheline, and T. L. Benzinger, " Detection of White Matter Disease in the Brain and Spine using Double Inversion Recovery SPACE at 3 Tesla", 2008, ISMRM
- M. Notohamiprodjo, A. Horng, J. G. Raya, W. Horger, Jaeseok Park, C. Trumm, M. Reiser, and C. Glaser, "A new Approach for High Resolution MRI of the Knee at 3 T Evaluation of a moderately T2 weighted 3D-TSE-fs (SPACE) Sequence", 2008, ISMRM
- YC Chung, M. Winner, J. Park, SV Raman, R. Jerecic, OP Simonetti, "T1-Weighted 3D Dark Blood TSE for Cartoid Artery Disease Imaging-Preliminary Experience", SCMR, 2008
- J. Park, JP. Mugler III, W. Horger, B. Kiefer, "T1-Optimized Single-Slab 3D Turbo Spin Echo Imaging with Long Echo Trains", 2007, ISMRM
- P. Lai, AC. Larson, Jaeseok Park, JC. Carr, D. Li, "Respiratory Self-Gated 4D Coronary MRA", 2006, ISMRM
- J. Park, AC. Larson, Q. Zhang, OP. Simonetti, D. Li, "4D Radial Coronary Artery Imaging: Cine Angiography with Phase Sensitve Fat Suppression (CAPS)", 2005, ISMRM
- J. Park, AC. Larson, Q. Zhang, OP. Simonetti, D. Li,"Fast Sensitivity Encoded Image Reconstruction using Rescaled Matrix for Non-Cartesian Trajectories", 2005, ISMRM
- J. Park, Q. Zhang, OP. Simonetti, D. Li, "SSFP Coronary MRA at 3 T Combining Extended Cardiac Data Acquisition with Parallel Imaging Reconstruction", 2005, ISMRM
- X. Bi, J. Park, AC. Larson, Q. Zhang, OP. Simonetti, D. Li, "4D Radial Coronary Artery Imaging at 3 T within a Single Breath-hold using Contrast Agent", 2005, ISMRM
- X. Bi, J. Park, V. Deshpande, D. Li, "Reduction of Eddy Current Included Image Artifacts in Coronary MRA using SSFP Sequence", 2005, ISMRM
- J. Park, Q. Zhang, OP. Simonetti, D. Li, "Artifact and Noise Suppression in GRAPPA Imaging using Improved k-Space Coil Calibration and Variable Density Sampling", 2004, ISMRM
- J. Park, Q. Zhang, OP. Simonetti, D. Li, "High Resolution SENSE Coronary MRA using Extended Data Acquisition for Coil Calibration", 2004, ISMRM
- J. Park, M. Richard, D. Li, "Feasibility and Performance of Breath-hold 3D True-FISP Coronary MRA using Self-Calibrating Parallel Acquisition", 2003, ISMRM
- Q. Zhang, J. Park, OP. Simonetti, D. Li, "Improved True-FISP Parallel Cine Imaging using a New Data Acquisition Scheme for Coil Sensitivity Calibation", 2003, ISMRM

• H. Merte jr., J. Park, WW. Schults, RB. Keller, "Criteria for Approximating Micro-Gravity Flow Boiling Characteristics in Earth Gravity", 2001, Banff, Canada