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3

Citations (Scopus):

29

Supervised MSc Theses

#	Thesis title	By	Date
1	FMRI motion correction in K-space based on deep learning algorithms	Meisam Pashootan & Abbas Nasiraei Moghaddam	July 2021
2	motion correction of radial SSFP FMRI in K-space using deep learning	Faeze Makhsousi & Abbas Nasiraei Moghaddam	April 2021
3	Reconstruction of mri images in 3D koosball imaging by spherical fourier transform and its suitable aquisition scheme.	Mojtaba Shafiekhani & Abbas Nasiraei Moghaddam	April 2021
4	Improving the efficiency of diffusion tensor imaging through radial acquisition and polar reconstruction	Mahsa Salimi Majd & Abbas Nasiraei Moghaddam	December 2020
5	Investigation of heart dynamics through regional and global left ventricle rotation and assessment of reproducibility of these parameters	Ayda Arami & Abbas Nasiraei Moghaddam	March 2020
6	Semi-industrial production and testing of a contrast agent injector based on the contrast agent flow circulation dynamic model in body	Majid Ghasemi & Abbas Nasiraei Moghaddam	September 2019
7	Online Reconstruction of magnetic resonance images with radial acquisition through polar fourier transform on MRI scanner	Fatemeh Rastegar Jooybari & Abbas Nasiraei Moghaddam	January 2019
8	Analysing the effective parameters in cardiac T1 mapping using MOLLI sequence & designing a method to improve T1 estimation	Mostafa Berangi & Abbas Nasiraei Moghaddam	September 2018
9	Detection of fine structures in human brain cortex, using steady state based functional MRI	Banafshe Shafieizargar & Abbas Nasiraei Moghaddam	February 2018

10	Adding the third dimension to displacement map using CMR tagging in the polar coordinate system	Ali Rezaei & Abbas Nasiraei Moghaddam	July 2017
11	Group analysis and statistical comparison for steady - state functional MRI methods	Arash Forodighasemabadi & Abbas Nasiraei Moghaddam	February 2017
12	Metal artifact estimation and correction in presence of foreign metallic objects in MRI	Sina Amirrajab & Abbas Nasiraei Moghaddam	February 2017
13	Analysis and calculation of heart rotational motion in healthy subjects and patients using tagged MRI images	Shahriar Shalika & Abbas Nasiraei Moghaddam	July 2016
14	Improving reproducibility and robustness of fMRI in Averaged-BOSS method through GRE BOLD Inspired Processing Techniques	Mahdi Khajehim & Abbas Nasiraei Moghaddam	February 2016
15	Application of compressed sensing in MR spectroscopic imaging	Mohammad Abdi Shektaei & Abbas Nasiraei Moghaddam	February 2015
16	Effects of shells (in the head and neck area) on the safety and quality of the MR imaging	Vahid Ghodrati Kouzehkonan & Abbas Nasiraei Moghaddam	February 2015
17	Improving the quality and speed of the strain Imaging through CMR polar tagging.	Shokoufeh Golshani & Abbas Nasiraei Moghaddam	October 2014
18	Effects of blood flow on SSFP MRI: quantification and artifact reduction	Saeid Ahmadiania & Abbas Nasiraei Moghaddam	February 2014
19	Strain and Torsion analysis of the myocardium in patients with cardiac contractile defects using the newly developed Tagged MRI	Razieh Kaveh & Abbas Nasiraei Moghaddam	October 2013
20	Classification of eye movements by image processing for helping disabled people	Alireza Rahimpour & Abbas Nasiraei Moghaddam	January 2012

Books

#	Title	Author(s)	Publisher country	publication date	version
Portal Records					
1	Heart Mechanics: Magnetic Resonance imaging	Abbas Nasiraei Moghaddam, Daniel B Ennis, El-Sayed Ibrahim	United States	May 2017	1

Journal Papers

Portal Records	
1	Vahid Malekian, Fatemeh Rastegar Jooybari, Banafshe Shafieizargar, Abbas Nasiraei Moghaddam, "SSFP fMRI at 3 tesla: Efficiency of polar acquisition-reconstruction technique", MAGNETIC RESONANCE IMAGING, September 2020 Vol. 74, Num. 1, Page 171-180, September 2020,
2	Kolsoum Dehdar, Shirin Mahdidoust, Morteza Salimi, Leila Gholami-Mahtaj, Milad Nazari, Sadeq Mohammadi, Samaneh Dehghan, Hamidreza Jamaati, Reza Khosrowabadi, Abbas Nasiraei Moghaddam, Victoria Barkley, Mohammad Javan, Javad Mirnajafi-Zadeh, Akira Sumiyoshi, Mohammad Reza Raoufy, "Allergen-induced anxiety-like behavior is associated with disruption of medial prefrontal cortex - amygdala circuit", Scientific Reports, December 2019 Vol. 9, Num. 0, Page 1-13, December 2019,
3	Vahid Malekian, Abbas Nasiraei Moghaddam, Amir Akhavan Bitaghsir, Gholamali Hossein- Zadeh, "Efficient de-noising of high-resolution fMRI using local and sub-band information", JOURNAL OF NEUROSCIENCE METHODS, November 2019 Vol. 331, Num. 1, Page 1-10, November 2019,

- 4 Jahanbakhsh Jahanzamin, Nasser Fatouree, Abbas Nasiraei Moghaddam, "Effect of turbulent models on left ventricle diastolic flow patterns simulation", *COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING*, August 2019 Vol. 22, Num. 15, Page 1229-1238, August 2019,
- 5 Vahid Malekian, Abbas Nasiraei Moghaddam, Mahdi Khajehim, "A robust SSFP technique for fMRI at ultra-high field strengths", *MAGNETIC RESONANCE IMAGING*, February 2018 Vol. 50, Num. 0, Page 17-25, February 2018,
- 6 Mahdi Khajehim, Abbas Nasiraei Moghaddam, "Investigating the spatial specificity of S2-SSFP fMRI: A Monte Carlo simulation approach", *MAGNETIC RESONANCE IMAGING*, December 2016 Vol. 37, Num. 0, Page 282-289, December 2016,
- 7 Shokoufeh Golshani, Abbas Nasiraei Moghaddam, "Efficient Radial Tagging CMR Exam: A Coherent k-Space Reading and Image Reconstruction Approach", *MAGNETIC RESONANCE IN MEDICINE*, March 2016 Vol. 0, Num. 0, Page 0-0, March 2016,
- 8 Ali Sarrami-Foroushani, Mohsen Nasr Esfahany, Abbas Nasiraei Moghaddam, Hamidreza Saligheh Rad, Firouznia, Madjid Shakiba, Hossein Ghanaati, Iain David Wilkinson, Alejandro Federico Frangi, "Velocity Measurement in Carotid Artery: Quantitative Comparison of Time-Resolved 3D Phase-Contrast MRI and Image-based Computational Fluid Dynamics", *IRANIAN JOURNAL OF RADIOLOGY*, July 2015 Vol. 12, Num. 4, Page 1-12, July 2015,
- 9 Navid Soltani Hafshejani, Abbas Nasiraei Moghaddam, Nasser Fatouree, Saeed Siri, Aisa Rasuli, "constitutive model of passive myo cardium of lamb", , February 2015 Vol. 8, Num. 4, Page 360-371, February 2015,
- 10 Wang, Abbas Nasiraei Moghaddam, Reyhan, Srinivasan, Finn , Ennis, "Complementary Radial Tagging for Improved Myocardial Tagging Contras", *MAGNETIC RESONANCE IN MEDICINE*, May 2014 Vol. -, Num. 0, Page 0-0, May 2014,
- 11 Razieh Kaveh, Abbas Nasiraei Moghaddam, Khan, Finn, "Regional rotation of the left ventricle in healthy and cardiomyopathic subjects measured with radial myocardial tagging", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, January 2014 Vol. 16, Num. 1, Page 24-25, January 2014,
- 12 Vesal Moaiyed, Abbas Nasiraei Moghaddam, "Non-uniform polar tagging", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, January 2014 Vol. 16, Num. 1, Page 31-32, January 2014,
- 13 Abbas Nasiraei Moghaddam, J P. Finn, "Tagging of Cardiac Magnetic Resonance Images in the Polar Coordinate System: Physical Principles and Practical Implementation", *MAGNETIC RESONANCE IN MEDICINE*, May 2013 Vol. -, Num. 0, Page 0-0, May 2013,
- 14 Razieh Kaveh, Abbas Nasiraei Moghaddam, Khan, Finn, "Twist measurement of the left ventricle through radial tagging", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, January 2013 Vol. 15, Num. 0, Page 48-49, January 2013,
- 15 Jafar Zamani, Abbas Nasiraei Moghaddam, Saligheh Rad, "Compressed sensing cardiac MRI exploiting spatio-temporal sparsity", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, January 2013 Vol. 15, Num. 1, Page 14-15, January 2013,
- 16 Ali Aghayi Far, Abbas Nasiraei Moghaddam, Nafiseh Babayi, "High resolution high density CMR circular tagging", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, January 2013 Vol. 15, Num. 1, Page 88-89, January 2013,
- 17 Alireza Rahimpour, Abbas Nasiraei Moghaddam, "Eye tracking by image processing for helping disabled people", , November 2012 Vol. 6, Num. 3, Page 11-22, November 2012,
- 18 J. M. Moriarty, G. L. Kung, Y. Ramoss, Abbas Nasiraei Moghaddam, D. B. Ennis, J.P. Finn, "Injection of gadolinium contrast through pediatric central venous catheters: a safety study", *PEDIATRIC RADIOLOGY*, April 2012 Vol. 42, Num. 9, Page 1064-1069, April 2012,
- 19 Nafiseh Babayi, Abbas Nasiraei Moghaddam, "Polar HARP for the polar CMR tagging", *JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE*, February 2012 Vol. 14, Num. 1, Page 15-15, February 2012,
- 20 Bahman Vahidi, Nasser Fatouree, Ali Imanparast, Abbas Nasiraei Moghaddam, "A Mathematical Simulation of the Ureter: Effects of the Model Parameters on Ureteral Pressure/Flow Relations", *JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME*, February 2011 Vol. 133, Num. 31004, Page 1-9, February 2011,

- 21 Roya S Saleh, J. Paul Finn, Michael Fenchel, Abbas Nasiraei Moghaddam, Mayil Krishnam6, Abrazado, Anthony Ton, Reza Habibi, Cooper, Fonkalsrud, "Cardiovascular magnetic resonance in patients with pectus excavatum compared with normal controls", JOURNAL OF CARDIOVASCULAR MAGNETIC RESONANCE, December 2010 Vol. 12, Num. 73, Page 1-10, December 2010,

Conference Papers

Portal Records

- 1 Elham Mohammadi, Sebastian Rosenzweig, Martin Uecker, Abbas Nasiraei Moghaddam, "Real-time radial tagging with radial FLASH: preliminary results ", Society for Cardiovascular Magnetic Resonance (SCMR) Program Committee for the SCMR 22nd Annual Scientific Sessions, February 2019
- 2 Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, Alessandra Griffo, Patric Hagmann, "decomposition of brain structural connectivity using independent component analysis ", Joint Annual Meeting International Society for Magnetic Resonance in Medicine (ISMRM)- European Society for Magnetic Resonance in Medicine and Biology ESMRMB - 2018, June 2018
- 3 Banafshe Shafieizargar, Abbas Nasiraei Moghaddam, "Radial acquisition and PFT reconstruction allow for retrospective selection of spatial resolution in fMRI studies ", Joint Annual Meeting International Society for Magnetic Resonance in Medicine (ISMRM)- European Society for Magnetic Resonance in Medicine and Biology ESMRMB - 2018, June 2018
- 4 Sina Amirrajab, Vahid Ghodrati, Abbas Nasiraei Moghaddam, "Correction of Ferromagnetic Object Artifacts Using Simulated Off-Resonance Map ", Joint Annual Meeting International Society for Magnetic Resonance in Medicine (ISMRM)- European Society for Magnetic Resonance in Medicine and Biology ESMRMB - 2018, June 2018
- 5 Vahid Malekian, Abbas Nasiraei Moghaddam, "High Resolution fMRI Data De-noising Technique Using 3D Spatio-Temporal Diffusion Filter ", International Society for Magnetic Resonance in Medicine (ISMRM) 2018- 26th Annual Meeting, June 2018
- 6 Vahid Malekian, Arash Forodighasemabadi, Abbas Nasiraei Moghaddam, "Complex-valued analysis of high-resolution SSFP-fMRI increases reliability in detecting active voxels ", Joint Annual Meeting International Society for Magnetic Resonance in Medicine (ISMRM)- European Society for Magnetic Resonance in Medicine and Biology ESMRMB - 2018, June 2018
- 7 Vahid Malekian, Abbas Nasiraei Moghaddam, Daniel Gomez, Jose Marques, David Norris, "A novel phase-based technique to reduce physiological noise in resting state fMRI data. ", International Society for Magnetic Resonance in Medicine (ISMRM) 2018- 26th Annual Meeting, June 2018
- 8 Mostafa Berangi, Abbas Nasiraei Moghaddam, "Analyzing the Influence of Imaging Parameters on Cardiac T1 Estimation Accuracy Using MOLLI ", (Iranian Conference on Electrical Engineering (ICEE, May 2018
- 9 Sina Amirrajab, Vahid Ghodrati, Abbas Nasiraei Moghaddam, "Estimation of non-excitability area around ferromagnetic objects in MRI ", European society for magnetic resonance in medicine 2017, October 2017
- 10 Parisa Fardafshari Talebazlu, Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, "Assessing the influence of functional connectivity estimation methods on graph metrics in resting-state fMRI ", 25th Iranian Conference on Electrical Engineering (ICEE (2017, May 2017
- 11 Banafshe Shafieizargar, Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, "Targeted fMRI using radial acquisition and polar reconstruction ", International Society for Magnetic Resonance in Medicine (ISMRM) 2017- 25th Annual Meeting, April 2017
- 12 Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, "Structural basis of functional networks: A fMRI/DTI fusion approach in network level ", International Society for Magnetic Resonance in Medicine (ISMRM) 2017- 25th Annual Meeting, April 2017
- 13 Aghaeifar, Ali, Abbas Nasiraei Moghaddam, Scheffler, Klaus, "Motion simulation and correction validation using MR tagging ", 25th Annual Meeting and Exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM 2017), April 2017





- 14 Fatemeh Rastegar Jooybari, Elham Mohammadi, Abbas Nasiraei Moghaddam, "Left Ventricle Circumferential Strain from Radially Tagged Images through CIRCOME combined by SinMod ", International Society for Magnetic Resonance in Medicine (ISMRM) 2017- 25th Annual Meeting, April 2017
- 15 Vahid Malekian, Abbas Nasiraei Moghaddam, Mahdi Khajehim, David G. Norris, "A robust non-balanced SSFP fMRI Technique for High Field: Comparison with SE-EPI and bSSFP Techniques at 7 Tesla ", International Society for Magnetic Resonance in Medicine (ISMRM) 2017- 25th Annual Meeting, April 2017
- 16 Arash Forodighasemabadi, Mahdi Khajehim, Vahid Malekian, Abbas Nasiraei Moghaddam, "A Group level analysis to compare characteristics of balanced SSFP fMRI with non-balanced techniques ", International Society for Magnetic Resonance in Medicine (ISMRM) 2017- 25th Annual Meeting, April 2017
- 17 Parisa Fardafshari Talebazlu, Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, "Does Method of Functional Connectivity Estimation Affect The Small Worldness Index? ", 7th International Conference of Cognitive Science (ICCS) 2017, April 2017
- 18 Farzaneh Keyvanfard, Abbas Nasiraei Moghaddam, "How imaging parameters change DTI indices in the voxel containing crossing fibers? A Monte Carlo simulation study ", 7th International Conference on Cognitive Science (ICCS) 2017, April 2017
- 19 Farzaneh Keyvanfard, Mahdi Khajehim, Abbas Nasiraei Moghaddam, "Assessing the Influence of DTI Processing Software in Detection of Brain Regions Involved in Alzheimer's Disease ", 7th International Conference of Cognitive Science (ICCS) 2017, April 2017
- 20 Abbas Nasiraei Moghaddam, Fatemeh Rastegar Jooybari, Elham Mohammadi, "SinMod method for quantification of LV rotational motion ", Society for Cardiovascular Magnetic Resonance (SCMR) 2017- 20th Annual Scientific Sessions, February 2017
- 21 Abbas Nasiraei Moghaddam, Shahriar Shalika, Vahid Ghodrati Kouzehkonan, "Rotational Motion of the Left Ventricle: the Robust Normal Pattern ", Society for Cardiovascular Magnetic Resonance (SCMR) 2017- 20th Annual Scientific Sessions, February 2017
- 22 Vahid Malekian, D. Gomez, Abbas Nasiraei Moghaddam, J.P. Marques, D.G. Norris, "Respiratory Noise Reduction in fMRI Data Utilizing Phase Information ", European Society for Magnetic Resonance in Medicine and Biology (ESMRMB) 2016 - 33rd Annual Scientific Meeting, September 2016
- 23 Vahid Malekian, Danny Jj Wang, Gholam-Ali Hossein-Zadeh, Abbas Nasiraei Moghaddam, "The Novel Anisotropic Filtering Method for Noise Reduction in fMRI utilizing phase information ", International Society for Magnetic Resonance in Medicine (ISMRM), May 2016
- 24 Mahdi Khajehim, Abbas Nasiraei Moghaddam, "Monte Carlo Simulation for A-BOSS fMRI ", International Society for Magnetic Resonance in Medicine (ISMRM)- 24rd international meeting, May 2016
- 25 Shahriar Shalika, Elham Mohammadi, Abbas Nasiraei Moghaddam, "Left Ventricle Rotational Motion From Polar Tagging MRI Using Monogenic Signal Method ", International Society for Magnetic Resonance in Medicine (ISMRM)- 24rd international meeting, May 2016
- 26 Mahdi Khajehim, Abbas Nasiraei Moghaddam, "A Systematic Investigation on the BOLD Contrast in S1- and S2- SSFP fMRI ", International Society for Magnetic Resonance in Medicine (ISMRM)- 24rd international meeting, May 2016
- 27 Seyedvahid Khodaei, Abbas Nasiraei Moghaddam, Nasser Fatouraee, Malikeh Nabaei, "Finite element simulation of mitral valve prolapse with anatomic geometry ", 24th Annual International Conference on Mechanical Engineering- ISME2016, April 2016
- 28 Shokoufeh Golshani, Nafiseh Babayi, Abbas Nasiraei Moghaddam, "Rotational Motion of Left Ventricle by Harmonic Phase on Radial Tagging ", Society for Cardiovascular Magnetic Resonance (SCMR) 19th Annual Scientific Sessions, January 2016
- 29 Shokoufeh Golshani, Abbas Nasiraei Moghaddam, "Real Time Circular Tagging is Possible Through Radial Acquisition ", Society for Cardiovascular Magnetic Resonance (SCMR) 19th Annual Scientific Sessions, January 2016
- 30 Shokoufeh Golshani, Abbas Nasiraei Moghaddam, "Circumferential Compression Encoding (CIRCOCOM) using Polar K-space ", Society for Cardiovascular Magnetic Resonance (SCMR) 19th Annual Scientific Sessions, January 2016

- 31 Azadeh Nazemoroaya, Abbas Nasiraei Moghaddam, "A Software Tool for Segmentation of the Myocardium Using Level-Set Algorithm ", Society for Cardiovascular Magnetic Resonance (SCMR) 19th Annual Scientific Sessions, January 2016
- 32 Seyedvahid Khodaei, Abbas Nasiraei Moghaddam, Nasser Fatouraee, Malikeh Nabaei, Saeed Siri, Keyvan Safaei Baghbaderani, "FEM Analysis of opening phase of anatomic mitral valve ", 23th international conference of mechanical engineering, ISME2015, May 2015
- 33 Saeed Siri, Malikeh Nabaei, Abbas Nasiraei Moghaddam, Nasser Fatouraee, Seyedvahid Khodaei, Navid Soltani Hafshejani, "effect of baroreflex mechanism on pressure wave amplitude in human vascular network ", 23th international conference of mechanical engineering, ISME2015, May 2015
- 34 Vahid Ghodrati Kouzehkonan, Abbas Nasiraei Moghaddam, "Torque and Transnational Force Considerations for Ferromagnetic Objects: the Saturation Effects ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd international meeting, May 2015
- 35 Mohammad Abdi Shektaei, Abbas Nasiraei Moghaddam, Rajakumar Nagarajan, Albert Thomas, "Sparse Reconstruction of Localized Correlated Spectroscopy: From Sub-Sampled Priors to Fast Acquisition ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd international meeting, May 2015
- 36 Vahid Ghodrati Kouzehkonan, Niloufar Zakariaei, Abbas Nasiraei Moghaddam, "Peripheral Nerve Stimulation Considerations in the Presence of the Foreign Metallic Objects ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd international meeting, May 2015
- 37 Shokoufeh Golshani, Abbas Nasiraei Moghaddam, "Efficient Radial Tagging: Under Sampled Radial acquisition with Polar Fourier Transform Recunstruction ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd international meeting, May 2015
- 38 Mohammad Abdi Shektaei, Felix Raschke, Franklyn A Howe, Abbas Nasiraei Moghaddam, "Accurate Compressive Sensing of 1H MR Spectroscopic Imaging in Brain Tumors ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd international meeting, May 2015
- 39 Mahdi Khajehim, Abbas Nasiraei Moghaddam, Hossein-Zadeh , Martin , Danny Jj Wang, "A Quantitative Analysis of fMRI Induced Phase Changes Using Averaged-BOSS (A-BOSS) ", International Society for Magnetic Resonance in Medicine (ISMRM)- 23rd annual meeting and exhibition, May 2015
- 40 Saeid Ahmadinia, Abbas Nasiraei Moghaddam, "Estimation of the flow motion in SSFP images using moving shadows; reliable or not? ", Society for Cardiovascular Magnetic Resonance (SCMR) 18th Annual Scientific Sessions, February 2015
- 41 Saeid Ahmadinia, Abbas Nasiraei Moghaddam, "Effect of segmentation of k-space in SSFP flow artifacts ", Society for Cardiovascular Magnetic Resonance (SCMR) 18th Annual Scientific Sessions, February 2015
- 42 Jafar Zamani, Abbas Nasiraei Moghaddam, Hamidreza S Rad, "Distributed compressed sensing to accelerate cine cardiac MRI ", Society for Cardiovascular Magnetic Resonance (SCMR) 18th Annual Scientific Sessions, February 2015
- 43 Ali Rezaei, Mohammad Abdi Shektaei, Abbas Nasiraei Moghaddam, "Electrical simulation of blood pressure and flow wave propagation and reflection in human arterial tree using distributed model and analysis of pulsatile power according to heart rate ", The First conference on Novel Approaches of Biomedical Engineering in Cardiovascular Disease, January 2015
- 44 Navid Soltani Hafshejani, Abbas Nasiraei Moghaddam, Nasser Fatouraee, Saeed Siri, Aisa Rasuli, "constitutive modelling of lambs passive myocardium ", 21st Iranian conference on bio-medical engineering, November 2014
- 45 Vahid Ghodrati Kouzehkonan, Abbas Nasiraei Moghaddam, "Torque and Translational Force Considerations for Ferromagnetic Shells in MR Imagingq ", Joint Annual meeting International Society for Magnetic Resonance in Medicine - European Society for Magnetic Resonance in Medicine and Biology 2014, May 2014
- 46 Ali Aghaeifar, Abbas Nasiraei Moghaddam, J P. Finn, "Inline Generation of Tagline Density Maps for Radial Strain Quantification from Circular MR Tagging ", Joint Annual meeting International Society for Magnetic Resonance in Medicine - European Society for Magnetic Resonance in Medicine and Biology 2014, May 2014

- 47 Zhe Wang, Abbas Nasiraei Moghaddam, Zou, Srinivasan, J P. Finn, Daniel Ennis, "Improved Myocardial Contrast Using Novel Complementary Radial MR Tagging Technique ", Joint Annual meeting International Society for Magnetic Resonance in Medicine - European Society for Magnetic Resonance in Medicine and Biology 2014, May 2014
- 48 Zahra Shams, Abbas Nasiraei Moghaddam, "Averaged-BOSS: Feasibility Study and Preliminary Results ", Joint Annual meeting International Society for Magnetic Resonance in Medicine - European Society for Magnetic Resonance in Medicine and Biology 2014, May 2014
- 49 Shokoufeh Golshani, Abbas Nasiraei Moghaddam, Holden Wu, J P. Finn, "Circular Tagging with Concentric Data Acquisition: Can We Go Real-Time? ", Joint Annual meeting International Society for Magnetic Resonance in Medicine - European Society for Magnetic Resonance in Medicine and Biology 2014, May 2014
- 50 Razieh Kaveh, Abbas Nasiraei Moghaddam, Khan S., J P. Finn, "Regional rotation of the left ventricle in healthy and cardiomyopathic subjects measured with radial myocardial tagging ", Society for Cardiovascular Magnetic Resonance (SCMR) 17th Annual Scientific Sessions, January 2014
- 51 Vesal Moaiyed, Abbas Nasiraei Moghaddam, "Non-uniform polar tagging ", Society for Cardiovascular Magnetic Resonance (SCMR) 17th Annual Scientific Sessions, January 2014
- 52 Sarah Khan, Abbas Nasiraei Moghaddam, Razieh Kaveh, Adam Plotnik, Evan Lehrman, Ali Nsair, J Paul Finn, "Myocardial tagging in the polar coordinate system; early clinical experience ", Society for Cardiovascular Magnetic Resonance (SCMR) 17th Annual Scientific Sessions, January 2014
- 53 Farhan Khodae, Abbas Nasiraei Moghaddam, Nasser Fatouraee, "3D modeling of blood flow in human circle of Willis and assess the effects of hyper-pressure on hemodynamics of flow ", 20th Iranian Conference of biomedical Engineering, December 2013
- 54 Ali Aghaeifar, Nafiseh Babayi, Abbas Nasiraei Moghaddam, Ahmad Ayatollahi, "High Resolution Tagging Pattern in the Polar Coordinate System; A Reconstruction Based Approach ", 21st Iranian Conference on Electrical Engineering (ICEE), May 2013
- 55 Wang Z, Rayhan M, Abbas Nasiraei Moghaddam, J P. Finn, Ennis D., "Automated Left Ventricular Twist Measurement with Complementary Radial Tags ", International Society for Magnetic Resonance in Medicine (ISMRM)- 21st international meeting, April 2013
- 56 Sarah N Khan, Abbas Nasiraei Moghaddam, Razieh Kaveh, Ali Nsair, Mona Bhatia, J Paul Finn, "Myocardial Tagging in the Polar Coordinate System; Initial Clinical Results ", International Society for Magnetic Resonance in Medicine (ISMRM)- 21st international meeting, April 2013
- 57 Saeid Ahmadinia, Abbas Nasiraei Moghaddam, "Blood flow effect in MRI SSFP imaging ", The First International Iranian Congress of Non Invasive Cardiovascular Imaging, April 2013
- 58 Maryam Eftekharian-Jahromi, Abbas Nasiraei Moghaddam, "Modeling Dynamic Behavior of Tracer through the Vessels and Its Effect on Contrast Enhancement ", The First International Iranian Congress of Non Invasive Cardiovascular Imaging, April 2013
- 59 Razieh Kaveh, Maryam Haftehkanaki, Abbas Nasiraei Moghaddam, Alizadeh Sani, Ojaghi Haghighi, J P. Finn, "Quantitative Analysis of Left Ventricular Deformation through Radial Tagging ", The First International Iranian Congress of Non Invasive Cardiovascular Imaging, April 2013
- 60 Razieh Kaveh, Abbas Nasiraei Moghaddam, Sarah N Khan, J Paul Finn, "Twist measurement of the left ventricle through radial tagging ", Society for Cardiovascular Magnetic Resonance (SCMR) 16th Annual Scientific Sessions, January 2013
- 61 Ali Aghaeifar, Nafiseh Babayi, Abbas Nasiraei Moghaddam, "High resolution high density CMR circular tagging ", Society for Cardiovascular Magnetic Resonance (SCMR) 16th Annual Scientific Sessions, January 2013
- 62 Jafar Zamani, Abbas Nasiraei Moghaddam, Saligheh Rad. Hamid, "Compressed sensing cardiac MRI exploiting spatio-temporal sparsity ", Society for Cardiovascular Magnetic Resonance (SCMR) 16th Annual Scientific Sessions, January 2013
- 63 Alireza Rahimpour, Mansur Vafadust, Abbas Nasiraei Moghaddam, "Eye Tracking by Image Processing for Helping Disabled People ", 19th Iranian Conference on BioMedical Engineering, December 2012

- 64 Jafar Zamani, Abbas Nasiraei Moghaddam, Hamidreza Saligheh Rad, "PILS-CS: Accelerating Partially Parallel Imaging with Localized Sensitivities (PILS) Using Compressed Sensing (CS) ", 34th Annual International IEEE EMBS Conference, August 2012
- 65 Jafar Zamani, Hamidreza Saligheh Rad, Abbas Nasiraei Moghaddam, "Application of Split Bregman Optimization Method for Compressed Sensing CE-MRA ", 34th Annual International IEEE EMBS Conference, August 2012
- 66 Wang Z, Abbas Nasiraei Moghaddam, Rayhan M; Srinivasan Sh, Natsuaki, J P. Finn, Ennis D., "Optimization of the radial tagging profile and validation using the Cardiac Atlas Project database ", International Society for Magnetic Resonance in Medicine (ISMRM)- 20th international meeting, May 2012
- 67 Maryam Haftehkhani, Abbas Nasiraei Moghaddam, Abd-Elmoniem, Finn, "Measuring the Radial Component of Left Ventricular Strain with Circular Tagging: Feasibility and Initial Results ", International Society for Magnetic Resonance in Medicine (ISMRM)- 20th international meeting, May 2012
- 68 Jafar Zamani, Abbas Nasiraei Moghaddam, Hamidreza Saligheh Rad, "MRI Reconstruction through Compressed Sensing Using Principle Component Analysis ", 20th Iranian Conference of Electrical Engineering, May 2012
- 69 Nafiseh Babayi, Abbas Nasiraei Moghaddam, "Polar HARP for the Polar CMR Tagging ", Society for Cardiovascular Magnetic Resonance (SCMR)15th Annual Scientific Sessions, February 2012
- 70 Middione M, Abbas Nasiraei Moghaddam, Natsuaki , Ennis D., "The effects of chemically shifted perivascular fat in quantitative phase contrast MRI ", International Society for Magnetic Resonance in Medicine (ISMRM)- 19th international meeting, May 2011
- 71 Wang Z, Abbas Nasiraei Moghaddam, Rayhan , J P Finn, Ennis, "Complementary Radial Tagging for the Assessment of Left Ventricular Function ", International Society for Magnetic Resonance in Medicine (ISMRM)- 19th international meeting, May 2011
- 72 Abbas Nasiraei Moghaddam, Abd-Elmoniem K, Heidari , Ruehm S, J P. Finn, "Left Ventricular Strain through Radial Tagging: Efficiency and Validity ", International Society for Magnetic Resonance in Medicine (ISMRM)- 19th international meeting, May 2011
- 73 Abbas Nasiraei Moghaddam, Yutaka Natsuaki, J. Paul Finn, "CMR Tagging in the polar coordinate system ", 2011 Society for Cardiovascular Magnetic Resonance (SCMR)/EuroCMR Joint Scientific Sessions, February 2011

Taught Courses

#	Course title	Description	Headlines	Date
1	Magnetic Resonance Imaging	Learning the principles of the Magnetic Resonance Imaging (MRI) system in signal generation and image formation		Spring 2021
2	Electromagnetics	Learning the principles of the Electromagnetics in a deductive approach		Spring 2021
3	Introduction to Biomed Eng.	An introduction to the general concepts, approaches and tools in the biomedical engineering		Fall 2020
4	Medical Imaging Systems	Intoduction to the physics techniques and applications of different medical imaging modalities		Fall 2020

Inventions/Patents

#	Invention title	Reg. number	Country	contributers	Reg. date	Exp. date
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1	POLAR MAGNETIC RESONANCE IMAGING AND APPLICATIONS THEREOF IN CARDIAC MAGNETIC RESONANCE IMAGING (2)	US10228435B2	2019/03/1	2035/11/1
2	real-time radial tagging	62/800,498	2019/02/1	-
3	FUNCTIONAL MAGNETIC RESONANCE IMAGING BY SPATIALLY MODULATION STEADY-STATE SIGNAL IN STEADY STATE FREE PRECISION	App. No. 14/164,133	2014/01/1	-