

# Hyung-Joong Kim

## List of Publications by Year in descending order

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58  
papers

722  
citations

567281

15  
h-index

610901

24  
g-index

58  
all docs

58  
docs citations

58  
times ranked

484  
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In Vivo</i> High-Resolution Conductivity Imaging of the Human Leg Using MREIT: The First Human Experiment. IEEE Transactions on Medical Imaging, 2009, 28, 1681-1687.	8.9	84
2	Error Analysis of Nonconstant Admittivity for MR-Based Electric Property Imaging. IEEE Transactions on Medical Imaging, 2012, 31, 430-437.	8.9	83
3	Anisotropic Conductivity Tensor Imaging of <i>In Vivo</i> Canine Brain Using DT-MREIT. IEEE Transactions on Medical Imaging, 2017, 36, 124-131.	8.9	37
4	Anisotropic conductivity tensor imaging in MREIT using directional diffusion rate of water molecules. Physics in Medicine and Biology, 2014, 59, 2955-2974.	3.0	36
5	Current Density Imaging During Transcranial Direct Current Stimulation Using DT-MRI and MREIT: Algorithm Development and Numerical Simulations. IEEE Transactions on Biomedical Engineering, 2016, 63, 168-175.	4.2	33
6	Evaluation of Hepatoprotective Effect of Curcumin on Liver Cirrhosis Using a Combination of Biochemical Analysis and Magnetic Resonance-Based Electrical Conductivity Imaging. Mediators of Inflammation, 2018, 2018, 1-9.	3.0	29
7	Experimental performance evaluation of multi-echo ICNE pulse sequence in magnetic resonance electrical impedance tomography. Magnetic Resonance in Medicine, 2011, 66, 957-965.	3.0	28
8	Electrodeless conductivity tensor imaging (CTI) using MRI: basic theory and animal experiments. Biomedical Engineering Letters, 2018, 8, 273-282.	4.1	25
9	Conductivity Tensor Imaging of <i>In Vivo</i> Human Brain and Experimental Validation Using Giant Vesicle Suspension. IEEE Transactions on Medical Imaging, 2019, 38, 1569-1577.	8.9	25
10	Regional absolute conductivity reconstruction using projected current density in MREIT. Physics in Medicine and Biology, 2012, 57, 5841-5859.	3.0	23
11	Feasibility of magnetic resonance electrical impedance tomography (MREIT) conductivity imaging to evaluate brain abscess lesion: <i>In vivo</i> canine model. Journal of Magnetic Resonance Imaging, 2013, 38, 189-197.	3.4	23
12	Software Toolbox for Low-Frequency Conductivity and Current Density Imaging Using MRI. IEEE Transactions on Biomedical Engineering, 2017, 64, 2505-2514.	4.2	20
13	Simultaneous imaging of dual-frequency electrical conductivity using a combination of MREIT and MREPT. Magnetic Resonance in Medicine, 2014, 71, 200-208.	3.0	17
14	Frequency-Dependent Conductivity Contrast for Tissue Characterization Using a Dual-Frequency Range Conductivity Mapping Magnetic Resonance Method. IEEE Transactions on Medical Imaging, 2015, 34, 507-513.	8.9	16
15	Simulations and phantom evaluations of magnetic resonance electrical impedance tomography (MREIT) for breast cancer detection. Journal of Magnetic Resonance, 2013, 230, 40-49.	2.1	15
16	Three-dimensional MREIT simulator of static bioelectromagnetism and MRI. Biomedical Engineering Letters, 2011, 1, 129-136.	4.1	14
17	Reconstruction of dual-frequency conductivity by optimization of phase map in MREIT and MREPT. BioMedical Engineering OnLine, 2014, 13, 24.	2.7	13
18	Extracellular Total Electrolyte Concentration Imaging for Electrical Brain Stimulation (EBS). Scientific Reports, 2018, 8, 290.	3.3	12

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19	Low-frequency dominant electrical conductivity imaging of in vivo human brain using high-frequency conductivity at Larmor-frequency and spherical mean diffusivity without external injection current. <i>NeuroImage</i> , 2021, 225, 117466.	4.2	12
20	<i>In Vivo</i> Measurement of Brain Tissue Response After Irradiation: Comparison of T2 Relaxation, Apparent Diffusion Coefficient, and Electrical Conductivity. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 2779-2784.	8.9	11
21	Validation of conductivity tensor imaging using giant vesicle suspensions with different ion mobilities. <i>BioMedical Engineering OnLine</i> , 2020, 19, 35.	2.7	11
22	High-frequency electrical properties tomography at 9.4T as a novel contrast mechanism for brain tumors. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 382-392.	3.0	11
23	Radiofrequency ablation lesion detection using MR-based electrical conductivity imaging: A feasibility study of <i>ex vivo</i> liver experiments. <i>International Journal of Hyperthermia</i> , 2013, 29, 643-652.	2.5	10
24	Alternating steady state free precession for estimation of current-induced magnetic flux density: A feasibility study. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 2009-2019.	3.0	10
25	Focused Current Density Imaging Using Internal Electrode in Magnetic Resonance Electrical Impedance Tomography (MREIT). <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 1938-1946.	4.2	9
26	In vivo mapping of current density distribution in brain tissues during deep brain stimulation (DBS). <i>AIP Advances</i> , 2017, 7, 015004.	1.3	9
27	Improved conductivity image of human lower extremity using MREIT with chemical shift artifact correction. <i>Biomedical Engineering Letters</i> , 2012, 2, 62-68.	4.1	8
28	Temporal Evolution of MRI Characteristics in Dogs with Collagenase-Induced Intracerebral Hemorrhage. <i>Comparative Medicine</i> , 2015, 65, 517-25.	1.0	8
29	Experimental evaluation of electrical conductivity imaging of anisotropic brain tissues using a combination of diffusion tensor imaging and magnetic resonance electrical impedance tomography. <i>AIP Advances</i> , 2016, 6, .	1.3	7
30	Longitudinal Bone Growth Stimulating Effect of Allium macrostemon in Adolescent Female Rats. <i>Molecules</i> , 2020, 25, 5449.	3.8	7
31	Extracellular electrical conductivity property imaging by decomposition of high-frequency conductivity at Larmor-frequency using multi-b-value diffusion-weighted imaging. <i>PLoS ONE</i> , 2020, 15, e0230903.	2.5	7
32	Experimental validations of in vivo human musculoskeletal tissue conductivity images using MR-based electrical impedance tomography. <i>Bioelectromagnetics</i> , 2014, 35, 363-372.	1.6	6
33	Sub-millimeter resolution electrical conductivity images of brain tissues using magnetic resonance-based electrical impedance tomography. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	6
34	MR-Based Electrical Conductivity Imaging of Liver Fibrosis in an Experimental Rat Model. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 53, 554-563.	3.4	6
35	A Case of Renal Artery Stenosis in a Child Confirmed by Multidetector Computed Tomographic Angiography. <i>Pediatric Cardiology</i> , 2011, 32, 702-703.	1.3	5
36	In vivo magnetic resonance electrical impedance tomography of canine brain: Disease model study of ischemia and abscess. <i>Biomedical Engineering Letters</i> , 2011, 1, 56-61.	4.1	4

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37	Optimization of magnetic flux density for fast MREIT conductivity imaging using multi-echo interleaved partial fourier acquisitions. <i>BioMedical Engineering OnLine</i> , 2013, 12, 82.	2.7	4
38	Anisotropic conductivity tensor imaging for transcranial direct current stimulation (tDCS) using magnetic resonance diffusion tensor imaging (MR-DTI). <i>PLoS ONE</i> , 2018, 13, e0197063.	2.5	4
39	Decomposition of high-frequency electrical conductivity into extracellular and intracellular compartments based on two-compartment model using low-to-high multi-b diffusion MRI. <i>BioMedical Engineering OnLine</i> , 2021, 20, 29.	2.7	4
40	Comparison of Five Conductivity Tensor Models and Image Reconstruction Methods Using MRI. <i>Molecules</i> , 2021, 26, 5499.	3.8	4
41	Regional Analysis of Liver Surface Nodularity in a Single Axial <scp>MR</scp> Image for Staging Liver Fibrosis. <i>Journal of Magnetic Resonance Imaging</i> , 2022, 56, 1781-1791.	3.4	4
42	Conductivity imaging of human lower extremity using MREIT with multi-echo pulse sequence and 3 mA imaging current. , 2011, , .		3
43	A Case of Type II Membranoproliferative Glomerulonephritis Detected by School Urinary Screening Tests. <i>Journal of the Korean Society of Pediatric Nephrology</i> , 2010, 14, 79.	0.1	3
44	Electrical conductivity-based contrast imaging for characterizing prostatic tissues: in vivo animal feasibility study. <i>BMC Urology</i> , 2019, 19, 95.	1.4	2
45	High-frequency conductivity at Larmor-frequency in human brain using moving local window multilayer perceptron neural network. <i>PLoS ONE</i> , 2021, 16, e0251417.	2.5	2
46	Realistic Electric Field Mapping of Anisotropic Muscle During Electrical Stimulation Using a Combination of Water Diffusion Tensor and Electrical Conductivity. <i>International Neurology Journal</i> , 2017, 21, S32-38.	1.2	2
47	Image-Based Evaluation of Irradiation Effects in Brain Tissues by Measuring Absolute Electrical Conductivity Using MRI. <i>Cancers</i> , 2021, 13, 5490.	3.7	2
48	Three-dimensional MREIT simulator (MREITSim). , 2011, , .		1
49	Feasibility of dual-frequency conductivity imaging using MREIT and MREPT. , 2011, , .		1
50	In vivo MREIT conductivity imaging of canine brain to evaluate ischemia and abscess. , 2011, , .		1
51	Modelling of electromagnetic field distribution for optimising electrode configurations in liver MR-based electrical impedance tomography. <i>Electronics Letters</i> , 2014, 50, 1273-1275.	1.0	1
52	Evaluation of three-dimensional anisotropic head model for mapping realistic electromagnetic fields of brain tissues. <i>AIP Advances</i> , 2015, 5, 087152.	1.3	1
53	Magnetic flux density measurement through phase decomposition using non-interleaved scan in MREIT. <i>Electronics Letters</i> , 2015, 51, 890-892.	1.0	1
54	Analysis of the bio-psychological characteristics of Sasang typology in Korean preschool children using the ponderal index and the temperament and character inventory. <i>Journal of Complementary and Integrative Medicine</i> , 2021, 18, 175-183.	0.9	1

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55	Evaluation of electrical conductivity and anisotropy in muscle tissues using conductivity tensor imaging (CTI). AIP Advances, 2020, 10, 115115.	1.3	1
56	Enhanced magnetic flux density mapping using coherent steady state equilibrium signal in MREIT. AIP Advances, 2016, 6, 035121.	1.3	0
57	MR-Based Electrical Conductivity Imaging of Liver Fibrosis in an Experimental Rat Model. Journal of Magnetic Resonance Imaging, 2021, 53, spcone.	3.4	0
58	Identification of Brain Damage after Seizures Using an MR-Based Electrical Conductivity Imaging Method. Diagnostics, 2021, 11, 569.	2.6	0