

Announcement

1657 Young Investigator Awards Winners

Reviews

1660 Renal MRI: From Nephron to NMR Signal

Octavia Bane, Erdmann Seeliger, Eleanor Cox, Julia Stabinska, Eric Bechler, Sara Lewis, LaTonya J. Hickson, Sue Francis, Eric Sigmund, and Thoralf Niendorf

1680 The 2021 WHO Classification for Gliomas and Implications on Imaging Diagnosis: Part 3—Summary of Imaging Findings on Glioneuronal and Neuronal Tumors

Yae Won Park, Philipp Vollmuth, Martha Foltyn-Dumitru, Felix Sahn, Kyu Sung Choi, Ji Eun Park, Sung Soo Ahn, Jong Hee Chang, and Se Hoon Kim

Research Articles

Pelvis

1703 Quantification of Endometrial Fibrosis Using Noninvasive MRI T2 Mapping: Initial Findings

Nan Zhou, Hui Zhu, Peipei Jiang, Qing Hu, Yongjing Feng, Weibo Chen, Kefeng Zhou, Yali Hu, and Zhengyang Zhou

Interventional

1714 Myeloperoxidase-Sensitive Magnetic Resonance Imaging Assesses Inflammatory Activation State in Experimental Mouse Acute Gout

Chunrong Zhu, Yunhe Li, Qiao Deng, Xinxin Liu, Qian Xia, Lei Zhong, Zhiyang Xia, Qiyue ShanZhou, Jun Lei, and Jiang Zhu

Editorial

1723 Editorial for "Myeloperoxidase-Sensitive Magnetic Resonance Imaging Assesses Inflammatory Activation State in Experimental Mouse Acute Gout"

Zhan Xu

Breast

1725 Intraobserver and Interobserver Reproducibility of Breast Diffusion-Weighted Imaging Quantitative Parameters: Readout-Segmented vs. Single-Shot Echo-Planar Imaging

Yiqi Hu, Qilan Hu, Chenao Zhan, Ting Yin, and Tao Ai

Editorial

1737 Editorial for "Intraobserver and Interobserver Reproducibility of Breast Diffusion-Weighted Imaging Quantitative Parameters: Readout-Segmented vs. Single-Shot Echo-Planar Imaging"

Stephane Loubrie, Summer Batasin, and Rebecca Rakow-Penner

1739 Deep Learning-Based Segmentation of Locally Advanced Breast Cancer on MRI in Relation to Residual Cancer Burden: A Multi-Institutional Cohort Study

Markus H. A. Janse, Liselore M. Janssen, Bas H. M. van der Velden, Maaïke R. Moman, Elian J. M. Wolters-van der Ben, Marc C. J. M. Kock, Max A. Viergever, Paul J. van Diest, and Kenneth G. A. Gilhuijs

Editorial

1750 Editorial for "Deep Learning-Based Segmentation of Locally Advanced Breast Cancer on MRI in Relation to Residual Cancer Burden: A Multi-Institutional Cohort Study"

Cory R. Wyatt and Wei Huang

1752 Feasibility of Quantitative MRI Using 3D-QALAS for Discriminating Immunohistochemical Status in Invasive Ductal Carcinoma of the Breast

Maki Amano, Shohei Fujita, Naoyuki Takei, Katsuhiko Sano, Akihiko Wada, Kanako Sato, Junko Kikuta, Yoshiki Kuwatsuru, Rina Tachibana, Towa Sekine, Yoshiya Horimoto, and Shigeki Aoki

Editorial

1760 Editorial for "Feasibility of Quantitative MRI using 3D-QALAS for Discriminating Immunohistochemical Status in Invasive Ductal Carcinoma of the Breast"

Jonn Terje Geitung

Technical

1762 LSW-Net: Lightweight Deep Neural Network Based on Small-World properties for Spine MR Image Segmentation

Siyuan He, Qi Li, Xianda Li, and Mengchao Zhang

Cardiac

1777 Low Prevalence of Late Myocardial Injury on Cardiac MRI Following COVID-19 Infection

Ady Orbach, Nilesh R. Ghugre, Labonny Biswas, Kim A. Connelly, Adrienne Chan, Bradley H. Strauss, Graham A. Wright, and Idan Roifman

- 1785 Image Improved Intravoxel Incoherent Motion MRI With Optimized Trigger Delays Based on Strain Curve Analysis to Evaluate Myocardial Microvascular Dysfunction of Exertional Heat Illness**
Jun Zhang, Shutian Xu, Song Luo, Xiang Kong, Qingqing Wang, Yan Ma, Weiqiang Dou, Li Qi, Zhihong Liu, and Long Jiang Zhang
- 1797 Image-Based Biological Heart Age Estimation Reveals Differential Aging Patterns Across Cardiac Chambers**
Ahmed M. Salih, Esmeralda Ruiz Pujadas, Víctor M. Campello, Celeste McCracken, Nicholas C. Harvey, Stefan Neubauer, Karim Lekadir, Thomas E. Nichols, Steffen E. Petersen, and Zahra Raisi-Estabragh
- Editorial** **1813 Editorial for "Image-Based Biological Heart Age Estimation Reveals Differential Aging Patterns Across Cardiac Chambers"**
Hideo Arai, Masateru Kawakubo, and Toshiaki Kadokami
- 1815 Cardiac MRI-Based Assessment of Myocardial Injury in Asymptomatic People Living With Human Immunodeficiency Virus: Correlation With nadir CD4 Count**
Xin Peng, Haibo Ding, Huaibi Huo, Yue Zheng, Jie Zhou, Han Li, Yang Hou, Xiaolin Li, Wenqing Geng, Hong Shang, and Ting Liu
- Editorial** **1824 Editorial for "Cardiac MRI-Based Assessment of Myocardial Injury in Asymptomatic People Living With Human Immunodeficiency Virus: Correlation With nadir CD4 Count"**
Leonardo Roeber, Gary Tse, and Giuseppe Biondi-Zoccai
- Musculoskeletal** **1826 The Impact of Fatty Infiltration on MRI Segmentation of Lower Limb Muscles in Neuromuscular Diseases: A Comparative Study of Deep Learning Approaches**
Marc-Adrien Hostin, Augustin C. Ogier, Constance P. Michel, Yann Le Fur, Maxime Guye, Shahram Attarian, Etienne Fortanier, Marc-Emmanuel Bellemare, and David Bendahan
- Editorial** **1836 Editorial for "The Impact of Fatty Infiltration on MRI Segmentation of Lower Limb Muscles in Neuromuscular Diseases: A Comparative Study of Deep Learning Approaches"**
Christopher J. Hanrahan
- Head and Neck** **1838 Brain-Tumor Interface-Based MRI Radiomics Models to Determine EGFR Mutation, Response to EGFR-TKI and T790M Resistance Mutation in Non-Small Cell Lung Carcinoma Brain Metastasis**
Ying Fan, Xinti Wang, Chunna Yang, Huanhuan Chen, Huan Wang, Xiaoyu Wang, Shaoping Hou, Lihua Wang, Yahong Luo, Xianzheng Sha, Huazhe Yang, Tao Yu, and Xiran Jiang
- Editorial** **1848 Editorial for "Brain-Tumor Interface-Based MRI Radiomics Models to Determine EGFR Mutation, Response to EGFR-TKI and T790M Resistance Mutation in Non-Small Cell Lung Carcinoma Brain Metastasis"**
Qingfei Luo and Xiaohong Joe Zhou
- 1850 The Consistence of Dynamic Contrast-Enhanced MRI and Filter-Exchange Imaging in Measuring Water Exchange Across the Blood–Brain Barrier in High-Grade Glioma**
Zejun Wang, Bao Wang, Zhaoqing Li, Guangxu Han, Cheng Meng, Bingjie Jiao, Kaiyue Guo, Yi-Cheng Hsu, Yi Sun, Yingchao Liu, and Ruiliang Bai
- Editorial** **1861 Editorial for "The Consistence of Dynamic-Contrast-Enhanced MRI and Filter-Exchange Imaging in Measuring Water Exchange Across the Blood–Brain Barrier in High-Grade Glioma"**
Je Yeong Sone, Janne Koskimäki, and Romuald Girard
- Neuro** **1863 Association Between MRI-Assessed Patterns of Connectome Gradient and Gene-Expression Profiles in Two Independent Patient Cohorts With Hepatitis B Virus-Related Cirrhosis**
Shiwei Lin, Rongfeng Qi, Xiaoshan Lin, Shengli Chen, Longjiang Zhang, and Yingwei Qiu
- 1875 Effect of General Anesthesia on MR Optic Nerve Sheath Diameter in the Pediatric Population**
Israel Cohen, Matan Kraus, Gahl Greenberg, Chen Hoffmann, and Shai Shrot
- 1882 Value of Radiomic Analysis Combined With Diffusion Tensor Imaging in Early Diagnosis of HIV-Associated Neurocognitive Disorders**
Yu Qi, Wei Wang, Bo Rao, Xue Yang, Wen Yu, Jia-ying Li, Zhi-chao Sun, Feini Zhou, Yuan-zhe Li, Yi-fan Guo, Yi Wang, and Hong-jun Li
- 1892 Mean Arterial Pressure and Cerebral Hemodynamics Across The Lifespan: A Cross-Sectional Study From Human Connectome Project-Aging**
Ezgi Yetim, John Jacoby, Nikou L. Damestani, Allison E. Lovely, David H. Salat, and Meher R. Juttukonda

- Editorial** 1901 **Editorial for "Mean Arterial Pressure and Cerebral Hemodynamics Across the Lifespan: A Cross-sectional Study From Human Connectome Project-Aging"**
Yu Guo
- 1903 **Venous Blood Oxygenation Measurements Using TRUST and T2-TRIR MRI During Hypoxic and Hypercapnic Gas Challenges**
Koen P. A. Baas, Chau Vu, Jian Shen, Bram F. Coolen, Bart J. Biemond, Gustav J. Strijkers, John C. Wood, and Aart J. Nederveen
- Editorial** 1915 **Editorial for "Venous Blood Oxygenation Measurements Using TRUST and T2-TRIR MRI During Hypoxic and Hypercapnic Gas Challenges"**
Raman Saggi
- Editorial** 1917 **Editorial for "Characterizing Streamline Count Invariant Graph Measures of Structural Connectomes"**
Pim Pullens
- Abdomen** 1918 **An MRI-Based Prognostic Stratification System for Medical Decision-Making of Multinodular Hepatocellular Carcinoma Patients Beyond the Milan Criteria**
Fei Wu, Xiaoyan Ni, Haitao Sun, Changwu Zhou, Peng Huang, Yuyao Xiao, Li Yang, Chun Yang, and Mengsu Zeng
- 1930 **A Cox Nomogram for Assessing Recurrence Free Survival in Hepatocellular Carcinoma Following Surgical Resection Using Dynamic Contrast-Enhanced MRI Radiomics**
Xinshan Cao, Haoran Yang, Xin Luo, Linxuan Zou, Qiang Zhang, Qilin Li, Juntao Zhang, Xiangfeng Li, Yan Shi, and Chenwang Jin
- 1942 **Diagnostic Performance of the 2018 EASL vs. LI-RADS for Hepatocellular Carcinoma Using CT and MRI: A Systematic Review and Meta-Analysis of Comparative Studies**
Jaeseung Shin, Sunyoung Lee, Ja Kyung Yoon, and Yun Ho Roh
- Editorial** 1951 **Editorial for "Diagnostic Performance of the 2018 EASL vs. LI-RADS for Hepatocellular Carcinoma Using CT and MRI: A Systematic Review and Meta-Analysis of Comparative Studies"**
Victoria Chernyak
- 1954 **Perfusion and T₂ Relaxation Time as Predictors of Severity and Outcome in Sepsis-Associated Acute Kidney Injury: A Preclinical MRI Study**
Wan-Ting Zhao, Karl-Heinz Herrmann, Renat Sibgatulin, Ali Nahardani, Martin Krämer, Barbara Heitplatz, Veerle van Marck, Stefan Reuter, Jürgen R. Reichenbach, and Verena Hoerr
- Editorial** 1964 **Editorial for "Perfusion and T₂ Relaxation Time as Predictors of Severity and Outcome in Sepsis-Associated Acute Kidney Injury: A Preclinical MRI Study"**
Frank G. Zöllner, Anna Caroli, and Nicholas M. Selby
- Pediatrics** 1966 **Presurgical MRI-Based Radiomics Models for Predicting Cerebellar Mutism Syndrome in Children With Posterior Fossa Tumors**
Wei Yang, Ping Yang, Yiming Li, Jiahui Chen, Jiashu Chen, Yingjie Cai, Kaiyi Zhu, Hong Zhang, Yanhua Li, Yun Peng, and Ming Ge
- 1977 **Development and Validation of a Combined MRI Radiomics, Imaging and Clinical Parameter-Based Machine Learning Model for Identifying Idiopathic Central Precocious Puberty in Girls**
Pinfa Zou, Lingfeng Zhang, Ruifang Zhang, Chenyan Wang, XingTong Lin, Can Lai, Yi Lu, and Zhihan Yan
- Editorial** 1988 **Editorial for "Development and Validation of a Combined MRI Radiomics, Imaging and Clinical Parameter Based Machine Learning Model for Identifying Idiopathic Central Precocious Puberty in Girls"**
Eva S. Peper and Jessica A. M. Bastiaansen

Letters to the Editor

- 1990 **In Vivo Cardiac Diffusion Imaging Without Motion-Compensation Leads to Unreasonably High Diffusivity**
Kevin Moulin, Christian T. Stoeck, Leon Axel, Jordi Broncano, Pierre Croisille, Erica Dall'Armellina, Daniel B. Ennis, Pedro F. Ferreira, Alexander Gotschy, Santiago Miro, Jurgen E. Schneider, Andrew D. Scott, David E. Sosnovik, Irvin Teh, Cyril Tous, Elizabeth M. Tunnicliffe, Magalie Viallon, and Christopher Nguyen
- 1992 **Response to "In Vivo Cardiac Diffusion Imaging Without Motion-Compensation Leads to Unreasonably High Diffusivity"**
Xiaorui Xiang, Xiaoqiang Lin, Baoteng Zhang, Chen Lin, Junqiang Lei, Shunlin Guo, and Shihua Zhao