# Riccardo Lattanzi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6338868/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 59 papers | 2,054 citations | 201674 27 h-index | 243625 44 g-index |
| 61 all docs | 61 docs citations | 61 times ranked | 2250 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Comprehensive quantification of signalâ€toâ€noise ratio and gâ€factor for imageâ€based and kâ€spaceâ€based parallel imaging reconstructions. Magnetic Resonance in Medicine, 2008, 60, 895-907. | 3.0 | 348 |
| 2 | Low rank alternating direction method of multipliers reconstruction for MR fingerprinting. Magnetic Resonance in Medicine, 2018, 79, 83-96. | 3.0 | 148 |
| 3 | Electrodynamic constraints on homogeneity and radiofrequency power deposition in multiple coil excitations. Magnetic Resonance in Medicine, 2009, 61, 315-334. | 3.0 | 100 |
| 4 | Ideal current patterns yielding optimal signalâ€toâ€noise ratio and specific absorption rate in magnetic resonance imaging: Computational methods and physical insights. Magnetic Resonance in Medicine, 2012, 68, 286-304. | 3.0 | 98 |
| 5 | Comparison of fitting methods and bâ€value sampling strategies for intravoxel incoherent motion in breast cancer. Magnetic Resonance in Medicine, 2015, 74, 1077-1085. | 3.0 | 95 |
| 6 | Recommendations towards standards for quantitative MRI (qMRI) and outstanding needs. Journal of Magnetic Resonance Imaging, 2019, 49, e26-e39. | 3.4 | 67 |
| 7 | Dependence of and field patterns of surface coils on the electrical properties of the sample and the <scp>MR</scp> operating frequency. Concepts in Magnetic Resonance Part B, 2016, 46, 25-40. | 0.7 | 66 |
| 8 | Performance evaluation of a 32â€element head array with respect to the ultimate intrinsic SNR. NMR in Biomedicine, 2010, 23, 142-151. | 2.8 | 53 |
| 9 | Magnetization transfer in magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2020, 84, 128-141. | 3.0 | 52 |
| 10 | Design of a nested eightâ€channel sodium and fourâ€channel proton coil for 7T knee imaging. Magnetic Resonance in Medicine, 2013, 70, 259-268. | 3.0 | 51 |
| 11 | Approaching ultimate intrinsic signalâ€toâ€noise ratio with loop and dipole antennas. Magnetic Resonance in Medicine, 2018, 79, 1789-1803. | 3.0 | 49 |
| 12 | Hip-Op: an innovative software to plan total hip replacement surgery. Informatics for Health and Social Care, 2002, 27, 71-83. | 1.0 | 46 |
| 13 | Specialised CT scan protocols for 3-D pre-operative planning of total hip replacement. Medical Engineering and Physics, 2004, 26, 237-245. | 1.7 | 46 |
| 14 | Rapid Radial T<sub>1</sub> and T<sub>2</sub> Mapping of the Hip Articular Cartilage With Magnetic Resonance Fingerprinting. Journal of Magnetic Resonance Imaging, 2019, 50, 810-815. | 3.4 | 46 |
| 15 | A new method to analyze dGEMRIC measurements in femoroacetabular impingement: preliminary validation against arthroscopic findings. Osteoarthritis and Cartilage, 2012, 20, 1127-1133. | 1.3 | 44 |
| 16 | Detection of cartilage damage in femoroacetabular impingement with standardized dGEMRIC at 3ÂT. Osteoarthritis and Cartilage, 2014, 22, 447-456. | 1.3 | 42 |
| 17 | Synthesized tissueâ€equivalent dielectric phantoms using salt and polyvinylpyrrolidone solutions. Magnetic Resonance in Medicine, 2018, 80, 413-419. | 3.0 | 40 |
| 18 | Approaching ultimate intrinsic <scp>SNR</scp> in a uniform spherical sample with finite arrays of loop coils. Concepts in Magnetic Resonance Part B, 2014, 44, 53-65. | 0.7 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Exploring the sensitivity of magnetic resonance fingerprinting to motion. Magnetic Resonance Imaging, 2018, 54, 241-248. | 1.8 | 39 |
| 20 | Comparison of a 28â€channel receive array coil and quadrature volume coil for morphologic imaging and T2 mapping of knee cartilage at 7T. Journal of Magnetic Resonance Imaging, 2012, 35, 441-448. | 3.4 | 35 |
| 21 | Whole body traveling wave magnetic resonance imaging at high field strength: Homogeneity, efficiency, and energy deposition as compared with traditional excitation mechanisms. Magnetic Resonance in Medicine, 2012, 67, 1183-1193. | 3.0 | 33 |
| 22 | Demystifying Radial Imaging of the Hip. Radiographics, 2013, 33, E97-E112. | 3.3 | 33 |
| 23 | Maximum efficiency radiofrequency shimming: Theory and initial application for hip imaging at 7 tesla. Magnetic Resonance in Medicine, 2013, 69, 1379-1388. | 3.0 | 31 |
| 24 | MRI of the Hip for the evaluation of femoroacetabular impingement; past, present, and future. Journal of Magnetic Resonance Imaging, 2015, 41, 558-572. | 3.4 | 30 |
| 25 | Multicompartment magnetic resonance fingerprinting. Inverse Problems, 2018, 34, 094005. | 2.0 | 30 |
| 26 | Labral and cartilage abnormalities in young patients with hip pain: accuracy of 3-Tesla indirect MR arthrography. Skeletal Radiology, 2015, 44, 97-105. | 2.0 | 29 |
| 27 | Improved detection of fMRI activation in the cerebellum at 7T with dielectric pads extending the imaging region of a commercial head coil. Journal of Magnetic Resonance Imaging, 2018, 48, 431-440. | 3.4 | 29 |
| 28 | Noninvasive Estimation of Electrical Properties From Magnetic Resonance Measurements via Global Maxwell Tomography and Match Regularization. IEEE Transactions on Biomedical Engineering, 2020, 67, 3-15. | 4.2 | 29 |
| 29 | Transverse slot antennas for high field MRI. Magnetic Resonance in Medicine, 2018, 80, 1233-1242. | 3.0 | 27 |
| 30 | Radiofrequency energy deposition and radiofrequency power requirements in parallel transmission with increasing distance from the coil to the sample. Magnetic Resonance in Medicine, 2016, 75, 423-432. | 3.0 | 22 |
| 31 | Hybrid-state free precession in nuclear magnetic resonance. Communications Physics, 2019, 2, . | 5.3 | 22 |
| 32 | Optimized quantification of spin relaxation times in the hybrid state. Magnetic Resonance in Medicine, 2019, 82, 1385-1397. | 3.0 | 21 |
| 33 | The â€œLoopoleâ€•Antenna: A Hybrid Coil Combining Loop and Electric Dipole Properties for Ultra-High-Field MRI. Concepts in Magnetic Resonance Part B, 2020, 2020, 1-9. | 0.7 | 18 |
| 34 | Effect of display modality on spatial accuracy of orthopaedic surgery pre-operative planning applications. Informatics for Health and Social Care, 2002, 27, 21-32. | 1.0 | 17 |
| 35 | Sizeâ€adaptable â€œTrellisâ€•structure for tailored MRI coil arrays. Magnetic Resonance in Medicine, 2019, 81, 3406-3415. | 3.0 | 17 |
| 36 | A New Method for Cartilage Evaluation in Femoroacetabular Impingement Using Quantitative T2 Magnetic Resonance Imaging: Preliminary Validation against Arthroscopic Findings. Cartilage, 2019, , 194760351987085. | 2.7 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | A B<sub>1</sub>â€insensitive high resolution 2D T<sub>1</sub> mapping pulse sequence for dGEMRIC of the HIP at 3 Tesla. Magnetic Resonance in Medicine, 2011, 66, 348-355. | 3.0 | 13 |
| 38 | Magnetic-Resonance-Based Electrical Property Mapping Using Global Maxwell Tomography With an 8-Channel Head Coil at 7 Tesla: A Simulation Study. IEEE Transactions on Biomedical Engineering, 2021, 68, 236-246. | 4.2 | 13 |
| 39 | Approaching ultimate intrinsic specific absorption rate in radiofrequency shimming using highâ€permittivity materials at 7 Tesla. Magnetic Resonance in Medicine, 2018, 80, 391-399. | 3.0 | 11 |
| 40 | Manipulating transmit and receive sensitivities of radiofrequency surface coils using shielded and unshielded high-permittivity materials. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 355-366. | 2.0 | 11 |
| 41 | Effect of radiofrequency shield diameter on signalâ€toâ€noise ratio at ultraâ€high field MRI. Magnetic Resonance in Medicine, 2021, 85, 3522-3530. | 3.0 | 11 |
| 42 | Global maxwell tomography: A novel technique for electrical properties mapping based on MR measurements and volume integral equation formulations. , 2016, , . | | 10 |
| 43 | Compression of Volume-Surface Integral Equation Matrices via Tucker Decomposition for Magnetic Resonance Applications. IEEE Transactions on Antennas and Propagation, 2022, 70, 459-471. | 5.1 | 10 |
| 44 | 29-Channel receive-only dense dipole head array for 7T MRI. , 2017, , . | | 9 |
| 45 | An analytic expression for the ultimate intrinsic SNR in a uniform sphere. Magnetic Resonance in Medicine, 2018, 80, 2256-2266. | 3.0 | 9 |
| 46 | A formalism to investigate the optimal transmit efficiency in radiofrequency shimming. NMR in Biomedicine, 2020, 33, e4383. | 2.8 | 9 |
| 47 | Disentangling the effects of high permittivity materials on signal optimization and sample noise reduction via ideal current patterns. Magnetic Resonance in Medicine, 2019, 81, 2746-2758. | 3.0 | 7 |
| 48 | Scattering from Spheres: A New Look into an Old Problem. Electronics (Switzerland), 2021, 10, 216. | 3.1 | 6 |
| 49 | Twentyâ€fourâ€“channel highâ€impedance glove array for hand and wrist MRI at 3T. Magnetic Resonance in Medicine, 2022, 87, 2566-2575. | 3.0 | 6 |
| 50 | Displacement current distribution on a high dielectric constant helmet and its effect on RF field at 10.5 T (447 MHz). Magnetic Resonance in Medicine, 2021, 86, 3292-3303. | 3.0 | 5 |
| 51 | Phase unwinding for dictionary compression with multiple channel transmission in magnetic resonance fingerprinting. Magnetic Resonance Imaging, 2018, 49, 32-38. | 1.8 | 4 |
| 52 | Seeking a Widely Adoptable Practical Standard to Estimate Signalâ€toâ€Noise Ratio in Magnetic Resonance Imaging for Multipleâ€Coil Reconstructions. Journal of Magnetic Resonance Imaging, 2021, 54, 1952-1964. | 3.4 | 4 |
| 53 | Global Maxwell Tomography using an 8-channel radiofrequency coil: simulation results for a tissue-mimicking phantom at 7T. , 2019, , . | | 2 |
| 54 | Novel Numerical Basis Sets for Electromagnetic Field Expansion in Arbitrary Inhomogeneous Objects. IEEE Transactions on Antennas and Propagation, 2022, 70, 8227-8241. | 5.1 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | A Hybrid Volume-Surface Integral Equation Method for Rapid Electromagnetic Simulations in MRI. IEEE Transactions on Biomedical Engineering, 2023, 70, 105-114. | 4.2 | 2 |
| 56 | Design and construction of a tissue-mimicking phantom to validate electrical properties mapping techniques based on magnetic resonance. , 2015, , . | | 1 |
| 57 | Mitigation of B1+ inhomogeneity using spatially selective excitation with jointly designed quadratic spatial encoding magnetic fields and RF shimming. Magnetic Resonance in Medicine, 2017, 78, 577-587. | 3.0 | 1 |
| 58 | MRI of the Hip for the evaluation of femoroacetabular impingement; past, present, and future. Journal of Magnetic Resonance Imaging, 2015, 41, spcone-spcone. | 3.4 | 0 |
| 59 | Electromagnetic Modeling of High-Channel Count Head Receiver Arrays for ultra-High Field MRI. , 2021, , . | | 0 |