

# Riccardo Lattanzi

## List of Publications by Year in descending order

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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	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
2	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
3	Twenty-four-channel high-impedance glove array for hand and wrist MRI at 3T. Magnetic Resonance in Medicine, 2022, 87, 2566-2575.	3.0	6
4	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
5	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
6	Scattering from Spheres: A New Look into an Old Problem. Electronics (Switzerland), 2021, 10, 216.	3.1	6
7	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
8	Seeking a Widely Adoptable Practical Standard to Estimate Signal-to-Noise Ratio in Magnetic Resonance Imaging for Multiple-Coil Reconstructions. Journal of Magnetic Resonance Imaging, 2021, 54, 1952-1964.	3.4	4
9	Electromagnetic Modeling of High-Channel Count Head Receiver Arrays for ultra-High Field MRI. , 2021, , .		0
10	Effect of radiofrequency shield diameter on signal-to-noise ratio at ultra-high field MRI. Magnetic Resonance in Medicine, 2021, 85, 3522-3530.	3.0	11
11	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
12	Magnetization transfer in magnetic resonance fingerprinting. Magnetic Resonance in Medicine, 2020, 84, 128-141.	3.0	52
13	A formalism to investigate the optimal transmit efficiency in radiofrequency shimming. NMR in Biomedicine, 2020, 33, e4383.	2.8	9
14	The "Loopole" 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
15	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
16	Recommendations towards standards for quantitative MRI (qMRI) and outstanding needs. Journal of Magnetic Resonance Imaging, 2019, 49, e26-e39.	3.4	67
17	Hybrid-state free precession in nuclear magnetic resonance. Communications Physics, 2019, 2, .	5.3	22
18	Optimized quantification of spin relaxation times in the hybrid state. Magnetic Resonance in Medicine, 2019, 82, 1385-1397.	3.0	21

#	ARTICLE	IF	CITATIONS
19	Global Maxwell Tomography using an 8-channel radiofrequency coil: simulation results for a tissue-mimicking phantom at 7T. , 2019, , .		2
20	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
21	Size-adaptable Trellis-structure for tailored MRI coil arrays. Magnetic Resonance in Medicine, 2019, 81, 3406-3415.	3.0	17
22	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
23	An analytic expression for the ultimate intrinsic SNR in a uniform sphere. Magnetic Resonance in Medicine, 2018, 80, 2256-2266.	3.0	9
24	Transverse slot antennas for high field MRI. Magnetic Resonance in Medicine, 2018, 80, 1233-1242.	3.0	27
25	Phase unwinding for dictionary compression with multiple channel transmission in magnetic resonance fingerprinting. Magnetic Resonance Imaging, 2018, 49, 32-38.	1.8	4
26	Approaching ultimate intrinsic specific absorption rate in radiofrequency shimming using high-permittivity materials at 7 Tesla. Magnetic Resonance in Medicine, 2018, 80, 391-399.	3.0	11
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	Low rank alternating direction method of multipliers reconstruction for MR fingerprinting. Magnetic Resonance in Medicine, 2018, 79, 83-96.	3.0	148
29	Approaching ultimate intrinsic signal-to-noise ratio with loop and dipole antennas. Magnetic Resonance in Medicine, 2018, 79, 1789-1803.	3.0	49
30	Synthesized tissue-equivalent dielectric phantoms using salt and polyvinylpyrrolidone solutions. Magnetic Resonance in Medicine, 2018, 80, 413-419.	3.0	40
31	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
32	Exploring the sensitivity of magnetic resonance fingerprinting to motion. Magnetic Resonance Imaging, 2018, 54, 241-248.	1.8	39
33	Multicompartment magnetic resonance fingerprinting. Inverse Problems, 2018, 34, 094005.	2.0	30
34	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
35	29-Channel receive-only dense dipole head array for 7T MRI. , 2017, , .		9
36	Global maxwell tomography: A novel technique for electrical properties mapping based on MR measurements and volume integral equation formulations. , 2016, , .		10

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37	Dependence of and field patterns of surface coils on the electrical properties of the sample and the <sc>MR</sc> operating frequency. Concepts in Magnetic Resonance Part B, 2016, 46, 25-40.	0.7	66
38	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
39	Design and construction of a tissue-mimicking phantom to validate electrical properties mapping techniques based on magnetic resonance. , 2015, , .		1
40	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
41	Comparison of fitting methods and b&Evalue sampling strategies for intravoxel incoherent motion in breast cancer. Magnetic Resonance in Medicine, 2015, 74, 1077-1085.	3.0	95
42	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
43	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
44	Detection of cartilage damage in femoroacetabular impingement with standardized dGEMRIC at 3&AT. Osteoarthritis and Cartilage, 2014, 22, 447-456.	1.3	42
45	Approaching ultimate intrinsic <sc>SNR</sc> in a uniform spherical sample with finite arrays of loop coils. Concepts in Magnetic Resonance Part B, 2014, 44, 53-65.	0.7	39
46	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
47	Design of a nested eight&Echannel sodium and four&Echannel proton coil for 7T knee imaging. Magnetic Resonance in Medicine, 2013, 70, 259-268.	3.0	51
48	Demystifying Radial Imaging of the Hip. Radiographics, 2013, 33, E97-E112.	3.3	33
49	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
50	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
51	Ideal current patterns yielding optimal signal&Eto&Enoise 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
52	Comparison of a 28&Echannel 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
53	A <i>B</i> <sub>1</sub>&Einsensitive high resolution 2D <i>T</i> <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
54	Performance evaluation of a 32&Eelement head array with respect to the ultimate intrinsic SNR. NMR in Biomedicine, 2010, 23, 142-151.	2.8	53

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55	Electrodynamic constraints on homogeneity and radiofrequency power deposition in multiple coil excitations. <i>Magnetic Resonance in Medicine</i> , 2009, 61, 315-334.	3.0	100
56	Comprehensive quantification of signal-to-noise ratio and $g$ -factor for image-based and $k$ -space-based parallel imaging reconstructions. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 895-907.	3.0	348
57	Specialised CT scan protocols for 3-D pre-operative planning of total hip replacement. <i>Medical Engineering and Physics</i> , 2004, 26, 237-245.	1.7	46
58	Effect of display modality on spatial accuracy of orthopaedic surgery pre-operative planning applications. <i>Informatics for Health and Social Care</i> , 2002, 27, 21-32.	1.0	17
59	Hip-Op: an innovative software to plan total hip replacement surgery. <i>Informatics for Health and Social Care</i> , 2002, 27, 71-83.	1.0	46