

Maria F Santarelli

List of Publications by Year in descending order

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116
papers

2,406
citations

279798

23
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233421

45
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121
all docs

121
docs citations

121
times ranked

2467
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep Learning Staging of Liver Iron Content From Multiecho MR Images. Journal of Magnetic Resonance Imaging, 2023, 57, 472-484.	3.4	6
2	Cardiac amyloidosis detection by early bisphosphonate (99mTc-HMDP) scintigraphy. Journal of Nuclear Cardiology, 2022, 29, 307-318.	2.1	9
3	Cardiac amyloidosis characterization by kinetic model fitting on [18F]florbetaben PET images. Journal of Nuclear Cardiology, 2022, 29, 1919-1932.	2.1	9
4	[18F]-Florbetaben PET/CT for Differential Diagnosis Among Cardiac Immunoglobulin Light Chain, Transthyretin Amyloidosis, and Mimicking Conditions. JACC: Cardiovascular Imaging, 2021, 14, 246-255.	5.3	51
5	Radio Frequency Coils for Hyperpolarized 13C Magnetic Resonance Experiments with a 3T MR Clinical Scanner: Experience from a Cardiovascular Lab. Electronics (Switzerland), 2021, 10, 366.	3.1	2
6	Deep-learning-based cardiac amyloidosis classification from early acquired pet images. International Journal of Cardiovascular Imaging, 2021, 37, 2327-2335.	1.5	16
7	Imaging Techniques as an Aid in the Early Detection of Cardiac Amyloidosis. Current Pharmaceutical Design, 2021, 27, 1878-1889.	1.9	6
8	The Core of Medical Imaging: State of the Art and Perspectives on the Detectors. Electronics (Switzerland), 2021, 10, 1642.	3.1	9
9	CZT Detectors-Based SPECT Imaging: How Detector and Collimator Arrangement Can Determine the Overall Performance of the Tomograph. Electronics (Switzerland), 2021, 10, 2230.	3.1	5
10	Probabilistic Graphical Models for Dynamic PET: A Novel Approach to Direct Parametric Map Estimation and Image Reconstruction. IEEE Transactions on Medical Imaging, 2020, 39, 152-160.	8.9	3
11	Negative binomial maximum likelihood expectation maximization (NB-MLEM) algorithm for reconstruction of pre-corrected PET data. Computers in Biology and Medicine, 2019, 115, 103481.	7.0	3
12	Biomolecular imaging of 13C-butyrate with dissolution-DNP: Polarization enhancement and formulation for in vivo studies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 199, 153-160.	3.9	7
13	Non-compact myocardium assessment by cardiac magnetic resonance: dependence on image analysis method. International Journal of Cardiovascular Imaging, 2018, 34, 1227-1238.	1.5	8
14	Direct Parametric Maps Estimation from Dynamic PET Data: An Iterated Conditional Modes Approach. Journal of Healthcare Engineering, 2018, 2018, 1-14.	1.9	4
15	Estimation of pancreatic R2* for iron overload assessment in the presence of fat: a comparison of different approaches. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 757-769.	2.0	9
16	Accelerated PET kinetic maps estimation by analytic fitting method. Computers in Biology and Medicine, 2018, 99, 221-235.	7.0	6
17	Measured PET Data Characterization with the Negative Binomial Distribution Model. Journal of Medical and Biological Engineering, 2017, 37, 299-312.	1.8	5
18	New Imaging Frontiers in Cardiology: Fast and Quantitative Maps from Raw Data. Current Pharmaceutical Design, 2017, 23, 3268-3284.	1.9	4

#	ARTICLE	IF	CITATIONS
19	The Influence of Noise in Dynamic PET Direct Reconstruction. IFMBE Proceedings, 2016, , 308-313.	0.3	0
20	A Conwayâ€œMaxwellâ€œPoisson (CMP) model to address data dispersion on positron emission tomography. Computers in Biology and Medicine, 2016, 77, 90-101.	7.0	11
21	16-Channel Surface Coil for 13C-Hyperpolarized Spectroscopic Imaging of Cardiac Metabolism in Pig Heart. Journal of Medical and Biological Engineering, 2016, 36, 53-61.	1.8	5
22	Variable density randomized stack of spirals (VDRâ€œSoS) for compressive sensing MRI. Magnetic Resonance in Medicine, 2016, 76, 59-69.	3.0	9
23	Realâ€œtime cardiac metabolism assessed with hyperpolarized [¹³ C]acetate in a largeâ€œanimal model. Contrast Media and Molecular Imaging, 2015, 10, 194-202.	0.8	44
24	Technological Innovations in Magnetic Resonance for Early Detection of Cardiovascular Diseases. Current Pharmaceutical Design, 2015, 22, 77-89.	1.9	5
25	Cardiac Metabolism in a Pig Model of Ischemiaâ€œReperfusion by Cardiac Magnetic Resonance with Hyperpolarized 13C-Pyruvate. IJC Metabolic & Endocrine, 2015, 6, 17-23.	0.5	7
26	Fast generation of T2â€œ maps in the entire range of clinical interest: Application to thalassemia major patients. Computers in Biology and Medicine, 2015, 56, 200-210.	7.0	19
27	Simulation and comparison of coils for Hyperpolarized 13 C MRS cardiac metabolism studies in pigs. Measurement: Journal of the International Measurement Confederation, 2015, 60, 78-84.	5.0	4
28	Improving sodium Magnetic Resonance in humans by design of a dedicated 23Na surface coil. Measurement: Journal of the International Measurement Confederation, 2014, 50, 285-292.	5.0	8
29	Estimation of occupational exposure to static magnetic fields due to usual movements in magnetic resonance units. Concepts in Magnetic Resonance Part B, 2014, 44, 75-81.	0.7	9
30	Models and Methods in Cardiac Imaging for Metabolism Studies. Current Pharmaceutical Design, 2014, 20, 6171-6181.	1.9	4
31	Transmit-Only/Receive-Only Radiofrequency System for Hyperpolarized 13C MRS Cardiac Metabolism Studies in Pigs. Applied Magnetic Resonance, 2013, 44, 1125-1138.	1.2	5
32	FDTD Analysis of a Radiofrequency Knee Coil for Low-Field MRI: Sample-Induced Resistance and Decoupling Evaluation. Applied Magnetic Resonance, 2013, 44, 1393-1403.	1.2	8
33	Automatic 2D registration of renal perfusion image sequences by mutual information and adaptive prediction. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2013, 26, 325-335.	2.0	15
34	Structured errors in reconstruction methods for Non-Cartesian MR data. Computers in Biology and Medicine, 2013, 43, 2256-2262.	7.0	4
35	Efficiency evaluation of a 13C Magnetic Resonance birdcage coil: Theory and comparison of four methods. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2201-2205.	5.0	5
36	Magnetic resonance butterfly coils: Design and application for hyperpolarized 13C studies. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3282-3290.	5.0	9

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37	Computational Analysis of a Radiofrequency Knee Coil for Low-Field MRI Using FDTD. Applied Magnetic Resonance, 2013, 44, 389-400.	1.2	14
38	Design of a quadrature surface coil for hyperpolarized ¹³ C MRS cardiac metabolism studies in pigs. Concepts in Magnetic Resonance Part B, 2013, 43, 69-77.	0.7	9
39	3D CMR Mapping of Metabolism by Hyperpolarized ¹³ C-Pyruvate in Ischemia-Reperfusion. JACC: Cardiovascular Imaging, 2013, 6, 743-744.	5.3	15
40	Regularization techniques on least squares non-uniform fast Fourier transform. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 561-573.	2.1	3
41	Cardiovascular Molecular Imaging: New Methodological Strategies. Current Pharmaceutical Design, 2013, 19, 2439-2446.	1.9	4
42	Reconstruction methods from hyperpolarized ¹³ C chemical shift imaging spiral 3D data: Comparison between direct summation and gridding method. , 2012, , .		0
43	A novel method for coil efficiency estimation: Validation with a ¹³ C birdcage. Concepts in Magnetic Resonance Part B, 2012, 41B, 139-143.	0.7	2
44	Segmental analysis of cardiac metabolism by hyperpolarized [1- ¹³ C] pyruvate: an in-vivo 3D MRI study in pigs. Journal of Cardiovascular Magnetic Resonance, 2012, 14, .	3.3	1
45	Classical and lateral skin effect contributions estimation in strip MR coils. Concepts in Magnetic Resonance Part B, 2012, 41B, 57-61.	0.7	20
46	Filter design for phased-array mr image reconstruction using super algorithm. Concepts in Magnetic Resonance Part B, 2012, 41B, 85-93.	0.7	1
47	Hyperpolarized ¹³ C MRS Cardiac Metabolism Studies in Pigs: Comparison Between Surface and Volume Radiofrequency Coils. Applied Magnetic Resonance, 2012, 42, 413-428.	1.2	18
48	Coil Sensitivity Estimation with Perturbing Sphere Method: Application to ¹³ C Birdcages. Applied Magnetic Resonance, 2012, 42, 511-518.	1.2	10
49	DNP Methods for Cardiac Metabolic Imaging with Hyperpolarized [1- ¹³ C]pyruvate Large Dose Injection in Pigs. Applied Magnetic Resonance, 2012, 43, 299-310.	1.2	12
50	Assessment of real-time myocardial uptake and enzymatic conversion of hyperpolarized [¹³ C]pyruvate in pigs using slice selective magnetic resonance spectroscopy. Contrast Media and Molecular Imaging, 2012, 7, 85-94.	0.8	40
51	How the signal-to-noise ratio influences hyperpolarized ¹³ C dynamic MRS data fitting and parameter estimation. NMR in Biomedicine, 2012, 25, 925-934.	2.8	18
52	Developments in Imaging Technologies Related to Hypertensive Cardiovascular Diseases. Current Pharmaceutical Design, 2011, 17, 3081-3091.	1.9	4
53	Sample-Induced Resistance Estimation in Magnetic Resonance Experiments: Simulation and Comparison of Two Methods. Applied Magnetic Resonance, 2011, 40, 351-361.	1.2	12
54	A novel tool for estimation of magnetic resonance occupational exposure to spatially varying magnetic fields. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2011, 24, 323-330.	2.0	21

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55	Detection of 3D Cardiac metabolism after injection of hyperpolarized [1-13C]pyruvate. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	4
56	Comparison between volume and surface coils for pig cardiac metabolism studies with hyperpolarized 13C MRS. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	1
57	B1+/actual flip angle and reception sensitivity mapping methods: simulation and comparison. Magnetic Resonance Imaging, 2011, 29, 717-722.	1.8	19
58	A real-time adaptive filtering approach to motion artefacts removal from ECG signals. International Journal of Biomedical Engineering and Technology, 2010, 3, 233.	0.2	15
59	Numerical Calculation of Peak-to-Average Specific Absorption Rate on Different Human Thorax Models for Magnetic Resonance Safety Considerations. Applied Magnetic Resonance, 2010, 38, 337-348.	1.2	21
60	Low-Field MR Coils: Comparison between Strip and Wire Conductors. Applied Magnetic Resonance, 2010, 39, 391-399.	1.2	31
61	Noise correlations and SNR in phased-array MRS. NMR in Biomedicine, 2010, 23, 66-73.	2.8	23
62	Preferential patterns of myocardial iron overload by multislice multiecho T_2^* CMR in thalassemia major patients. Magnetic Resonance in Medicine, 2010, 64, 211-219.	3.0	64
63	Experimental approaches to cardiac imaging with hyperpolarized [1-13c]pyruvate: a feasibility study in rats with a 3T clinical scanner. Journal of Cardiovascular Magnetic Resonance, 2010, 12, .	3.3	8
64	Cardiac metabolism with hyperpolarized [1-13c]pyruvate: a feasibility study in mini-pig with a large dose injection. Journal of Cardiovascular Magnetic Resonance, 2010, 12, .	3.3	7
65	Hyperpolarized MRS surface coil: Design and signal-to-noise ratio estimation. Medical Physics, 2010, 37, 5361-5369.	3.0	24
66	Can Imaging Techniques Identify Smoking-Related Cardiovascular Disease?. Current Pharmaceutical Design, 2010, 16, 2578-2585.	1.9	3
67	Evaluation of a web-based network for reproducible T_2^* MRI assessment of iron overload in thalassemia. International Journal of Medical Informatics, 2009, 78, 503-512.	3.3	71
68	Accurate segmentation of subcutaneous and intermuscular adipose tissue from MR images of the thigh. Journal of Magnetic Resonance Imaging, 2009, 29, 677-684.	3.4	79
69	Influence of myocardial fibrosis and blood oxygenation on heart T_2^* values in thalassemia patients. Journal of Magnetic Resonance Imaging, 2009, 29, 832-837.	3.4	28
70	Multislice multiecho T_2^* cardiac magnetic resonance for the detection of heterogeneous myocardial iron distribution in thalassaemia patients. NMR in Biomedicine, 2009, 22, 707-715.	2.8	42
71	Improved T_2^* assessment in liver iron overload by magnetic resonance imaging. Magnetic Resonance Imaging, 2009, 27, 188-197.	1.8	119
72	Beyond amygdala: Default Mode Network activity differs between patients with Social Phobia and healthy controls. Brain Research Bulletin, 2009, 79, 409-413.	3.0	165

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73	The Biological Effects of Diagnostic Cardiac Imaging. Current Pharmaceutical Design, 2009, 15, 1123-1130.	1.9	5
74	Independent component analysis applied to the removal of motion artifacts from electrocardiographic signals. Medical and Biological Engineering and Computing, 2008, 46, 251-261.	2.8	134
75	Automatic correction of intensity inhomogeneities improves unsupervised assessment of abdominal fat by MRI. Journal of Magnetic Resonance Imaging, 2008, 28, 403-410.	3.4	29
76	3D Medical Image Processing. , 2008, , 67-85.		5
77	Sensing Glove for Brain Studies: Design and Assessment of Its Compatibility for fMRI With a Robust Test. IEEE/ASME Transactions on Mechatronics, 2008, 13, 345-354.	5.8	35
78	Standardized T2* Map of a Normal Human Heart to Correct T2* Segmental Artefacts; Myocardial Iron Overload and Fibrosis in Thalassemia Intermedia Versus Thalassemia Major Patients and Electrocardiogram Changes in Thalassemia Major Patients. Hemoglobin, 2008, 32, 97-107.	0.8	20
79	Signal-to-noise ratio improvement of cardiac magnetic resonance spectroscopy signals acquired by phased array coils: a simulation based approach. , 2008, , .		1
80	Automatic assessment of myocardial fibrosis by delayed enhanced magnetic resonance imaging. , 2008, , .		0
81	Ultrasound Techniques for Drug Delivery in Cardiovascular Medicine. Current Drug Discovery Technologies, 2008, 5, 328-332.	1.2	10
82	Fundamentals in Cardiovascular Imaging Technologies. Current Pharmaceutical Design, 2008, 14, 1745-1752.	1.9	9
83	A geographic network for MRI assessment of iron overload in thalassemia: the MIOT experience. , 2008, , .		0
84	Multislice Multiecho T2* Cardiovascular Magnetic Resonance Detects Heterogeneous Myocardial Iron Distribution in Thalassemia Patients. Blood, 2008, 112, 3877-3877.	1.4	0
85	Magnetic Resonance T2* Technique for Segmental and Global Quantification of Myocardial Iron : Multi-Centre Validation in the MIOT (Myocardial Iron Overload in Thalassemia) Network. Blood, 2008, 112, 5420-5420.	1.4	0
86	A Robust Method for Assessment of Iron Overload in Liver by Magnetic Resonance Imaging. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2895-8.	0.5	6
87	Coil sensitivity map-based filter for phased-array image reconstruction in Magnetic Resonance Imaging. International Journal of Biomedical Engineering and Technology, 2007, 1, 4.	0.2	20
88	Standardized T2* map of normal human heart in vivo to correct T2* segmental artefacts. NMR in Biomedicine, 2007, 20, 578-590.	2.8	119
89	Magnetostatic simulation for accurate design of low field MRI phased-array coils. Concepts in Magnetic Resonance Part B, 2007, 31B, 140-146.	0.7	35
90	Multichannel Techniques for Motion Artifacts Removal from Electrocardiographic Signals. , 2006, 2006, 3391-4.		22

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91	Multislice multiecho T2* cardiovascular magnetic resonance for detection of the heterogeneous distribution of myocardial iron overload. <i>Journal of Magnetic Resonance Imaging</i> , 2006, 23, 662-668.	3.4	173
92	Myocardial perfusion by first pass contrast magnetic resonance: a robust method for quantitative regional assessment of perfusion reserve index. <i>Heart</i> , 2006, 92, 689-690.	2.9	7
93	A Compatible Electrocutaneous Display for functional Magnetic Resonance Imaging application. , 2006, 2006, 1021-4.		4
94	Physical principles of imaging with magnetic resonance. , 2005, , 1-29.		0
95	Molecular Imaging: Its Application In Cardiovascular Diagnosis. <i>Current Pharmaceutical Design</i> , 2005, 11, 2225-2234.	1.9	12
96	A Fast and Effective Method to Assess Myocardial Necrosis by Means of Contrast Magnetic Resonance Imaging. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2005, 7, 487-494.	3.3	67
97	Frequency domain approach to blind source separation in ECG monitoring by wearable system. , 2005, , .		12
98	Conductor geometry and capacitor quality for performance optimization of low-frequency birdcage coils. <i>Concepts in Magnetic Resonance</i> , 2004, 20B, 9-16.	1.3	41
99	A quadrature lowpass birdcage coil for a vertical low field MRI scanner. <i>Concepts in Magnetic Resonance</i> , 2004, 22B, 1-6.	1.3	10
100	An accurate and robust method for unsupervised assessment of abdominal fat by MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2004, 20, 684-689.	3.4	140
101	Automated cardiac MR image segmentation: theory and measurement evaluation. <i>Medical Engineering and Physics</i> , 2003, 25, 149-159.	1.7	75
102	A new method for quantitative cellular imaging on 3-D scaffolds using fluorescence microscopy. <i>IEEE Transactions on Nanobioscience</i> , 2003, 2, 110-117.	3.3	11
103	Automatic Characterization of Myocardial Perfusion in Contrast Enhanced MRI. <i>Eurasip Journal on Advances in Signal Processing</i> , 2003, 2003, 1.	1.7	8
104	New Technological Developments in the Clinical Imaging of Atherosclerotic Plaque. <i>Current Pharmaceutical Design</i> , 2003, 9, 2403-2415.	1.9	8
105	A fast and accurate simulator for the design of birdcage coils in MRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2002, 15, 36-44.	2.0	64
106	A fast and accurate simulator for the design of birdcage coils in MRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2002, 15, 36-44.	2.0	11
107	Non-linear prediction for oesophageal voice analysis. <i>Medical Engineering and Physics</i> , 2002, 24, 529-533.	1.7	6
108	A model-based method for myocardium flow estimation. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2000, 11, 87-88.	2.0	0

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109	Combining high-performance computing and networking for advanced 3-D cardiac imaging. IEEE Transactions on Information Technology in Biomedicine, 2000, 4, 58-67.	3.2	3
110	Fast and quantitative analysis of 4D cardiac images using a SMP architecture. Lecture Notes in Computer Science, 1998, , 447-451.	1.3	1
111	On-line 3D evaluation of left ventricular wall motion in magnetic resonance imaging. Technology and Health Care, 1998, 6, 151-7.	1.2	0
112	Real-time multimodal medical image processing: a dynamic volume-rendering application. IEEE Transactions on Information Technology in Biomedicine, 1997, 1, 171-178.	3.2	13
113	A model of ultrasound backscatter for the assessment of myocardial tissue structure and architecture. IEEE Transactions on Biomedical Engineering, 1996, 43, 901-911.	4.2	17
114	A regression model of ultrasound reflectivity from normal myocardium. Medical Engineering and Physics, 1995, 17, 141-144.	1.7	3
115	Dynamically variable electronic delays for ultrasound imaging. Journal of Biomedical Engineering, 1991, 13, 469-472.	0.7	2
116	Independent component analysis of fMRI data: a model based approach for artifacts separation. , 0, , .		0