Diego Hernando

List of Publications by Year
in descending order

106 papers	3,689 citations	147566 31 h-index	143772 57 g-index
109 all docs	109 docs citations	109 times ranked	4077 citing authors

#	Article	IF	Citations
1	Robust water/fat separation in the presence of large field inhomogeneities using a graph cut algorithm. Magnetic Resonance in Medicine, 2010, 63, 79-90.	1.9	260
2	Linearity, Bias, and Precision of Hepatic Proton Density Fat Fraction Measurements by Using MR Imaging: A Meta-Analysis. Radiology, 2018, 286, 486-498.	3.6	225
3	Quantification of liver iron with MRI: State of the art and remaining challenges. Journal of Magnetic Resonance Imaging, 2014, 40, 1003-1021.	1.9	208
4	Accuracy of Liver Fat Quantification With Advanced CT, MRI, and Ultrasound Techniques: Prospective Comparison With MR Spectroscopy. American Journal of Roentgenology, 2017, 208, 92-100.	1.0	180
5	Effect of Multipeak Spectral Modeling of Fat for Liver Iron and Fat Quantification: Correlation of Biopsy with MR Imaging Results. Radiology, 2012, 265, 133-142.	3.6	169
6	Quantitative magnetic resonance imaging of hepatic steatosis: Validation in ex vivo human livers. Hepatology, 2015, 62, 1444-1455.	3.6	128
7	Chemical shiftâ€“based water/fat separation: A comparison of signal models. Magnetic Resonance in Medicine, 2010, 64, 811-822.	1.9	116
8	Multipeak fatâ€corrected complex R2* relaxometry: Theory, optimization, and clinical validation. Magnetic Resonance in Medicine, 2013, 70, 1319-1331.	1.9	115
9	Dermal white adipose tissue: a new component of the thermogenic response. Journal of Lipid Research, 2015, 56, 2061-2069.	2.0	104
10	Multisite, multivendor validation of the accuracy and reproducibility of proton-density fat-fraction quantification at 1.5T and 3T using a fat-water phantom. Magnetic Resonance in Medicine, 2017, 77, 1516-1524.	1.9	99
11	Quantitative susceptibility mapping in the abdomen as an imaging biomarker of hepatic iron overload. Magnetic Resonance in Medicine, 2015, 74, 673-683.	1.9	98
12	Prevalence of Fatty Liver Disease and Hepatic Iron Overload in a Northeastern German Population by Using Quantitative MR Imaging. Radiology, 2017, 284, 706-716.	3.6	91
13	R mapping in the presence of macroscopic B₀ field variations. Magnetic Resonance in Medicine, 2012, 68, 830-840.	1.9	80
14	Quantitative chemical shift-encoded MRI is an accurate method to quantify hepatic steatosis. Journal of Magnetic Resonance Imaging, 2014, 39, 1494-1501.	1.9	78
15	Quantification of Liver Fat Content with CT and MRI: State of the Art. Radiology, 2021, 301, 250-262.	3.6	77
16	Quantification of Liver Fat Content With Unenhanced MDCT: Phantom and Clinical Correlation With MRI Proton Density Fat Fraction. American Journal of Roentgenology, 2018, 211, W151-W157.	1.0	73
17	Standardized Approach for ROI-Based Measurements of Proton Density Fat Fraction and R2* in the Liver. American Journal of Roentgenology, 2017, 209, 592-603.	1.0	68
18	Detecting Microglial Density With Quantitative Multi-Compartment Diffusion MRI. Frontiers in Neuroscience, 2019, 13, 81.	1.4	66

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19	MRIâ€based quantitative susceptibility mapping (QSM) and R2* mapping of liver iron overload: Comparison with SQUIDâ€based biomagnetic liver susceptometry. Magnetic Resonance in Medicine, 2017, 78, 264-270.	1.9	61
20	Relaxivity of Ferumoxytol at 1.5 T and 3.0 T. Investigative Radiology, 2018, 53, 257-263.	3.5	61
21	On the confounding effect of temperature on chemical shiftâ€encoded fat quantification. Magnetic Resonance in Medicine, 2014, 72, 464-470.	1.9	56
22	Proton density fat-fraction is an accurate biomarker of hepatic steatosis in adolescent girls and young women. European Radiology, 2015, 25, 2921-2930.	2.3	54
23	Sensitivity of chemical shiftâ€encoded fat quantification to calibration of fat MR spectrum. Magnetic Resonance in Medicine, 2016, 75, 845-851.	1.9	52
24	Comparison of R₂* correction methods for accurate fat quantification in fatty liver. Journal of Magnetic Resonance Imaging, 2013, 37, 414-422.	1.9	47
25	Validation of MRI biomarkers of hepatic steatosis in the presence of iron overload in the ob/ob mouse. Journal of Magnetic Resonance Imaging, 2012, 35, 844-851.	1.9	41
26	Adipose tissue MRI for quantitative measurement of central obesity. Journal of Magnetic Resonance Imaging, 2013, 37, 707-716.	1.9	41
27	R2* estimation using â€œinâ€phaseâ€•echoes in the presence of fat: The effects of complex spectrum of fat. Journal of Magnetic Resonance Imaging, 2013, 37, 717-726.	1.9	40
28	Quantification of liver fat in the presence of iron overload. Journal of Magnetic Resonance Imaging, 2017, 45, 428-439.	1.9	39
29	Linearity and Bias of Proton Density Fat Fraction as a Quantitative Imaging Biomarker: A Multicenter, Multiplatform, Multivendor Phantom Study. Radiology, 2021, 298, 640-651.	3.6	39
30	Magnetic susceptibility as a B₀ field strength independent MRI biomarker of liver iron overload. Magnetic Resonance in Medicine, 2013, 70, 648-656.	1.9	36
31	Quantification of liver fat with respiratoryâ€gated quantitative chemical shift encoded MRI. Journal of Magnetic Resonance Imaging, 2015, 42, 1241-1248.	1.9	24
32	Optimized Diffusionâ€Weighting Gradient Waveform Design (ODGD) formulation for motion compensation and concomitant gradient nulling. Magnetic Resonance in Medicine, 2019, 81, 989-1003.	1.9	24
33	Magnetic resonance imaging of obesity and metabolic disorders: Summary from the 2019 ISMRM Workshop. Magnetic Resonance in Medicine, 2020, 83, 1565-1576.	1.9	24
34	The effects of concomitant gradients on chemical shift encoded MRI. Magnetic Resonance in Medicine, 2017, 78, 730-738.	1.9	22
35	Motionâ€robust and bloodâ€suppressed M 1â€optimized diffusion MR imaging of the liver. Magnetic Resonance in Medicine, 2019, 82, 302-311.	1.9	22
36	Development, validation, qualification, and dissemination of quantitative MR methods: Overview and recommendations by the ISMRM quantitative MR study group. Magnetic Resonance in Medicine, 2022, 87, 1184-1206.	1.9	21

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37	Complex confounder-corrected R2* mapping for liver iron quantification with MRI. European Radiology, 2021, 31, 264-275.	2.3	20
38	Prostate enlargement and altered urinary function are part of the aging process. Aging, 2019, 11, 2653-2669.	1.4	20
39	Characterizing the limits of MRI near metallic prostheses. Magnetic Resonance in Medicine, 2015, 74, 1564-1573.	1.9	19
40	Accuracy of PDFF estimation by magnitudeâ€based and complexâ€based MRI in children with MR spectroscopy as a reference. Journal of Magnetic Resonance Imaging, 2017, 46, 1641-1647.	1.9	19
41	Chemical shift encoding (CSE) for sensitive fluorineâ€19 MRI of perfluorocarbons with complex spectra. Magnetic Resonance in Medicine, 2018, 79, 2724-2730.	1.9	19
42	High specificity targeting and detection of human neuroblastoma using multifunctional anti-GD2 iron-oxide nanoparticles. Nanomedicine, 2015, 10, 2973-2988.	1.7	18
43	Noise properties of proton density fat fraction estimated using chemical shiftâ€“encoded MRI. Magnetic Resonance in Medicine, 2018, 80, 685-695.	1.9	17
44	Stimulated echo based mapping (STEM) of T₁, T₂, and apparent diffusion coefficient: validation and protocol optimization. Magnetic Resonance in Medicine, 2019, 81, 167-181.	1.9	17
45	Evaporative cooling provides a major metabolic energy sink. Molecular Metabolism, 2019, 27, 47-61.	3.0	17
46	B₀ and B₁ inhomogeneities in the liver at 1.5 T and 3.0 T. Magnetic Resonance in Medicine, 2021, 85, 2212-2220.	1.9	17
47	Effect of hepatocyte-specific gadolinium-based contrast agents on hepatic fat-fraction and R2âž. Magnetic Resonance Imaging, 2015, 33, 43-50.	1.0	16
48	Validation of a motionâ€robust 2D sequential technique for quantification of hepatic proton density fat fraction during free breathing. Journal of Magnetic Resonance Imaging, 2018, 48, 1578-1585.	1.9	16
49	Sensitivity of quantitative relaxometry and susceptibility mapping to microscopic iron distribution. Magnetic Resonance in Medicine, 2020, 83, 673-680.	1.9	16
50	Histological Grading of Hepatocellular Carcinomas with Intravoxel Incoherent Motion Diffusion-weighted Imaging: Inconsistent Results Depending on the Fitting Method. Magnetic Resonance in Medical Sciences, 2018, 17, 168-173.	1.1	14
51	Quantitative diffusion MRI using reduced field-of-view and multi-shot acquisition techniques: Validation in phantoms and prostate imaging. Magnetic Resonance Imaging, 2018, 51, 173-181.	1.0	14
52	Intraindividual Crossover Comparison of Gadoxetic Acid Dose for Liver MRI in Normal Volunteers. Magnetic Resonance in Medical Sciences, 2016, 15, 60-72.	1.1	13
53	An acetoneâ€based phantom for quantitative diffusion MRI. Journal of Magnetic Resonance Imaging, 2017, 46, 1683-1692.	1.9	13
54	Clinical Implementation of a Focused MRI Protocol for Hepatic Fat and Iron Quantification. American Journal of Roentgenology, 2019, 213, 90-95.	1.0	13

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55	Quantitative ferumoxytol-enhanced MRI in pregnancy: A feasibility study in the nonhuman primate. Magnetic Resonance Imaging, 2020, 65, 100-108.	1.0	13
56	Pharmacokinetics of Ferumoxytol in the Abdomen and Pelvis: A Dosing Study with 1.5- and 3.0-T MRI Relaxometry. Radiology, 2020, 294, 108-116.	3.6	13
57	A Pilot Study of Quantitative MRI Parametric Response Mapping of Bone Marrow Fat for Treatment Assessment in Myelofibrosis. Tomography, 2016, 2, 67-78.	0.8	13
58	Determination of optimized set of b-values for Apparent Diffusion Coefficient mapping in liver Diffusion-Weighted MRI. Journal of Magnetic Resonance, 2020, 310, 106634.	1.2	12
59	Contrasting recruitment of skinâ€associated adipose depots during cold challenge of mouse and human. Journal of Physiology, 2022, 600, 847-868.	1.3	12
60	High SNR Acquisitions Improve the Repeatability of Liver Fat Quantification Using Confounder-corrected Chemical Shift-encoded MR Imaging. Magnetic Resonance in Medical Sciences, 2017, 16, 332-339.	1.1	11
61	Interâ€method reproducibility of biexponential <scp>R</scp>₂ MR relaxometry for estimation of liver iron concentration. Magnetic Resonance in Medicine, 2018, 80, 2691-2701.	1.9	11
62	Temperatureâ€corrected proton density fat fraction estimation using chemical shiftâ€encoded MRI in phantoms. Magnetic Resonance in Medicine, 2021, 86, 69-81.	1.9	11
63	Combined gadoxetic acid and gadofosveset enhanced liver MRI: A feasibility and parameter optimization study. Magnetic Resonance in Medicine, 2016, 75, 318-328.	1.9	10
64	A chemical shift encoding (CSE) approach for spectral selection in fluorineâ€19 MRI. Magnetic Resonance in Medicine, 2018, 79, 2183-2189.	1.9	10
65	T₁â€corrected quantitative chemical shiftâ€encoded MRI. Magnetic Resonance in Medicine, 2020, 83, 2051-2063.	1.9	10
66	Phaseâ€based T₂ mapping with gradient echo imaging. Magnetic Resonance in Medicine, 2020, 84, 609-619.	1.9	10
67	Design and evaluation of quantitative MRI phantoms to mimic the simultaneous presence of fat, iron, and fibrosis in the liver. Magnetic Resonance in Medicine, 2021, 85, 734-747.	1.9	10
68	Limits of Fat Quantification in the Presence of Iron Overload. Journal of Magnetic Resonance Imaging, 2021, 54, 1166-1174.	1.9	10
69	Multisite multivendor validation of a quantitative MRI and CT compatible fat phantom. Medical Physics, 2021, 48, 4375-4386.	1.6	10
70	Mathematical optimization of contrast concentration for t₁â€weighted spoiled gradient echo imaging. Magnetic Resonance in Medicine, 2016, 75, 1556-1564.	1.9	9
71	Assessment of a highâ€SNR chemicalâ€shiftâ€encoded MRI with complex reconstruction for proton density fat fraction (PDFF) estimation overall and in the lowâ€fat range. Journal of Magnetic Resonance Imaging, 2019, 49, 229-238.	1.9	9
72	Quantification of sarcomatoid differentiation in renal cell carcinoma on magnetic resonance imaging. Quantitative Imaging in Medicine and Surgery, 2018, 8, 373-382.	1.1	8

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73	Evaluation of a motionâ€robust 2D chemical shiftâ€encoded technique for R2* and field map quantification in ferumoxytolâ€enhanced MRI of the placenta in pregnant rhesus macaques. Journal of Magnetic Resonance Imaging, 2020, 51, 580-592.	1.9	8
74	Characterization and correction of cardiovascular motion artifacts in diffusionâ€weighted imaging of the pancreas. Magnetic Resonance in Medicine, 2021, 86, 1956-1969.	1.9	8
75	Characterizing a short T₂* signal component in the liver using ultrashort TE chemical shiftâ€encoded MRI at 1.5T and 3.0T. Magnetic Resonance in Medicine, 2019, 82, 2032-2045.	1.9	7
76	Relaxivityâ€iron calibration in hepatic iron overload: Reproducibility and extension of a Monte Carlo model. NMR in Biomedicine, 2021, 34, e4604.	1.6	7
77	Quantitative diffusion MRI of the abdomen and pelvis. Medical Physics, 2021, , .	1.6	7
78	b value and firstâ€order motion moment optimized data acquisition for repeatable quantitative intravoxel incoherent motion DWI. Magnetic Resonance in Medicine, 2022, 87, 2724-2740.	1.9	7
79	Accelerating fully phaseâ€encoded MRI near metal using multiband radiofrequency excitation. Magnetic Resonance in Medicine, 2017, 77, 1223-1230.	1.9	6
80	Stimulated-echo diffusion-weighted imaging with moderate b values for the detection of prostate cancer. European Radiology, 2020, 30, 3236-3244.	2.3	6
81	Spectroscopyâ€based multiâ€parametric quantification in subjects with liver iron overload at 1.5T and 3T. Magnetic Resonance in Medicine, 2022, 87, 597-613.	1.9	6
82	Freeâ€breathing mapping of hepatic iron overload in children using 3D multiâ€echo UTE cones MRI. Magnetic Resonance in Medicine, 2021, 85, 2608-2621.	1.9	6
83	Proton density water fraction as a reproducible MRâ€based measurement of breast density. Magnetic Resonance in Medicine, 2022, 87, 1742-1757.	1.9	6
84	Exact Calculation of Noise Maps and ${g}$ -Factor in GRAPPA Using a ${k}$ -Space Analysis. IEEE Transactions on Medical Imaging, 2018, 37, 480-490.	5.4	5
85	Impact of ferumoxytol magnetic resonance imaging on the rhesus macaque maternalâ€“fetal interfaceâ€. Biology of Reproduction, 2020, 102, 434-444.	1.2	5
86	Motionâ€robust, highâ€SNR liver fat quantification using a 2D sequential acquisition with a variable flip angle approach. Magnetic Resonance in Medicine, 2020, 84, 2004-2017.	1.9	5
87	Comprehensive non-invasive analysis of lower urinary tract anatomy using MRI. Abdominal Radiology, 2021, 46, 1670-1676.	1.0	5
88	Accuracies of Chemical Shift In/Opposed Phase and Chemical Shift Encoded Magnetic Resonance Imaging to Detect Intratumoral Fat in Hepatocellular Carcinoma. Journal of Magnetic Resonance Imaging, 2021, 53, 1791-1802.	1.9	5
89	Utilization of a balanced steady state free precession signal model for improved fat/water decomposition. Magnetic Resonance in Medicine, 2016, 75, 1269-1277.	1.9	4
90	Waterâ€“fat magnetic resonance imaging quantifies relative proportions of brown and white adipose tissues: ex-vivo experiments. Journal of Medical Imaging, 2018, 5, 1.	0.8	3

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91	Ultrasonography of the Adult Male Urinary Tract for Urinary Functional Testing. Journal of Visualized Experiments, 2019, , .	0.2	2
92	Freeâ€breathing liver fat and quantification using motionâ€corrected averaging based on a nonlocal means algorithm. Magnetic Resonance in Medicine, 2021, 85, 653-666.	1.9	2
93	Addressing concomitant gradient phase errors in timeâ€interleaved chemical shiftâ€encoded MRI fat fraction and R 2 * mapping with a passâ€specific phase fitting method. Magnetic Resonance in Medicine, 2022, , .	1.9	2
94	Correction to "Compressed-sensing MRI with random encoding". IEEE Transactions on Medical Imaging, 2013, 32, 1362-1362.	5.4	1
95	Effect of Metabolic Syndrome on Anatomy and Function of the Lower Urinary Tract Assessed on MRI. Urology, 2022, 159, 176-181.	0.5	1
96	Improved free-breathing liver fat and iron quantification using a 2D chemical shiftâ€“encoded MRI with flip angle modulation and motion-corrected averaging. European Radiology, 2022, 32, 5458-5467.	2.3	1
97	Quantification of liver proton-density fat fraction in 7.1T preclinical MR systems: Impact of the fitting technique. Journal of Magnetic Resonance Imaging, 2016, 44, 1425-1431.	1.9	0
98	Computation of exact gâ€factor maps in 3D GRAPPA reconstructions. Magnetic Resonance in Medicine, 2019, 81, 1353-1367.	1.9	0
99	Effect of noise and estimator type on bias for analysis of liver proton density fat fraction. Magnetic Resonance Imaging, 2020, 74, 244-249.	1.0	0
100	Multi-Center, Multi-Vendor Reproducibility and Calibration of MRI-Based R2* for Liver Iron Quantification. Blood, 2021, 138, 2010-2010.	0.6	0
101	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0
102	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0
103	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0
104	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0
105	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0
106	A pilot study of bladder voiding with real-time MRI and computational fluid dynamics. , 2020, 15, e0238404.		0