Matt A Bernstein

List of Publications by Year
in descending order

83 papers	6,557 citations	159585 30 h-index	91884 69 g-index
89 all docs	89 docs citations	89 times ranked	8335 citing authors

#	Article	IF	Citations
1	Leftâ€“Right Intensity Asymmetries Vary Depending on Scanner Model for FLAIR and T 1 Weighted MRI Images. Journal of Magnetic Resonance Imaging, 2022, , .	3.4	3
2	Evaluation of hearing loss in young adults after exposure to 3.0T MRI with standard hearing protection. Journal of the Acoustical Society of America, 2022, 151, 1913-1921.	1.1	1
3	Application of Adaptive Image Receive Coil Technology for Whole-Brain Imaging. American Journal of Roentgenology, 2021, 216, 552-559.	2.2	10
4	Improved Brain MR Imaging from a Compact, Lightweight 3T Scanner with Highâ€Performance Gradients. Journal of Magnetic Resonance Imaging, 2021, , .	3.4	3
5	Findings of the AAPM Ad Hoc committee on magnetic resonance imaging in radiation therapy: Unmet needs, opportunities, and recommendations. Medical Physics, 2021, 48, 4523-4531.	3.0	9
6	Distortionâ€free imaging: A double encoding method (DIADEM) combined with multiband imaging for rapid distortionâ€free highâ€resolution diffusion imaging on a compact 3T with highâ€performance gradients. Journal of Magnetic Resonance Imaging, 2020, 51, 296-310.	3.4	15
7	The effect of spiral trajectory correction on pseudoâ€continuous arterial spin labeling with highâ€performance gradients on a compact 3T scanner. Magnetic Resonance in Medicine, 2020, 84, 192-205.	3.0	7
8	Reducing PNS with minimal performance penalties via simple pulse sequence modifications on a high-performance compact 3T scanner. Physics in Medicine and Biology, 2020, 65, 15NT02.	3.0	11
9	Oscillating diffusionâ€encoding with a high gradientâ€amplitude and high slewâ€rate headâ€only gradient for human brain imaging. Magnetic Resonance in Medicine, 2020, 84, 950-965.	3.0	22
10	The benefit of high-performance gradients on echo planar imaging for BOLD-based resting-state functional MRI. Physics in Medicine and Biology, 2020, 65, 235024.	3.0	6
11	Reproducibility and the future of MRI research. Magnetic Resonance in Medicine, 2019, 82, 1981-1983.	3.0	28
12	Diffusion MRI Indices and Their Relation to Cognitive Impairment in Brain Aging: The Updated Multi-protocol Approach in ADNI3. Frontiers in Neuroinformatics, 2019, 13, 2.	2.5	79
13	Model-Based Iterative Reconstruction for Echo Planar Imaging: Methods and Applications. , 2019, , .		0
14	Partial fourier shells trajectory for non-cartesian MRI. Physics in Medicine and Biology, 2019, 64, 04NT01.	3.0	3
15	Lightweight, compact, and highâ€performance 3<scp>T MR</scp> system for imaging the brain and extremities. Magnetic Resonance in Medicine, 2018, 80, 2232-2245.	3.0	70
16	The effect of concomitant fields in fast spin echo acquisition on asymmetric MRI gradient systems. Magnetic Resonance in Medicine, 2018, 79, 1354-1364.	3.0	9
17	<scp>B</scp>₀ concomitant field compensation for <scp>MRI</scp> systems employing asymmetric transverse gradient coils. Magnetic Resonance in Medicine, 2018, 79, 1538-1544.	3.0	30
18	Reduced acoustic noise in diffusion tensor imaging on a compact <scp>MRI</scp> system. Magnetic Resonance in Medicine, 2018, 79, 2902-2911.	3.0	6

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19	Magnetizationâ€prepared shells trajectory with automated gradient waveform design. Magnetic Resonance in Medicine, 2018, 79, 2024-2035.	3.0	3
20	Improving apparent diffusion coefficient accuracy on a compact 3T MRI scanner using gradient nonlinearity correction. Journal of Magnetic Resonance Imaging, 2018, 48, 1498-1507.	3.4	13
21	Image-based gradient non-linearity characterization to determine higher-order spherical harmonic coefficients for improved spatial position accuracy in magnetic resonance imaging. Magnetic Resonance Imaging, 2017, 38, 54-62.	1.8	19
22	Correction of metal-induced susceptibility artifacts for functional MRI during deep brain stimulation. NeuroImage, 2017, 158, 26-36.	4.2	22
23	Gradient pre-emphasis to counteract first-order concomitant fields on asymmetric MRI gradient systems. Magnetic Resonance in Medicine, 2017, 77, 2250-2262.	3.0	30
24	Peripheral nerve stimulation characteristics of an asymmetric headâ€only gradient coil compatible with a highâ€channelâ€count receiver array. Magnetic Resonance in Medicine, 2016, 76, 1939-1950.	3.0	55
25	Partial fourier and parallel <scp>MR</scp> image reconstruction with integrated gradient nonlinearity correction. Magnetic Resonance in Medicine, 2016, 75, 2534-2544.	3.0	12
26	Technical Note: Compact threeâ€tesla magnetic resonance imager with highâ€performance gradients passes ACR image quality and acoustic noise tests. Medical Physics, 2016, 43, 1259-1264.	3.0	23
27	Diffusion tensor distribution function metrics boost power to detect deficits in Alzheimer's disease. , 2016, , .		1
28	MRI in radiation oncology: Underserved needs. Magnetic Resonance in Medicine, 2016, 75, 11-14.	3.0	13
29	High slewâ€rate headâ€only gradient for improving distortion in echo planar imaging: Preliminary experience. Journal of Magnetic Resonance Imaging, 2016, 44, 653-664.	3.4	53
30	Comparison of accelerated T1-weighted whole-brain structural-imaging protocols. NeuroImage, 2016, 124, 157-167.	4.2	14
31	Temporal lobe anatomy: eight imaging signs to facilitate interpretation of MRI. Surgical and Radiologic Anatomy, 2016, 38, 433-443.	1.2	7
32	NonCartesian MR image reconstruction with integrated gradient nonlinearity correction. Medical Physics, 2015, 42, 7190-7201.	3.0	17
33	Integrated image reconstruction and gradient nonlinearity correction. Magnetic Resonance in Medicine, 2015, 74, 1019-1031.	3.0	42
34	Rich club analysis in the Alzheimer's disease connectome reveals a relatively undisturbed structural core network. Human Brain Mapping, 2015, 36, 3087-3103.	3.6	125
35	Does MRI scan acceleration affect power to track brain change?. Neurobiology of Aging, 2015, 36, S167-S177.	3.1	10
36	Diffusion weighted imaging-based maximum density path analysis and classification of Alzheimer's disease. Neurobiology of Aging, 2015, 36, S132-S140.	3.1	61

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37	Magnetic resonance imaging in Alzheimer's Disease Neuroimaging Initiative 2. Alzheimer's and Dementia, 2015, 11, 740-756.	0.8	142
38	Spectral graph theory and graph energy metrics show evidence for the alzheimer's disease disconnection syndrome in APOE-4 risk gene carriers. , 2015, 2015, 458-461.		17
39	Feature selection improves the accuracy of classifying Alzheimer disease using diffusion tensor images. , 2015, 2015, 126-130.		25
40	Cardiovascular magnetic resonance phase contrast imaging. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 71.	3.3	184
41	Connectivity network measures predict volumetric atrophy in mild cognitive impairment. Neurobiology of Aging, 2015, 36, S113-S120.	3.1	31
42	Serum cholesterol and variant in cholesterol-related gene CETP predict white matter microstructure. Neurobiology of Aging, 2014, 35, 2504-2513.	3.1	26
43	Algebraic Connectivity of Brain Networks Shows Patterns of Segregation Leading to Reduced Network Robustness in Alzheimerâ€™s Disease. Mathematics and Visualization, 2014, 2014, 55-64.	0.6	18
44	High Performance Non-uniform FFT on Modern X86-based Multi-core Systems. , 2012, , .		5
45	Effects of MRI scan acceleration on brain volume measurement consistency. Journal of Magnetic Resonance Imaging, 2012, 36, 1234-1240.	3.4	18
46	Sparsity and lowâ€contrast object detectability. Magnetic Resonance in Medicine, 2012, 67, 1022-1032.	3.0	9
47	Comparing 3 T and 1.5 T MRI for tracking Alzheimer's disease progression with tensorâ€based morphometry. Human Brain Mapping, 2010, 31, 499-514.	3.6	66
48	Update on the Magnetic Resonance Imaging core of the Alzheimer's Disease Neuroimaging Initiative. Alzheimer's and Dementia, 2010, 6, 212-220.	0.8	311
49	Contrastâ€enhanced intracranial magnetic resonance angiography with a spherical shells trajectory and online gridding reconstruction. Journal of Magnetic Resonance Imaging, 2009, 30, 1101-1109.	3.4	6
50	Measurement of MRI scanner performance with the ADNI phantom. Medical Physics, 2009, 36, 2193-2205.	3.0	134
51	The Alzheimer's disease neuroimaging initiative (ADNI): MRI methods. Journal of Magnetic Resonance Imaging, 2008, 27, 685-691.	3.4	2,553
52	3D magnetization prepared elliptical centric fast gradient echo imaging. Magnetic Resonance in Medicine, 2008, 59, 434-439.	3.0	19
53	Intensity non-uniformity correction using N3 on 3-T scanners with multichannel phased array coils. NeuroImage, 2008, 39, 1752-1762.	4.2	128
54	Calorimetric calibration of head coil SAR estimates displayed on a clinical MR scanner. Physics in Medicine and Biology, 2008, 53, 2565-2576.	3.0	17

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55	Head and Neck MRA at 3.0T. Current Protocols in Magnetic Resonance Imaging, 2008, 15, A7.8.1.	0.0	0
56	Motion correction properties of the shells k-space trajectory. Magnetic Resonance Imaging, 2006, 24, 739-749.	1.8	10
57	Three-dimensional MRI with an undersampled spherical shells trajectory. Magnetic Resonance in Medicine, 2006, 56, 553-562.	3.0	16
58	Imaging artifacts at 3.0T. Journal of Magnetic Resonance Imaging, 2006, 24, 735-746.	3.4	233
59	COMMON IMAGE RECONSTRUCTION TECHNIQUES. , 2004, , 491-571.		3
60	ANGIOGRAPHIC PULSE SEQUENCES. , 2004, , 648-701.		8
61	Improved image quality of intracranial aneurysms: 3.0-T versus 1.5-T time-of-flight MR angiography. American Journal of Neuroradiology, 2004, 25, 84-7.	2.4	99
62	Reduction of RF power for magnetization transfer with optimized application of RF pulses ink-space. Magnetic Resonance in Medicine, 2003, 50, 114-121.	3.0	20
63	RINGLET motion correction for 3D MRI acquired with the elliptical centric view order. Magnetic Resonance in Medicine, 2003, 50, 802-812.	3.0	7
64	Hybrid phased array for improved internal auditory canal imaging at 3.0-T MR. Journal of Magnetic Resonance Imaging, 2002, 16, 300-304.	3.4	9
65	Correction of concomitant magnetic field-induced image artifacts in nonaxial echo-planar imaging. Magnetic Resonance in Medicine, 2002, 48, 509-515.	3.0	58
66	Magnetic Resonance Angiography at 3.0 Tesla: Initial Clinical Experience. Topics in Magnetic Resonance Imaging, 2001, 12, 183-204.	1.2	102
67	Effect of windowing and zero-filled reconstruction of MRI data on spatial resolution and acquisition strategy. Journal of Magnetic Resonance Imaging, 2001, 14, 270-280.	3.4	134
68	High-resolution intracranial and cervical MRA at 3.0T: Technical considerations and initial experience. Magnetic Resonance in Medicine, 2001, 46, 955-962.	3.0	203
69	Carotid Arteries: Maximizing Arterial to Venous Contrast in Fluoroscopically Triggered Contrast-enhanced MR Angiography with Elliptic Centric View Ordering. Radiology, 1999, 211, 265-273.	7.3	123
70	Concomitant gradient field effects in spiral scans. Magnetic Resonance in Medicine, 1999, 41, 103-112.	3.0	79
71	Theoretical limits of spatial resolution in elliptical-centric contrast-enhanced 3D-MRA. Magnetic Resonance in Medicine, 1999, 42, 1106-1116.	3.0	71
72	Concomitant magnetic-field-induced artifacts in axial echo planar imaging. Magnetic Resonance in Medicine, 1998, 39, 596-605.	3.0	65

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73	Artifacts induced by concomitant magnetic field in fast spin-echo imaging. Magnetic Resonance in Medicine, 1998, 40, 582-591.	3.0	49
74	Reconstructions of phase contrast, phased array multicoil data. Magnetic Resonance in Medicine, 1994, 32, 330-334.	3.0	135
75	Minimizing TE in moment-nulled or flow-encoded two-and three-dimensional gradient-echo imaging. Journal of Magnetic Resonance Imaging, 1992, 2, 583-588.	3.4	96
76	Encoding strategies for three-direction phase-contrast MR imaging of flow. Journal of Magnetic Resonance Imaging, 1991, 1, 405-413.	3.4	404
77	Comparison of phase-difference and complex-difference processing in phase-contrast MR angiography. Journal of Magnetic Resonance Imaging, 1991, 1, 725-729.	3.4	87
78	Equations Representing Physical Quantities. , 0, , 1-17.		1
79	A Few Pitfalls and a Few Useful Tricks. , 0, , 18-46.		0
80	Estimation and Approximation. , 0, , 115-154.		0
81	Introduction to Dimensional Analysis and Scaling. , 0, , 155-187.		0
82	Generalizing Equations. , 0, , 188-213.		0
83	Systematic Dimensional Analysis of the Scaling Relationship for Gradient and Shim Coil Design Parameters. Magnetic Resonance in Medicine, 0, , .	3.0	4