Roland Bammer

List of Publications by Year
in descending order

123 papers	15,487 citations	25031 57 h-index	22829 112 g-index
123 all docs	123 docs citations	123 times ranked	13254 citing authors

#	Article	IF	Citations
1	Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging. New England Journal of Medicine, 2018, 378, 708-718.	27.0	3,433
2	Magnetic resonance imaging profiles predict clinical response to early reperfusion: The diffusion and perfusion imaging evaluation for understanding stroke evolution (DEFUSE) study. Annals of Neurology, 2006, 60, 508-517.	5.3	1,138
3	MRI profile and response to endovascular reperfusion after stroke (DEFUSE 2): a prospective cohort study. Lancet Neurology, The, 2012, 11, 860-867.	10.2	718
4	Basic principles of diffusion-weighted imaging. European Journal of Radiology, 2003, 45, 169-184.	2.6	702
5	Cognitive processing speed and the structure of white matter pathways: Convergent evidence from normal variation and lesion studies. NeuroImage, 2008, 42, 1032-1044.	4.2	413
6	Realâ€time diffusionâ€perfusion mismatch analysis in acute stroke. Journal of Magnetic Resonance Imaging, 2010, 32, 1024-1037.	3.4	364
7	Optimal Tmax Threshold for Predicting Penumbral Tissue in Acute Stroke. Stroke, 2009, 40, 469-475.	2.0	359
8	Children's Reading Performance is Correlated with White Matter Structure Measured by Diffusion Tensor Imaging. Cortex, 2005, 41, 354-363.	2.4	338
9	Improved diffusionâ€weighted singleâ€shot echoâ€planar imaging (EPI) in stroke using sensitivity encoding (SENSE). Magnetic Resonance in Medicine, 2001, 46, 548-554.	3.0	295
10	Diffusion tensor imaging using singleâ€shot SENSEâ€EPI. Magnetic Resonance in Medicine, 2002, 48, 128-136.	3.0	267
11	Magnetic resonance diffusion tensor imaging for characterizing diffuse and focal white matter abnormalities in multiple sclerosis. Magnetic Resonance in Medicine, 2000, 44, 583-591.	3.0	241
12	A multicenter randomized controlled trial of endovascular therapy following imaging evaluation for ischemic stroke (DEFUSE 3). International Journal of Stroke, 2017, 12, 896-905.	5.9	236
13	RAPID Automated Patient Selection for Reperfusion Therapy. Stroke, 2011, 42, 1608-1614.	2.0	235
14	Characterizing non-gaussian diffusion by using generalized diffusion tensors. Magnetic Resonance in Medicine, 2004, 51, 924-937.	3.0	224
15	In vivo MR tractography using diffusion imaging. European Journal of Radiology, 2003, 45, 223-234.	2.6	219
16	Refining the Definition of the Malignant Profile. Stroke, 2011, 42, 1270-1275.	2.0	209
17	Line scan diffusion imaging of the spine. American Journal of Neuroradiology, 2003, 24, 5-12.	2.4	200
18	Acute Stroke Imaging Research Roadmap II. Stroke, 2013, 44, 2628-2639.	2.0	192

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19	Hypoperfusion Intensity Ratio Predicts Infarct Progression and Functional Outcome in the DEFUSE 2 Cohort. Stroke, 2014, 45, 1018-1023.	2.0	189
20	Risk Factors of Symptomatic Intracerebral Hemorrhage After tPA Therapy for Acute Stroke. Stroke, 2007, 38, 2275-2278.	2.0	176
21	The Infarct Core is Well Represented by the Acute Diffusion Lesion: Sustained Reversal is Infrequent. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 50-56.	4.3	172
22	Apparent Diffusion Coefficient Threshold for Delineation of Ischemic Core. International Journal of Stroke, 2015, 10, 348-353.	5.9	160
23	Comparison of Minimally Invasive and Conventional Open Posterolateral Lumbar Fusion Using Magnetic Resonance Imaging and Retraction Pressure Studies. Journal of Spinal Disorders and Techniques, 2006, 19, 77-86.	1.9	159
24	Diffusion-weighted MR imaging (DWI) in spinal cord ischemia. Neuroradiology, 2006, 48, 795-801.	2.2	159
25	Ischemic core and hypoperfusion volumes predict infarct size in <scp>SWIFT PRIME</scp>. Annals of Neurology, 2016, 79, 76-89.	5.3	155
26	Time-resolved 3D quantitative flow MRI of the major intracranial vessels: Initial experience and comparative evaluation at 1.5T and 3.0T in combination with parallel imaging. Magnetic Resonance in Medicine, 2007, 57, 127-140.	3.0	153
27	Optimal Definition for PWI/DWI Mismatch in Acute Ischemic Stroke Patients. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 887-891.	4.3	146
28	Effect of Collateral Blood Flow on Patients Undergoing Endovascular Therapy for Acute Ischemic Stroke. Stroke, 2014, 45, 1035-1039.	2.0	141
29	The Growth Rate of Early DWI Lesions is Highly Variable and Associated with Penumbral Salvage and Clinical Outcomes following Endovascular Reperfusion. International Journal of Stroke, 2015, 10, 723-729.	5.9	140
30	A benchmarking tool to evaluate computer tomography perfusion infarct core predictions against a DWI standard. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1780-1789.	4.3	136
31	Relationships Between Infarct Growth, Clinical Outcome, and Early Recanalization in Diffusion and Perfusion Imaging for Understanding Stroke Evolution (DEFUSE). Stroke, 2008, 39, 2257-2263.	2.0	122
32	Worse Stroke Outcome in Atrial Fibrillation is Explained by More Severe Hypoperfusion, Infarct Growth, and Hemorrhagic Transformation. International Journal of Stroke, 2015, 10, 534-540.	5.9	118
33	Computed tomographic perfusion to Predict Response to Recanalization in ischemic stroke. Annals of Neurology, 2017, 81, 849-856.	5.3	110
34	Early Diffusion-Weighted Imaging and Perfusion-Weighted Imaging Lesion Volumes Forecast Final Infarct Size in DEFUSE 2. Stroke, 2013, 44, 681-685.	2.0	106
35	Reliability of brain volume measurements: A test-retest dataset. Scientific Data, 2014, 1, 140037.	5.3	106
36	The MRA-DWI Mismatch Identifies Patients With Stroke Who Are Likely to Benefit From Reperfusion. Stroke, 2008, 39, 2491-2496.	2.0	103

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37	Relationships Between Cerebral Perfusion and Reversibility of Acute Diffusion Lesions in DEFUSE. Stroke, 2009, 40, 1692-1697.	2.0	100
38	Diffusion-weighted Imaging with Navigated Interleaved Echo-planar Imaging and a Conventional Gradient System. Radiology, 1999, 211, 799-806.	7.3	94
39	Diffusion-tensor imaging of cognitive performance. Brain and Cognition, 2002, 50, 396-413.	1.8	91
40	Combined spinâ€•and gradientâ€echo perfusionâ€weighted imaging. Magnetic Resonance in Medicine, 2012, 68, 30-40.	3.0	91
41	Acute Stroke Imaging Research Roadmap III Imaging Selection and Outcomes in Acute Stroke Reperfusion Clinical Trials. Stroke, 2016, 47, 1389-1398.	2.0	88
42	Response to endovascular reperfusion is not time-dependent in patients with salvageable tissue. Neurology, 2015, 85, 708-714.	1.1	87
43	Augmented generalized SENSE reconstruction to correct for rigid body motion. Magnetic Resonance in Medicine, 2007, 57, 90-102.	3.0	84
44	Early Diffusion-Weighted Imaging Reversal After Endovascular Reperfusion Is Typically Transient in Patients Imaged 3 to 6 Hours After Onset. Stroke, 2014, 45, 1024-1028.	2.0	84
45	The Effects of Alteplase 3 to 6 Hours After Stroke in the EPITHETâ€“DEFUSE Combined Dataset. Stroke, 2013, 44, 87-93.	2.0	82
46	CBF measurements using multidelay pseudocontinuous and velocityâ€selective arterial spin labeling in patients with long arterial transit delays: Comparison with xenon CT CBF. Journal of Magnetic Resonance Imaging, 2012, 36, 110-119.	3.4	78
47	Automated Detection of Intracranial Large Vessel Occlusions on Computed Tomography Angiography. Stroke, 2019, 50, 2790-2798.	2.0	77
48	Foundations of advanced magnetic resonance imaging. NeuroRx, 2005, 2, 167-196.	6.0	73
49	Diffusion-weighted imaging of the spinal cord: Interleaved echo-planar imaging is superior to fast spin-echo. Journal of Magnetic Resonance Imaging, 2002, 15, 364-373.	3.4	70
50	Advanced imaging improves prediction of hemorrhage after stroke thrombolysis. Annals of Neurology, 2013, 73, 510-519.	5.3	70
51	Inter-sequence and inter-imaging unit variability of diffusion tensor MR imaging histogram-derived metrics of the brain in healthy volunteers. American Journal of Neuroradiology, 2003, 24, 638-43.	2.4	69
52	Assessment of the DTIâ€ALPS Parameter Along the Perivascular Space in Older Adults at Risk of Dementia. Journal of Neuroimaging, 2021, 31, 569-578.	2.0	68
53	Current Concepts and Advances in Clinical Parallel Magnetic Resonance Imaging. Topics in Magnetic Resonance Imaging, 2004, 15, 129-158.	1.2	67
54	Ultra-high resolution diffusion tensor imaging of the microscopic pathways of the medial temporal lobe. NeuroImage, 2012, 62, 2065-2082.	4.2	65

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55	Advanced Diffusion-Weighted Magnetic Resonance Imaging Techniques of the Human Spinal Cord. Topics in Magnetic Resonance Imaging, 2010, 21, 367-378.	1.2	63
56	Perfusion mapping with multiecho multishot parallel imaging EPI. Magnetic Resonance in Medicine, 2007, 58, 70-81.	3.0	62
57	COMT genotype affects prefrontal white matter pathways in children and adolescents. NeuroImage, 2010, 53, 926-934.	4.2	62
58	Measuring brain oxygenation in humans using a multiparametric quantitative blood oxygenation level dependent MRI approach. Magnetic Resonance in Medicine, 2012, 68, 905-911.	3.0	61
59	Correlation of AOL recanalization, TIMI reperfusion and TICI reperfusion with infarct growth and clinical outcome. Journal of NeuroInterventional Surgery, 2014, 6, 724-728.	3.3	60
60	Geography, Structure, and Evolution of Diffusion and Perfusion Lesions in Diffusion and Perfusion Imaging Evaluation For Understanding Stroke Evolution (DEFUSE). Stroke, 2009, 40, 3245-3251.	2.0	58
61	New Methods in Diffusion-Weighted and Diffusion Tensor Imaging. Magnetic Resonance Imaging Clinics of North America, 2009, 17, 175-204.	1.1	56
62	Impact of Diffusion-Weighted Imaging Lesion Volume on the Success of Endovascular Reperfusion Therapy. Stroke, 2013, 44, 2205-2211.	2.0	55
63	High-resolution cerebral blood volume imaging in humans using the blood pool contrast agent ferumoxytol. Magnetic Resonance in Medicine, 2013, 70, 705-710.	3.0	52
64	Fast Automatic Detection of Large Vessel Occlusions on CT Angiography. Stroke, 2019, 50, 3431-3438.	2.0	51
65	Prognostic value of diffusion-weighted MRI for post-cardiac arrest coma. Neurology, 2020, 94, e1684-e1692.	1.1	51
66	Occipital-Callosal Pathways in Children: Validation and Atlas Development. Annals of the New York Academy of Sciences, 2005, 1064, 98-112.	3.8	49
67	Simultaneous Perfusion and Permeability Measurements Using Combined Spin- and Gradient-Echo MRI. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 732-743.	4.3	49
68	Plasticity of left perisylvian white-matter tracts is associated with individual differences in math learning. Brain Structure and Function, 2016, 221, 1337-1351.	2.3	49
69	Arterial Spin Labeling Imaging Findings in Transient Ischemic Attack Patients: Comparison with Diffusion- and Bolus Perfusion-Weighted Imaging. Cerebrovascular Diseases, 2012, 34, 221-228.	1.7	46
70	Patients With the Malignant Profile Within 3 Hours of Symptom Onset Have Very Poor Outcomes After Intravenous Tissue-Type Plasminogen Activator Therapy. Stroke, 2012, 43, 2494-2496.	2.0	46
71	A Comparison of Relative Time to Peak and Tmax for Mismatch-Based Patient Selection. Frontiers in Neurology, 2017, 8, 539.	2.4	46
72	Reperfusion of Very Low Cerebral Blood Volume Lesion Predicts Parenchymal Hematoma After Endovascular Therapy. Stroke, 2015, 46, 1245-1249.	2.0	42

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73	Automated Calculation of Alberta Stroke Program Early CT Score. Stroke, 2019, 50, 3277-3279.	2.0	42
74	Automated Perfusion Imaging for the Evaluation of Transient Ischemic Attack. Stroke, 2012, 43, 1556-1560.	2.0	41
75	Clinical Outcomes Strongly Associated With the Degree of Reperfusion Achieved in Target Mismatch Patients. Stroke, 2013, 44, 1885-1890.	2.0	38
76	Diffusion imaging in multiple sclerosis. Neuroimaging Clinics of North America, 2002, 12, 71-106.	1.0	34
77	The Association between Lesion Location and Functional Outcome after Ischemic Stroke. International Journal of Stroke, 2015, 10, 1270-1276.	5.9	33
78	Angiographic Outcome of Endovascular Stroke Therapy Correlated with MR Findings, Infarct Growth, and Clinical Outcome in the DEFUSE 2 Trial. International Journal of Stroke, 2014, 9, 860-865.	5.9	32
79	Diffusion-Weighted Magnetic Resonance Imaging of the Spine and Spinal Cord. Seminars in Roentgenology, 2006, 41, 294-311.	0.6	31
80	Low peak power multiband spokes pulses for B₁⁺ inhomogeneityâ€compensated simultaneous multislice excitation in high field MRI. Magnetic Resonance in Medicine, 2015, 74, 747-755.	3.0	31
81	A Score Based on Age and DWI Volume Predicts Poor Outcome following Endovascular Treatment for Acute Ischemic Stroke. International Journal of Stroke, 2015, 10, 705-709.	5.9	30
82	Prospective motion correction using coilâ€mounted cameras: Crossâ€calibration considerations. Magnetic Resonance in Medicine, 2018, 79, 1911-1921.	3.0	30
83	Distal Medium Vessel Occlusions Can Be Accurately and Rapidly Detected Using Tmax Maps. Stroke, 2021, 52, 3308-3317.	2.0	30
84	Trade-off between angular and spatial resolutions in in vivo fiber tractography. NeuroImage, 2016, 129, 117-132.	4.2	27
85	Generalized Diffusion Tensor Imaging (GDTI): A Method for Characterizing and Imaging Diffusion Anisotropy Caused by Non-Gaussian Diffusion. Israel Journal of Chemistry, 2010, 43, 145-154.	2.3	25
86	Optimal Computed Tomographic Perfusion Scan Duration for Assessment of Acute Stroke Lesion Volumes. Stroke, 2016, 47, 2966-2971.	2.0	25
87	Extended hybrid-space SENSE for EPI: Off-resonance and eddy current corrected joint interleaved blip-up/down reconstruction. NeuroImage, 2017, 153, 97-108.	4.2	24
88	Comparison of Magnetic Resonance Imaging Mismatch Criteria to Select Patients for Endovascular Stroke Therapy. Stroke, 2014, 45, 1369-1374.	2.0	22
89	Time From Imaging to Endovascular Reperfusion Predicts Outcome in Acute Stroke. Stroke, 2018, 49, 952-957.	2.0	21
90	Comparison of the response to endovascular reperfusion in relation to site of arterial occlusion. Neurology, 2013, 81, 614-618.	1.1	20

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91	Cerebral Blood Flow Predicts the Infarct Core. Stroke, 2019, 50, 2783-2789.	2.0	20
92	Cerebral Blood Flow Changes in Glioblastoma Patients Undergoing Bevacizumab Treatment Are Seen in Both Tumor and Normal Brain. Neuroradiology Journal, 2015, 28, 112-119.	1.2	19
93	Where have our patients gone? The impact of COVIDâ€19 on stroke imaging and intervention at an Australian stroke center. Journal of Medical Imaging and Radiation Oncology, 2020, 64, 607-614.	1.8	18
94	Markerâ€free optical stereo motion tracking for inâ€bore MRI and PETâ€MRI application. Medical Physics, 2020, 47, 3321-3331.	3.0	17
95	Contactâ€free physiological monitoring using a markerless optical system. Magnetic Resonance in Medicine, 2015, 74, 571-577.	3.0	16
96	Prediction of final infarct volume on subacute MRI by quantifying cerebral edema in ischemic stroke. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 3077-3084.	4.3	16
97	A withinâ€coil optical prospective motionâ€correction system for brain imaging at 7T. Magnetic Resonance in Medicine, 2020, 84, 1661-1671.	3.0	14
98	Patients with Single Distal MCA Perfusion Lesions Have a High Rate of Good Outcome with or without Reperfusion. International Journal of Stroke, 2014, 9, 156-159.	5.9	13
99	Detection of Cortical Venous Drainage and Determination of the Borden Type of Dural Arteriovenous Fistula by Means of 3D Pseudocontinuous Arterial Spin-Labeling MRI. American Journal of Roentgenology, 2016, 207, 163-169.	2.2	13
100	Iodinated contrast media shortage: Insights and guidance from two major public hospitals. Journal of Medical Imaging and Radiation Oncology, 2022, 66, 946-956.	1.8	12
101	Interhospital variation in reperfusion rates following endovascular treatment for acute ischemic stroke. Journal of NeuroInterventional Surgery, 2015, 7, 231-233.	3.3	10
102	Prospective motion correction for 3D pseudo-continuous arterial spin labeling using an external optical tracking system. Magnetic Resonance Imaging, 2017, 39, 44-52.	1.8	9
103	T1 maps from shifted spin echoes and stimulated echoes. Magnetic Resonance in Medicine, 2001, 46, 1242-1245.	3.0	8
104	Yield of CT perfusion for the evaluation of transient ischaemic attack. International Journal of Stroke, 2015, 10, 25-29.	5.9	6
105	Effect of Number of Acquisitions in Diffusion Tensor Imaging of the Pediatric Brain: Optimizing Scan Time and Diagnostic Experience. Journal of Neuroimaging, 2015, 25, 296-302.	2.0	5
106	Comparison of T2*GRE and DSC-PWI for hemorrhage detection in acute ischemic stroke patients: Pooled analysis of the EPITHET, DEFUSE 2, and SENSE 3 stroke studies. International Journal of Stroke, 2020, 15, 216-225.	5.9	5
107	Abstract 52: Results of DEFUSE 2: Imaging Endpoints. Stroke, 2012, 43, .	2.0	5
108	Feasibility of Marker-Free Motion Tracking for Motion-Corrected MRI and PET-MRI. , 2016, , .		4

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109	Abstract 73: Results of DEFUSE 2: Clinical Endpoints. Stroke, 2012, 43, .	2.0	4
110	Modern Applications of MRI in Medical Sciences. , 0, , 343-476.		2
111	Comparison of Tmax values between full- and half-dose gadolinium perfusion studies. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 336-341.	4.3	1
112	Optimizing a Feature-Based Motion Tracking System for Prospective Head Motion Estimation in MRI and PET/MRI. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 98-112.	3.7	1
113	Foundations of advanced magnetic resonance imaging. Neurotherapeutics, 2005, 2, 167-196.	4.4	1
114	Abstract 92: MRI Patient Selection In Acute Stroke Trials: Implications For Sample Size. Stroke, 2012, 43, .	2.0	1
115	Abstract 105: Diagnostic Accuracy of MRI in Spontaneous Intra-cerebral Hemorrhage (DASH) - Final Results. Stroke, 2012, 43, .	2.0	1
116	MR perfusion imaging: Halfâ€dose gadolinium is half the quality. Journal of Neuroimaging, 2021, 31, 1014-1019.	2.0	0
117	Abstract 2697: Fully-automated Identification of Acute Stroke Lesion Volumes with CT Perfusion. Stroke, 2012, 43, .	2.0	0
118	Abstract 3752: Performance Of Color ADC Maps As A Prognostic Tool In Comatose Post-cardiac Arrest Patients. Stroke, 2012, 43, .	2.0	0
119	Abstract 96: CTP-Mismatch Maps Improve Interobserver Agreement. Stroke, 2012, 43, .	2.0	0
120	Abstract 95: Regional Very Low Cerebral Blood Volume with Subsequent Local Reperfusion Predicts Hemorrhagic Transformation in Acute Ischemic Stroke. Stroke, 2012, 43, .	2.0	0
121	Abstract 135: Correlation of TICI Reperfusion with MR Reperfusion, Infarct Growth and Clinical Outcome in the DEFUSE 2 Trial. Stroke, 2012, 43, .	2.0	0
122	Abstract 53: The Malignant MRI profile: Implications for Endovascular Therapy. Stroke, 2012, 43, .	2.0	0
123	Abstract 6: Patient Selection is a Better Predictor of Good Outcome Than Time to Reperfusion in Acute Ischemic Stroke. Stroke, 2016, 47, .	2.0	0