Roland Bammer

List of Publications by Citations

114 papers	11,877 citations	52 h-index	108 g-index
123 ext. papers	13,867 ext. citations	6.3 avg, IF	6.06 L-index

#	Paper	IF	Citations
114	Thrombectomy for Stroke at 6 to 16 Hours with Selection by Perfusion Imaging. *New England Journal of Medicine*, **2018**, 378, 708-718	59.2	2185
113	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, 508-17	9.4	1004
112	MRI profile and response to endovascular reperfusion after stroke (DEFUSE 2): a prospective cohort study. *Lancet Neurology, The*, **2012**, 11, 860-7	24.1	612
111	Basic principles of diffusion-weighted imaging. *European Journal of Radiology*, **2003**, 45, 169-84	4.7	582
110	Cognitive processing speed and the structure of white matter pathways: convergent evidence from normal variation and lesion studies. *NeuroImage*, **2008**, 42, 1032-44	7.9	355
109	Optimal Tmax threshold for predicting penumbral tissue in acute stroke. *Stroke*, **2009**, 40, 469-75	6.7	298
108	ChildrenTs reading performance is correlated with white matter structure measured by diffusion tensor imaging. *Cortex*, **2005**, 41, 354-63	3.8	297
107	Real-time diffusion-perfusion mismatch analysis in acute stroke. *Journal of Magnetic Resonance Imaging*, **2010**, 32, 1024-37	5.6	289
106	Improved diffusion-weighted single-shot echo-planar imaging (EPI) in stroke using sensitivity encoding (SENSE). *Magnetic Resonance in Medicine*, **2001**, 46, 548-54	4.4	252
105	Diffusion tensor imaging using single-shot SENSE-EPI. *Magnetic Resonance in Medicine*, **2002**, 48, 128-36	4.4	244
104	Magnetic resonance diffusion tensor imaging for characterizing diffuse and focal white matter abnormalities in multiple sclerosis. *Magnetic Resonance in Medicine*, **2000**, 44, 583-91	4.4	227
103	Characterizing non-Gaussian diffusion by using generalized diffusion tensors. *Magnetic Resonance in Medicine*, **2004**, 51, 924-37	4.4	206
102	RAPID automated patient selection for reperfusion therapy: a pooled analysis of the Echoplanar Imaging Thrombolytic Evaluation Trial (EPITHET) and the Diffusion and Perfusion Imaging Evaluation for Understanding Stroke Evolution (DEFUSE) Study. *Stroke*, **2011**, 42, 1608-14	6.7	191
101	In vivo MR tractography using diffusion imaging. *European Journal of Radiology*, **2003**, 45, 223-34	4.7	177
100	Refining the definition of the malignant profile: insights from the DEFUSE-EPITHET pooled data set. *Stroke*, **2011**, 42, 1270-5	6.7	176
99	A multicenter randomized controlled trial of endovascular therapy following imaging evaluation for ischemic stroke (DEFUSE 3). *International Journal of Stroke*, **2017**, 12, 896-905	6.3	165
98	Risk factors of symptomatic intracerebral hemorrhage after tPA therapy for acute stroke. *Stroke*, **2007**, 38, 2275-8	6.7	155

97	The infarct core is well represented by the acute diffusion lesion: sustained reversal is infrequent. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 50-6	7.3	148
96	Acute Stroke Imaging Research Roadmap II. *Stroke*, **2013**, 44, 2628-39	6.7	133
95	Diffusion-weighted MR imaging (DWI) in spinal cord ischemia. *Neuroradiology*, **2006**, 48, 795-801	3.2	133
94	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, 127-40	4.4	132
93	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		132
92	Optimal definition for PWI/DWI mismatch in acute ischemic stroke patients. *Journal of Cerebral Blood Flow and Metabolism*, **2008**, 28, 887-91	7.3	127
91	Relationships between infarct growth, clinical outcome, and early recanalization in diffusion and perfusion imaging for understanding stroke evolution (DEFUSE). *Stroke*, **2008**, 39, 2257-63	6.7	115
90	Ischemic core and hypoperfusion volumes predict infarct size in SWIFT PRIME. *Annals of Neurology*, **2016**, 79, 76-89	9.4	114
89	Apparent diffusion coefficient threshold for delineation of ischemic core. *International Journal of Stroke*, **2015**, 10, 348-53	6.3	112
88	Effect of collateral blood flow on patients undergoing endovascular therapy for acute ischemic stroke. *Stroke*, **2014**, 45, 1035-9	6.7	110
87	Hypoperfusion intensity ratio predicts infarct progression and functional outcome in the DEFUSE 2 Cohort. *Stroke*, **2014**, 45, 1018-23	6.7	104
86	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, 723-9	6.3	100
85	The MRA-DWI mismatch identifies patients with stroke who are likely to benefit from reperfusion. *Stroke*, **2008**, 39, 2491-6	6.7	96
84	Early diffusion-weighted imaging and perfusion-weighted imaging lesion volumes forecast final infarct size in DEFUSE 2. *Stroke*, **2013**, 44, 681-5	6.7	88
83	Diffusion-tensor imaging of cognitive performance. *Brain and Cognition*, **2002**, 50, 396-413	2.7	83
82	Reliability of brain volume measurements: a test-retest dataset. *Scientific Data*, **2014**, 1, 140037	8.2	82
81	Diffusion-weighted imaging with navigated interleaved echo-planar imaging and a conventional gradient system. *Radiology*, **1999**, 211, 799-806	20.5	82
80	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	7.3	81

79	Relationships between cerebral perfusion and reversibility of acute diffusion lesions in DEFUSE: insights from RADAR. *Stroke*, **2009**, 40, 1692-7	6.7	81
78	Computed tomographic perfusion to Predict Response to Recanalization in ischemic stroke. *Annals of Neurology*, **2017**, 81, 849-856	9.4	79
77	Augmented generalized SENSE reconstruction to correct for rigid body motion. *Magnetic Resonance in Medicine*, **2007**, 57, 90-102	4.4	77
76	Acute Stroke Imaging Research Roadmap III Imaging Selection and Outcomes in Acute Stroke Reperfusion Clinical Trials: Consensus Recommendations and Further Research Priorities. *Stroke*, **2016**, 47, 1389-98	6.7	77
75	Response to endovascular reperfusion is not time-dependent in patients with salvageable tissue. *Neurology*, **2015**, 85, 708-14	6.5	75
74	Worse stroke outcome in atrial fibrillation is explained by more severe hypoperfusion, infarct growth, and hemorrhagic transformation. *International Journal of Stroke*, **2015**, 10, 534-40	6.3	73
73	The effects of alteplase 3 to 6 hours after stroke in the EPITHET-DEFUSE combined dataset: post hoc case-control study. *Stroke*, **2013**, 44, 87-93	6.7	73
72	Combined spin- and gradient-echo perfusion-weighted imaging. *Magnetic Resonance in Medicine*, **2012**, 68, 30-40	4.4	70
71	Early diffusion-weighted imaging reversal after endovascular reperfusion is typically transient in patients imaged 3 to 6 hours after onset. *Stroke*, **2014**, 45, 1024-8	6.7	69
70	Foundations of advanced magnetic resonance imaging. *NeuroRx*, **2005**, 2, 167-96		67
69	Diffusion-weighted imaging of the spinal cord: interleaved echo-planar imaging is superior to fast spin-echo. *Journal of Magnetic Resonance Imaging*, **2002**, 15, 364-73	5.6	67
68	CBF measurements using multidelay pseudocontinuous and velocity-selective arterial spin labeling in patients with long arterial transit delays: comparison with xenon CT CBF. *Journal of Magnetic Resonance Imaging*, **2012**, 36, 110-9	5.6	66
67	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	4.4	63
66	Current concepts and advances in clinical parallel magnetic resonance imaging. *Topics in Magnetic Resonance Imaging*, **2004**, 15, 129-58	2.3	62
65	Advanced imaging improves prediction of hemorrhage after stroke thrombolysis. *Annals of Neurology*, **2013**, 73, 510-9	9.4	57
64	COMT genotype affects prefrontal white matter pathways in children and adolescents. *NeuroImage* , **2010**, 53, 926-34	7.9	57
63	Line scan diffusion imaging of the spine. *American Journal of Neuroradiology*, **2003**, 24, 5-12	4.4	56
62	Advanced diffusion-weighted magnetic resonance imaging techniques of the human spinal cord. *Topics in Magnetic Resonance Imaging*, **2010**, 21, 367-78	2.3	52

61	New methods in diffusion-weighted and diffusion tensor imaging. *Magnetic Resonance Imaging Clinics of North America*, **2009**, 17, 175-204	1.6	51
60	Perfusion mapping with multiecho multishot parallel imaging EPI. *Magnetic Resonance in Medicine*, **2007**, 58, 70-81	4.4	51
59	Measuring brain oxygenation in humans using a multiparametric quantitative blood oxygenation level dependent MRI approach. *Magnetic Resonance in Medicine*, **2012**, 68, 905-11	4.4	49
58	Correlation of AOL recanalization, TIMI reperfusion and TICI reperfusion with infarct growth and clinical outcome. *Journal of NeuroInterventional Surgery*, **2014**, 6, 724-8	7.8	48
57	Ultra-high resolution diffusion tensor imaging of the microscopic pathways of the medial temporal lobe. *NeuroImage*, **2012**, 62, 2065-82	7.9	48
56	Geography, structure, and evolution of diffusion and perfusion lesions in Diffusion and perfusion imaging Evaluation For Understanding Stroke Evolution (DEFUSE). *Stroke*, **2009**, 40, 3245-51	6.7	48
55	Occipital-callosal pathways in children: Validation and atlas development. *Annals of the New York Academy of Sciences*, **2005**, 1064, 98-112	6.5	47
54	High-resolution cerebral blood volume imaging in humans using the blood pool contrast agent ferumoxytol. *Magnetic Resonance in Medicine*, **2013**, 70, 705-10	4.4	46
53	Impact of diffusion-weighted imaging lesion volume on the success of endovascular reperfusion therapy. *Stroke*, **2013**, 44, 2205-11	6.7	44
52	Arterial spin labeling imaging findings in transient ischemic attack patients: comparison with diffusion- and bolus perfusion-weighted imaging. *Cerebrovascular Diseases*, **2012**, 34, 221-8	3.2	41
51	Simultaneous perfusion and permeability measurements using combined spin- and gradient-echo MRI. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 732-43	7.3	37
50	Automated Detection of Intracranial Large Vessel Occlusions on Computed Tomography Angiography: A Single Center Experience. *Stroke*, **2019**, 50, 2790-2798	6.7	36
49	Automated perfusion imaging for the evaluation of transient ischemic attack. *Stroke*, **2012**, 43, 1556-60	6.7	36
48	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, 2494-6	6.7	35
47	Reperfusion of very low cerebral blood volume lesion predicts parenchymal hematoma after endovascular therapy. *Stroke*, **2015**, 46, 1245-9	6.7	34
46	Plasticity of left perisylvian white-matter tracts is associated with individual differences in math learning. *Brain Structure and Function*, **2016**, 221, 1337-51	4	33
45	Diffusion imaging in multiple sclerosis. *Neuroimaging Clinics of North America*, **2002**, 12, 71-106	3	32
44	Clinical outcomes strongly associated with the degree of reperfusion achieved in target mismatch patients: pooled data from the Diffusion and Perfusion Imaging Evaluation for Understanding Stroke Evolution studies. *Stroke*, **2013**, 44, 1885-90	6.7	31

43	Low peak power multiband spokes pulses for B1 (+) inhomogeneity-compensated simultaneous multislice excitation in high field MRI. *Magnetic Resonance in Medicine*, **2015**, 74, 747-55	4.4	28
42	Fast Automatic Detection of Large Vessel Occlusions on CT Angiography. *Stroke*, **2019**, 50, 3431-3438	6.7	28
41	A Comparison of Relative Time to Peak and Tmax for Mismatch-Based Patient Selection. *Frontiers in Neurology*, **2017**, 8, 539	4.1	28
40	Diffusion-weighted magnetic resonance imaging of the spine and spinal cord. *Seminars in Roentgenology*, **2006**, 41, 294-311	0.8	25
39	Prospective motion correction using coil-mounted cameras: Cross-calibration considerations. *Magnetic Resonance in Medicine*, **2018**, 79, 1911-1921	4.4	24
38	The association between lesion location and functional outcome after ischemic stroke. *International Journal of Stroke*, **2015**, 10, 1270-6	6.3	24
37	A score based on age and DWI volume predicts poor outcome following endovascular treatment for acute ischemic stroke. *International Journal of Stroke*, **2015**, 10, 705-9	6.3	23
36	Trade-off between angular and spatial resolutions in in vivo fiber tractography. *NeuroImage*, **2016**, 129, 117-132	7.9	22
35	Automated Calculation of Alberta Stroke Program Early CT Score: Validation in Patients With Large Hemispheric Infarct. *Stroke*, **2019**, 50, 3277-3279	6.7	21
34	Comparison of magnetic resonance imaging mismatch criteria to select patients for endovascular stroke therapy. *Stroke*, **2014**, 45, 1369-74	6.7	20
33	Prognostic value of diffusion-weighted MRI for post-cardiac arrest coma. *Neurology*, **2020**, 94, e1684-e1692	6.9	18
32	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, 860-5	6.3	18
31	Comparison of the response to endovascular reperfusion in relation to site of arterial occlusion. *Neurology*, **2013**, 81, 614-8	6.5	18
30	Cerebral Blood Flow Changes in Glioblastoma Patients Undergoing Bevacizumab Treatment Are Seen in Both Tumor and Normal Brain. *Neuroradiology Journal*, **2015**, 28, 112-9	2	16
29	Time From Imaging to Endovascular Reperfusion Predicts Outcome in Acute Stroke. *Stroke*, **2018**, 49, 952-957	6.7	16
28	Assessment of the DTI-ALPS Parameter Along the Perivascular Space in Older Adults at Risk of Dementia. *Journal of Neuroimaging*, **2021**, 31, 569-578	2.8	16
27	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	3.4	15
26	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	7.3	14

25	Contact-free physiological monitoring using a markerless optical system. *Magnetic Resonance in Medicine*, **2015**, 74, 571-7	4.4	14
24	Extended hybrid-space SENSE for EPI: Off-resonance and eddy current corrected joint interleaved blip-up/down reconstruction. *NeuroImage*, **2017**, 153, 97-108	7.9	13
23	Cerebral Blood Flow Predicts the Infarct Core: New Insights From Contemporaneous Diffusion and Perfusion Imaging. *Stroke*, **2019**, 50, 2783-2789	6.7	12
22	Optimal Computed Tomographic Perfusion Scan Duration for Assessment of Acute Stroke Lesion Volumes. *Stroke*, **2016**, 47, 2966-2971	6.7	12
21	Patients with single distal MCA perfusion lesions have a high rate of good outcome with or without reperfusion. *International Journal of Stroke*, **2014**, 9, 156-9	6.3	12
20	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, 163-9	5.4	12
19	A within-coil optical prospective motion-correction system for brain imaging at 7T. *Magnetic Resonance in Medicine*, **2020**, 84, 1661-1671	4.4	9
18	Interhospital variation in reperfusion rates following endovascular treatment for acute ischemic stroke. *Journal of NeuroInterventional Surgery*, **2015**, 7, 231-3	7.8	8
17	Where have our patients gone? The impact of COVID-19 on stroke imaging and intervention at an Australian stroke center. *Journal of Medical Imaging and Radiation Oncology*, **2020**, 64, 607-614	1.7	8
16	Prospective motion correction for 3D pseudo-continuous arterial spin labeling using an external optical tracking system. *Magnetic Resonance Imaging*, **2017**, 39, 44-52	3.3	7
15	Marker-free optical stereo motion tracking for in-bore MRI and PET-MRI application. *Medical Physics* , **2020**, 47, 3321-3331	4.4	7
14	T1 maps from shifted spin echoes and stimulated echoes. *Magnetic Resonance in Medicine*, **2001**, 46, 1242-5	4.4	7
13	Yield of CT perfusion for the evaluation of transient ischaemic attack. *International Journal of Stroke*, **2015**, 10 Suppl A100, 25-9	6.3	6
12	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	2.8	4
11	Abstract 52: Results of DEFUSE 2: Imaging Endpoints. *Stroke*, **2012**, 43,	6.7	4
10	Distal Medium Vessel Occlusions Can Be Accurately and Rapidly Detected Using Maps. *Stroke*, **2021**, 52, 3308-3317	6.7	3
9	Feasibility of Marker-Free Motion Tracking for Motion-Corrected MRI and PET-MRI **2016**,		2
8	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	6.3	2

7	Modern Applications of MRI in Medical Sciences343-476		1
6	Foundations of advanced magnetic resonance imaging. *Neurotherapeutics*, **2005**, 2, 167-196	6.4	1
5	Comparison of Tmax values between full- and half-dose gadolinium perfusion studies. *Journal of Cerebral Blood Flow and Metabolism*, **2021**, 41, 336-341	7.3	1
4	Abstract 73: Results of DEFUSE 2: Clinical Endpoints. *Stroke*, **2012**, 43,	6.7	1
3	Iodinated contrast media shortage: insights and guidance from two major public hospitals. *Journal of Medical Imaging and Radiation Oncology*,	1.7	0
2	MR perfusion imaging: Half-dose gadolinium is half the quality. *Journal of Neuroimaging*, **2021**, 31, 1014-1019	1.8	
1	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*, **2021**, 1-1	4.2	