Jana Maria Hutter

List of Publications by Year
in descending order

89 papers	3,266 citations	218677 26 h-index	223800 46 g-index
105 all docs	105 docs citations	105 times ranked	2848 citing authors

#	Article	IF	Citations
1	Visual assessment of the placenta in antenatal magnetic resonance imaging across gestation in normal and compromised pregnancies: Observations from a large cohort study. Placenta, 2022, 117, 29-38.	1.5	5
2	Cardiac and placental imaging (CARP) in pregnancy to assess aetiology of preeclampsia. Placenta, 2022, 122, 46-55.	1.5	2
3	Neonatal multi-modal cortical profiles predict 18-month developmental outcomes. Developmental Cognitive Neuroscience, 2022, 54, 101103.	4.0	11
4	Effects of gestational age at birth on perinatal structural brain development in healthy termâ€born babies. Human Brain Mapping, 2022, 43, 1577-1589.	3.6	3
5	Predicting age and clinical risk from the neonatal connectome. NeuroImage, 2022, 257, 119319.	4.2	11
6	The Developing Human Connectome Project Neonatal Data Release. Frontiers in Neuroscience, 2022, 16, .	2.8	42
7	The developing brain structural and functional connectome fingerprint. Developmental Cognitive Neuroscience, 2022, 55, 101117.	4.0	5
8	Antenatal diagnosis of chorioamnionitis: A review of the potential role of fetal and placental imaging. Prenatal Diagnosis, 2022, 42, 1049-1058.	2.3	7
9	Antenatal thymus volumes in fetuses that delivered <32Âweeks' gestation: An MRI pilot study. Acta Obstetricia Et Gynecologica Scandinavica, 2021, 100, 1040-1050.	2.8	16
10	Scattered slice SHARD reconstruction for motion correction in multi-shell diffusion MRI. NeuroImage, 2021, 225, 117437.	4.2	44
11	Placental magnetic resonance imaging in chronic hypertension: A case-control study. Placenta, 2021, 104, 138-145.	1.5	13
12	Brain volumetry in fetuses that deliver very preterm: An MRI pilot study. NeuroImage: Clinical, 2021, 30, 102650.	2.7	17
13	The effect of maternal position on venous return for pregnant women during MRI. NMR in Biomedicine, 2021, 34, e4475.	2.8	14
14	Predicting Preterm Birth Using Multimodal Fetal Imaging. Lecture Notes in Computer Science, 2021, , 284-293.	1.3	0
15	Spatio-Temporal Atlas of Normal Fetal Craniofacial Feature Development andÂCNN-Based Ocular Biometry forÂMotion-Corrected Fetal MRI. Lecture Notes in Computer Science, 2021, , 168-178.	1.3	6
16	Uncertainty-Aware Deep Learning Based Deformable Registration. Lecture Notes in Computer Science, 2021, , 54-63.	1.3	1
17	Phenotyping the Preterm Brain: Characterizing Individual Deviations From Normative Volumetric Development in Two Large Infant Cohorts. Cerebral Cortex, 2021, 31, 3665-3677.	2.9	19
18	T2* placental MRI in pregnancies complicated with fetal congenital heart disease. Placenta, 2021, 108, 23-31.	1.5	16

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19	Development of human white matter pathways in utero over the second and third trimester. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	55
20	Multi-Channel 4D Parametrized Atlas of Macro- and Microstructural Neonatal Brain Development. Frontiers in Neuroscience, 2021, 15, 661704.	2.8	8
21	An efficient and combined placental â€ADC acquisition in pregnancies with and without preâ€eclampsia. Magnetic Resonance in Medicine, 2021, 86, 2684-2691.	3.0	2
22	Data-Driven multi-Contrast spectral microstructure imaging with InSpect: INtegrated SPECTral component estimation and mapping. Medical Image Analysis, 2021, 71, 102045.	11.6	22
23	APPLAUSE: Automatic Prediction of PLAcental health via U-net Segmentation and statistical Evaluation. Medical Image Analysis, 2021, 72, 102145.	11.6	13
24	Combined diffusionâ€relaxometry microstructure imaging: Current status and future prospects. Magnetic Resonance in Medicine, 2021, 86, 2987-3011.	3.0	46
25	Assessment of the fetal thymus gland: Comparing MRI-acquired thymus volumes with 2D ultrasound measurements. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2021, 264, 1-7.	1.1	2
26	The use of functional placental magnetic resonance imaging for assessment of the placenta after prolonged preterm rupture of the membranes in vivo: A pilot study. Acta Obstetricia Et Gynecologica Scandinavica, 2021, 100, 2244-2252.	2.8	6
27	Preterm birth alters the development of cortical microstructure and morphology at term-equivalent age. NeuroImage, 2021, 243, 118488.	4.2	40
28	Anisotropy in the Human Placenta in Pregnancies Complicated by Fetal Growth Restriction. Mathematics and Visualization, 2021, , 263-276.	0.6	1
29	Higher Order Spherical Harmonics Reconstruction of Fetal Diffusion MRI With Intensity Correction. IEEE Transactions on Medical Imaging, 2020, 39, 1104-1113.	8.9	20
30	Perfusion and apparent oxygenation in the human placenta (PERFOX). Magnetic Resonance in Medicine, 2020, 83, 549-560.	3.0	20
31	Foetal lung volumes in pregnant women who deliver very preterm: a pilot study. Pediatric Research, 2020, 87, 1066-1071.	2.3	16
32	On the need for bundle-specific microstructure kernels in diffusion MRI. NeuroImage, 2020, 208, 116460.	4.2	9
33	Reduced structural connectivity in cortico-striatal-thalamic network in neonates with congenital heart disease. NeuroImage: Clinical, 2020, 28, 102423.	2.7	14
34	CRAFT (Cerclage after full dilatation caesarean section): protocol of a mixed methods study investigating the role of previous in-labour caesarean section in preterm birth risk. BMC Pregnancy and Childbirth, 2020, 20, 698.	2.4	6
35	A dataâ€driven approach to optimising the encoding for multiâ€shell diffusion MRI with application to neonatal imaging. NMR in Biomedicine, 2020, 33, e4348.	2.8	18
36	Investigating altered brain development in infants with congenital heart disease using tensor-based morphometry. Scientific Reports, 2020, 10, 14909.	3.3	17

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37	Parental age effects on neonatal white matter development. NeuroImage: Clinical, 2020, 27, 102283.	2.7	12
38	Development of Microstructural and Morphological Cortical Profiles in the Neonatal Brain. Cerebral Cortex, 2020, 30, 5767-5779.	2.9	42
39	Systematic evaluation of velocityâ€selective arterial spin labeling settings for placental perfusion measurement. Magnetic Resonance in Medicine, 2020, 84, 1828-1843.	3.0	23
40	Modelling brain development to detect white matter injury in term and preterm born neonates. Brain, 2020, 143, 467-479.	7.6	44
41	Heterogeneity in Brain Microstructural Development Following Preterm Birth. Cerebral Cortex, 2020, 30, 4800-4810.	2.9	54
42	Multi-channel Registration for Diffusion MRI: Longitudinal Analysis for the Neonatal Brain. Lecture Notes in Computer Science, 2020, , 111-121.	1.3	3
43	Diffusion Tensor Driven Image Registration: A Deep Learning Approach. Lecture Notes in Computer Science, 2020, , 131-140.	1.3	5
44	Acquiring and Predicting Multidimensional Diffusion (MUDI) Data: An Open Challenge. Mathematics and Visualization, 2020, , 195-208.	0.6	8
45	Data-Driven Multi-contrast Spectral Microstructure Imaging with InSpect. Lecture Notes in Computer Science, 2020, , 375-385.	1.3	1
46	Deformable Slice-to-Volume Registration for Reconstruction of Quantitative T2* Placental and Fetal MRI. Lecture Notes in Computer Science, 2020, , 222-232.	1.3	8
47	T2* Placental Magnetic Resonance Imaging in Preterm Preeclampsia. Hypertension, 2020, 75, 1523-1531.	2.7	52
48	Cortical morphology at birth reflects spatiotemporal patterns of gene expression in the fetal human brain. PLoS Biology, 2020, 18, e3000976.	5.6	38
49	Optimizing maternal fat suppression with constrained imageâ€based shimming in fetal <scp>MR</scp>. Magnetic Resonance in Medicine, 2019, 81, 477-485.	3.0	14
50	Automated processing pipeline for neonatal diffusion MRI in the developing Human Connectome Project. NeuroImage, 2019, 185, 750-763.	4.2	127
51	Complex diffusion-weighted image estimation via matrix recovery under general noise models. NeuroImage, 2019, 200, 391-404.	4.2	184
52	InSpect: INtegrated SPECTral Component Estimation and Mapping for Multi-contrast Microstructural MRI. Lecture Notes in Computer Science, 2019, , 755-766.	1.3	5
53	Combined diffusionâ€relaxometry MRI to identify dysfunction in the human placenta. Magnetic Resonance in Medicine, 2019, 82, 95-106.	3.0	74
54	In Utero Diffusion MRI. Topics in Magnetic Resonance Imaging, 2019, 28, 255-264.	1.2	11

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55	Learning Compact <inline-formula> <tex-math notation="LaTeX">${q}$ </tex-math> </inline-formula>-Space Representations for Multi-Shell Diffusion-Weighted MRI. IEEE Transactions on Medical Imaging, 2019, 38, 834-843.	8.9	19
56	A framework for multi-component analysis of diffusion MRI data over the neonatal period. NeuroImage, 2019, 186, 321-337.	4.2	47
57	Multiâ€modal functional MRI to explore placental function over gestation. Magnetic Resonance in Medicine, 2019, 81, 1191-1204.	3.0	60
58	A Framework for Calculating Time-Efficient Diffusion MRI Protocols for Anisotropic IVIM and An Application in the Placenta. Mathematics and Visualization, 2019, , 251-263.	0.6	3
59	The developing human connectome project: A minimal processing pipeline for neonatal cortical surface reconstruction. NeuroImage, 2018, 173, 88-112.	4.2	315
60	Threeâ€dimensional motion corrected sensitivity encoding reconstruction for multiâ€shot multiâ€slice MRI: Application to neonatal brain imaging. Magnetic Resonance in Medicine, 2018, 79, 1365-1376.	3.0	108
61	Timeâ€efficient and flexible design of optimized multishell HARDI diffusion. Magnetic Resonance in Medicine, 2018, 79, 1276-1292.	3.0	72
62	Placenta microstructure and microcirculation imaging with diffusion MRI. Magnetic Resonance in Medicine, 2018, 80, 756-766.	3.0	53
63	An efficient sequence for fetal brain imaging at 3T with enhanced T₁ contrast and motion robustness. Magnetic Resonance in Medicine, 2018, 80, 137-146.	3.0	5
64	Multimodal surface matching with higher-order smoothness constraints. NeuroImage, 2018, 167, 453-465.	4.2	219
65	Innerâ€volume echo volumar imaging (<scp>IVEVI</scp>) for robust fetal brain imaging. Magnetic Resonance in Medicine, 2018, 80, 279-285.	3.0	4
66	Quiet echo planar imaging for functional and diffusion MRI. Magnetic Resonance in Medicine, 2018, 79, 1447-1459.	3.0	35
67	Integrated and efficient diffusion-relaxometry using ZEBRA. Scientific Reports, 2018, 8, 15138.	3.3	82
68	Slice-level diffusion encoding for motion and distortion correction. Medical Image Analysis, 2018, 48, 214-229.	11.6	22
69	Construction of a neonatal cortical surface atlas using Multimodal Surface Matching in the Developing Human Connectome Project. NeuroImage, 2018, 179, 11-29.	4.2	83
70	Placenta Maps: In Utero Placental Health Assessment of the Human Fetus. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1612-1623.	4.4	21
71	A dedicated neonatal brain imaging system. Magnetic Resonance in Medicine, 2017, 78, C1-C1.	3.0	2
72	Impaired development of the cerebral cortex in infants with congenital heart disease is correlated to reduced cerebral oxygen delivery. Scientific Reports, 2017, 7, 15088.	3.3	60

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73	A deformable model for the reconstruction of the neonatal cortex. , 2017, , .		29
74	A dedicated neonatal brain imaging system. Magnetic Resonance in Medicine, 2017, 78, 794-804.	3.0	233
75	Dynamic Field Mapping and Motion Correction Using Interleaved Double Spin-Echo Diffusion MRI. Lecture Notes in Computer Science, 2017, , 523-531.	1.3	5
76	Sensitivity Encoding for Aligned Multishot Magnetic Resonance Reconstruction. IEEE Transactions on Computational Imaging, 2016, 2, 266-280.	4.4	65
77	Reduction of respiratory motion artifacts for free-breathing whole-heart coronary MRA by weighted iterative reconstruction. Magnetic Resonance in Medicine, 2015, 73, 1885-1895.	3.0	39
78	Highly undersampled peripheral Time-of-Flight magnetic resonance angiography: optimized data acquisition and iterative image reconstruction. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2015, 28, 437-446.	2.0	17
79	Multi-Dimensional Flow-Preserving Compressed Sensing (MuFloCoS) for Time-Resolved Velocity-Encoded Phase Contrast MRI. IEEE Transactions on Medical Imaging, 2015, 34, 400-414.	8.9	16
80	Self-gated MRI motion modeling for respiratory motion compensation in integrated PET/MRI. Medical Image Analysis, 2015, 19, 110-120.	11.6	103
81	High-resolution 3D whole-heart coronary MRA: a study on the combination of data acquisition in multiple breath-holds and 1D residual respiratory motion compensation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2014, 27, 435-443.	2.0	28
82	Free-Breathing Whole-Heart Coronary MRA: Motion Compensation Integrated into 3D Cartesian Compressed Sensing Reconstruction. Lecture Notes in Computer Science, 2013, 16, 575-582.	1.3	8
83	Multi-dimensional flow-adapted compressed sensing (MDFCS) for time-resolved velocity-encoded Phase Contrast MRA. , 2013, , .		2
84	Passive time-multiplexing super-resolved technique for axially moving targets. Applied Optics, 2013, 52, C11.	1.8	5
85	A realistic digital phantom for perfusion C-arm CT based on MRI data. , 2013, , .		5
86	Self-gated Radial MRI for Respiratory Motion Compensation on Hybrid PET/MR Systems. Lecture Notes in Computer Science, 2013, 16, 17-24.	1.3	33
87	Low-Rank and Sparse Matrix Decomposition for Compressed Sensing Reconstruction of Magnetic Resonance 4D Phase Contrast Blood Flow Imaging (LoSDeCoS 4D-PCI). Lecture Notes in Computer Science, 2013, 16, 558-565.	1.3	4
88	Virtual angiography using CFD simulations based on patient-specific parameter optimization. , 2012, , .		7
89	T2* relaxometry to characterize normal placental development over gestation in-vivo at 3T. Wellcome Open Research, 0, 4, 166.	1.8	10