Mike MÃ¼ller-Petke

List of Publications by Year
in descending order

31 papers	**615** citations	623734 **14** h-index	610901 **24** g-index
31 all docs	**31** docs citations	**31** times ranked	**354** citing authors

#	Article	IF	Citations
1	MRSmatlab â€" A software tool for processing, modeling, and inversion of magnetic resonance sounding data. Geophysics, 2016, 81, WB9-WB21.	2.6	70
2	Hydraulic properties at the North Sea island of Borkum derived from joint inversion of magnetic resonance and electrical resistivity soundings. Hydrology and Earth System Sciences, 2012, 16, 3279-3291.	4.9	48
3	Detecting unfrozen sediments below thermokarst lakes with surface nuclear magnetic resonance. Geophysical Research Letters, 2013, 40, 535-540.	4.0	45
4	Improved prediction of hydraulic conductivity for coarse-grained, unconsolidated material from nuclear magnetic resonance. Geophysics, 2013, 78, EN55-EN64.	2.6	41
5	Evaluation of surface nuclear magnetic resonance-estimated subsurface water content. New Journal of Physics, 2011, 13, 095002.	2.9	40
6	Twoâ€dimensional distribution of relaxation time and water content from surface nuclear magnetic resonance. Near Surface Geophysics, 2014, 12, 231-241.	1.2	37
7	Magnetic resonance tomography using elongated transmitter and in-loop receiver arrays for time-efficient 2-D imaging of subsurface aquifer structures. Geophysical Journal International, 2015, 200, 824-836.	2.4	37
8	Joint parameter estimation from magnetic resonance and vertical electric soundings using a multiâ€objective genetic algorithm. Geophysical Prospecting, 2014, 62, 364-376.	1.9	34
9	Nuclear magnetic resonance average pore-size estimations outside the fast-diffusion regime. Geophysics, 2015, 80, D195-D206.	2.6	32
10	Enabling surface nuclear magnetic resonance at high-noise environments using a pre-polarization pulse. Geophysical Journal International, 2018, 212, 1463-1467.	2.4	30
11	Imaging shallow three dimensional water-bearing structures using magnetic resonance tomography. Journal of Applied Geophysics, 2015, 116, 17-27.	2.1	28
12	First evidence of detecting surface nuclear magnetic resonance signals using a compact Bâ€field sensor. Geophysical Research Letters, 2014, 41, 4222-4229.	4.0	21
13	Reliability and limitations of surface NMR assessed by comparison to borehole NMR. Near Surface Geophysics, 2011, 9, 123-134.	1.2	20
14	Frequency cycling for compensation of undesired off-resonance effects in surface nuclear magnetic resonance. Geophysics, 2016, 81, WB33-WB48.	2.6	18
15	Utilizing pre-polarization to enhance SNMR signalsâ€"effect of imperfect switch-off. Geophysical Journal International, 2020, 222, 815-826.	2.4	13
16	Two-dimensional QT inversion of complex magnetic resonance tomography data. Geophysics, 2018, 83, JM65-JM75.	2.6	12
17	Coupled magnetic resonance and electrical resistivity tomography: An open-source toolbox for surface nuclear-magnetic resonance. Geophysics, 2020, 85, F53-F64.	2.6	12
18	Structurally coupled cooperative inversion of magnetic resonance with resistivity soundings. Geophysics, 2018, 83, JM51-JM63.	2.6	10

#	Article	IF	Citations
19	Magnetic resonance tomography constrained by ground-penetrating radar for improved hydrogeophysical characterization. Geophysics, 2020, 85, JM13-JM26.	2.6	10
20	Review of Acquisition and Signal Processing Methods for Electromagnetic Noise Reduction and Retrieval of Surface Nuclear Magnetic Resonance Parameters. Surveys in Geophysics, 2022, 43, 999-1053.	4.6	9
21	Tools and Techniques: Nuclear Magnetic Resonance. , 2015, , 419-445.		7
22	Successful Sampling Strategy Advances Laboratory Studies of NMR Logging in Unconsolidated Aquifers. Geophysical Research Letters, 2017, 44, 11,021.	4.0	7
23	Non-remote reference noise cancellation - using reference data in the presence of surface-NMR signals. Journal of Applied Geophysics, 2020, 177, 104040.	2.1	7
24	First Measurements of Surface Nuclear Magnetic Resonance Signals in a Grounded Bipole. Geophysical Research Letters, 2019, 46, 9620-9627.	4.0	5
25	Feasibility study on prepolarized surface nuclear magnetic resonance for soil moisture measurements. Vadose Zone Journal, 2021, 20, e20138.	2.2	5
26	Surface Nuclear Magnetic Resonance Measurements in Berlin - Proof-Of-Concept for Applying the Prepolarisation Technique in Urban Areas. , 2019, , .		5
27	First Measurements of Surface Nuclear Magnetic Resonance Signals Without an Oscillating Excitation Pulse â€" Exploiting Nonâ€Adiabatic Prepolarization Switchâ€Off. Geophysical Research Letters, 2021, 48, e2021GL095371.	4.0	4
28	Frequency cycling to alleviate unknown frequency offsets for adiabatic half-passage pulses in surface nuclear magnetic resonance. Geophysics, 2018, 83, JM29-JM38.	2.6	3
29	Improved hydrogeophysical imaging by structural coupling of 2D magnetic resonance and electrical resistivity tomography. Geophysics, 2021, 86, WB77-WB88.	2.6	3
30	Application of adiabatic pulses for magnetic Resonance Sounding â€" Pulse shapes and resolution. Journal of Applied Geophysics, 2020, 179, 104079.	2.1	1
31	A fast multi-exponential inversion of magnetic resonance sounding using iterative Lanczos bidiagonalization algorithm. Journal of Applied Geophysics, 2020, 175, 103985.	2.1	1