Electrical conductivity, induced polarization, and perm sandstone

Geophysics 79, D301-D318 DOI: 10.1190/geo2014-0036.1

Citation Report

#	Article	IF	CITATIONS
1	Quadrature conductivity: A quantitative indicator of bacterial abundance in porous media. Geophysics, 2014, 79, D363-D375.	1.4	21
2	Electrical properties of methane hydrate + sediment mixtures. Journal of Geophysical Research: Solid Earth, 2015, 120, 4773-4783.	1.4	25
3	Pore connectivity, electrical conductivity, and partial water saturation: Network simulations. Journal of Geophysical Research: Solid Earth, 2015, 120, 4055-4068.	1.4	37
4	Estimation of soil salinity in a drip irrigation system by using joint inversion of multicoil electromagnetic induction measurements. Water Resources Research, 2015, 51, 3490-3504.	1.7	42
5	Predicting permeability from the characteristic relaxation time and intrinsic formation factor of complex conductivity spectra. Water Resources Research, 2015, 51, 6672-6700.	1.7	86
6	Universal scaling of the formation factor in clays: Example from the Nankai Trough. Journal of Geophysical Research: Solid Earth, 2015, 120, 7361-7375.	1.4	16
7	Permeability prediction based on induced polarization: Insights from measurements on sandstone and unconsolidated samples spanning a wide permeability range. Geophysics, 2015, 80, D161-D173.	1.4	86
8	Electrokinetic experimental study on saturated rock samples: zeta potential and surface conductance. Geophysical Journal International, 2015, 201, 869-877.	1.0	34
9	The emergence of hydrogeophysics for improved understanding of subsurface processes over multiple scales. Water Resources Research, 2015, 51, 3837-3866.	1.7	479
10	Experimental measurements of seismoelectric signals in borehole models. Geophysical Journal International, 2015, 203, 1937-1945.	1.0	22
11	Evaluating the potential for quantitative monitoring of in situ chemical oxidation of aqueousâ€phase TCE using inâ€phase and quadrature electrical conductivity. Water Resources Research, 2015, 51, 5239-5259.	1.7	9
12	Induced polarization dependence on pore space geometry: Empirical observations and mechanistic predictions. Journal of Applied Geophysics, 2015, 123, 310-315.	0.9	16
13	Theoretical study on the amplitude ratio of the seismoelectric field to the Stoneley wave and the formation tortuosity estimation from seismoelectric logs. Geophysical Journal International, 2015, 203, 2277-2286.	1.0	9
14	Pore Space Connectivity and the Transport Properties of Rocks. Oil and Gas Science and Technology, 2016, 71, 50.	1.4	20
15	Induced polarization response of porous media with metallic particles — Part 4: Detection of metallic and nonmetallic targets in time-domain induced polarization tomography. Geophysics, 2016, 81, D359-D375.	1.4	43
16	A laboratory investigation of the thermoelectric effect. Geophysics, 2016, 81, E243-E257.	1.4	13
17	Salinity dependence of the complex surface conductivity of the Portland sandstone. Geophysics, 2016, 81, D125-D140.	1.4	42
18	Core-scale electrical resistivity tomography (ERT) monitoring of CO2–brine mixture in Fontainebleau sandstone. Journal of Applied Geophysics, 2016, 130, 23-36.	0.9	14

#	Article	IF	CITATIONS
19	The evaluation of rock permeability with streaming current measurements. Geophysical Journal International, 2016, 206, 1563-1573.	1.0	17
20	Textural control on the quadrature conductivity of porous media. Geophysics, 2016, 81, E297-E309.	1.4	25
21	Study into the correlation of dominant pore throat size and SIP relaxation frequency. Journal of Applied Geophysics, 2016, 135, 375-386.	0.9	25
22	Construction of pore network models for Berea and Fontainebleau sandstones using non-linear programing and optimization techniques. Advances in Water Resources, 2016, 98, 198-210.	1.7	18
23	Evaluation of low frequency polarization models using well characterized sintered porous glass samples. Journal of Applied Geophysics, 2016, 124, 39-53.	0.9	4
24	Induced polarization response of porous media with metallic particles — Part 5: Influence of the background polarization. Geophysics, 2017, 82, E77-E96.	1.4	21
25	Induced polarization response of porous media with metallic particles — Part 6: The case of metals and semimetals. Geophysics, 2017, 82, E97-E110.	1.4	21
26	Long-term ERT monitoring of biogeochemical changes of an aged hydrocarbon contamination. Journal of Contaminant Hydrology, 2017, 201, 19-29.	1.6	40
27	Upscaling of spectral induced polarization response using random tube networks. Geophysical Journal International, 2017, 209, 948-960.	1.0	19
28	Relationship between electrical conductivity anisotropy and fabric anisotropy in granular materials during drained triaxial compressive tests: a numerical approach. Geophysical Journal International, 2017, 210, 1-17.	1.0	10
29	Alteration of volcanic rocks: A new non-intrusive indicator based on induced polarization measurements. Journal of Volcanology and Geothermal Research, 2017, 341, 351-362.	0.8	36
30	Redox Reactions During Sandstone Flow-through Experiments at Geothermal Conditions. Procedia Earth and Planetary Science, 2017, 17, 53-56.	0.6	1
31	Pore network extraction from pore space images of various porous media systems. Water Resources Research, 2017, 53, 3424-3445.	1.7	59
32	Induced polarization of volcanic rocks. 2. Influence of pore size and permeability. Geophysical Journal International, 2017, 208, 814-825.	1.0	31
33	Pressureâ€Ðependent Elastic and Transport Properties of Porous and Permeable Rocks: Microstructural Control. Journal of Geophysical Research: Solid Earth, 2017, 122, 8952-8968.	1.4	26
34	Resurrection of a reservoir sandstone from tomographic data using three-dimensional printing. AAPG Bulletin, 2017, 101, 1425-1443.	0.7	25
35	Dielectric spectroscopy of granular material in an electrolyte solution of any ionic strength. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 533, 356-370.	2.3	5
36	Complex conductivity of soils. Water Resources Research, 2017, 53, 7121-7147.	1.7	109

#	ARTICLE	IF	CITATIONS
37	Characterization of reactive flow-induced evolution of carbonate rocks using digital core analysis - part 2: Calculation of the evolution of percolation and transport properties. Journal of Contaminant Hydrology, 2017, 204, 11-27.	1.6	11
38	Recommendations for Field-Scale Induced Polarization (IP) Data Acquisition and Interpretation. Journal of Environmental and Engineering Geophysics, 2017, 22, 395-410.	1.0	28
39	Copper precipitation as consequence of steel corrosion in a flow-through experiment mimicking a geothermal production well. Geothermal Energy, 2017, 5, .	0.9	7
40	Characterization of Fontainebleau Sandstone: Quartz Overgrowth and its Impact on Pore-Throat Framework. Journal of Petroleum & Environmental Biotechnology, 2017, 08, .	0.3	25
41	Poreâ€scale modelling of complex conductivity of saturated granular materials. Near Surface Geophysics, 2017, 15, 593-602.	0.6	6
42	Archie's Saturation Exponent for Natural Gas Hydrate in Coarseâ€Grained Reservoirs. Journal of Geophysical Research: Solid Earth, 2018, 123, 2069-2089.	1.4	96
43	Complex conductivity of volcanic rocks and the geophysical mapping of alteration in volcanoes. Journal of Volcanology and Geothermal Research, 2018, 357, 106-127.	0.8	58
44	Physical Explanation of Archie's Porosity Exponent in Granular Materials: A Processâ€Based, Poreâ€Scale Numerical Study. Geophysical Research Letters, 2018, 45, 1870-1877.	1.5	16
45	Experimental-artificial intelligence approach for characterizing electrical resistivity of partially saturated clay liners. Applied Clay Science, 2018, 156, 1-10.	2.6	31
46	Resistivity Characterization of Aquifer in Coastal Semiarid Areas: An Approach for Hydrogeological Evaluation. Handbook of Environmental Chemistry, 2018, , 213-233.	0.2	6
47	Complex conductivity of tight sandstones. Geophysics, 2018, 83, E55-E74.	1.4	18
48	Numerical and theoretical simulations of the dielectric properties of porous rocks. Journal of Applied Geophysics, 2018, 159, 186-192.	0.9	8
49	Prediction of tortuosity, permeability, and pore radius of water-saturated unconsolidated glass beads and sands. Journal of the Acoustical Society of America, 2018, 143, 3154-3168.	0.5	21
50	Image Segmentation and Analysis of Pore Network Geometry in Two Natural Sandstones. Frontiers in Earth Science, 2018, 6, .	0.8	33
51	Transport of water and ions in partially water-saturated porous media. Part 3. Electrical conductivity. Advances in Water Resources, 2018, 121, 97-111.	1.7	15
52	Relating unsaturated electrical and hydraulic conductivity of cement-based materials. Australian Journal of Civil Engineering, 2018, 16, 129-142.	0.6	8
53	Permeability estimation from induced polarization: an evaluation of geophysical length scales using an effective hydraulic radius concept. Near Surface Geophysics, 2019, 17, 581-594.	0.6	16
54	Influence of CO ₂ on the Electrical Conductivity and Streaming Potential of Carbonate Rocks. Journal of Geophysical Research: Solid Earth, 2019, 124, 10056-10073.	1.4	12

ARTICLE IF CITATIONS # A physically based model for the electrical conductivity of water-saturated porous media. 1.0 31 55 Geophysical Journal International, 2019, 219, 866-876. Pore-scale heterogeneity, flow channeling and permeability: Network simulation and comparison to experimental data. Physica A: Statistical Mechanics and Its Applications, 2019, 535, 122533. 1.2 Variations in Elastic and Electrical Properties of Crustal Rocks With Varying Degree of 57 1.4 12 Microfracturation. Journal of Geophysical Research: Solid Earth, 2019, 124, 6376-6396. The Influence of Microporous Cements on the Pore Network Geometry of Natural Sedimentary Rocks. 58 0.8 24 Frontiers in Earth Science, 2019, 7, . Lowâ€Frequency Induced Polarization of Porous Media Undergoing Freezing: Preliminary Observations 59 1.4 22 and Modeling. Journal of Geophysical Research: Solid Earth, 2019, 124, 4523-4544. Induced polarization tomography applied to the detection and the monitoring of leaks in embankments. Engineering Geology, 2019, 254, 89-101. Permeability Prediction in Rocks Experiencing Mineral Precipitation and Dissolution: A Numerical 61 1.7 28 Study. Water Resources Research, 2019, 55, 3107-3121. Gas permeability in unconventional tight sandstones: Scaling up from pore to core. Journal of 2.1 Petroleum Science and Engineering, 2019, 173, 1163-1172. Dielectric properties of fractured carbonate rocks from finite-difference modeling. Geophysics, 2019, 63 1.4 10 84, MR37-MR44. Electrical Resistivity of Freezing Clay: Experimental Study and Theoretical Model. Journal of 64 1.0 Geophysical Research F: Earth Surface, 2020, 125, e2019JF005267. Dielectric behaviors of marine sediments for reliable estimation of gas hydrate saturation based on 2.1 65 6 numerical simulation. Journal of Natural Gas Science and Engineering, 2020, 73, 103065. Pore network analysis of Brae Formation sandstone, North Sea. Marine and Petroleum Geology, 2020, 1.5 122, 104614. A Framework for Poreâ€Scale Simulation of Effective Electrical Conductivity and Permittivity of Porous Media in the Frequency Range From 1ÂmHz to 1ÂGHz. Journal of Geophysical Research: Solid 67 1.4 11 Earth, 2020, 125, e2020 B020515. A fractal model for the electrical conductivity of water-saturated porous media during mineral 1.7 precipitation-dissolution processes. Advances in Water Resources, 2020, 145, 103742. Experimental Measurement of the Transport Flow Path Aperture in Thermally Cracked Granite and the 69 0.3 7 Relationship between Pore Structure and Permeability. Geofluids, 2020, 2020, 1-10. Complex conductivity of rammed earth. Engineering Geology, 2020, 273, 105697. A Pore-Network Simulation Model of Dynamic CO2 Migration in Organic-Rich Shale Formations. 71 1.2 10 Transport in Porous Media, 2020, 133, 479-496. Induced polarization as a tool to non-intrusively characterize embankment hydraulic properties. 19 Engineering Geology, 2020, 271, 105604.

CITATION REPORT

#	Article	IF	Citations
73	Applications of critical path analysis to uniform grain packings with narrow conductance distributions: I. Single-phase permeability. Advances in Water Resources, 2020, 137, 103529.	1.7	9
74	Mapping biogeochemically active zones in landfills with induced polarization imaging: The Heferlbach landfill. Waste Management, 2020, 107, 121-132.	3.7	29
75	Theoretical power-law relationship between permeability and formation factor. Journal of Petroleum Science and Engineering, 2021, 198, 108249.	2.1	9
76	Non-invasive quantification of throat-size distribution and corresponding capillary pressure. Journal of Petroleum Science and Engineering, 2021, 196, 108019.	2.1	5
77	Pore-scale assessment of subsurface carbon storage potential: implications for the UK Geoenergy Observatories project. Petroleum Geoscience, 2021, 27, petgeo2020-092.	0.9	9
78	Predicting Single-Phase Permeability of Porous Media Using Critical-Path Analysis. , 2021, , 273-288.		1
79	Earth buildings with local materials: Assessing the variability of properties measured using non-destructive methods. Construction and Building Materials, 2021, 281, 122613.	3.2	21
80	完全饱和ä,Žéƒ¨å^†é¥±å'Œå¤a"介舨ä,的水æµé¢"测:基于å^†å½¢çš"æ–°æ,—é€çŽ‡æ¨¡åž‹. Hydrogeo	log øJø urna	al, 20 21, 29,
81	A general form of Archie's model for estimating bulk soil electrical conductivity. Journal of Hydrology, 2021, 597, 126160.	2.3	26
82	Comparison of gas, Klinkenberg, and liquid permeability of sandstone: Flow regime and pore size. AAPG Bulletin, 2021, 105, 1383-1403.	0.7	4
83	Rock-physics characterization of chalk by combining acoustic and electromagnetic properties. Geophysics, 2022, 87, MR1-MR11.	1.4	6
84	The salinity dependence of electrical conductivity and Archie's cementation exponent in shale formations. Journal of Petroleum Science and Engineering, 2022, 208, 109324.	2.1	11
85	Estimating Single-Phase Permeability of Porous Media Using Critical-Path Analysis. , 2021, , 1-16.		0
86	Pore-structure characterization by combined laboratory nuclear magnetic resonance and spectral induced polarization: A case study of Kansas carbonates. , 2017, , .		0
87	Special Session II Complete Session. , 2017, , .		0
88	Estimating pore-size distribution in carbonate reservoir rocks using joint inversion of NMR and complex conductivity data. , 2018, , .		1
89	Pore-scale numerical study of Archie's cementation factor in saturated granular materials. , 2018, , .		0
90	Mapping and Monitoring of DNAPL Source Zones With Combined Direct Current Resistivity and Induced Polarization: A Fieldâ€Scale Numerical Investigation. Water Resources Research, 2021, 57, e2021WR031366.	1.7	15

#	Article	IF	CITATIONS
91	Poreâ€Scale Investigation of the Electrical Resistivity of Saturated Porous Media: Flow Patterns and Porosity Efficiency. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022608.	1.4	7
92	Pore Scale Numerical Modelling of Geological Carbon Storage Through Mineral Trapping Using True Pore Geometries. Transport in Porous Media, 2022, 141, 667-693.	1.2	13
93	Developing a soil column system to measure hydrogeophysical properties of unconsolidated sediment. Vadose Zone Journal, 2022, 21, .	1.3	2
94	Imaging acidic contaminants in a confined aquifer using electromagnetic geophysical method constrained by hydrochemical data. Journal of Hydrology, 2022, 609, 127704.	2.3	1
95	Petrophysics of Chicxulub impact crater's peak ring. Journal of Geophysical Research: Solid Earth, 0, , .	1.4	0
97	Numerical Simulation of Fluid Flow in Carbonate Rocks Based on Digital Rock Technology. Energies, 2022, 15, 3748.	1.6	2
98	Interpreting Self-Potential Signal during Reactive Transport: Application to Calcite Dissolution and Precipitation. Water (Switzerland), 2022, 14, 1632.	1.2	4
99	The upper percolation threshold and porosity–permeability relationship in sandstone reservoirs using digital image analysis. Scientific Reports, 2022, 12, .	1.6	5
100	Permeability estimating beyond boreholes from electrical conductivity data determined from magnetotelluric sounding: Soultz-sous-Forêts site (France) case study. Geothermics, 2022, 105, 102513.	1.5	10
101	Modelling and simulation of borehole seismoelectric response with an impermeable wall. Journal of the Acoustical Society of America, 2022, 152, 765-775.	0.5	Ο
102	A Review on Applications of Time-Lapse Electrical Resistivity Tomography Over the Last 30 Years : Perspectives for Mining Waste Monitoring. Surveys in Geophysics, 2022, 43, 1699-1759.	2.1	22
103	The Role of Poreâ€Shape and Poreâ€Space Heterogeneity in Nonâ€Archie Behavior of Resistivity Index Curves. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	2
104	The Influence of Magnetic Minerals on Induced Polarization Measurements in Sedimentary Rocks. Geophysical Research Letters, 2022, 49, .	1.5	3
105	Quantification of soil textural and hydraulic properties in a complex conductivity imaging framework: Results from the Wolfsegg slope. Frontiers in Earth Science, 0, 10, .	0.8	2
106	The evolving representative elementary volume size in crystalline and granular rocks under triaxial compression approaching macroscopic failure. Geophysical Journal International, 2022, 232, 1898-1913.	1.0	2
107	An improved effective medium model for the electrical properties of granular rocks accounting for grain contact. Geophysical Journal International, 0, , .	1.0	0
108	The Influence of Grain Size Distribution on Mechanical Compaction and Compaction Localization in Porous Rocks. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	4
109	Integration of hydrochemical and induced polarization analysis for leachate localization in a municipal landfill. Waste Management, 2023, 157, 130-140.	3.7	5

#	Article	IF	CITATIONS
110	Residual NAPL Morphology Effects on Electrical Resistivity: Insights From Micromodel Displacement Experiments and Pore Network Simulations. Water Resources Research, 2022, 58, .	1.7	2
111	Geoelectrical and hydro-chemical monitoring of karst formation at the laboratory scale. Hydrology and Earth System Sciences, 2023, 27, 417-430.	1.9	1
112	Characterization of Pore Electrical Conductivity in Porous Media by Weakly Conductive and Nonconductive Pores. Surveys in Geophysics, 2023, 44, 877-923.	2.1	3
117	Tortuosity and grain size modeling for permeability prediction in clastics. , 2023, , .		0