Andre Revil

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1427352/publications.pdf

Version: 2024-02-01

280 papers 15,381 citations

69 h-index 25787 108 g-index

294 all docs

294 docs citations

times ranked

294

6712 citing authors

#	Article	IF	CITATIONS
1	The emergence of hydrogeophysics for improved understanding of subsurface processes over multiple scales. Water Resources Research, 2015, 51, 3837-3866.	4.2	479
2	Permeability of shaly sands. Water Resources Research, 1999, 35, 651-662.	4.2	382
3	Electrical conductivity in shaly sands with geophysical applications. Journal of Geophysical Research, 1998, 103, 23925-23936.	3.3	376
4	Complex conductivity of water-saturated packs of glass beads. Journal of Colloid and Interface Science, 2008, 321, 103-117.	9.4	345
5	Streaming potential in porous media: 1. Theory of the zeta potential. Journal of Geophysical Research, 1999, 104, 20021-20031.	3.3	326
6	Theory of ionic-surface electrical conduction in porous media. Physical Review B, 1997, 55, 1757-1773.	3.2	270
7	Improved hydrogeophysical characterization using joint inversion of cross-hole electrical resistance and ground-penetrating radar traveltime data. Water Resources Research, 2006, 42, .	4.2	270
8	Effective conductivity and permittivity of unsaturated porous materials in the frequency range 1 mHz–1GHz. Water Resources Research, 2013, 49, 306-327.	4.2	263
9	Review: Some low-frequency electrical methods for subsurface characterization and monitoring in hydrogeology. Hydrogeology Journal, 2012, 20, 617-658.	2.1	259
10	An overview of the spectral induced polarization method for nearâ€surface applications. Near Surface Geophysics, 2012, 10, 453-468.	1.2	233
11	Electrokinetic coupling in unsaturated porous media. Journal of Colloid and Interface Science, 2007, 313, 315-327.	9.4	205
12	Deep Convolutional Encoderâ€Decoder Networks for Uncertainty Quantification of Dynamic Multiphase Flow in Heterogeneous Media. Water Resources Research, 2019, 55, 703-728.	4.2	201
13	Ionic Diffusivity, Electrical Conductivity, Membrane and Thermoelectric Potentials in Colloids and Granular Porous Media: A Unified Model. Journal of Colloid and Interface Science, 1999, 212, 503-522.	9.4	192
14	Groundwater redox conditions and conductivity in a contaminant plume from geoelectrical investigations. Hydrology and Earth System Sciences, 2004, 8, 8-22.	4.9	188
15	Spectral induced polarization of shaly sands: Influence of the electrical double layer. Water Resources Research, 2012, 48, .	4.2	188
16	Determination of permeability from spectral induced polarization in granular media. Geophysical Journal International, 2010, , .	2.4	184
17	Sulfur, iron-, and calcium cycling associated with natural electric currents running through marine sediment. Geochimica Et Cosmochimica Acta, 2012, 92, 1-13.	3.9	165
18	A mechanistic model for the spectral induced polarization of clay materials. Journal of Geophysical Research, 2009, 114 , .	3.3	162

#	Article	IF	Citations
19	Relationship between self-potential (SP) signals and redox conditions in contaminated groundwater. Geophysical Research Letters, 2003, 30, .	4.0	160
20	Improved hydrogeophysical characterization and monitoring through parallel modeling and inversion of time-domain resistivity and induced-polarization data. Geophysics, 2010, 75, WA27-WA41.	2.6	159
21	Deep Autoregressive Neural Networks for Highâ€Dimensional Inverse Problems in Groundwater Contaminant Source Identification. Water Resources Research, 2019, 55, 3856-3881.	4.2	157
22	Tomography of the Darcy velocity from selfâ€potential measurements. Geophysical Research Letters, 2007, 34, .	4.0	156
23	Streaming potentials of granular media: Influence of the Dukhin and Reynolds numbers. Journal of Geophysical Research, 2007, 112, .	3.3	133
24	Spectral induced polarization of partially saturated clay-rocks: a mechanistic approach. Geophysical Journal International, 2010, 180, 210-224.	2.4	133
25	Pore-scale heterogeneity, energy dissipation and the transport properties of rocks. Geophysical Research Letters, 1995, 22, 1529-1532.	4.0	131
26	Salinity dependence of spectral induced polarization in sands and sandstones. Geophysical Journal International, 2011, 187, 813-824.	2.4	125
27	Self-potential signals associated with pumping tests experiments. Journal of Geophysical Research, 2004, 109, .	3.3	124
28	Streaming current generation in two-phase flow conditions. Geophysical Research Letters, 2007, 34, .	4.0	122
29	Mechanical compaction of sand/clay mixtures. Journal of Geophysical Research, 2002, 107, ECV $11-1-ECV$ $11-15$.	3.3	119
30	Electrical conductivity, induced polarization, and permeability of the Fontainebleau sandstone. Geophysics, 2014, 79, D301-D318.	2.6	119
31	Removal of levofloxacin from aqueous solution using rice-husk and wood-chip biochars. Chemosphere, 2016, 150, 694-701.	8.2	119
32	Influence of oil saturation upon spectral induced polarization of oil-bearing sands. Geophysical Journal International, 2010, 183, 211-224.	2.4	117
33	Electrochemical charge of silica surfaces at high ionic strength in narrow channels. Journal of Colloid and Interface Science, 2010, 343, 381-386.	9.4	116
34	On charge accumulation in heterogeneous porous rocks under the influence of an external electric field. Geophysics, 2013, 78, D271-D291.	2.6	116
35	Influence of surface conductivity on the apparent zeta potential of amorphous silica nanoparticles. Journal of Colloid and Interface Science, 2013, 410, 81-93.	9.4	113
36	Inner structure of La Fossa di Vulcano (Vulcano Island, southern Tyrrhenian Sea, Italy) revealed by highâ€resolution electric resistivity tomography coupled with selfâ€potential, temperature, and CO ₂ diffuse degassing measurements. Journal of Geophysical Research, 2008, 113, .	3.3	110

#	Article	IF	CITATIONS
37	Complex conductivity of soils. Water Resources Research, 2017, 53, 7121-7147.	4.2	109
38	Coupled hydromechanical and electromagnetic disturbances in unsaturated porous materials. Water Resources Research, 2013, 49, 744-766.	4.2	107
39	Induced polarization response of porous media with metallic particles â€" Part 1: A theory for disseminated semiconductors. Geophysics, 2015, 80, D525-D538.	2.6	105
40	Threeâ \in dimensional inversion of selfâ \in potential data used to constrain the pattern of groundwater flow in geothermal fields. Journal of Geophysical Research, 2008, 113, .	3.3	103
41	Unified water isotherms for clayey porous materials. Water Resources Research, 2013, 49, 5685-5699.	4.2	103
42	Understanding biogeobatteries: Where geophysics meets microbiology. Journal of Geophysical Research, 2010, 115, .	3.3	98
43	Thermal conductivity of unconsolidated sediments with geophysical applications. Journal of Geophysical Research, 2000, 105, 16749-16768.	3.3	96
44	Electrical properties of zeolitized volcaniclastic materials. Journal of Geophysical Research, 2002, 107, ECV 3-1.	3.3	96
45	Image-guided inversion of electrical resistivity data. Geophysical Journal International, 2014, 197, 292-309.	2.4	96
46	Derivation of Soilâ€Specific Streaming Potential Electrical Parameters from Hydrodynamic Characteristics of Partially Saturated Soils. Vadose Zone Journal, 2012, 11, .	2.2	95
47	Geophysical investigations at Stromboli volcano, Italy: implications for ground water flow and paroxysmal activity. Geophysical Journal International, 2004, 157, 426-440.	2.4	92
48	Pervasive pressure-solution transfer: A poro-visco-plastic model. Geophysical Research Letters, 1999, 26, 255-258.	4.0	90
49	Stochastic joint inversion of hydrogeophysical data for salt tracer test monitoring and hydraulic conductivity imaging. Advances in Water Resources, 2013, 52, 62-77.	3.8	90
50	Predicting permeability from the characteristic relaxation time and intrinsic formation factor of complex conductivity spectra. Water Resources Research, 2015, 51, 6672-6700.	4.2	86
51	Streaming potentials in two-phase flow conditions. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	85
52	Seismoelectric response of heavy oil reservoirs: theory and numerical modelling. Geophysical Journal International, 2010, 180, 781-797.	2.4	84
53	A sandbox experiment to investigate bacteria-mediated redox processes on self-potential signals. Geophysical Research Letters, 2005, 32, .	4.0	82
54	Hydroelectric coupling in a clayey material. Geophysical Research Letters, 2001, 28, 1643-1646.	4.0	81

#	Article	IF	CITATIONS
55	Preferential fluid flow pathways in embankment dams imaged by selfâ€potential tomography. Near Surface Geophysics, 2009, 7, 447-462.	1.2	81
56	Spectral induced polarization porosimetry. Geophysical Journal International, 2014, 198, 1016-1033.	2.4	80
57	Time-lapse three-dimensional inversion of complex conductivity data using an active time constrained (ATC) approach. Geophysical Journal International, 2011, 187, 237-251.	2.4	7 9
58	Saline pulse test monitoring with the selfâ€potential method to nonintrusively determine the velocity of the pore water in leaking areas of earth dams and embankments. Water Resources Research, 2012, 48, .	4.2	79
59	Induced polarization response of porous media with metallic particles — Part 2: Comparison with a broad database of experimental data. Geophysics, 2015, 80, D539-D552.	2.6	79
60	Reconstruction of the Water Table from Selfâ€Potential Data: A Bayesian Approach. Ground Water, 2009, 47, 213-227.	1.3	75
61	Stochastic joint inversion of 2D seismic and seismoelectric signals in linear poroelastic materials: A numerical investigation. Geophysics, 2010, 75, N19-N31.	2.6	75
62	Induced polarization signatures of cations exhibiting differential sorption behaviors in saturated sands. Water Resources Research, 2011, 47, .	4.2	75
63	Constitutive equations for coupled flows in clay materials. Water Resources Research, 2011, 47, .	4.2	75
64	Is it the grain size or the characteristic pore size that controls the induced polarization relaxation time of clean sands and sandstones?. Water Resources Research, $2012, 48,$	4.2	75
65	Bayesian inference of the Cole?Cole parameters from time- and frequency-domain induced polarization. Geophysical Prospecting, 2007, 55, 589-605.	1.9	74
66	The effects of artificial recharge of groundwater on controlling land subsidence and its influence on groundwater quality and aquifer energy storage in Shanghai, China. Environmental Earth Sciences, 2016, 75, 1.	2.7	74
67	Hydrogeology of Stromboli volcano, Aeolian Islands (Italy) from the interpretation of resistivity tomograms, self-potential, soil temperature and soil CO2 concentration measurements. Geophysical Journal International, 2011, 186, 1078-1094.	2.4	73
68	A double layer model of the gas bubble/water interface. Journal of Colloid and Interface Science, 2012, 388, 243-256.	9.4	73
69	Geophysical Methods for Monitoring Temperature Changes in Shallow Low Enthalpy Geothermal Systems. Energies, 2014, 7, 5083-5118.	3.1	73
70	CECâ€normalized clayâ€water sorption isotherm. Water Resources Research, 2011, 47, .	4.2	71
71	Complex conductivity tensor of anisotropic hydrocarbon-bearing shales and mudrocks. Geophysics, 2013, 78, D403-D418.	2.6	70
72	Tomography of self-potential anomalies of electrochemical nature. Geophysical Research Letters, 2001, 28, 4363-4366.	4.0	68

#	Article	IF	CITATIONS
73	Mapping electron sources and sinks in a marine biogeobattery. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1475-1486.	3.0	68
74	Genesis of mud volcanoes in sedimentary basins: A solitary wave-based mechanism. Geophysical Research Letters, 2002, 29, 15-1.	4.0	67
75	Stochastic joint inversion of temperature and self-potential data. Geophysical Journal International, 2009, 179, 640-654.	2.4	67
76	Spectral induced polarization of clay-sand mixtures: Experiments and modeling. Geophysics, 2014, 79, E353-E375.	2.6	67
77	Integration of Adversarial Autoencoders With Residual Dense Convolutional Networks for Estimation of Nonâ€Gaussian Hydraulic Conductivities. Water Resources Research, 2020, 56, e2019WR026082.	4.2	67
78	Grain Shape Effects on Permeability, Formation Factor, and Capillary Pressure from Pore-Scale Modeling. Transport in Porous Media, 2014, 102, 71-90.	2.6	66
79	Changes in induced polarization associated with the sorption of sodium, lead, and zinc on silica sands. Journal of Colloid and Interface Science, 2011, 360, 739-752.	9.4	65
80	Low-frequency complex conductivity of sandy and clayey materials. Journal of Colloid and Interface Science, 2013, 398, 193-209.	9.4	65
81	Streaming electrical potential anomaly along faults in geothermal areas. Geophysical Research Letters, 1998, 25, 3197-3200.	4.0	64
82	Redox potential distribution inferred from selfâ€potential measurements associated with the corrosion of a burden metallic body. Geophysical Prospecting, 2008, 56, 269-282.	1.9	64
83	Interfacial polarization of disseminated conductive minerals in absence of redox-active species — Part 1: Mechanistic model and validation. Geophysics, 2016, 81, E139-E157.	2.6	64
84	Threeâ€Dimensional Electrical Resistivity Tomography of the Solfatara Crater (Italy): Implication for the Multiphase Flow Structure of the Shallow Hydrothermal System. Journal of Geophysical Research: Solid Earth, 2017, 122, 8749-8768.	3.4	62
85	Resistivity and self-potential tomography applied to groundwater remediation and contaminant plumes: Sandbox and field experiments. Journal of Hydrology, 2015, 530, 1-14.	5.4	59
86	Influence of oil wettability upon spectral induced polarization of oil-bearing sands. Geophysics, 2011, 76, A31-A36.	2.6	58
87	Retention and transport of graphene oxide in water-saturated limestone media. Chemosphere, 2017, 180, 506-512.	8.2	58
88	Complex conductivity of volcanic rocks and the geophysical mapping of alteration in volcanoes. Journal of Volcanology and Geothermal Research, 2018, 357, 106-127.	2.1	58
89	IP4DI: A software for time-lapse 2D/3D DC-resistivity and induced polarization tomography. Computers and Geosciences, 2013, 54, 164-170.	4.2	56
90	4D timeâ€lapse ERT inversion: introducing combined time and space constraints. Near Surface Geophysics, 2014, 12, 25-34.	1.2	56

#	Article	IF	CITATIONS
91	Thermoelectric self-potential and resistivity data localize the burning front of underground coal fires. Geophysics, 2013, 78, B259-B273.	2.6	55
92	Assessment of parametric uncertainty for groundwater reactive transport modeling. Water Resources Research, 2014, 50, 4416-4439.	4.2	55
93	The volcano-electric effect. Journal of Geophysical Research, 2003, 108, .	3.3	53
94	Effects of grain size and structural heterogeneity on the transport and retention of nano-TiO2 in saturated porous media. Science of the Total Environment, 2016, 563-564, 987-995.	8.0	53
95	Threeâ€Dimensional Electrical Conductivity and Induced Polarization Tomography of a Rock Glacier. Journal of Geophysical Research: Solid Earth, 2018, 123, 9528-9554.	3.4	53
96	Detection and localization of hydromechanical disturbances in a sandbox using the selfâ€potential method. Journal of Geophysical Research, 2008, 113, .	3.3	52
97	A new model for the spectral induced polarization signature of bacterial growth in porous media. Water Resources Research, 2012, 48, .	4.2	52
98	The pH dependence of spectral induced polarization of silica sands: Experiment and modeling. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	50
99	Retention and Release of Graphene Oxide in Structured Heterogeneous Porous Media under Saturated and Unsaturated Conditions. Environmental Science & E	10.0	49
100	Effects of Drying on the Low-Frequency Electrical Properties of Tournemire Argillites. Pure and Applied Geophysics, 2007, 164, 2043-2066.	1.9	48
101	Self-potential signals generated by the corrosion of buried metallic objects with application to contaminant plumes. Geophysics, 2013, 78, EN65-EN82.	2.6	48
102	Hydraulic conductivity field characterization from the joint inversion of hydraulic heads and selfâ€potential data. Water Resources Research, 2014, 50, 3502-3522.	4.2	48
103	Saturation dependence of the quadrature conductivity of oilâ€bearing sands. Geophysical Research Letters, 2012, 39, .	4.0	47
104	Induced polarization of volcanic rocks – 1. Surface versus quadrature conductivity. Geophysical Journal International, 2017, 208, 826-844.	2.4	47
105	3D electrical conductivity tomography of volcanoes. Journal of Volcanology and Geothermal Research, 2018, 356, 243-263.	2.1	47
106	Pattern of shallow ground water flow at Mount Princeton Hot Springs, Colorado, using geoelectrical methods. Journal of Volcanology and Geothermal Research, 2010, 198, 217-232.	2.1	46
107	Effects of Humic Acid and Solution Chemistry on the Retention and Transport of Cerium Dioxide Nanoparticles in Saturated Porous Media. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	45
108	Interfacial polarization of disseminated conductive minerals in absence of redox-active species â€" Part 2: Effective electrical conductivity and dielectric permittivity. Geophysics, 2016, 81, E159-E176.	2.6	45

#	Article	IF	Citations
109	Large-scale, probabilistic salinity mapping using airborne electromagnetics for groundwater management in Zeeland, the Netherlands. Environmental Research Letters, 2018, 13, 084011.	5.2	44
110	Diffusion of ions in unsaturated porous materials. Journal of Colloid and Interface Science, 2008, 319, 226-235.	9.4	43
111	Potential of Electrical Resistivity Tomography to Detect Fault Zones in Limestone and Argillaceous Formations in the Experimental Platform of Tournemire, France. Pure and Applied Geophysics, 2010, 167, 1405-1418.	1.9	43
112	Electric potential source localization reveals a borehole leak during hydraulic fracturing. Geophysics, 2013, 78, D93-D113.	2.6	43
113	Induced polarization response of porous media with metallic particles â€" Part 4: Detection of metallic and nonmetallic targets in time-domain induced polarization tomography. Geophysics, 2016, 81, D359-D375.	2.6	43
114	Transport of water and ions in partially water-saturated porous media. Part 1. Constitutive equations. Advances in Water Resources, 2017, 103, 119-138.	3.8	43
115	Salinity dependence of the complex surface conductivity of the Portland sandstone. Geophysics, 2016, 81, D125-D140.	2.6	42
116	Characterization of groundwater and surface water mixing in a semiconfined karst aquifer using timeâ€lapse electrical resistivity tomography. Water Resources Research, 2014, 50, 2566-2585.	4.2	41
117	Threeâ€dimensional resistivity tomography of Vulcan's forge, Vulcano Island, southern Italy. Geophysical Research Letters, 2010, 37, .	4.0	40
118	Effects of error covariance structure on estimation of model averaging weights and predictive performance. Water Resources Research, 2013, 49, 6029-6047.	4.2	40
119	Localization of a coal seam fire using combined self-potential and resistivity data. International Journal of Coal Geology, 2014, 128-129, 109-118.	5. O	40
120	A Taylor Expansionâ€Based Adaptive Design Strategy for Global Surrogate Modeling With Applications in Groundwater Modeling. Water Resources Research, 2017, 53, 10802-10823.	4.2	40
121	A case study of resistivity and selfâ€potential signatures of hydrothermal instabilities, Inferno Crater Lake, Waimangu, New Zealand. Geophysical Research Letters, 2009, 36, .	4.0	39
122	Dipolar selfâ€potential anomaly associated with carbon dioxide and radon flux at Syabruâ€Bensi hot springs in central Nepal. Journal of Geophysical Research, 2009, 114, .	3.3	39
123	SP2DINV: A 2D forward and inverse code for streaming potential problems. Computers and Geosciences, 2013, 59, 9-16.	4.2	39
124	Importance of structural history in the summit area of Stromboli during the 2002–2003 eruptive crisis inferred from temperature, soil CO2, self-potential, and electrical resistivity tomography. Journal of Volcanology and Geothermal Research, 2009, 183, 213-227.	2.1	38
125	Electrical burst signature of poreâ€scale displacements. Water Resources Research, 2009, 45, .	4.2	38
126	Influence of flow velocity and spatial heterogeneity on DNAPL migration in porous media: insights from laboratory experiments and numerical modelling. Hydrogeology Journal, 2015, 23, 1703-1718.	2.1	38

#	Article	IF	Citations
127	Geophysics at the interface: Response of geophysical properties to solid-fluid, fluid-fluid, and solid-solid interfaces. Reviews of Geophysics, 2010, 48, .	23.0	37
128	Inversion of generalized relaxation time distributions with optimized damping parameter. Journal of Applied Geophysics, 2014, 109, 119-132.	2.1	37
129	Geophysical signatures of disseminated iron minerals: A proxy for understanding subsurface biophysicochemical processes. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1831-1849.	3.0	36
130	Alteration of volcanic rocks: A new non-intrusive indicator based on induced polarization measurements. Journal of Volcanology and Geothermal Research, 2017, 341, 351-362.	2.1	36
131	Transport properties of the Callovoâ€Oxfordian clay rock under partially saturated conditions. Water Resources Research, 2010, 46, .	4.2	35
132	Stochastic inversion of permeability and dispersivities from time lapse selfâ€potential measurements: A controlled sandbox study. Geophysical Research Letters, 2010, 37, .	4.0	35
133	Induced polarization tomography applied to the detection and the monitoring of leaks in embankments. Engineering Geology, 2019, 254, 89-101.	6.3	35
134	Direct estimation of the distribution of relaxation times from inducedâ€polarization spectra using a Fourier transform analysis. Near Surface Geophysics, 2012, 10, 517-531.	1.2	34
135	Ionic contribution to the self-potential signals associated with a redox front. Journal of Contaminant Hydrology, 2009, 109, 27-39.	3.3	33
136	High-resolution magnetic susceptibility measurements for investigating magnetic mineral formation during microbial mediated iron reduction. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 80-94.	3.0	33
137	Connecting complex conductivity spectra to mercury porosimetry of sedimentary rocks. Geophysics, 2016, 81, E17-E32.	2.6	33
138	Self-potential signals associated with localized leaks in embankment dams and dikes. Engineering Geology, 2019, 253, 229-239.	6.3	33
139	Improving Simulation Efficiency of MCMC for Inverse Modeling of Hydrologic Systems With a Kalmanâ€Inspired Proposal Distribution. Water Resources Research, 2020, 56, e2019WR025474.	4.2	33
140	Petrophysical properties of saprolites from the Oak Ridge Integrated Field Research Challenge site, Tennessee. Geophysics, 2013, 78, D21-D40.	2.6	32
141	Seismoelectric couplings in a poroelastic material containing two immiscible fluid phases. Geophysical Journal International, 2015, 202, 850-870.	2.4	32
142	Induced polarization response of porous media with metallic particles $\hat{a}\in$ " Part 3: A new approach to time-domain induced polarization tomography. Geophysics, 2016, 81, D345-D357.	2.6	32
143	Laboratory determination of the complex conductivity tensor of unconventional anisotropic shales. Geophysics, 2014, 79, E183-E200.	2.6	31
144	Induced polarization of volcanic rocks. 2. Influence of pore size and permeability. Geophysical Journal International, 2017, 208, 814-825.	2.4	31

#	Article	IF	CITATIONS
145	Hydrogeophysical investigations of the former S-3 ponds contaminant plumes, Oak Ridge Integrated Field Research Challenge site, Tennessee. Geophysics, 2013, 78, EN29-EN41.	2.6	30
146	Quantitative assessment of electrical resistivity tomography for monitoring DNAPLs migration – Comparison with high-resolution light transmission visualization in laboratory sandbox. Journal of Hydrology, 2017, 544, 254-266.	5.4	30
147	Constraining fault-zone hydrogeology through integrated hydrological and geoelectrical analysis. Hydrogeology Journal, 2010, 18, 1057-1067.	2.1	29
148	Joint inversion of steady-state hydrologic and self-potential data for 3D hydraulic conductivity distribution at the Boise Hydrogeophysical Research Site. Journal of Hydrology, 2011, 407, 115-128.	5.4	29
149	Joint inversion of hydraulic head and selfâ€potential data associated with harmonic pumping tests. Water Resources Research, 2016, 52, 6769-6791.	4.2	29
150	Specific storage and hydraulic conductivity tomography through the joint inversion of hydraulic heads and self-potential data. Advances in Water Resources, 2016, 89, 80-90.	3.8	29
151	Time-lapse joint inversion of crosswell DC resistivity and seismic data: A numerical investigation. Geophysics, 2012, 77, D141-D157.	2.6	28
152	Pore-scale modeling of electrical resistivity and permeability in FIB-SEM images of organic mudrock. Geophysics, 2014, 79, D289-D299.	2.6	28
153	Measurements of elastic and electrical properties of an unconventional organic shale under differential loading. Geophysics, 2015, 80, D363-D383.	2.6	28
154	Determination of the permeability of seepage flow paths in dams from self-potential measurements. Engineering Geology, 2020, 268, 105514.	6.3	28
155	A physical model of the lowâ€frequency electrical polarization of clay rocks. Journal of Geophysical Research, 2008, 113, .	3.3	27
156	Evidence that bio-metallic mineral precipitation enhances the complex conductivity response at a hydrocarbon contaminated site. Journal of Applied Geophysics, 2013, 98, 113-123.	2.1	27
157	Coupled hydrogeophysical inversion to identify non-Gaussian hydraulic conductivity field by jointly assimilating geochemical and time-lapse geophysical data. Journal of Hydrology, 2019, 578, 124092.	5 . 4	27
158	Hydrogeophysical Characterization of Nonstationary DNAPL Source Zones by Integrating a Convolutional Variational Autoencoder and Ensemble Smoother. Water Resources Research, 2021, 57, e2020WR028538.	4.2	27
159	Localization and characterization of cracks in clayâ€rocks using frequency and timeâ€domain induced polarization. Geophysical Prospecting, 2013, 61, 134-152.	1.9	26
160	Coupled hydrogeophysical inversion of DNAPL source zone architecture and permeability field in a 3D heterogeneous sandbox by assimilation time-lapse cross-borehole electrical resistivity data via ensemble Kalman filtering. Journal of Hydrology, 2018, 567, 149-164.	5 . 4	26
161	Three-dimensional modeling of frequency- and time-domain electromagnetic methods with induced polarization effects. Computers and Geosciences, 2019, 124, 85-92.	4.2	26
162	Magnetic susceptibility as a proxy for investigating microbially mediated iron reduction. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	25

#	Article	IF	Citations
163	Textural control on the quadrature conductivity of porous media. Geophysics, 2016, 81, E297-E309.	2.6	25
164	Induced polarization of volcanic rocks. 3. Imaging clay cap properties in geothermal fields. Geophysical Journal International, 2019, 218, 1398-1427.	2.4	25
165	Selfâ€Potential Tomography of a Deepâ€Sea Polymetallic Sulfide Deposit on Southwest Indian Ridge. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019738.	3.4	25
166	Visualization of conduitâ€matrix conductivity differences in a karst aquifer using timeâ€lapse electrical resistivity. Geophysical Research Letters, 2012, 39, .	4.0	24
167	Transport of sulfacetamide and levofloxacin in granular porous media under various conditions: Experimental observations and model simulations. Science of the Total Environment, 2016, 573, 1630-1637.	8.0	24
168	Correlation analysis for spread-spectrum induced-polarization signal processing in electromagnetically noisy environments. Geophysics, 2017, 82, E243-E256.	2.6	24
169	Self-potential: A Non-intrusive Ground Water Flow Sensor. Journal of Environmental and Engineering Geophysics, 2017, 22, 235-247.	0.5	24
170	Transport of water and ions in partially water-saturated porous media. Part 2. Filtration effects. Advances in Water Resources, 2017, 103, 139-152.	3.8	24
171	Variations of petrophysical properties and spectral induced polarization in response to drainage and imbibition: a study on a correlated random tube network. Geophysical Journal International, 2018, 212, 1398-1411.	2.4	24
172	Induced polarization response of porous media with metallic particles â€" Part 8: Influence of temperature and salinity. Geophysics, 2018, 83, E435-E456.	2.6	24
173	Induced polarization response of porous media with metallic particles â€" Part 7: Detection and quantification of buried slag heaps. Geophysics, 2018, 83, E277-E291.	2.6	24
174	Redox potential distribution of an organic-rich contaminated site obtained by the inversion of self-potential data. Journal of Hydrology, 2017, 554, 111-127.	5.4	23
175	Electroosmotic flow and the validity of the classical Darcy equation in silty shales. Geophysical Research Letters, 2002, 29, 14-1-14-4.	4.0	22
176	Lowâ€Frequency Induced Polarization of Porous Media Undergoing Freezing: Preliminary Observations and Modeling. Journal of Geophysical Research: Solid Earth, 2019, 124, 4523-4544.	3.4	22
177	Induced polarization as a tool to characterize shallow landslides. Journal of Hydrology, 2020, 589, 125369.	5. 4	22
178	Quadrature conductivity: A quantitative indicator of bacterial abundance in porous media. Geophysics, 2014, 79, D363-D375.	2.6	21
179	Biodegradation of Pyrene by Free and Immobilized Cells of Herbaspirillum chlorophenolicum Strain FA1. Water, Air, and Soil Pollution, 2016, 227, 1.	2.4	21
180	Effects of surface active agents on DNAPL migration and distribution in saturated porous media. Science of the Total Environment, 2016, 571, 1147-1154.	8.0	21

#	Article	IF	Citations
181	Induced polarization response of porous media with metallic particles — Part 5: Influence of the background polarization. Geophysics, 2017, 82, E77-E96.	2.6	21
182	Induced polarization response of porous media with metallic particles â€" Part 6: The case of metals and semimetals. Geophysics, 2017, 82, E97-E110.	2.6	21
183	Hysteresis of the selfâ€potential response associated with harmonic pumping tests. Geophysical Research Letters, 2008, 35, .	4.0	20
184	Theory and numerical modeling of electrical selfâ€potential signatures of unsaturated flow in melting snow. Water Resources Research, 2012, 48, .	4.2	19
185	2D joint inversion of geophysical data using petrophysical clustering and facies deformation. Geophysics, 2015, 80, M69-M88.	2.6	19
186	Upscaling of spectral induced polarization response using random tube networks. Geophysical Journal International, 2017, 209, 948-960.	2.4	19
187	Induced polarization as a tool to non-intrusively characterize embankment hydraulic properties. Engineering Geology, 2020, 271, 105604.	6.3	19
188	Complex conductivity of tight sandstones. Geophysics, 2018, 83, E55-E74.	2.6	18
189	Complex Conductivity of Graphitic Schists and Sandstones. Journal of Geophysical Research: Solid Earth, 2019, 124, 8223-8249.	3.4	18
190	Improved Characterization of DNAPL Source Zones via Sequential Hydrogeophysical Inversion of Hydraulicâ€Head, Selfâ€Potential and Partitioning Tracer Data. Water Resources Research, 2020, 56, e2020WR027627.	4.2	18
191	Delineation of contaminant plume for an inorganic contaminated site using electrical resistivity tomography: comparison with direct-push technique. Environmental Monitoring and Assessment, 2018, 190, 187.	2.7	16
192	Retention and Transport of Bisphenol A and Bisphenol S in Saturated Limestone Porous Media. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	16
193	Retrieving electric resistivity data from selfâ€potential measurements by crossâ€correlation. Geophysical Research Letters, 2010, 37, .	4.0	15
194	Complex conductivity of oil-contaminated clayey soils. Journal of Hydrology, 2018, 561, 930-942.	5.4	15
195	Transport of water and ions in partially water-saturated porous media. Part 3. Electrical conductivity. Advances in Water Resources, 2018, 121, 97-111.	3.8	15
196	Influence of temperature on seismic velocities and complex conductivity of heavy oil-bearing sands. Geophysics, 2012, 77, WA19-WA34.	2.6	14
197	Time-lapse joint inversion of geophysical data with automatic joint constraints and dynamic attributes. Geophysical Journal International, 2016, 207, 1401-1419.	2.4	14
198	3D geostatistical inversion of induced polarization data and its application to coal seam fires. Geophysics, 2018, 83, E133-E150.	2.6	14

#	Article	IF	Citations
199	Electrical conductivity and induced polarization investigations at Kilauea volcano, Hawai'i. Journal of Volcanology and Geothermal Research, 2018, 368, 31-50.	2.1	14
200	Induced polarization response of porous media with metallic particles — Part 10: Influence of desiccation. Geophysics, 2019, 84, E357-E375.	2.6	14
201	Time-domain induced polarization as a tool to image clogging in treatment wetlands. Science of the Total Environment, 2020, 724, 138189.	8.0	14
202	Induced polarization of volcanic rocks. 4. Large-scale induced polarization imaging. Geophysical Journal International, 2021, 225, 950-967.	2.4	14
203	Induced Polarization as a Tool to Assess Mineral Deposits: A Review. Minerals (Basel, Switzerland), 2022, 12, 571.	2.0	14
204	Geochemical and geophysical responses during the infiltration of fresh water into the contaminated saprolite of the Oak Ridge Integrated Field Research Challenge site, Tennessee. Water Resources Research, 2013, 49, 4952-4970.	4.2	13
205	A laboratory investigation of the thermoelectric effect. Geophysics, 2016, 81, E243-E257.	2.6	13
206	Modeling the evolution of complex conductivity during calcite precipitation on glass beads. Geophysical Journal International, 0, , ggx001.	2.4	13
207	Induced polarization signature of coal seam fires. Geophysical Journal International, 2017, 208, 1313-1331.	2.4	13
208	Streaming Potential Coupling Coefficient and Transport Properties of Unsaturated Carbonate Rocks. Vadose Zone Journal, 2018, 17, 180030.	2.2	13
209	Application of the Mise-Ã-la-Masse method to detect the bottom leakage of water reservoirs. Engineering Geology, 2019, 261, 105272.	6.3	13
210	Stochastic structure-constrained image-guided inversion of geophysical data. Geophysics, 2016, 81, E89-E101.	2.6	12
211	Electrical conductivity and induced polarization investigations at Krafla volcano, Iceland. Journal of Volcanology and Geothermal Research, 2018, 368, 73-90.	2.1	12
212	Influence of CO ₂ on the Electrical Conductivity and Streaming Potential of Carbonate Rocks. Journal of Geophysical Research: Solid Earth, 2019, 124, 10056-10073.	3.4	12
213	Field-scale estimation of soil properties from spectral induced polarization tomography. Geoderma, 2021, 403, 115380.	5.1	12
214	Virtual electrode current injection using seismic focusing and seismoelectric conversion. Geophysical Journal International, 2012, , .	2.4	11
215	Self-potential signals from an analog biogeobattery model. Geophysics, 2012, 77, EN29-EN37.	2.6	11
216	Characterization of the regional groundwater quality evolution in the North Plain of Jiangsu Province, China. Environmental Earth Sciences, 2015, 74, 5587-5604.	2.7	11

#	Article	IF	CITATIONS
217	Transport of a PAH-degrading bacterium in saturated limestone media under various physicochemical conditions: Common and unexpected retention and remobilization behaviors. Journal of Hazardous Materials, 2019, 380, 120858.	12.4	11
218	Induced polarization response of porous media with metallic particles $\hat{a}\in$ " Part 9: Influence of permafrost. Geophysics, 2019, 84, E337-E355.	2.6	11
219	Multiscale induced polarization tomography in hydrogeophysics: A new approach. Advances in Water Resources, 2019, 134, 103451.	3.8	11
220	A geophysical index to map alteration, permeability, and mechanical properties within volcanoes. Application to the soft volcanic rocks from Whakaari/White Island (New Zealand). Journal of Volcanology and Geothermal Research, 2020, 401, 106945.	2.1	11
221	Surface Conduction Model for Fractal Porous Media. Geophysical Research Letters, 2020, 47, e2020GL087553.	4.0	11
222	Effect of root exudates on the stability and transport of graphene oxide in saturated porous media. Journal of Hazardous Materials, 2021, 413, 125362.	12.4	11
223	Temperature distribution in a permafrost-affected rock ridge from conductivity and induced polarization tomography. Geophysical Journal International, 2021, 225, 1207-1221.	2.4	11
224			

#	Article	IF	CITATIONS
235	Complex conductivity of rammed earth. Engineering Geology, 2020, 273, 105697.	6.3	9
236	Application of spectral induced polarization for characterizing surfactant-enhanced DNAPL remediation in laboratory column experiments. Journal of Contaminant Hydrology, 2020, 230, 103603.	3.3	9
237	Spectral Induced Polarization Detects Cracks and Distinguishes between Open- and Clay-filled Fractures. Journal of Environmental and Engineering Geophysics, 2011, 16, 85-91.	0.5	8
238	HT2DINV: A 2D forward and inverse code for steady-state and transient hydraulic tomography problems. Computers and Geosciences, 2015, 85, 36-44.	4.2	8
239	Streaming potential coupling coefficient in unsaturated carbonate rocks. Geophysical Journal International, 2017, 210, 291-302.	2.4	8
240	3D electrical conductivity imaging of Halemaâ€~umaâ€~u lava lake (KÄ«lauea volcano). Journal of Volcanology and Geothermal Research, 2019, 381, 185-192.	2.1	8
241	Leakage detection of water reservoirs using a Mise-Ã-la-Masse approach. Journal of Hydrology, 2019, 572, 51-65.	5.4	8
242	Dating the landscape evolution around the Chauvet-Pont d'Arc cave. Scientific Reports, 2021, 11, 8944.	3.3	8
243	Induced Polarization of Carbonates. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022029.	3.4	8
244	Induced polarization of volcanic rocks. 5. Imaging the temperature field of shield volcanoes. Geophysical Journal International, 2021, 225, 1492-1509.	2.4	8
245	Deep learning based optimization under uncertainty for surfactant-enhanced DNAPL remediation in highly heterogeneous aquifers. Journal of Hydrology, 2022, 608, 127639.	5.4	8
246	3D self-potential tomography of seafloor massive sulfide deposits using an autonomous underwater vehicle. Geophysics, 2022, 87, B255-B267.	2.6	8
247	Joint inversion of physical and geochemical parameters in groundwater models by sequential ensemble-based optimal design. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1919-1937.	4.0	7
248	Characterization of the non-Gaussian hydraulic conductivity field via deep learning-based inversion of hydraulic-head and self-potential data. Journal of Hydrology, 2022, 610, 127830.	5 . 4	6
249	Design and Implementation of Geophysical Monitoring and Remote Sensing during a Full-Scale Embankment Internal Erosion Test. , 2014, , .		5
250	Finding buried metallic pipes using a non-destructive approach based on 3D time-domain induced polarization data. Journal of Applied Geophysics, 2018, 151, 234-245.	2.1	5
251	Advances in Multiphase Flow and Transport in the Subsurface Environment. Geofluids, 2018, 2018, 1-2.	0.7	5
252	Electrical Conductivity Versus Temperature in Freezing Conditions: A Field Experiment Using a Basket Geothermal Heat Exchanger. Geophysical Research Letters, 2019, 46, 14531-14538.	4.0	5

#	Article	IF	Citations
253	Reply to comment by D. Gibert and P. Sailhac on "Selfâ€potential signals associated with preferential groundwater flow pathways in sinkholes― Journal of Geophysical Research, 2008, 113, .	3.3	4
254	Multiphysics borehole geophysical measurements, formation evaluation, petrophysics, and rock physics $\hat{a} \in \text{``Introduction.}$ Geophysics, 2012, 77, WA1-WA2.	2.6	4
255	Comment on "Cooperative constrained inversion of multiple electromagnetic data sets―(Michael S.) Tj ETÇ 2014, 79, X27-X31.)q1 1 0.78 2.6	34314 rgBT (4
256	Comment on "Dependence of shear wave seismoelectrics on soil textures: a numerical study in the vadose zone―by F.I. Zyserman, L.B. Monachesi and L. Jouniaux. Geophysical Journal International, 2017, 209, 1095-1098.	2.4	4
257	Simulation of Core Phases From Coda Interferometry. Journal of Geophysical Research: Solid Earth, 2018, 123, 4983-4999.	3.4	4
258	Experimental determination of frequency- and temperature-dependent electrical properties of water-saturated clays using spectral induced polarization and network analyzer technique. Measurement: Journal of the International Measurement Confederation, 2022, 190, 110653.	5.0	4
259	Optimized arrays for electrical resistivity tomography survey using Bayesian experimental design. Geophysics, 2022, 87, E189-E203.	2.6	4
260	Induced Polarization and Magnetic Responses of Serpentinized Ultramafic Rocks From Midâ€Ocean Ridges. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	4
261	Induced polarization images alteration in stratovolcanoes. Journal of Volcanology and Geothermal Research, 2022, 429, 107598.	2.1	4
262	Differential pressure dependence of the complex conductivity of sandstones. Geophysical Journal International, 2019, 219, 2110-2124.	2.4	3
263	Integrating hydraulic tomography, electrical resistivity tomography, and partitioning interwell tracer test datasets to improve identification of pool-dominated DNAPL source zone architecture. Journal of Contaminant Hydrology, 2021, 241, 103809.	3.3	3
264	The Co-application of Willow and Earthworms/Horseradish for Removal of Pentachlorophenol from Contaminated Soils. Soil and Sediment Contamination, 2013, 22, 498-509.	1.9	2
265	Modeling Transient Streaming Potentials in Fallingâ€Head Permeameter Tests. Ground Water, 2014, 52, 535-549.	1.3	2
266	Identification of non-Gaussian parameters in heterogeneous aquifers by a modified probability conditioning method through hydraulic-head assimilation. Hydrogeology Journal, 2021, 29, 819-839.	2.1	2
267	Evaluation of the benefits of improved permeability estimation on high-resolution characterization of DNAPL distribution in aquifers with low-permeability lenses. Journal of Hydrology, 2021, 603, 126955.	5.4	2
268	Chargeability of Porous Rocks With or Without Metallic Particles. Petrophysics, 2018, 59, 543-552.	0.3	2
269	Seismoelectric conversion generated from water-oil boundary in unsaturated porous media., 2013,,.		1
270	Comment on â€~Electrical conductance of a sandstone partially saturated with varying concentrations of NaCl solutions' by R. Umezawa, N. Nishiyama, M. Katsura and S. Nakashima. Geophysical Journal International, 2017, 211, 1099-1103.	2.4	1

#	Article	IF	CITATIONS
271	Editorial: Exploring new frontiers withJGR–Solid Earth. Journal of Geophysical Research, 2009, 114, .	3.3	O
272	A numerical investigation of crossâ€hole seismoelectric conversion. , 2010, , .		0
273	lmaging using crossâ€hole seismoelectric tomography. , 2011, , .		O
274	An appreciation to the peer reviewers for <i>JGR Solid Earth</i> in 2014. Journal of Geophysical Research: Solid Earth, 2015, 120, 4681-4688.	3.4	0
275	Comment on: "Feasibility of electromagnetic methods to detect and image steam-assisted gravity drainage steam chambers―(S. G. R. Devriese and D. W. Oldenburg, Geophysics, 81, no.Â4, E227–E244). Geophysics, 2016, 81, X1-X2.	2.6	0
276	Thank You to Our 2019 Reviewers. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019781.	3.4	0
277	Analysis of Interfacial Water in Clay by High Frequency Dielectric Relaxation Spectroscopy. , 2021, , .		O
278	Induced polarization of the 1630-monogenetic dome, Furnas volcano, São Miguel Island, Azores archipelago. Journal of Volcanology and Geothermal Research, 2021, 420, 107410.	2.1	0
279	Preliminary results for a near surface 3â€Ð seismic survey of a geothermal system in Colorado. , 2010, , .		0
280	Characterization of Excavation Damaged Zone and its structural heterogeneities with Time and Spectral IP methods. , 2012, , .		0