Lyesse Laloui

List of Publications by Year
in descending order

236	9,632	38660 50	46693 89
papers	citations	h-index	g-index

263	263	263	3481
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental and numerical investigations of the behaviour of a heat exchanger pile. International Journal for Numerical and Analytical Methods in Geomechanics, 2006, 30, 763-781.	1.7	521
2	Experimental study of thermal effects on the mechanical behaviour of a clay. International Journal for Numerical and Analytical Methods in Geomechanics, 2004, 28, 209-228.	1.7	437
3	Effective stress concept in unsaturated soils: Clarification and validation of a unified framework. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 771-801.	1.7	388
4	Fundamentals of desiccation cracking of fine-grained soils: experimental characterisation and mechanisms identification. Canadian Geotechnical Journal, 2009, 46, 1177-1201.	1.4	335
5	Thermo-mechanical behaviour of energy piles. Geotechnique, 2012, 62, 503-519.	2.2	334
6	Thermo-plasticity of clays. Computers and Geotechnics, 2003, 30, 649-660.	2.3	231
7	Geotechnical Analysis of Heat Exchanger Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 890-902.	1.5	222
8	Advances in modelling hysteretic water retention curve in deformable soils. Computers and Geotechnics, 2008, 35, 835-844.	2.3	221
9	Comportement d'un pieu bi-fonction, fondation et Ã©changeur de chaleur. Canadian Geotechnical Journal, 2003, 40, 388-402.	1.4	202
10	Experimental investigations of the soilâ€“concrete interface: physical mechanisms, cyclic mobilization, and behaviour at different temperatures. Canadian Geotechnical Journal, 2016, 53, 659-672.	1.4	143
11	Behaviour of a group of energy piles. Canadian Geotechnical Journal, 2015, 52, 1913-1929.	1.4	140
12	Energy and geotechnical behaviour of energy piles for different design solutions. Applied Thermal Engineering, 2015, 86, 199-213.	3.0	137
13	Response of soil subjected to thermal cyclic loading: Experimental and constitutive study. Engineering Geology, 2015, 190, 65-76.	2.9	133
14	Centrifuge modelling of heating effects on energy pile performance in saturated sand. Canadian Geotechnical Journal, 2015, 52, 1045-1057.	1.4	129
15	Thermally induced group effects among energy piles. Geotechnique, 2017, 67, 374-393.	2.2	127
16	Discrete element modelling of drying shrinkage and cracking of soils. Computers and Geotechnics, 2009, 36, 61-69.	2.3	121
17	Numerical study of the response of a group of energy piles under different combinations of thermo-mechanical loads. Computers and Geotechnics, 2016, 72, 126-142.	2.3	117
18	Investigation into water retention behaviour of deformable soils. Canadian Geotechnical Journal, 2013, 50, 200-208.	1.4	112

#	Article	IF	Citations
19	ACMEG-T: Soil Thermoplasticity Model. Journal of Engineering Mechanics - ASCE, 2009, 135, 932-944.	1.6	110
20	Centrifuge modelling of energy piles subjected to heating and cooling cycles in clay. Geotechnique Letters, 2014, 4, 310-316.	0.6	110
21	Solid-liquid-air coupling in multiphase porous media. International Journal for Numerical and Analytical Methods in Geomechanics, 2003, 27, 183-206.	1.7	109
22	3-D micro-architecture and mechanical response of soil cemented via microbial-induced calcite precipitation. Scientific Reports, 2018, 8, 1416.	1.6	108
23	ACMEGâ€TS: A constitutive model for unsaturated soils under nonâ€isothermal conditions. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 1955-1988.	1.7	103
24	Numerical analysis of the geotechnical behaviour of energy piles. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 861-888.	1.7	103
25	Modelling landslides in unsaturated slopes subjected to rainfall infiltration using material point method. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 1358-1380.	1.7	101
26	Numerical modelling of energy piles in saturated sand subjected to thermo-mechanical loads. Geomechanics for Energy and the Environment, 2015, 1, 1-15.	1.2	99
27	Numerical analysis of seasonal heat storage in an energy pile foundation. Computers and Geotechnics, 2014, 55, 67-77.	2.3	97
28	Fabric evolution during hydromechanical loading of a compacted silt. International Journal for Numerical and Analytical Methods in Geomechanics, 2004, 28, 483-499.	1.7	96
29	Explaining thermal failure in saturated clays. Geotechnique, 2009, 59, 197-212.	2.2	93
30	Experimental analysis of the water retention behaviour of shales. International Journal of Rock Mechanics and Minings Sciences, 2014, 72, 61-70.	2.6	92
31	The interaction factor method for energy pile groups. Computers and Geotechnics, 2016, 80, 121-137.	2.3	88
32	A decade of progress and turning points in the understanding of bio-improved soils: A review. Geomechanics for Energy and the Environment, 2019, 19, 100116.	1.2	86
33	On the use of the generalised effective stress in the constitutive modelling of unsaturated soils. Computers and Geotechnics, 2009, 36, 20-23.	2.3	84
34	A THERMO-VISCOPLASTIC CONSTITUTIVE MODEL FOR CLAYS. International Journal for Numerical and Analytical Methods in Geomechanics, 1997, 21, 313-335.	1.7	81
35	Towards a secure basis for the design of geothermal piles. Acta Geotechnica, 2014, 9, 355-366.	2.9	76
36	Thermo-hydro-mechanical simulation of ATLAS in situ large scale test in Boom Clay. Computers and Geotechnics, 2009, 36, 626-640.	2.3	74

#	Article	IF	Citations
37	Structural characterization of unsaturated aggregated soil. Canadian Geotechnical Journal, 2010, 47, 297-311.	1.4	74
38	Similarity solution for cavity expansion in thermoplastic soil. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 274-294.	1.7	74
39	Induced seismicity in geologic carbon storage. Solid Earth, 2019, 10, 871-892.	1.2	74
40	Desiccation cracking of soils. European Journal of Environmental and Civil Engineering, 2009, 13, 869-888.	1.0	72
41	Suction Induced Effects on the Fabric of a Structured Soil. Transport in Porous Media, 2006, 64, 261-278.	1.2	71
42	Fabric characteristics and mechanical response of bio-improved sand to various treatment conditions. Geotechnique Letters, 2016, 6, 50-57.	0.6	70
43	Cell-free soil bio-cementation with strength, dilatancy and fabric characterization. Acta Geotechnica, 2019, 14, 639-656.	2.9	69
44	Benchmark of constitutive models for unsaturated soils. Geotechnique, 2011, 61, 283-302.	2.2	68
45	Thermo-mechanical behaviour of soils. Revue EuropÃ©enne De GÃ©nie Civil, 2001, 5, 809-843.	0.0	64
46	Group action effects caused by various operating energy piles. Geotechnique, 2018, 68, 834-841.	2.2	62
47	A bio-chemo-hydro-mechanical model for microbially induced calcite precipitation in soils. Computers and Geotechnics, 2012, 46, 104-120.	2.3	61
48	Performance of a geothermal energy deicing system for bridge deck using a pile heat exchanger. International Journal of Energy Research, 2019, 43, 596-603.	2.2	61
49	Modelling the behaviour of a large landslide with respect to hydrogeological and geomechanical parameter heterogeneity. Landslides, 2005, 2, 3-14.	2.7	56
50	Cyclic Loadâ€“Transfer Approach for the Analysis of Energy Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	54
51	Anisotropic Behaviour of Opalinus Clay Through Consolidated and Drained Triaxial Testing in Saturated Conditions. Rock Mechanics and Rock Engineering, 2018, 51, 1305-1319.	2.6	52
52	Formation of drying crack patterns in soils: a deterministic approach. Acta Geotechnica, 2013, 8, 215-221.	2.9	51
53	Thermo-mechanical volume change behaviour of Opalinus Clay. International Journal of Rock Mechanics and Minings Sciences, 2016, 90, 15-25.	2.6	51
54	Microbially induced calcite precipitation effect on soil thermal conductivity. Geotechnique Letters, 2016, 6, 39-44.	0.6	50

#	Article	IF	Citations
55	Constitutive analysis of shale: a coupled damage plasticity approach. International Journal of Solids and Structures, 2015, 75-76, 88-98.	1.3	48
56	On the hydro-mechanical behaviour of remoulded and natural Opalinus Clay shale. Engineering Geology, 2016, 208, 128-135.	2.9	48
57	Non-isothermal plasticity model for cyclic behaviour of soils. International Journal for Numerical and Analytical Methods in Geomechanics, 2008, 32, 437-460.	1.7	45
58	Modelling the combined effect of strain rate and temperature on one-dimensional compression of soils. Canadian Geotechnical Journal, 2008, 45, 1765-1777.	1.4	44
59	Anisotropic volumetric behaviour of Opalinus clay shale upon suction variation. Geotechnique Letters, 2016, 6, 144-148.	0.6	44
60	Analysis of the vertical displacement of energy pile groups. Geomechanics for Energy and the Environment, 2018, 16, 1-14.	1.2	44
61	Numerical investigation of the convection heat transfer driven by airflows in underground tunnels. Applied Thermal Engineering, 2019, 159, 113844.	3.0	44
62	Energy performance and economic feasibility of energy segmental linings for subway tunnels. Tunnelling and Underground Space Technology, 2019, 91, 102997.	3.0	43
63	One-dimensional compression and consolidation of shales. International Journal of Rock Mechanics and Minings Sciences, 2016, 88, 286-300.	2.6	42
64	Long-term performance and life cycle assessment of energy piles in three different climatic conditions. Renewable Energy, 2020, 146, 1177-1191.	4.3	42
65	Load Transfer Method for Energy Piles in a Group with Pileâ€“Soilâ€“Slabâ€“Pile Interaction. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	42
66	Early warning thresholds for partially saturated slopes in volcanic ashes. Computers and Geotechnics, 2013, 49, 79-89.	2.3	41
67	Contribution to the design methodologies of piled raft foundations under combined loadings. Canadian Geotechnical Journal, 2016, 53, 559-577.	1.4	41
68	Hydro-mechanical behaviour of shallow Opalinus Clay shale. Engineering Geology, 2019, 251, 214-227.	2.9	41
69	Advances in Volume Measurement in Unsaturated Soil Triaxial Tests. Soils and Foundations, 2006, 46, 341-349.	1.3	40
70	Water flow between soil aggregates. Transport in Porous Media, 2007, 68, 219-236.	1.2	39
71	Benchmark of experimental techniques for measuring and controlling suction. Geotechnique, 2011, 61, 303-312.	2.2	39
72	Constitutive models for granular materials including quasi-static frictional behaviour: Toward a thermodynamic theory of plasticity. Continuum Mechanics and Thermodynamics, 1999, 11, 263-275.	1.4	37

#	Article	IF	Citations
73	Estimating the geothermal potential of heat-exchanger anchors on a cut-and-cover tunnel. Geothermics, 2014, 51, 380-387.	1.5	37
74	Elasto-Plasticity of Unsaturated Soils: Laboratory Test Results on a Remoulded Silt. Soils and Foundations, 2006, 46, 545-556.	1.3	36
75	Identification of mechanisms for landslide type initiation of debris flows. Engineering Geology, 2009, 109, 114-123.	2.9	36
76	Displacement interaction among energy piles bearing on stiff soil strata. Computers and Geotechnics, 2017, 90, 144-154.	2.3	36
77	Hydromechanical Aspects of CO2 Breakthrough into Clay-rich Caprock. Energy Procedia, 2017, 114, 3219-3228.	1.8	36
78	Numerical simulation of the non-isothermal mechanical behaviour of soils. Computers and Geotechnics, 2008, 35, 729-745.	2.3	35
79	Temperature-dependent internal friction of clay in a cylindrical heat source problem. Geotechnique, 2011, 61, 831-844.	2.2	35
80	Coupled multiphase thermo-hydro-mechanical analysis of supercritical CO 2 injection: Benchmark for the In Salah surface uplift problem. International Journal of Greenhouse Gas Control, 2016, 51, 394-408.	2.3	35
81	Advanced compact device for the in situ determination of geothermal characteristics of soils. Energy and Buildings, 2008, 40, 1344-1352.	3.1	34
82	Retention behaviour of natural clayey materials at different temperatures. Acta Geotechnica, 2013, 8, 537-546.	2.9	34
83	Constitutive analysis of the mechanical anisotropy of Opalinus Clay. Acta Geotechnica, 2013, 8, 137-154.	2.9	32
84	Nonstationary flow surface theory for modeling the viscoplastic behaviors of soils. Computers and Geotechnics, 2016, 76, 105-119.	2.3	32
85	Analysis of the FEBEX multiâ€barrier system including thermoplasticity of unsaturated bentonite. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 399-422.	1.7	31
86	Understanding the behaviour of energy geo-structures. Proceedings of the Institution of Civil Engineers: Civil Engineering, 2011, 164, 184-191.	0.3	30
87	Effect of non-linear soil deformation on the interaction among energy piles. Computers and Geotechnics, 2017, 86, 9-20.	2.3	29
88	Numerical modelling of the hydrogeological and geomechanical behaviour of a large slope movement: the Triesenberg landslide (Liechtenstein). Canadian Geotechnical Journal, 2007, 44, 840-857.	1.4	28
89	Desiccation shrinkage of nonâ€clayey soils: multiphysics mechanisms and a microstructural model. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 1761-1781.	1.7	28
90	Plastic-damage modeling of saturated quasi-brittle shales. International Journal of Rock Mechanics and Minings Sciences, 2017, 93, 295-306.	2.6	28

#	Article	IF	Citations
91	New basis for the constitutive modelling of aggregated soils. Acta Geotechnica, 2008, 3, 61-69.	2.9	26
92	An innovative device for determining the soil water retention curve under high suction at different temperatures. Acta Geotechnica, 2011, 6, 135-142.	2.9	26
93	The impact of the volumetric swelling behavior on the water uptake of gas shale. Journal of Natural Gas Science and Engineering, 2018, 49, 132-144.	2.1	26
94	Experimental investigation of energy piles: From laboratory to field testing. Geomechanics for Energy and the Environment, 2021, 27, 100214.	1.2	26
95	Calibration of an elasto-plastic constitutive model by a constrained optimisation procedure. Computers and Geotechnics, 2006, 33, 432-443.	2.3	25
96	Analysis of the interaction factor method for energy pile groups with slab. Computers and Geotechnics, 2020, 119, 103294.	2.3	25
97	A three-scale cracking criterion for drying soils. Acta Geophysica, 2014, 62, 1049-1059.	1.0	24
98	Potential fracture propagation into the caprock induced by cold<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si36.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>CO</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:m in normal faulting stress regimes. Geomechanics for Energy and the Environment, 2015, 2, 22-31.	1.2	24
99	Quantification of Viscous Creep Influence on Storage Capacity of Caprock. Energy Procedia, 2017, 114, 3237-3246.	1.8	24
100	Energy geostructures. , 2020, , 25-65.		24
101	Mechanisms and critical properties in drying shrinkage of soils: experimental and numerical parametric studies. Canadian Geotechnical Journal, 2013, 50, 536-549.	1.4	23
102	Hydromechanical behaviour of a volcanic ash. Geotechnique, 2013, 63, 1433-1446.	2.2	23
103	Heat-exchanger piles for the de-icing of bridges. Acta Geotechnica, 2014, 9, 413-423.	2.9	23
104	Numerical Study on the Suitability of Centrifuge Testing for Capturing the Thermal-Induced Mechanical Behavior of Energy Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	1.5	23
105	Advances in the Testing of the Hydro-mechanical Behaviour of Shales. Springer Series in Geomechanics and Geoengineering, 2013, , 57-68.	0.0	23
106	Three-dimensional finite element analysis of piled rafts with energy piles. Computers and Geotechnics, 2019, 114, 103115.	2.3	22
107	Thermally induced deformation of soils: A critical overview of phenomena, challenges and opportunities. Geomechanics for Energy and the Environment, 2021, 25, 100193.	1.2	22
108	Benchmark study of undrained triaxial testing of Opalinus Clay shale: Results and implications for robust testing. Geomechanics for Energy and the Environment, 2021, 25, 100210.	1.2	22

#	Article	IF	Citations
109	Thermo-mechanical behavior of a full-scale energy pile equipped with a spiral pipe configuration. Canadian Geotechnical Journal, 2021, 58, 1757-1769.	1.4	22
110	A double-structure hydromechanical constitutive model for compacted bentonite. Computers and Geotechnics, 2019, 115, 103173.	2.3	21
111	The role of thermal loads in the performance-based design of energy piles. Geomechanics for Energy and the Environment, 2020, 21, 100153.	1.2	21
112	Potential for Fault Reactivation Due to CO2 Injection in a Semi-Closed Saline Aquifer. Energy Procedia, 2017, 114, 3282-3290.	1.8	20
113	Hydro-mechanical Modeling of Tunnel Excavation in Anisotropic Shale with Coupled Damage-Plasticity and Micro-dilatant Regularization. Rock Mechanics and Rock Engineering, 2018, 51, 3819-3833.	2.6	20
114	Wave Propagation in the Vicinities of Rock Fractures Under Obliquely Incident Wave. Rock Mechanics and Rock Engineering, 2016, 49, 1789-1802.	2.6	19
115	Microstructure observations in compacted clays subjected to thermal loading. Engineering Geology, 2021, 287, 105928.	2.9	19
116	Thermodynamical approach for CamClay-family models with Roscoe-type dilatancy rules. International Journal for Numerical and Analytical Methods in Geomechanics, 1994, 18, 133-138.	1.7	18
117	Mechanical Testing in Unsaturated Soils. Geotechnical and Geological Engineering, 2008, 26, 675-689.	0.8	18
118	Experimental assessment of the hydro-mechanical behaviour of a shale caprock during CO2 injection. International Journal of Greenhouse Gas Control, 2021, 106, 103225.	2.3	18
119	Miscible and immiscible multiphase flow in deformable porous media. Mathematical and Computer Modelling, 2003, 37, 571-582.	2.0	17
120	An introduction to the constitutive modelling of unsaturated soils. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 651-669.	0.0	17
121	Hydro-mechanical analysis of volcanic ash slopes during rainfall. Geotechnique, 2016, 66, 220-231.	2.2	17
122	The thermal energy storage potential of underground tunnels used as heat exchangers. Renewable Energy, 2021, 176, 214-227.	4.3	17
123	Constitutive modelling of the thermo-plastic behaviour of soils. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 635-650.	0.0	16
124	Impact of CO2 injection on the hydro-mechanical behaviour of a clay-rich caprock. International Journal of Greenhouse Gas Control, 2018, 71, 133-141.	2.3	16
125	A Full-Scale Application of Slope Stabilization via Calcite Bio-Mineralization Followed by Long-Term GIS Surveillance. , 2020, , .		16
126	Experimental and numerical investigation of the thermo-mechanical behaviour of an energy sheet pile wall. Geomechanics for Energy and the Environment, 2021, 25, 100208.	1.2	16

#	Article	IF	Citations
127	THM coupling sensitivity analysis in geological nuclear waste storage. Engineering Geology, 2013, 163, 113-121.	2.9	15
128	Shot-clay MX-80 bentonite: An assessment of the hydro-mechanical behaviour. Engineering Geology, 2014, 173, 10-18.	2.9	15
129	A hydromechanical approach to assess CO2 injection-induced surface uplift and caprock deflection. Geomechanics for Energy and the Environment, 2015, 4, 51-60.	1.2	15
130	Impacts of Thermally Induced Stresses on Fracture Stability During Geological Storage of CO2. Energy Procedia, 2016, 86, 411-419.	1.8	15
131	Performance-based Design of Energy Pile Foundations. DFI Journal, 2018, 12, 94-107.	0.2	15
132	A generalized water retention model with soil fabric evolution. Geomechanics for Energy and the Environment, 2021, 25, 100205.	1.2	15
133	Machine learning enhancement of thermal response tests for geothermal potential evaluations at site and regional scales. Geothermics, 2021, 95, 102132.	1.5	15
134	Controlling the calcium carbonate microstructure of engineered living building materials. Journal of Materials Chemistry A, 2021, 9, 24438-24451.	5.2	15
135	Experimental analysis of the cyclic behaviour of kaolin at high temperature. Geotechnique, 2010, 60, 651-655.	2.2	14
136	Desiccation shrinkage of nonâ€clayey soils: a numerical study. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 1782-1800.	1.7	14
137	Nonlinear Elastic Response of Partially Saturated Gas Shales in Uniaxial Compression. Rock Mechanics and Rock Engineering, 2018, 51, 1967-1978.	2.6	14
138	Cyclic thermomechanical response of fine-grained soilâ^'concrete interface for energy piles applications. Canadian Geotechnical Journal, 2021, 58, 1216-1230.	1.4	14
139	Constitutive modelling of unsaturated soils. Revue EuropÃ©enne De GÃ©nie Civil, 2001, 5, 797-807.	0.0	13
140	Analytical Time-Domain Solution of Plane Wave Propagation Across a Viscoelastic Rock Joint. Rock Mechanics and Rock Engineering, 2017, 50, 2731-2747.	2.6	13
141	Heat Transfer in Soils. Geotechnical, Geological and Earthquake Engineering, 2009, , 69-79.	0.1	13
142	Numerical and Phenomenological Study of Desiccation of Soil. , 2006, , 166.		12
143	Increasing understanding and confidence in THM simulations of Engineered Barrier Systems. Environmental Geotechnics, 2020, 7, 59-71.	1.3	12
144	Coupled hydro-mechanical analysis of compacted bentonite behaviour during hydration. Computers and Geotechnics, 2021, 140, 104447.	2.3	12

#	Article	IF	Citations
145	Gas shales testing in controlled partially saturated conditions. International Journal of Rock Mechanics and Minings Sciences, 2018, 107, 110-119.	2.6	11
146	Hydrothermal interactions in energy walls. Underground Space (China), 2021, 6, 173-184.	3.4	11
147	Effect of End-Restraint Conditions on Energy Pile Behavior. , 2017, , .		10
148	Heat exchange potential of energy tunnels for different internal airflow characteristics. Geomechanics for Energy and the Environment, 2022, 30, 100229.	1.2	10
149	Generalized effective stress concept for saturated active clays. Canadian Geotechnical Journal, 2021, 58, 1627-1639.	1.4	10
150	Injection-induced seismicity: strategies for reducing risk using high stress path reservoirs and temperature-induced stress preconditioning. Geophysical Journal International, 2020, 220, 1436-1446.	1.0	9
151	Direct currents stimulate carbonate mineralization for soil improvement under various chemical conditions. Scientific Reports, 2020, 10, 17014.	1.6	9
152	Energy geostructures: Theory and application. E3S Web of Conferences, 2020, 205, 01004.	0.2	9
153	Predicting the axial capacity of piles in sand. Computers and Geotechnics, 2015, 69, 485-495.	2.3	8
154	Equivalent pier analysis of full-scale pile groups subjected to mechanical and thermal loads. Computers and Geotechnics, 2020, 120, 103410.	2.3	8
155	Extension of Winklerâ€™s solution to non-isothermal conditions for capturing the behaviour of plane geostructures subjected to thermal and mechanical actions. Computers and Geotechnics, 2020, 128, 103618.	2.3	8
156	Constitutive modelling of the thermo-plastic behaviour of soils. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 635-650.	0.0	8
157	Stresses and deformations induced by geothermal operations of energy tunnels. Tunnelling and Underground Space Technology, 2022, 124, 104438.	3.0	8
158	Failure mechanism of fine-grained soil-structure interface for energy piles. Soils and Foundations, 2022, 62, 101152.	1.3	8
159	Attrition and particle breakage under monotonic and cyclic loading. Comptes Rendus - Mecanique, 2006, 334, 1-7.	2.1	7
160	Thermal cycling effects on the structure and physical properties of granular materials. Granular Matter, 2020, 22, 1.	1.1	7
161	Effect of the mineralogical composition on the elastoplastic hydromechanical response of Opalinus Clay shale. International Journal of Rock Mechanics and Minings Sciences, 2021, 143, 104747.	2.6	7
162	Experimental analysis of a thermoactive underground railway station. Geomechanics for Energy and the Environment, 2022, 29, 100275.	1.2	7

#	Article	IF	Citations
163	In Situ Testing of a Heat Exchanger Pile. , 2011, , .		6
164	Numerical analysis of canister movements in an engineered barrier system. Acta Geotechnica, 2016, 11, 145-159.	2.9	6
165	A methodology to detect and locate low-permeability faults to reduce the risk of inducing seismicity of fluid injection operations in deep saline formations. International Journal of Greenhouse Gas Control, 2017, 59, 110-122.	2.3	6
166	Impact of material properties on caprock stability inCO2geological storage. Geomechanics for Energy and the Environment, 2017, 11, 28-41.	1.2	6
167	An Oedometer for Studying Combined Effects of Temperature and Suction on Soils. Geotechnical Testing Journal, 2010, 33, 112-122.	0.5	6
168	An introduction to the constitutive modelling of unsaturated soils. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 651-669.	0.0	6
169	Analysis of compaction phenomena due to water injection in reservoirs with a three-phase geomechanical model. Journal of Petroleum Science and Engineering, 2010, 73, 33-40.	2.1	5
170	Experimental and Numerical Investigations of the Behavior of a Heat Exchanger Pile. , 2015, , 515-535.		5
171	On the Formulation of Anisotropicâ€“Polyaxial Failure Criteria: A Comparative Study. Rock Mechanics and Rock Engineering, 2018, 51, 479-489.	2.6	5
172	Early-stage thermal performance design of thermo-active walls implemented in underground infrastructures. Geomechanics for Energy and the Environment, 2022, 30, 100218.	1.2	5
173	Thermo-mechanical behaviour of soils. Revue EuropÃ©enne De GÃ©nie Civil, 2001, 5, 809-843.	0.0	5
174	Evaluating CO2 breakthrough in a shaly caprock material: a multi-scale experimental approach. Scientific Reports, 2022, 12, .	1.6	5
175	Chapter 37 Experimental and numerical investigations of the behaviour of a heat exchanger pile. Elsevier Geo-Engineering Book Series, 2005, 3, 1065-1084.	0.0	4
176	Estimating soil thermal diffusivity with interference analyses. Acta Geotechnica, 2015, 10, 197-208.	2.9	4
177	Strength Evolution of Geomaterials in the Octahedral Plane under Nonisothermal and Unsaturated Conditions. International Journal of Geomechanics, 2017, 17, .	1.3	4
178	Thermal stress analysis of energy piles. Geotechnique, 2021, , 1-12.	2.2	4
179	Water Influence on Mechanical Behaviour of Pavements: Constitutive Modelling. Geotechnical, Geological and Earthquake Engineering, 2009, , 193-216.	0.1	4
180	An experimental investigation challenging the thermal collapse of sand. Geotechnique, 2024, 74, 296-306.	2.2	4

#	Article	IF	Citations
181	Analysis of thermally induced mechanical interactions in energy pile groups. , 2016, , 171-178.		3
182	The Role of Anisotropy on the Volumetric Behaviour of Opalinus Clay upon Suction Change. Springer Series in Geomechanics and Geoengineering, 2017, , 315-321.	0.0	3
183	Anisotropic Behaviour of Shallow Opalinus Clay. Springer Series in Geomechanics and Geoengineering, 2019, , 442-448.	0.0	3
184	Thermal design and full-scale thermal response test on Energy Walls. E3S Web of Conferences, 2019, 92, 18011.	0.2	3
185	Compaction-Induced Permeability Lossâ€™s Effect on Induced Seismicity During Reservoir Depletion. Pure and Applied Geophysics, 2019, 176, 4277-4296.	0.8	3
186	Bentonite clay barriers in nuclear waste repositories. E3S Web of Conferences, 2020, 205, 01003.	0.2	3
187	Transient dynamics of the thermally induced deformation of sands. International Journal for Numerical and Analytical Methods in Geomechanics, 2022, 46, 1972-1988.	1.7	3
188	Unified approach of coupled constitutive laws. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 713-723.	0.0	2
189	Numerical modelling of the behaviour of a heat exchanger pile. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 827-839.	0.0	2
190	Numerical modelling of coupled poromechanics processes. Revue EuropÃ©enne De GÃ©nie Civil, 2006, 10, 669-701.	0.0	2
191	Coupled Thermo-hydro-Mechanical Effects on Caprock Stability During Carbon Dioxide Injection. Energy Procedia, 2017, 114, 3202-3209.	1.8	2
192	A Stress-Strain Framework for Modelling the Behaviour of Unsaturated Soils under Non-Isothermal Conditions. , 2007, , 119-125.		2
193	Mechanics of Multiphase Porous Media â€" Application to Unsaturated Soils. , 2001, , 153-180.		2
194	Techniques for the Modelling of the Process Systems in Slow and Fast-Moving Landslides. Advances in Natural and Technological Hazards Research, 2014, , 83-129.	1.1	2
195	Unified approach of coupled constitutive laws. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 713-723.	0.0	2
196	Unified Stress Framework for Modelling Unsaturated Subsoil Behaviour. Road Materials and Pavement Design, 2007, 8, 767-781.	2.0	1
197	Unsaturated Soils under Non-Isothermal Conditions: Framework of a New Constitutive Model. , 2008, , .		1
198	Modelling Coupled Mechanics, Moisture and Heat in Pavement Structures. Geotechnical, Geological and Earthquake Engineering, 2009, , 243-281.	0.1	1

#	Article	IF	Citations
199	Multi-physical processes in geomechanics. European Journal of Environmental and Civil Engineering, 2009, 13, 803-830.	1.0	1
200	Editorial: bio- and chemo-mechanical processes in geotechnical engineering. Geotechnique, 2013, 63, 189-190.	2.2	1
201	One Dimensional Consolidation of Opalinus Clay from Shallow Depth. Springer Series in Geomechanics and Geoengineering, 2017, , 338-344.	0.0	1
202	Reservoir Stimulation's Effect on Depletionâ€Induced Seismicity. Journal of Geophysical Research: Solid Earth, 2018, 123, 7806-7823.	1.4	1
203	Soil-structure interaction of surface footings. Computers and Geotechnics, 2021, 134, 104103.	2.3	1
204	Discussion on â€œExperimental Deformation of Opalinus Clay at Elevated Temperature and Pressure Conditions: Mechanical Properties and the Influence of Rock Fabricâ€•of Schuster, V., Rybacki, E., Bonnelye, A., Herrmann, J., Schleicher, A.M., Dresen, G.. Rock Mechanics and Rock Engineering, 0, , 1.	2.6	1
205	Developing a high capacity axis translation apparatus for gas shale testing. E3S Web of Conferences, 2020, 195, 03020.	0.2	1
206	A coupled hydro â€“ mechanical approach for modelling the volume change behaviour of compacted bentonite. E3S Web of Conferences, 2020, 195, 04006.	0.2	1
207	Benefits and drawbacks of applied direct currents for soil improvement via carbonate mineralization. E3S Web of Conferences, 2020, 195, 05007.	0.2	1
208	Geomechanics for energy and the environment: Current developments. Geomechanics for Energy and the Environment, 2022, 32, 100345.	1.2	1
209	Thermo-Mechanical Yielding of a Clay. Elsevier Geo-Engineering Book Series, 2004, 2, 489-493.	0.0	0
210	Fabric Evolution of an Unsaturated Compacted Soil during Hydromechanical Loading. , 2005, , 147-158.		0
211	Reply to Discussion on â€œOn the use of generalised effective stress in the constitutive modelling of unsaturated soilsâ€• Computers and Geotechnics, 2009, 36, 1362-1363.	2.3	0
212	Reply to the discussion by G. Qu on â€œModelling the combined effect of strain rate and temperature on one-dimensional compression of soilsâ€Appears in the Canadian Geotechnical Journal, 46(9): 1100â€“1101.. Canadian Geotechnical Journal, 2009, 46, 1102-1102.	1.4	0
213	One-Dimensional Transient Analysis of Rainfall Infiltration in Unsaturated Volcanic Ash. Springer Series in Geomechanics and Geoengineering, 2015, , 107-118.	0.0	0
214	Multiphysical phenomena and mechanisms involved with energy piles. , 2016, , 11-18.		0
215	Constitutive Framework for Unsaturated Soils with Differentiation of Capillarity and Adsorption. Springer Series in Geomechanics and Geoengineering, 2017, , 447-454.	0.0	0
216	Coupled Analysis of CO2 Injection Induced Stress Variation in the Caprock. Springer Series in Geomechanics and Geoengineering, 2017, , 455-462.	0.0	0

#	Article	IF	Citations
217	Investigation of the Intrinsic Permeability of MX-80 Bentonite through a 4-Scale Analysis of Its Fabric. , 2017, , .		0
218	Gas Shale Water Imbibition Tests with Controlled Suction Technique. Springer Series in Geomechanics and Geoengineering, 2019, , 250-257.	0.0	0
219	Thermomechanical behaviour of energy pile groups. , 2020, , 299-330.		0
220	Analytical modelling of capacity and deformation of single energy piles. , 2020, , 457-565.		0
221	Thermohydromechanical behaviour of soils and soilâ€“structure interfaces. , 2020, , 209-269.		0
222	Thermomechanical behaviour of single energy piles. , 2020, , 271-298.		0
223	Analytical modelling of capacity and deformation of energy pile groups. , 2020, , 567-680.		0
224	Electrokinetic treatments of soils: potential for geoenergy applications. E3S Web of Conferences, 2020, 205, 09002.	0.2	0
225	Performance of Energy Piles Considering Reinforced Concrete Non-Linearity. , 2020, , .		0
226	Microfluidic-Based Study on the Activation and Evolution of Calcite Bio-Mineralization for Geotechnical Applications. , 2020, , .		0
227	Analytical Modelling of Energy Geostructures. Lecture Notes in Civil Engineering, 2021, , 1093-1101.	0.3	0
228	Numerical modelling of the behaviour of a heat exchanger pile. Revue EuropÃ©enne De GÃ©nie Civil, 2005, 9, 827-839.	0.0	0
229	Numerical modelling of coupled poromechanics processes. Revue EuropÃ©enne De GÃ©nie Civil, 2006, 10, 669-671.	0.0	0
230	1D Compression Behaviour of Opalinus Clay. Springer Series in Geomechanics and Geoengineering, 2017, , 322-329.	0.0	0
231	Load transfer approach for the geotechnical analysis of energy piles in a group with slab. E3S Web of Conferences, 2020, 205, 05008.	0.2	0
232	Non-isothermal volume change behavior of saturated sand subjected to minimal vertical effective stress. E3S Web of Conferences, 2020, 205, 09008.	0.2	0
233	An extended generalized effective stress for active clays. E3S Web of Conferences, 2020, 195, 02004.	0.2	0
234	Effective stress concept for mechanical modeling of clays under different environmental conditions. E3S Web of Conferences, 2020, 205, 13015.	0.2	0

#	Article	IF	Citations
235	Swelling and shrinkage of gas shales due to suction variations. E3S Web of Conferences, 2020, 205, 13004.	0.2	0
236	The impact of the compaction and mineralogical composition on the retention behaviour of Opalinus Clay. E3S Web of Conferences, 2020, 205, 13009.	0.2	0