Jean Michel Pereira

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2533648/publications.pdf

Version: 2024-02-01

118 papers	2,666 citations	201658 27 h-index	206102 48 g-index
128 all docs	128 docs citations	128 times ranked	1648 citing authors

#	Article	IF	Citations
1	Influence of heterogeneities of density on the hydromechanical behaviour of pellet-based bentonite materials in imbibition experiments. Applied Clay Science, 2022, 216, 106353.	5.2	2
2	Influence of multiscale surface roughness on permeability in fractures. Physical Review Fluids, 2022, 7, .	2.5	2
3	The Influence of Cyclic Thermal Loading on the Response of Energy Piles Subjected to Combined Axial/Horizontal Loading. , 2022, , .		0
4	A pore-resolved interface tracking algorithm for simulating multiphase flow in arbitrarily structured porous media. Advances in Water Resources, 2022, 162, 104152.	3.8	7
5	Undrained cylindrical cavity expansion/contraction in stiff clays using a twoâ€surface plasticity model. International Journal for Numerical and Analytical Methods in Geomechanics, 2022, 46, 570-593.	3.3	4
6	CO2 plume and pressure monitoring through pressure sensors above the caprock. International Journal of Greenhouse Gas Control, 2022, 117, 103660.	4.6	4
7	Emergence of unstable invasion during imbibition in regular porous media. Journal of Fluid Mechanics, 2022, 941, .	3.4	6
8	Enhancing Spontaneous Droplet Motion on Structured Surfaces with Tailored Wedge Design. Advanced Materials Interfaces, 2021, 8, 2000520.	3.7	8
9	Investigating the hydromechanical behaviour of bentonite pellets by swelling pressure tests and discrete element modelling. Acta Geotechnica, 2021, 16, 507-524.	5.7	16
10	Packing of wet monodisperse spheres. Powder Technology, 2021, 378, 60-64.	4.2	6
11	Droplet Transport: Enhancing Spontaneous Droplet Motion on Structured Surfaces with Tailored Wedge Design (Adv. Mater. Interfaces 2/2021). Advanced Materials Interfaces, 2021, 8, 2170010.	3.7	0
12	ModÃ©lisation physique du comportement thermo-mÃ©canique dâ€™un pieu gÃ©othermique. Revue FranÃ§aise De GÃ©otechnique, 2021, , 3.	0.1	3
13	General Statistics-Based Methodology for the Determination of the Geometrical and Mechanical Representative Elementary Volumes of Fractured Media. Rock Mechanics and Rock Engineering, 2021, 54, 1841-1861.	5.4	10
14	Permeability of Uniformly Graded 3D Printed Granular Media. Geophysical Research Letters, 2021, 48, .	4.0	17
15	Effect of bacterial nanocellulose on the fresh and hardened states of oil well cement. Journal of Petroleum Science and Engineering, 2021, 199, 108259.	4.2	10
16	Effect of Grain Shape on Quasiâ€Static Fluidâ€Fluid Displacement in Porous Media. Water Resources Research, 2021, 57, e2020WR029415.	4.2	12
17	Impact of an SRA (hexylene glycol) on irreversible drying shrinkage and pore solution properties of cement pastes. Cement and Concrete Research, 2021, 143, 106227.	11.0	14
18	Towards the End of Drying of Granular Materials: Enhanced Evaporation and Dryingâ€Induced Collapse. Water Resources Research, 2021, 57, e2021WR030125.	4.2	5

#	Article	IF	Citations
19	Cement with bacterial nanocellulose cured at reservoir temperature: Mechanical performance in the context of CO2 geological storage. Geomechanics for Energy and the Environment, 2021, , 100267.	2.5	1
20	Long-term thermo-mechanical behaviour of energy piles in clay. Environmental Geotechnics, 2020, 7, 237-248.	2.3	15
21	Experimental investigation on the grain-scale compression behavior of loose wet granular material. Acta Geotechnica, 2020, 15, 1039-1055.	5.7	5
22	Effects of the initial granular structure of clay sealing materials on their swelling properties: experiments and DEM simulations. EPJ Nuclear Sciences & Technologies, 2020, 6, 1.	0.7	6
23	Modelling the behaviour of bentonite pellet-powder mixtures upon hydration from dry granular state to saturated homogeneous state. Engineering Geology, 2020, 278, 105847.	6.3	15
24	CO₂ geological storage: Microstructure and mechanical behavior of cement modified with a biopolymer after carbonation. E3S Web of Conferences, 2020, 205, 02007.	0.5	2
25	A finite difference model for undefined end boundary to analyse the heat transfer in dry sands. International Journal of Geotechnical Engineering, 2020, , 1-7.	2.0	1
26	A two-surface thermomechanical plasticity model considering thermal cyclic behavior. Acta Geotechnica, 2020, 15, 2741-2755.	5.7	7
27	Contactless probing of polycrystalline methane hydrate at pore scale suggests weaker tensile properties than thought. Nature Communications, 2020, 11, 3379.	12.8	18
28	Thermo-elasto-plastic modeling of saturated clays under undrained conditions. Computers and Geotechnics, 2020, 125, 103688.	4.7	9
29	Fast Fourier transform-based homogenisation of gas hydrate bearing sediments. Geotechnique Letters, 2020, 10, 367-376.	1.2	4
30	Effect of Wetting Transition during Multiphase Displacement in Porous Media. Langmuir, 2020, 36, 2449-2458.	3.5	20
31	A Fast Testing Method for Discriminating Hardened Cement Paste Reactivity with External Sulphate. RILEM Bookseries, 2020, , 121-136.	0.4	0
32	Modelling the hydromechanical behaviour of expansive granular mixtures upon hydration. E3S Web of Conferences, 2020, 195, 02006.	0.5	0
33	Numerical homogenization method in the modeling of gas hydrate bearing sediments. E3S Web of Conferences, 2020, 205, 11002.	0.5	0
34	Thermo-mechanical behavior of energy diaphragm wall: Physical and numerical modelling. Applied Thermal Engineering, 2019, 146, 243-251.	6.0	24
35	Disorder characterization of porous media and its effect on fluid displacement. Physical Review Fluids, 2019, 4, .	2.5	54
36	Fabric characterisation in transitional soils. Granular Matter, 2018, 20, 1.	2.2	10

#	Article	IF	Citations
37	Three-dimensional numerical and analytical study of horizontal group of square anchor plates in sand. Acta Geotechnica, 2018, 13, 159-174.	5.7	17
38	Hydro-mechanical behaviour of high-density bentonite pellet on partial hydration. Geotechnique Letters, 2018, 8, 330-335.	1.2	22
39	Permeability changes in coal seams: The role of anisotropy. International Journal of Coal Geology, 2018, 199, 52-64.	5.0	17
40	Conductive Heat Transfer Analysis of Energy Pile. Lecture Notes in Civil Engineering, 2018, , 685-693.	0.4	0
41	Basic Mechanical Properties of Wet Granular Materials: A DEM Study. Journal of Engineering Mechanics - ASCE, 2017, 143, .	2.9	32
42	Experimental Study on a Scaled Model of Offshore Wind Turbine on Monopile Foundation. Springer Series in Solid and Structural Mechanics, 2017, , 249-267.	0.2	1
43	A Suction- and Temperature-Controlled Oedometric Device. Springer Series in Geomechanics and Geoengineering, 2017, , 199-206.	0.1	0
44	Discrete Digital Projections Correlation: A Reconstruction-Free Method to Quantify Local Kinematics in Granular Media by X-ray Tomography. Experimental Mechanics, 2017, 57, 819-830.	2.0	18
45	Direct and inverse problems of gas emission and the sorptive deformation of coal beds. Journal of Applied and Industrial Mathematics, 2017, 11, 236-243.	0.4	2
46	Long-term thermo-mechanical behavior of energy pile in dry sand. Acta Geotechnica, 2017, 12, 729-737.	5.7	61
47	Numerical study of one-dimensional compression of granular materials. II. Elastic moduli, stresses, and microstructure. Physical Review E, 2017, 95, 032908.	2.1	23
48	Salient comments from an expert panel on energy geotechnics. Environmental Geotechnics, 2017, 4, 135-142.	2.3	5
49	Experimental Evaluation of the Natural Frequency of an Offshore Wind Turbineâ€™s Scaled Model. , 2017, , .		0
50	Elastic and Filtration Properties of Coal by Adsorption Test Data Based on Inverse Problem Solution. , 2017, , .		0
51	Estimation of the deformation and filtration properties of coal by adsorption test data based on solution of the inverse problem. Doklady Physics, 2017, 62, 323-327.	0.7	3
52	Numerical study of one-dimensional compression of granular materials. I. Stress-strain behavior, microstructure, and irreversibility. Physical Review E, 2017, 95, 032907.	2.1	25
53	Water retention and thermal conductivity of a natural unsaturated loess. Geotechnique Letters, 2017, 7, 286-291.	1.2	11
54	Investigation into macroscopic and microscopic behaviors of wet granular soils using discrete element method and X-ray computed tomography. EPJ Web of Conferences, 2017, 140, 08018.	0.3	0

#	Article	IF	Citations
55	A DEM study of oedometric compression of model granular materials Initial state influence, stress ratio, elasticity, irreversibility.. EPJ Web of Conferences, 2017, 140, 02028.	0.3	0
56	Investigation into the isotropic compression of wet granular soils using discrete element method. E3S Web of Conferences, 2016, 9, 08008.	0.5	1
57	Macro-microscopic one-dimensional compression of wet granular soils by experimental investigation. E3S Web of Conferences, 2016, 9, 06001.	0.5	3
58	A twoâ€surface thermomechanical model for saturated clays. International Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 1059-1080.	3.3	21
59	Mechanical behaviour of a small-scale energy pile in saturated clay. Geotechnique, 2016, 66, 878-887.	4.0	61
60	Adsorptive-mechanical properties of reconstituted granular coal: Experimental characterization and poromechanical modeling. International Journal of Coal Geology, 2016, 162, 158-168.	5.0	32
61	Effect of temperature on the shear strength of soils and the soilâ€"structure interface. Canadian Geotechnical Journal, 2016, 53, 1186-1194.	2.8	146
62	A two-surface plasticity model for stiff clay. Acta Geotechnica, 2016, 11, 871-885.	5.7	27
63	Thermo-mechanical behavior of small-scale energy pile in dry sand. , 2016, , 577-583.		0
64	Stress from NaCl crystallisation by carbon dioxide injection in aquifers. Environmental Geotechnics, 2015, 2, 280-291.	2.3	11
65	Effects of Humidity on the Time-Dependent Behaviour of Geomaterials. , 2015, , .		0
66	Benchmarking selection of parameter values for the Barcelona basic model. Engineering Geology, 2015, 196, 99-118.	6.3	14
67	Impact of excavation damage on the thermo-hydro-mechanical properties of natural Boom Clay. Engineering Geology, 2015, 195, 196-205.	6.3	29
68	Experimental investigation of the influence of supercritical state on the relative permeability of Vosges sandstone. Comptes Rendus - Mecanique, 2015, 343, 495-502.	2.1	10
69	Desorption-induced shear failure of coal bed seams during gas depletion. International Journal of Coal Geology, 2015, 137, 142-151.	5.0	85
70	Combined effects of structure and partial saturation in natural soils. Journal of Geo-Engineering Sciences, 2014, 2, 3-16.	0.3	3
71	A Thermodynamic Approach to Effective Stresses in Unsaturated Soils Incorporating the Concept of Partial Pore Deformations. Vadose Zone Journal, 2014, 13, 1-11.	2.2	9
72	Design tools for thermoactive geotechnical systems. DFI Journal, 2014, 8, 121-129.	0.2	7

#	Article	IF	Citations
73	Measurement and modeling of adsorptiveâ€"poromechanical properties of bituminous coal cores exposed to CO2: Adsorption, swelling strains, swelling stresses and impact on fracture permeability. International Journal of Coal Geology, 2014, 134-135, 80-95.	5.0	96
74	Anisotropic thermal conductivity of natural Boom Clay. Applied Clay Science, 2014, 101, 282-287.	5.2	27
75	A simple method for numerical modelling of mechanical behaviour of an energy pile. Geotechnique Letters, 2014, 4, 119-124.	1.2	35
76	An elastoplastic model with combined isotropicâ€"kinematic hardening to predict the cyclic behavior of stiff clays. Computers and Geotechnics, 2014, 62, 193-202.	4.7	16
77	Experimental study on the mechanical behaviour of a heat exchanger pile using physical modelling. Acta Geotechnica, 2014, 9, 385-398.	5.7	98
78	Investigating the anisotropy of the shear modulus of natural Boom Clay. Geotechnique Letters, 2014, 4, 98-101.	1.2	9
79	Editorial: Energy geostorage. Geotechnique Letters, 2014, 4, 118-118.	1.2	1
80	Assessment of exit hydraulic gradients at the toe of levees in water drawdown conditions. , 2014, , 171-181.		3
81	A Î¼CT investigation of the collapse of a loose unsaturated sand specimen: Comparison between macroscopic and mesoscopic scale. , 2014, , 1171-1176.		0
82	Influence of damage on pore size distribution and permeability of rocks. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 810-831.	3.3	53
83	Full 3D investigation and characterisation of capillary collapse of a loose unsaturated sand using X-ray CT. Granular Matter, 2013, 15, 783-800.	2.2	59
84	A Chemo-Poromechanical Model for Well/Caprock Interface in Presence of CO2. , 2013, , .		2
85	Numerical modelling of the hydroâ€chemoâ€mechanical behaviour of geomaterials in the context of CO₂ injection. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 3052-3069.	3.3	14
86	Retention and permeability properties of damaged porous rocks. Computers and Geotechnics, 2013, 48, 272-282.	4.7	27
87	A viscoplastic constitutive model for unsaturated geomaterials. Computers and Geotechnics, 2013, 54, 143-151.	4.7	36
88	Poromechanics of Salt Nucleation within an Unsaturated Reservoir Rock. , 2013, , .		3
89	On some advanced thermoâ€mechanical models for saturated clays. International Journal for Numerical and Analytical Methods in Geomechanics, 2013, 37, 2952-2971.	3.3	36
90	X-ray microtomography characterisation of the changes in statistical homogeneity of an unsaturated sand during imbibition. Geotechnique Letters, 2013, 3, 84-88.	1.2	20

#	Article	IF	Citations
91	Editorial: Experimental micro-mechanics for geomaterials. Geotechnique Letters, 2013, 3, 42-43.	1.2	3
92	A transverse isotropic model for microporous solids: Application to coal matrix adsorption and swelling. Journal of Geophysical Research: Solid Earth, 2013, 118, 6113-6123.	3.4	64
93	Effects of the Presence of CO2 at the Well/Caprock Interface: Crystallization Damage. , 2013, , .		1
94	Measurement of Adsorptive-Mechanical Properties of Fractured Coal Cores. , 2013, , .		0
95	Rock Stiffness and Permeability During Crack Opening and Closure: A Planar Transverse Isotropic (PTI) Model Using Pore Size Distributions (PSD). , 2013, , .		0
96	Dependence on injection temperature and on aquiferâ€™s petrophysical properties of the local stress applying on the pore wall of a crystallized pore in the context of CO₂storage in deep saline aquifers. EPJ Applied Physics, 2013, 64, 21101.	0.7	10
97	Stress Induced by Precipitation of Salts under CO2 Injection in Deep Saline Aquifers. , 2013, , .		1
98	On-sample water content measurement for a complete local monitoring in triaxial testing of unsaturated soils. Geotechnique, 2012, 62, 595-604.	4.0	21
99	Strain-rate effects in deep marine clays from the Gulf of Guinea. Geotechnique, 2012, 62, 767-775.	4.0	18
100	Preliminary study on the mechanical behaviour of heat exchanger pile in physical model. Geotechnique, 2012, 62, 1047-1051.	4.0	98
101	The water retention properties of a natural unsaturated loess from northern France. Geotechnique, 2012, 62, 95-106.	4.0	126
102	Explicit integration of a thermo-mechanical model for clays. Computers and Geotechnics, 2012, 46, 13-25.	4.7	7
103	A thermodynamically consistent framework for saturated viscoplastic rock-materials subject to damage. Mechanics Research Communications, 2012, 45, 15-21.	1.8	15
104	The Influence of Changes in Water Content on the Electrical Resistivity of a Natural Unsaturated Loess. Geotechnical Testing Journal, 2012, 35, 11-17.	1.0	14
105	Benchmark of experimental techniques for measuring and controlling suction. Geotechnique, 2011, 61, 303-312.	4.0	39
106	Benchmark of constitutive models for unsaturated soils. Geotechnique, 2011, 61, 283-302.	4.0	68
107	Some aspects of the compression and collapse behaviour of an unsaturated natural loess. Geotechnique Letters, 2011, 1, 17-22.	1.2	80
108	Revisiting the thermodynamics of hardening plasticity for unsaturated soils. Computers and Geotechnics, 2010, 37, 207-215.	4.7	63

#	Article	IF	Citations
109	A microstructurally based effective stress for unsaturated soils. Geotechnique, 2010, 60, 913-925.	4.0	312
110	On the time-dependent behaviour of unsaturated geomaterials. , 2010, , 921-925.		5
111	Modelling the unsaturated behaviour of structured soils. , 2010, , 939-944.		0
112	A constitutive model for unsaturated cemented soils under cyclic loading. Computers and Geotechnics, 2008, 35, 853-859.	4.7	61
113	A damage model for unsaturated natural loess submitted to cyclic loading. , 2008, , 647-652.		1
114	Sedimentationâ€“consolidation of a double porosity material. Computers and Geotechnics, 2007, 34, 532-538.	4.7	2
115	Adaptation of existing behaviour models to unsaturated states: application to CJS model. International Journal for Numerical and Analytical Methods in Geomechanics, 2005, 29, 1127-1155.	3.3	57
116	Book reviewThermo-poroelasticity and Geomechanics. A. P. S. Selvadurai and A. P. Suvorov. Cambridge, UK: Cambridge University Press, 2017. 268 pp. ISBN 978-1-107-14289-3, Â£69Â·99. Geotechnique, 0, ,4.0 1-1.		0
117	Chemo-Poromechanical Study of Wellbore Cement Integrity. , 0, , 209-228.		0
118	Evaluation de la premiÃ¨re frÃ©quence propre dâ€™un modÃ¨le rÃ©duit dâ€™Ã©olienne offshore fondÃ© sur monopieu. , 0, , .		0