John S Mccartney

List of Publications by Year
in descending order

66 papers	2,332 citations	218677 26 h-index	223800 46 g-index
66 all docs	66 docs citations	66 times ranked	998 citing authors

#	Article	IF	Citations
1	Investigation of a field-scale energy micropile in stratified soil under cyclic temperature changes. Geomechanics for Energy and the Environment, 2022, 29, 100263.	2.5	5
2	Centrifuge Modeling Methodology for Energy Pile Pullout from Saturated Soft Clay. Geotechnical Testing Journal, 2022, 45, 20210062.	1.0	4
3	Thermal resistance analysis of an energy pile and adjacent soil using radial temperature gradients. Renewable Energy, 2022, 190, 1066-1077.	8.9	11
4	Soil Thermal Response to Temperature Cycles and End Boundary Conditions of Energy Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	3.0	8
5	Improvement on the Calculation of Heat Transfer Rate for a New Type of Geothermal Energy Pile. , 2021, , .		0
6	Effect of nearby piles and soil properties on thermal behaviour of a field-scale energy pile. Canadian Geotechnical Journal, 2021, 58, 1351-1364.	2.8	22
7	Cross-sectional thermo-mechanical responses of energy piles. Computers and Geotechnics, 2021, 138, 104320.	4.7	17
8	Thermal Conductivity of Biocemented Graded Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	3.0	30
9	Thermohydraulic Responses of Unsaturated Sand around a Model Energy Pile. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	3.0	6
10	A Temperature-Dependent Model for Ultimate Bearing Capacity of Energy Piles in Unsaturated Fine-Grained Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	3.0	3
11	Thermal diffusivity of municipal solid waste based on inverse analysis of in-situ heat extraction test. Japanese Geotechnical Society Special Publication, 2021, 9, 435-440.	0.2	1
12	Energy geostructures: A review of analysis approaches, in situ testing and model scale experiments. Geomechanics for Energy and the Environment, 2020, 22, 100173.	2.5	79
13	Temperature-Dependent Model for Small-Strain Shear Modulus of Unsaturated Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	3.0	24
14	Soil thermal responses around a field-scale energy pile. E3S Web of Conferences, 2020, 205, 05027.	0.5	1
15	Axial Load Transfer Analyses of Energy Piles at a Rock Site. Geotechnical and Geological Engineering, 2020, 38, 4711-4733.	1.7	7
16	Thermal Conductivity of Municipal Solid Waste from In Situ Heat Extraction Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	3.0	9
17	Thermal Conductivity of Granular Soil Mixtures with Contrasting Particle Shapes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	3.0	19
18	A novel analytical multilayer cylindrical heat source model for vertical ground heat exchangers installed in layered ground. Energy, 2020, 200, 117545.	8.8	32

#	Article	IF	Citations
19	Mechanical response of a thermal micro-pile installed in stratified sedimentary soil. E3S Web of Conferences, 2020, 205, 05007.	0.5	2
20	Thermal volume changes of saturated sand during loading-unloading-heating phase. E3S Web of Conferences, 2020, 205, 08002.	0.5	5
21	Thermal Conductivity of Sandâ€"Tire Shred Mixtures. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	3.0	30
22	Effects of Cyclic Temperature Variations on Thermal Response of an Energy Pile under a Residential Building. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	3.0	50
23	Emerging Thermal Issues in Geotechnical Engineering. Springer Series in Geomechanics and Geoengineering, 2019, , 275-317.	0.1	15
24	A novel energy pile: The thermo-syphon helical pile. Applied Thermal Engineering, 2019, 159, 113882.	6.0	12
25	Axial and radial thermal responses of energy pile under six storey residential building. Canadian Geotechnical Journal, 2019, 56, 1019-1033.	2.8	31
26	Scaling Shear Modulus from Small to Finite Strain for Unsaturated Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	3.0	25
27	Gradation-Dependent Thermal Conductivity of Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	3.0	47
28	Evaluation of Coupled Thermal and Hydraulic Relationships Used in Simulation of Thermally-Induced Water Flow in Unsaturated Soils. , 2018, , .		1
29	Axial and Radial Thermal Responses of a Field-Scale Energy Pile under Monotonic and Cyclic Temperature Changes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	3.0	83
30	Investigation of potential dragdown/uplift effects on energy piles. Geomechanics for Energy and the Environment, 2017, 10, 21-28.	2.5	66
31	Parameters for Load Transfer Analysis of Energy Piles in Uniform Nonplastic Soils. International Journal of Geomechanics, 2017, 17, .	2.7	58
32	Influence of anisotropic stress states on the thermal volume change of unsaturated silt. Soils and Foundations, 2017, 57, 252-266.	3.1	3
33	Thermal volume change of poorly draining soils I: Critical assessment of volume change mechanisms. Computers and Geotechnics, 2016, 80, 26-40.	4.7	57
34	Numerical analysis of energy piles under different boundary conditions and thermal loading cycles. E3S Web of Conferences, 2016, 9, 05005.	0.5	11
35	Impact of Long-Term Temperature Cycling on the Thermo-Hydro-Mechanical Behavior of Unsaturated Soils Surrounding an Energy Pile. , 2016, , .		1
36	Unified Model for Small-Strain Shear Modulus of Variably Saturated Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	3.0	55

#	Article	IF	Citations
37	Impact of Drainage Conditions on the Thermal Volume Change of Soft Clay. , 2016, , .		8
38	Small-Strain Shear Modulus Model for Saturated and Unsaturated Soils. , 2016, , .		3
39	Heat Transfer in Unsaturated Soil with Application to Borehole Thermal Energy Storage. Vadose Zone Journal, 2016, 15, 1-17.	2.2	42
40	Yielding of Silt at High Temperature and Suction Magnitudes. Geotechnical and Geological Engineering, 2016, 34, 501-514.	1.7	29
41	Parameterization of a calibrated geothermal energy pile model. Geomechanics for Energy and the Environment, 2016, 5, 1-15.	2.5	53
42	Suction-Induced Hardening Effects on the Shear Modulus of Unsaturated Silt. International Journal of Geomechanics, 2016, 16, .	2.7	22
43	Energy geotechnics: Advances in subsurface energy recovery, storage, exchange, and waste management. Computers and Geotechnics, 2016, 75, 244-256.	4.7	86
44	High-Pressure Thermal Isotropic Cell for Evaluation of Thermal Volume Change of Soils. Geotechnical Testing Journal, 2016, 39, 20150114.	1.0	10
45	Cyclic heating effects on thermal volume change of silt. Environmental Geotechnics, 2015, 2, 257-268.	2.3	67
46	Development of a Full-Scale Soil-Borehole Thermal Energy Storage System. , 2015, , .		11
47	Critical Review of Thermal Conductivity Models for Unsaturated Soils. Geotechnical and Geological Engineering, 2015, 33, 207-221.	1.7	207
48	Seasonal Response of Energy Foundations During Building Operation. Geotechnical and Geological Engineering, 2015, 33, 343-356.	1.7	100
49	Centrifuge Modeling of End-Restraint Effects in Energy Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	3.0	112
50	Environmental geotechnics in the US region: a brief overview. Environmental Geotechnics, 2015, 2, 319-325.	2.3	9
51	Introduction to the Special Issue of Geotechnical and Geological Engineering Entitled: â€œThermo-Hydro-Mechanical Behavior of Soils and Energy Geostructuresâ€• Geotechnical and Geological Engineering, 2015, 33, 175-177.	1.7	0
52	Response of an Energy Foundation to Temperature Fluctuations. , 2015, , .		5
53	Evaluation of thermo-mechanical and thermal behavior of full-scale energy foundations. Acta Geotechnica, 2015, 10, 179-195.	5.7	189
54	Impact of Horizontal Run-Out Length on the Thermal Response of Full-Scale Energy Foundations. , 2014, , .		13

#	Article	IF	Citations
55	Evaluation of Head Restraint Effects on Energy Foundations. , 2014, , .		7
56	Thermo-Mechanical Characterization of a Full-Scale Energy Foundation. , 2014, , .		22
57	Centrifuge Modeling of Soil-Structure Interaction in Energy Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, .	3.0	158
58	Municipal solid waste landfills as geothermal heat sources. Renewable and Sustainable Energy Reviews, 2013, 19, 463-474.	16.4	45
59	Analysis of Thermo-Active Foundations With U-Tube Heat Exchangers. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.8	17
60	Impact of Hydraulic Hysteresis on the Small-Strain Shear Modulus of Low Plasticity Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1326-1333.	3.0	101
61	Impact of Heat Exchange on Side Shear in Thermo-Active Foundations. , 2011, , .		60
62	Centrifuge Permeameter for Unsaturated Soils. II: Measurement of the Hydraulic Characteristics of an Unsaturated Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1064-1076.	3.0	29
63	Centrifuge Permeameter for Unsaturated Soils. I: Theoretical Basis and Experimental Developments. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1051-1063.	3.0	46
64	Correction of Lightning Effects on Water Content Reflectometer Soil Moisture Data. Vadose Zone Journal, 2006, 5, 673-683.	2.2	0
65	Closure to â€œAnalysis of a Large Database of GCL Internal Shear Strength Resultsâ€•by Jorge G. Zornberg, John S. McCartney, and Robert H. Swan Jr.. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 1376-1379.	3.0	4
66	Analysis of a Large Database of GCL Internal Shear Strength Results. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 367-380.	3.0	47