John Mccartney

List of Publications by Year
in descending order

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120 papers	3,357 citations	147566 31 h-index	174990 52 g-index
121 all docs	121 docs citations	121 times ranked	1276 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.	1.2	5
2	2D and 3D simulations of static response of a geosynthetic reinforced soil bridge abutment. Geosynthetics International, 2022, 29, 534-546.	1.5	3
3	Centrifuge Modeling Methodology for Energy Pile Pullout from Saturated Soft Clay. Geotechnical Testing Journal, 2022, 45, 20210062.	0.5	4
4	Centrifuge modeling of temperature effects on the pullout capacity of torpedo piles in soft clay. Soils and Rocks, 2022, 45, 1-13.	0.2	4
5	Centrifuge Shake Table Tests on Rocking Footings on Sand. , 2022, , .		1
6	Water Retention in Expansive Clay under Elevated Temperatures and Constrained Conditions. , 2022, , .		0
7	Seismic Response of Rail Embankments. , 2022, , .		2
8	Thermal resistance analysis of an energy pile and adjacent soil using radial temperature gradients. Renewable Energy, 2022, 190, 1066-1077.	4.3	11
9	Soil Thermal Response to Temperature Cycles and End Boundary Conditions of Energy Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	1.5	8
10	Effect of Relative Density on the Drained Seismic Compression of Unsaturated Backfills. Lecture Notes in Civil Engineering, 2022, , 277-288.	0.3	1
11	Undrained Seismic Compression of Unsaturated Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	15
12	Impacts of Fixed-End and Flexible Boundary Conditions on Seismic Response of Shallow Foundations on Saturated Sand in 1-g Shaking Table Tests. Geotechnical Testing Journal, 2021, 44, 637-664.	0.5	9
13	Editorial: Special Issue on Advances in Laboratory Experimentation for Unsaturated Soils. Geotechnical Testing Journal, 2021, 44, 235-236.	0.5	0
14	Improvement on the Calculation of Heat Transfer Rate for a New Type of Geothermal Energy Pile. , 2021, , .		0
15	Hydromechanical behavior of unsaturated soils: Interpretation of compression curves in terms of effective stress. Soils and Rocks, 2021, 44, 1-19.	0.2	3
16	Effect of nearby piles and soil properties on thermal behaviour of a field-scale energy pile. Canadian Geotechnical Journal, 2021, 58, 1351-1364.	1.4	22
17	Cross-sectional thermo-mechanical responses of energy piles. Computers and Geotechnics, 2021, 138, 104320.	2.3	17
18	Thermal Conductivity of Biocemented Graded Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	30

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19	Thermohydraulic Responses of Unsaturated Sand around a Model Energy Pile. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	6
20	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, .	1.5	3
21	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
22	Transient evaluation of a soil-borehole thermal energy storage system. Renewable Energy, 2020, 147, 2582-2598.	4.3	32
23	Impact of temperature on the pullout of reinforcing geotextiles from unsaturated silt. Geosynthetics International, 2020, 27, 1-15.	1.5	10
24	Energy geostructures: A review of analysis approaches, in situ testing and model scale experiments. Geomechanics for Energy and the Environment, 2020, 22, 100173.	1.2	79
25	Temperature-Dependent Model for Small-Strain Shear Modulus of Unsaturated Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	24
26	Reinforcing Effect of Polypropylene Waste Strips on Compacted Lateritic Soils. Sustainability, 2020, 12, 9572.	1.6	7
27	Simulation of the thermo-hydraulic response of energy piles in unsaturated soils. E3S Web of Conferences, 2020, 205, 05002.	0.2	3
28	Soil thermal responses around a field-scale energy pile. E3S Web of Conferences, 2020, 205, 05027.	0.2	1
29	Axial Load Transfer Analyses of Energy Piles at a Rock Site. Geotechnical and Geological Engineering, 2020, 38, 4711-4733.	0.8	7
30	Thermal Conductivity of Municipal Solid Waste from In Situ Heat Extraction Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	9
31	Pullout of geogrids from tire-derived aggregate having large particle size. Geosynthetics International, 2020, 27, 671-684.	1.5	12
32	Thermal Conductivity of Granular Soil Mixtures with Contrasting Particle Shapes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	19
33	Drained Seismic Compression of Unsaturated Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	9
34	Shearing Behavior of Interfaces between Tire-Derived Aggregate and Three Soil Materials. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	6
35	Impacts of Unsaturated Conditions on The Ultimate Axial Capacity of Energy Piles. E3S Web of Conferences, 2020, 195, 04005.	0.2	6
36	Physical Modeling of Stone Columns in Unsaturated Soil Deposits. Geotechnical Testing Journal, 2020, 43, 20170405.	0.5	5

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37	Mechanical response of a thermal micro-pile installed in stratified sedimentary soil. E3S Web of Conferences, 2020, 205, 05007.	0.2	2
38	Thermal Conductivity of Sandâ€“Tire Shred Mixtures. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	30
39	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, .	1.5	50
40	Physical Model Tests of Half-Scale Geosynthetic Reinforced Soil Bridge Abutments. I: Static Loading. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	17
41	Physical Model Tests of Half-Scale Geosynthetic Reinforced Soil Bridge Abutments. II: Dynamic Loading. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	18
42	Emerging Thermal Issues in Geotechnical Engineering. Springer Series in Geomechanics and Geoengineering, 2019, , 275-317.	0.0	15
43	A novel energy pile: The thermo-syphon helical pile. Applied Thermal Engineering, 2019, 159, 113882.	3.0	12
44	Closure to â€œRoles of Particle Breakage and Drainage in the Isotropic Compression of Sand to High Pressuresâ€•by Woongju Mun and John S. McCartney. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, 07019008.	1.5	0
45	Relative density effects on the bearing capacity of unsaturated sand. Soils and Foundations, 2019, 59, 1280-1291.	1.3	7
46	Axial and radial thermal responses of energy pile under six storey residential building. Canadian Geotechnical Journal, 2019, 56, 1019-1033.	1.4	31
47	Numerical Simulation of Deformation and Failure Behavior of Geosynthetic Reinforced Soil Bridge Abutments. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, 04018037.	1.5	44
48	Large-Scale Combination Direct Shear/Simple Shear Device for Tire-Derived Aggregate. Geotechnical Testing Journal, 2018, 41, 20160245.	0.5	14
49	Role of Nonequilibrium Water Vapor Diffusion in Thermal Energy Storage Systems in the Vadose Zone. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	38
50	Transverse shaking table test of a half-scale geosynthetic reinforced soil bridge abutment. Geosynthetics International, 2018, 25, 582-598.	1.5	12
51	Numerical simulation of the deformation response of geosynthetic reinforced soil mini-piers. Geosynthetics International, 2018, 25, 271-286.	1.5	15
52	An approach for shake table performance evaluation during repair and retrofit actions. Earthquake Engineering and Structural Dynamics, 2018, 47, 131-146.	2.5	11
53	Scaling Shear Modulus from Small to Finite Strain for Unsaturated Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	25
54	Application of Hysteretic Trends in the Preconsolidation Stress of Unsaturated Soils. Geotechnical and Geological Engineering, 2018, 36, 193-207.	0.8	3

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55	Effects of temperature on the shear strength of saturated sand. Soils and Foundations, 2018, 58, 1326-1338.	1.3	25
56	Numerical study on maximum reinforcement tensile forces in geosynthetic reinforced soil bridge abutments. Geotextiles and Geomembranes, 2018, 46, 634-645.	2.3	22
57	Gradation-Dependent Thermal Conductivity of Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	47
58	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, .	1.5	83
59	Shaking Table Test of a Half-Scale Geosynthetic-Reinforced Soil Bridge Abutment. Geotechnical Testing Journal, 2018, 41, 20160268.	0.5	16
60	Influence of Temperature on the Volume Change Behavior of Saturated Sand. Geotechnical Testing Journal, 2018, 41, 20160308.	0.5	26
61	Compression of Unsaturated Clay under High Stresses. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, 02817003.	1.5	1
62	Constitutive Model for Drained Compression of Unsaturated Clay to High Stresses. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	9
63	Numerical Study of the Compaction Effect on the Static Behavior of a Geosynthetic Reinforced Soil-Integrated Bridge System. , 2017, , .		3
64	3D Deformation Behavior of Geosynthetic-Reinforced Soil Bridge Abutments. , 2017, , .		3
65	Experimental Design for a Half-Scale Shaking Table Test of a Geosynthetic-Reinforced Soil Bridge Abutment. , 2017, , .		3
66	Investigation of potential dragdown/uplift effects on energy piles. Geomechanics for Energy and the Environment, 2017, 10, 21-28.	1.2	66
67	Parameters for Load Transfer Analysis of Energy Piles in Uniform Nonplastic Soils. International Journal of Geomechanics, 2017, 17, .	1.3	58
68	Shearing Behavior of Tire-Derived Aggregate with Large Particle Size. II: Cyclic Simple Shear. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	24
69	Shearing Behavior of Tire-Derived Aggregate with Large Particle Size. I: Internal and Concrete Interface Direct Shear. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	34
70	Constitutive Model for the Undrained Compression of Unsaturated Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	6
71	Pore water pressure prediction for undrained heating of soils. Environmental Geotechnics, 2017, 4, 70-78.	1.3	35
72	Impact of void ratio and state parameters on the small strain shear modulus of unsaturated soils. Japanese Geotechnical Society Special Publication, 2016, 2, 241-246.	0.2	3

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73	Thermal Volume Change of Unsaturated Silt under Different Stress States and Suction Magnitudes. E3S Web of Conferences, 2016, 9, 09009.	0.2	2
74	Thermal volume change of poorly draining soils I: Critical assessment of volume change mechanisms. Computers and Geotechnics, 2016, 80, 26-40.	2.3	57
75	Numerical analysis of energy piles under different boundary conditions and thermal loading cycles. E3S Web of Conferences, 2016, 9, 05005.	0.2	11
76	Unified Model for Small-Strain Shear Modulus of Variably Saturated Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	55
77	Small-Strain Shear Modulus Model for Saturated and Unsaturated Soils. , 2016, , .		3
78	Heat Transfer in Unsaturated Soil with Application to Borehole Thermal Energy Storage. Vadose Zone Journal, 2016, 15, 1-17.	1.3	42
79	Numerical Modeling of a Soilâ€Borehole Thermal Energy Storage System. Vadose Zone Journal, 2016, 15, 1-17.	1.3	56
80	Yielding of Silt at High Temperature and Suction Magnitudes. Geotechnical and Geological Engineering, 2016, 34, 501-514.	0.8	29
81	Thermal volume change of poorly draining soils II: Model development and experimental validation. Computers and Geotechnics, 2016, 80, 16-25.	2.3	48
82	Parameterization of a calibrated geothermal energy pile model. Geomechanics for Energy and the Environment, 2016, 5, 1-15.	1.2	53
83	Suction-Induced Hardening Effects on the Shear Modulus of Unsaturated Silt. International Journal of Geomechanics, 2016, 16, .	1.3	22
84	Energy geotechnics: Advances in subsurface energy recovery, storage, exchange, and waste management. Computers and Geotechnics, 2016, 75, 244-256.	2.3	86
85	Procedure to Estimate the Seismic Settlement of Partially Saturated Soils. Indian Geotechnical Journal, 2016, 46, 272-275.	0.7	3
86	Calibration of Capacitance Sensors for Compacted Silt in Non-Isothermal Applications. Geotechnical Testing Journal, 2016, 39, 169-180.	0.5	6
87	Cyclic heating effects on thermal volume change of silt. Environmental Geotechnics, 2015, 2, 257-268.	1.3	67
88	Development of a Full-Scale Soil-Borehole Thermal Energy Storage System. , 2015, , .		11
89	Critical Review of Thermal Conductivity Models for Unsaturated Soils. Geotechnical and Geological Engineering, 2015, 33, 207-221.	0.8	207
90	Seasonal Response of Energy Foundations During Building Operation. Geotechnical and Geological Engineering, 2015, 33, 343-356.	0.8	100

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91	Thermal behaviour of unsaturated silt at high suction magnitudes. Geotechnique, 2015, 65, 703-716.	2.2	78
92	Centrifuge Modeling of End-Restraint Effects in Energy Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	1.5	112
93	Coupled Axisymmetric Thermo-Poro-Mechanical Finite Element Analysis of Energy Foundation Centrifuge Experiments in Partially Saturated Silt. Geotechnical and Geological Engineering, 2015, 33, 373-388.	0.8	28
94	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.	0.8	0
95	Compression mechanisms of unsaturated clay under high stresses. Canadian Geotechnical Journal, 2015, 52, 2099-2112.	1.4	34
96	Heat transfer analysis of thermo-active foundations. Energy and Buildings, 2015, 86, 492-501.	3.1	23
97	Evaluation of thermo-mechanical and thermal behavior of full-scale energy foundations. Acta Geotechnica, 2015, 10, 179-195.	2.9	189
98	Compression Behavior of Unsaturated Clay under High Stresses. , 2014, , .		1
99	Impact of Horizontal Run-Out Length on the Thermal Response of Full-Scale Energy Foundations. , 2014, , .		13
100	Evaluation of Head Restraint Effects on Energy Foundations. , 2014, , .		7
101	Coupled Thermo-Poro-Mechanical Finite Element Analysis of an Energy Foundation Centrifuge Experiment in Partially Saturated Silt. , 2014, , .		6
102	Nonisothermal Shear Strength of Compacted Silt at Residual Saturation. , 2014, , .		5
103	Shear Behavior of Silty Soil and Soil-Structure Interface under Temperature Effects. , 2014, , .		27
104	Issues in the Implementation of Sustainable Heat Exchange Technologies in Reinforced, Unsaturated Soil Structures. , 2014, , .		18
105	Outcomes from international workshop on thermoactive geotechnical systems for near-surface geothermal energy: from research to practice. DFI Journal, 2014, 8, 59-73.	0.2	11
106	Centrifuge Modeling of Soil-Structure Interaction in Energy Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, .	1.5	158
107	Issues involved with thermoactive geotechnical systems: characterization of thermomechanical soil behavior and soil-structure interface behavior. DFI Journal, 2014, 8, 108-120.	0.2	18
108	Thermal Borehole Shear Device. Geotechnical Testing Journal, 2014, 37, 20140009.	0.5	20

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109	Empirical Methodology to Estimate Seismically Induced Settlement of Partially Saturated Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 367-376.	1.5	40
110	Municipal solid waste landfills as geothermal heat sources. Renewable and Sustainable Energy Reviews, 2013, 19, 463-474.	8.2	45
111	Impact of Heat Exchange on the Thermo-Hydro-Mechanical Response of Reinforced Embankments. , 2013, , .		18
112	Analysis of Thermo-Active Foundations With U-Tube Heat Exchangers. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.1	17
113	Strain Distributions in Full-Scale Energy Foundations (DFI Young Professor Paper Competition 2012). DFI Journal, 2012, 6, 26-38.	0.2	81
114	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.	1.5	101
115	Impact of Heat Exchange on Side Shear in Thermo-Active Foundations. , 2011, , .		60
116	Engineering Performance of Thermo-Active Foundations. , 2010, , .		11
117	Centrifuge Permeameter for Unsaturated Soils. I: Theoretical Basis and Experimental Developments. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1051-1063.	1.5	46
118	Impact of Effective Stress on the Dynamic Shear Modulus of Unsaturated Sand. , 2010, , .		42
119	Effects of infiltration and evaporation on geosynthetic capillary barrier performance. Canadian Geotechnical Journal, 2010, 47, 1201-1213.	1.4	45
120	Analysis of a Large Database of GCL-Geomembrane Interface Shear Strength Results. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 209-223.	1.5	63