

J Carlos Santamarina

List of Publications by Year in descending order

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246
papers

15,698
citations

18436

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times ranked

7995
citing authors

#	ARTICLE	IF	CITATIONS
1	Particle Shape Effects on Packing Density, Stiffness, and Strength: Natural and Crushed Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 591-602.	1.5	1,127
2	Physical properties of hydrate-bearing sediments. Reviews of Geophysics, 2009, 47, .	9.0	746
3	Biogeochemical processes and geotechnical applications: progress, opportunities and challenges. Geotechnique, 2013, 63, 287-301.	2.2	591
4	Bender Elements: Performance and Signal Interpretation. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 1063-1070.	1.5	550
5	Biological Considerations in Geotechnical Engineering. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 1222-1233.	1.5	518
6	Factors Affecting Efficiency of Microbially Induced Calcite Precipitation. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 992-1001.	1.5	503
7	Specific surface: determination and relevance. Canadian Geotechnical Journal, 2002, 39, 233-241.	1.4	487
8	Water-CO ₂ -mineral systems: Interfacial tension, contact angle, and diffusion—Implications to CO ₂ geological storage. Water Resources Research, 2010, 46, .	1.7	370
9	Mechanical properties of sand, silt, and clay containing tetrahydrofuran hydrate. Journal of Geophysical Research, 2007, 112, .	3.3	361
10	Challenges, Uncertainties, and Issues Facing Gas Production From Gas-Hydrate Deposits. SPE Reservoir Evaluation and Engineering, 2011, 14, 76-112.	1.1	257
11	Hydrate morphology: Physical properties of sands with patchy hydrate saturation. Journal of Geophysical Research, 2012, 117, .	3.3	231
12	Unsaturated Particulate Materials—Particle-Level Studies. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2001, 127, 84-96.	1.5	213
13	Compressional and shear wave velocities in uncemented sediment containing gas hydrate. Geophysical Research Letters, 2005, 32, .	1.5	211
14	Fundamental study of thermal conduction in dry soils. Granular Matter, 2008, 10, 197-207.	1.1	191
15	Hydro-bio-geomechanical properties of hydrate-bearing sediments from Nankai Trough. Marine and Petroleum Geology, 2015, 66, 434-450.	1.5	190
16	Soils and waves: Particulate materials behavior, characterization and process monitoring. Journal of Soils and Sediments, 2001, 1, 130-130.	1.5	187
17	Sand—rubber mixtures (large rubber chips). Canadian Geotechnical Journal, 2008, 45, 1457-1466.	1.4	173
18	Fabric map for kaolinite: effects of pH and ionic concentration on behavior. Clays and Clay Minerals, 2005, 53, 211-223.	0.6	166

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19	Seismic characteristics of fluid escape pipes in sedimentary basins: Implications for pipe genesis. <i>Marine and Petroleum Geology</i> , 2015, 65, 126-140.	1.5	149
20	Effect of cementation on the small-strain parameters of sands. <i>Canadian Geotechnical Journal</i> , 2001, 38, 191-199.	1.4	141
21	Why coal ash and tailings dam disasters occur. <i>Science</i> , 2019, 364, 526-528.	6.0	134
22	Behavior of Rigid-Soft Particle Mixtures. <i>Journal of Materials in Civil Engineering</i> , 2007, 19, 179-184.	1.3	126
23	Discrete element modelling of geomechanical behaviour of methane hydrate soils with pore-filling hydrate distribution. <i>Granular Matter</i> , 2010, 12, 517-525.	1.1	124
24	Mechanical Effects of Biogenic Nitrogen Gas Bubbles in Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2012, 138, 128-137.	1.5	124
25	Role of Particle Angularity on the Mechanical Behavior of Granular Mixtures. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2013, 139, 353-355.	1.5	123
26	The hydraulic conductivity of sediments: A pore size perspective. <i>Engineering Geology</i> , 2018, 233, 48-54.	2.9	123
27	Rheological and mechanical properties of mortars prepared with natural and manufactured sands. <i>Cement and Concrete Research</i> , 2008, 38, 1142-1147.	4.6	121
28	Stress anisotropy and wave propagation: a micromechanical view. <i>Canadian Geotechnical Journal</i> , 1996, 33, 770-782.	1.4	120
29	Modeling Bridge Deterioration with Markov Chains. <i>Journal of Transportation Engineering</i> , 1992, 118, 820-833.	0.9	119
30	Desiccation cracks in saturated fine-grained soils: particle-level phenomena and effective-stress analysis. <i>Geotechnique</i> , 2011, 61, 961-972.	2.2	117
31	Properties and phenomena relevant to CH ₄ -CO ₂ replacement in hydrate-bearing sediments. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	116
32	Gas Production from Hydrate-Bearing Sediments: The Role of Fine Particles. <i>Energy & Fuels</i> , 2012, 26, 480-487.	2.5	111
33	CO ₂ breakthrough—Caprock sealing efficiency and integrity for carbon geological storage. <i>International Journal of Greenhouse Gas Control</i> , 2017, 66, 218-229.	2.3	111
34	Observations related to tetrahydrofuran and methane hydrates for laboratory studies of hydrate-bearing sediments. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, n/a-n/a.	1.0	108
35	Interparticle Contact Behavior and Wave Propagation. <i>Journal of Geotechnical Engineering</i> , 1996, 122, 831-839.	0.4	105
36	Gas hydrate dissociation in sediments: Pressure-temperature evolution. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .	1.0	100

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37	Effect of surface roughness on wave propagation parameters. <i>Geotechnique</i> , 1998, 48, 129-136.	2.2	95
38	Mechanical limits to microbial activity in deep sediments. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	1.0	95
39	Thermal conductivity of hydrate-bearing sediments. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	95
40	Electrical Conductivity in Soils: Underlying Phenomena. <i>Journal of Environmental and Engineering Geophysics</i> , 2003, 8, 263-273.	1.0	94
41	Membership functions I: Comparing methods of measurement. <i>International Journal of Approximate Reasoning</i> , 1987, 1, 287-301.	1.9	92
42	Particle Clogging in Radial Flow: Microscale Mechanisms. <i>SPE Journal</i> , 2006, 11, 193-198.	1.7	92
43	CO ₂ geological storage – Geotechnical implications. <i>KSCE Journal of Civil Engineering</i> , 2011, 15, 707-719.	0.9	91
44	Energy and quality of life. <i>Energy Policy</i> , 2012, 49, 468-476.	4.2	91
45	Geophysical and geotechnical properties of near-seafloor sediments in the northern Gulf of Mexico gas hydrate province. <i>Earth and Planetary Science Letters</i> , 2005, 237, 924-939.	1.8	88
46	A constitutive mechanical model for gas hydrate bearing sediments incorporating inelastic mechanisms. <i>Computers and Geotechnics</i> , 2017, 84, 28-46.	2.3	86
47	Flexural excitation in a standard torsional-resonant column device. <i>Canadian Geotechnical Journal</i> , 1998, 35, 478-490.	1.4	85
48	Small-Strain Stiffness, Shear-Wave Velocity, and Soil Compressibility. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2014, 140, .	1.5	85
49	P-wave monitoring of hydrate-bearing sand during CH ₄ –CO ₂ replacement. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1031-1038.	2.3	83
50	Thermally Induced Long-Term Displacement of Thermoactive Piles. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2014, 140, .	1.5	83
51	Soil Behavior at the Microscale: Particle Forces. , 2003, , 25.		80
52	Stress-strain response of hydrate-bearing sands: Numerical study using discrete element method simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	79
53	Mineral Dissolution and the Evolution of k_0 . <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2009, 135, 1141-1147.	1.5	76
54	Fines Classification Based on Sensitivity to Pore-Fluid Chemistry. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	1.5	76

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55	Electrification at water-hydrophobe interfaces. <i>Nature Communications</i> , 2020, 11, 5285.	5.8	75
56	Revised Soil Classification System for Coarse-Fine Mixtures. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2017, 143, .	1.5	74
57	Bio-inspired geotechnical engineering: principles, current work, opportunities and challenges. <i>Geotechnique</i> , 2022, 72, 687-705.	2.2	74
58	Instrumented pressure testing chamber for characterizing sediment cores recovered at in situ hydrostatic pressure. <i>Marine Geology</i> , 2006, 229, 285-293.	0.9	72
59	Decementation, Softening, and Collapse: Changes in Small-Strain Shear Stiffness in k_0 Loading. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2005, 131, 350-358.	1.5	71
60	Laboratory Strategies for Hydrate Formation in Fine-Grained Sediments. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 2583-2596.	1.4	71
61	Hydraulic conductivity in spatially varying media-a pore-scale investigation. <i>Geophysical Journal International</i> , 2011, 184, 1167-1179.	1.0	70
62	Clogging: bridge formation and vibration-based destabilization. <i>Canadian Geotechnical Journal</i> , 2008, 45, 177-184.	1.4	68
63	Evolution of gas saturation and relative permeability during gas production from hydrate-bearing sediments: Gas invasion vs. gas nucleation. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 116-126.	1.4	68
64	Aggregate production: Fines generation during rock crushing. <i>International Journal of Mineral Processing</i> , 2007, 81, 237-247.	2.6	67
65	Contraction-driven shear failure in compacting uncemented sediments. <i>Geology</i> , 2008, 36, 931.	2.0	64
66	Bacteria in sediments: pore size effects. <i>Geotechnique Letters</i> , 2011, 1, 91-93.	0.6	64
67	Spatial Variability in Soils: High Resolution Assessment with Electrical Needle Probe. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2004, 130, 843-850.	1.5	62
68	Clay interaction with liquid and supercritical CO ₂ : The relevance of electrical and capillary forces. <i>International Journal of Greenhouse Gas Control</i> , 2012, 10, 351-362.	2.3	62
69	Parametric study of the physical properties of hydrate-bearing sand, silt, and clay sediments: 2. Small-strain mechanical properties. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	61
70	Hydrate formation and growth in pores. <i>Journal of Crystal Growth</i> , 2012, 345, 61-68.	0.7	60
71	Hydrate-Bearing Sediments from the Krishna-Godavari Basin: Physical Characterization, Pressure Core Testing, and Scaled Production Monitoring. <i>Energy & Fuels</i> , 2010, 24, 5972-5983.	2.5	58
72	Volume change associated with formation and dissociation of hydrate in sediment. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	1.0	57

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73	Formation history and physical properties of sediments from the Mount Elbert Gas Hydrate Stratigraphic Test Well, Alaska North Slope. <i>Marine and Petroleum Geology</i> , 2011, 28, 427-438.	1.5	57
74	Maximum recoverable gas from hydrate bearing sediments by depressurization. <i>Energy</i> , 2017, 141, 1622-1628.	4.5	57
75	A pressure core based characterization of hydrate-bearing sediments in the Ulleung Basin, Sea of Japan (East Sea). <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	56
76	Particle Migration and Clogging in Porous Media: A Convergent Flow Microfluidics Study. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 9495-9504.	1.4	56
77	Geotechnical characterization of marine sediments in the Ulleung Basin, East Sea. <i>Engineering Geology</i> , 2011, 117, 151-158.	2.9	55
78	Thermally vs. seismically induced block displacements in Masada rock slopes. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 61, 196-211.	2.6	55
79	Fluid-driven fractures in uncemented sediments: Underlying particle-level processes. <i>Earth and Planetary Science Letters</i> , 2010, 299, 180-189.	1.8	54
80	Hydrate adhesive and tensile strengths. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, n/a-n/a.	1.0	53
81	Pressure Core Characterization Tools for Hydrate-Bearing Sediments. <i>Scientific Drilling</i> , 0, 14, 44-48.	1.0	53
82	Hydrate bearing clayey sediments: Formation and gas production concepts. <i>Marine and Petroleum Geology</i> , 2016, 77, 235-246.	1.5	51
83	Shear wave propagation in jointed rock: state of stress. <i>Geotechnique</i> , 2002, 52, 495-505.	2.2	50
84	Mechanical and electromagnetic properties of northern Gulf of Mexico sediments with and without THF hydrates. <i>Marine and Petroleum Geology</i> , 2008, 25, 884-895.	1.5	50
85	Strain-Rate Effects in Mexico City Soil. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2009, 135, 300-305.	1.5	49
86	Long-Term Foundation Response to Repetitive Loading. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2014, 140, .	1.5	49
87	Title is missing!. <i>Journal of Nondestructive Evaluation</i> , 2003, 22, 39-52.	1.1	48
88	CH ₄ -CO ₂ replacement in hydrate-bearing sediments: A pore-scale study. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	1.0	47
89	Soil Compressibility Models for a Wide Stress Range. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	1.5	47
90	Dielectric Permittivity of Soils Mixed with Organic and Inorganic Fluids (0.02 GHz to 1.30 GHz). <i>Journal of Environmental and Engineering Geophysics</i> , 1997, 2, 37-51.	1.0	46

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91	Recoverable gas from hydrate-bearing sediments: Pore network model simulation and macroscale analyses. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	46
92	Formation and development of salt crusts on soil surfaces. <i>Acta Geotechnica</i> , 2016, 11, 1103-1109.	2.9	46
93	Study of Geoprocesses with Complementary Mechanical and Electromagnetic Wave Measurements in an Oedometer. <i>Geotechnical Testing Journal</i> , 1995, 18, 307.	0.5	46
94	Changes in dielectric permittivity and shear wave velocity during concentration diffusion. <i>Canadian Geotechnical Journal</i> , 1995, 32, 647-659.	1.4	45
95	Physical characterization of core samples recovered from Gulf of Mexico. <i>Marine and Petroleum Geology</i> , 2006, 23, 893-900.	1.5	45
96	Hydrate nucleation in quiescent and dynamic conditions. <i>Fluid Phase Equilibria</i> , 2014, 378, 107-112.	1.4	45
97	Ant tunneling—a granular media perspective. <i>Granular Matter</i> , 2010, 12, 607-616.	1.1	44
98	A study of consolidation using mechanical and electromagnetic waves. <i>Geotechnique</i> , 1997, 47, 203-219.	2.2	43
99	Micaceous Sands: Microscale Mechanisms and Macroscale Response. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2007, 133, 1136-1143.	1.5	43
100	Discussion: Interpretation of bender element tests. <i>Geotechnique</i> , 1997, 47, 873-877.	2.2	42
101	Coupled Numerical Modeling of Gas Hydrate-Bearing Sediments: From Laboratory to Field-Scale Analyses. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 10,326.	1.4	42
102	Methane hydrate-bearing sediments: Pore habit and implications. <i>Marine and Petroleum Geology</i> , 2020, 116, 104302.	1.5	42
103	Sustainable development and energy geotechnology — Potential roles for geotechnical engineering. <i>KSCE Journal of Civil Engineering</i> , 2011, 15, 611-621.	0.9	41
104	PicoTesla magnetic tunneling junction sensors integrated with double staged magnetic flux concentrators. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	40
105	Long-wavelength P-wave and S-wave propagation in jointed rock masses. <i>Geophysics</i> , 2009, 74, E205-E214.	1.4	39
106	Parametric study of the physical properties of hydrate-bearing sand, silt, and clay sediments: 1. Electromagnetic properties. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	39
107	Water retention curve for hydrate-bearing sediments. <i>Geophysical Research Letters</i> , 2013, 40, 5637-5641.	1.5	39
108	Haines jumps: Pore scale mechanisms. <i>Physical Review E</i> , 2019, 100, 023115.	0.8	39

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109	Sampling disturbance in hydrate-bearing sediment pressure cores: NGHP-01 expedition, Krishnaâ€“Godavari Basin example. <i>Marine and Petroleum Geology</i> , 2014, 58, 178-186.	1.5	38
110	Physical properties of fine-grained sediments with segregated hydrate lenses. <i>Marine and Petroleum Geology</i> , 2019, 109, 899-911.	1.5	38
111	The effect of particle shape on discharge and clogging. <i>Scientific Reports</i> , 2021, 11, 3309.	1.6	37
112	26. The Impact of Hydrate Saturation on the Mechanical, Electrical, and Thermal Properties of Hydrate-Bearing Sand, Silts, and Clay. , 2010, , 373-384.		36
113	Biogeochemical processes and geotechnical applications: progress, opportunities and challenges. , 2014, , 143-157.		36
114	Laboratory X-ray Tomography: A Valuable Experimental Tool for Revealing Processes in Soils. <i>Geotechnical Testing Journal</i> , 2014, 38, 20140060.	0.5	36
115	Study of Clay-Cement Slurries with Mechanical and Electromagnetic Waves. <i>Journal of Geotechnical Engineering</i> , 1996, 122, 365-373.	0.4	35
116	Detection of Surface Breaking Cracks in Concrete Members Using Rayleigh Waves. <i>Journal of Environmental and Engineering Geophysics</i> , 2005, 10, 295-306.	1.0	35
117	4. A Survey of Elastic and Electromagnetic Properties of Near-Surface Soils. , 2005, , 71-88.		35
118	Displacement field in contractionâ€“driven faults. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	35
119	Closure to â€“Particle Shape Effects on Packing Density, Stiffness, and Strength: Natural and Crushed Sandsâ€“by Gye-Chun Cho, Jake Dodds, and J. Carlos Santamarina. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2007, 133, 1474-1474.	1.5	34
120	Seismic monitoring short-duration events: liquefaction in 1g models. <i>Canadian Geotechnical Journal</i> , 2007, 44, 659-672.	1.4	34
121	Mixtures of Fine-Grained Minerals â€“ Kaolinite and Carbonate Grains. <i>Clays and Clay Minerals</i> , 2008, 56, 599-611.	0.6	33
122	Soft Sediments: Wave-based Characterization. <i>International Journal of Geomechanics</i> , 2005, 5, 147-157.	1.3	32
123	Mexico City Soil Behavior at Different Strains: Observations and Physical Interpretation. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2001, 127, 783-789.	1.5	31
124	Engineered CO2 injection: The use of surfactants for enhanced sweep efficiency. <i>International Journal of Greenhouse Gas Control</i> , 2014, 20, 324-332.	2.3	30
125	Soil desiccation cracks as a suctionâ€“contraction process. <i>Geotechnique Letters</i> , 2017, 7, 279-285.	0.6	30
126	Particle transport in a nonuniform flow field: Retardation and clogging. <i>Applied Physics Letters</i> , 2007, 90, 244101.	1.5	29

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127	Open-mode discontinuities in soils. <i>Geotechnique Letters</i> , 2011, 1, 95-99.	0.6	29
128	Analysis of inverted base pavements with thin-asphalt layers. <i>International Journal of Pavement Engineering</i> , 2016, 17, 590-601.	2.2	29
129	Natural Rock Fractures: From Aperture to Fluid Flow. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 5827-5844.	2.6	29
130	Attenuation in sand: an exploratory study on the small-strain behavior and the influence of moisture condensation. <i>Granular Matter</i> , 2007, 9, 365-376.	1.1	27
131	Numerical Simulation of Inverted Pavement Systems. <i>Journal of Transportation Engineering</i> , 2012, 138, 1507-1519.	0.9	27
132	Sand response to a large number of loading cycles under zero-lateral-strain conditions: evolution of void ratio and small-strain stiffness. <i>Geotechnique</i> , 2019, 69, 501-513.	2.2	26
133	The critical state line of nonplastic tailings. <i>Canadian Geotechnical Journal</i> , 2020, 57, 1508-1517.	1.4	26
134	Blast Densification: Multi-Instrumented Case History. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2009, 135, 723-734.	1.5	25
135	Characterization and Engineering Properties of Dry and Ponded Class-F Fly Ash. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2019, 145, .	1.5	25
136	Wave Propagation in Soils: Multi-Mode, Wide-Band Testing in a Waveguide Device. <i>Geotechnical Testing Journal</i> , 1996, 19, 130-140.	0.5	25
137	Sands subjected to repetitive vertical loading under zero lateral strain: accumulation models, terminal densities, and settlement. <i>Canadian Geotechnical Journal</i> , 2016, 53, 2039-2046.	1.4	24
138	Energy geo-storage "analysis and geomechanical implications. <i>KSCE Journal of Civil Engineering</i> , 2011, 15, 655-667.	0.9	23
139	Coda Wave Analysis to Monitor Processes in Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2013, 139, 1504-1511.	1.5	23
140	Grain-Displacive Gas Migration in Fine-Grained Sediments. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 2274-2285.	1.4	23
141	An implicit joint-continuum model for the hydro-mechanical analysis of fractured rock masses. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2019, 119, 140-148.	2.6	23
142	Suspension extraction through an opening before clogging. <i>Applied Physics Letters</i> , 2004, 85, 4535.	1.5	21
143	Gas Hydrates as a Potential Energy Source: State of Knowledge and Challenges. , 2013, , 977-1033.		21
144	Capillary pressure across a pore throat in the presence of surfactants. <i>Water Resources Research</i> , 2016, 52, 9586-9599.	1.7	21

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145	Depth-Dependent Seabed Properties: Geoacoustic Assessment. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	21
146	Spatial variability: drained and undrained deviatoric load response. Geotechnique, 2008, 58, 805-814.	2.2	20
147	Dissolution of randomly distributed soluble grains: post-dissolution <i>in situ</i> loading and shear. Geotechnique, 2014, 64, 828-836.	2.2	20
148	CO ₂ geological storage: hydrochemo-mechanical analyses and implications. , 2014, 4, 528-543.		20
149	Desiccation crack formation beneath the surface. Geotechnique, 2020, 70, 181-186.	2.2	20
150	Risk-Based Bridge Management. Journal of Transportation Engineering, 1993, 119, 742-750.	0.9	19
151	Ferromagnetic Inclusions in Geomaterials: Implications. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 167-179.	1.5	19
152	Sediment–well interaction during depressurization. Acta Geotechnica, 2017, 12, 883-895.	2.9	19
153	CO ₂ breakthrough and leak-sealing – Experiments on shale and cement. International Journal of Greenhouse Gas Control, 2013, 19, 471-477.	2.3	18
154	Transport and Adsorption of Silica Nanoparticles in Carbonate Reservoirs: A Sand Column Study. Energy & Fuels, 2019, 33, 4009-4016.	2.5	18
155	Inverted base pavements: construction and performance. International Journal of Pavement Engineering, 2019, 20, 697-703.	2.2	18
156	The LaGrange case history: inverted pavement system characterisation and preliminary numerical analyses. International Journal of Pavement Engineering, 2013, 14, 463-471.	2.2	17
157	Closure to – Revised Soil Classification System for Coarse-Fine Mixtures – by Junghee Park and J. Carlos Santamarina. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, 07018019.	1.5	17
158	Thermal Conductivity of Sand–Silt Mixtures. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	17
159	Negative skin friction and the neutral plane. Canadian Geotechnical Journal, 1994, 31, 591-597.	1.4	16
160	Wave propagation in thin Plexiglas plates: implications for Rayleigh waves. NDT and E International, 2000, 33, 33-41.	1.7	16
161	Geometry-coupled reactive fluid transport at the fracture scale: application to CO ₂ geologic storage. Geofluids, 2016, 16, 329-341.	0.3	16
162	Coupled diffusion–fabric-flow phenomena: an effective stress analysis. Canadian Geotechnical Journal, 1996, 33, 515-522.	1.4	15

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163	Tomographic Detection of Low-Velocity Anomalies with Limited Data Sets (Velocity and Attenuation). Geotechnical Testing Journal, 2000, 23, 472-486.	0.5	15
164	Particle transport in porous media: The role of inertial effects and path tortuosity in the velocity of the particles. Applied Physics Letters, 2009, 95, .	1.5	14
165	The influence of the anisotropic stress state on the intermediate strain properties of granular material. Geotechnique, 2018, 68, 221-232.	2.2	14
166	Risk-based bridge management: optimization and inspection scheduling. Canadian Journal of Civil Engineering, 1994, 21, 897-902.	0.7	13
167	Low and High Strain Macrobehavior of Grain Masses—The Effect of Particle Eccentricity. Transactions of the American Society of Agricultural Engineers, 1995, 38, 877-887.	0.9	13
168	Heat transport in granular materials during cyclic fluid flow. Granular Matter, 2011, 13, 29-37.	1.1	13
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