

Nicholas Sitar

List of Publications by Year in descending order

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91
papers

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101543

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docs citations

94
times ranked

3998
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of depositional fabric on mechanical properties of naturally deposited sands. <i>Geotechnique</i> , 2024, 74, 250-264.	4.0	3
2	Microstructural differences between naturally-deposited and laboratory beach sands. <i>Granular Matter</i> , 2022, 24, 9.	2.2	1
3	Seismic Earth Pressure: Pitfalls and Recommendations. , 2022, , .		0
4	Hydrological control shift from river level to rainfall in the reactivated Guobu slope besides the Laxiwa hydropower station in China. <i>Remote Sensing of Environment</i> , 2021, 265, 112664.	11.0	15
5	Coupled three-dimensional discrete element-lattice Boltzmann methods for fluid-solid interaction with polyhedral particles. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2019, 43, 2270-2287.	3.3	8
6	Modeling of Dynamic Rock-Fluid Interaction Using Coupled 3-D Discrete Element and Lattice Boltzmann Methods. <i>Rock Mechanics and Rock Engineering</i> , 2019, 52, 5161-5180.	5.4	10
7	Reliability analysis of the influence of seepage on levee stability. <i>Environmental Geotechnics</i> , 2018, , 1-10.	2.3	3
8	Comparison of Pseudo-Static Limit Equilibrium and Elastic Wave Equation Analyses of Dynamic Earth Pressures on Retaining Structures. , 2018, , .		1
9	Generalized contact model for polyhedra in three-dimensional discontinuous deformation analysis. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2018, 42, 1471-1492.	3.3	25
10	A fast direct search algorithm for contact detection of convex polygonal or polyhedral particles. <i>Computers and Geotechnics</i> , 2017, 87, 76-85.	4.7	25
11	Stability investigation and stabilization of a heavily fractured and loosened rock slope during construction of a strategic hydropower station in China. <i>Engineering Geology</i> , 2017, 221, 70-81.	6.3	25
12	Parallel and scalable block system generation. <i>Computers and Geotechnics</i> , 2017, 89, 168-178.	4.7	7
13	Stochastic Analysis of Levee Stability Subject to Variable Seepage Conditions. , 2017, , .		2
14	Seismic Earth Pressures on Retaining Structures and Basement Walls in Cohesionless Soils. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	3.0	33
15	Seismic response of retaining walls with cohesive backfill: Centrifuge model studies. <i>Soil Dynamics and Earthquake Engineering</i> , 2016, 90, 411-419.	3.8	16
16	On seismic response of stiff and flexible retaining structures. <i>Soil Dynamics and Earthquake Engineering</i> , 2016, 91, 284-293.	3.8	27
17	System reliability approach for rock scour. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2016, 85, 102-111.	5.8	3
18	Detection and location of rock falls using seismic and infrasound sensors. <i>Engineering Geology</i> , 2015, 193, 49-60.	6.3	49

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19	Soil-Structure Interaction Effects on Seismically Isolated Nuclear Power Plants. , 2015, , .		0
20	Reliability approach to slope stability analysis with spatially correlated soil properties. Soils and Foundations, 2013, 53, 1-10.	3.1	36
21	Probabilistic evaluation of seismically induced permanent deformation of slopes. Soil Dynamics and Earthquake Engineering, 2013, 44, 67-77.	3.8	39
22	Coseismic Tectonic Surface Deformation during the 2010 Maule, Chile, M _w 8.8 Earthquake. Earthquake Spectra, 2012, 28, 39-54.	3.1	11
23	Seismic Performance of Earth Structures during the February 2010 Maule, Chile, Earthquake: Dams, Levees, Tailings Dams, and Retaining Walls. Earthquake Spectra, 2012, 28, 75-96.	3.1	39
24	3-D Stratigraphy and Root Geometry from Trench and Ground-Based LiDAR Mapping. , 2012, , .		2
25	Seismically Induced Lateral Earth Pressures on Retaining Structures and Basement Walls. , 2012, , .		34
26	Rock fall dynamics and deposition: an integrated analysis of the 2009 Ahwiyah Point rock fall, Yosemite National Park, USA. Earth Surface Processes and Landforms, 2012, 37, 680-691.	2.5	42
27	Static and Dynamic Axial Response of Drilled Piers. II: Numerical Simulation. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 1143-1153.	3.0	19
28	Static and Dynamic Axial Response of Drilled Piers. I: Field Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 1133-1142.	3.0	3
29	Stability of Steep Slopes in Cemented Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 43-51.	3.0	63
30	Seismic Earth Pressures on Cantilever Retaining Structures. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1324-1333.	3.0	135
31	Seismic Earth Pressures: Fact or Fiction?. , 2010, , .		23
32	The importance of distribution types on finite element analyses of foundation settlement. Computers and Geotechnics, 2009, 36, 474-483.	4.7	41
33	Geotechnical Properties of Cemented Sands in Steep Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 1359-1366.	3.0	69
34	Influence of Stochastic Discontinuity Network Parameters on the Formation of Removable Blocks in Rock Slopes. Rock Mechanics and Rock Engineering, 2008, 41, 563-585.	5.4	25
35	Processes of coastal bluff erosion in weakly lithified sands, Pacifica, California, USA. Geomorphology, 2008, 97, 483-501.	2.6	167
36	Dynamic Centrifuge Study of Seismically Induced Lateral Earth Pressures on Retaining Structures. , 2008, , .		8

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37	New Approaches to Stability Analysis of Steep Coastal Bluffs. , 2008, , .		1
38	Effective Elastic Stiffness for Periodic Masonry Structures via Eigenstrain Homogenization. Journal of Materials in Civil Engineering, 2007, 19, 269-277.	2.9	19
39	Rock Wedge Stability Analysis Using System Reliability Methods. Rock Mechanics and Rock Engineering, 2007, 40, 419-427.	5.4	66
40	Centrifuge Model Studies of the Seismic Response of Reinforced Soil Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 388-400.	3.0	81
41	Inference of discontinuity trace length distributions using statistical graphical models. International Journal of Rock Mechanics and Minings Sciences, 2006, 43, 877-893.	5.8	36
42	A spectral method for clustering of rock discontinuity sets. International Journal of Rock Mechanics and Minings Sciences, 2006, 43, 1052-1061.	5.8	67
43	System reliability approach to rock slope stability. International Journal of Rock Mechanics and Minings Sciences, 2006, 43, 847-859.	5.8	93
44	The Hayward fault. , 2006, , 273-331.		1
45	Monitoring of Coastal Bluff Stability Using High Resolution 3 D Laser Scanning. , 2005, , 1.		7
46	Smart element method II. An element based on the finite Eshelby tensor. International Journal for Numerical Methods in Engineering, 2005, 64, 1303-1333.	2.8	3
47	Dynamic Displacement of a Block on an Inclined Plane: Analytical, Experimental and DDA Results. Rock Mechanics and Rock Engineering, 2005, 38, 153-167.	5.4	69
48	Influence of Kinematics on Landslide Mobility and Failure Mode. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 716-728.	3.0	87
49	Wireless sensors for wildfire monitoring. , 2005, 5765, 477.		122
50	Geotechnical Reconnaissance of the 2002 Denali Fault, Alaska, Earthquake. Earthquake Spectra, 2004, 20, 639-667.	3.1	25
51	Time Integration in Discontinuous Deformation Analysis. Journal of Engineering Mechanics - ASCE, 2004, 130, 249-258.	2.9	86
52	Evaluation of factors controlling earthquake-induced landslides caused by Chi-Chi earthquake and comparison with the Northridge and Loma Prieta events. Engineering Geology, 2004, 71, 79-95.	6.3	270
53	Direct Estimation of Yield Acceleration in Slope Stability Analyses. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2004, 130, 111-115.	3.0	15
54	The 2002 Denali Fault Earthquake, Alaska: A Large Magnitude, Slip-Partitioned Event. Science, 2003, 300, 1113-1118.	12.6	359

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55	Landslides and liquefaction triggered by the M 7.9 Denali Fault earthquake of 3 November 2002. GSA Today, 2003, 13, 4.	2.0	48
56	Displacement Accuracy of Discontinuous Deformation Analysis Method Applied to Sliding Block. Journal of Engineering Mechanics - ASCE, 2002, 128, 1158-1168.	2.9	62
57	Simplified Method for Evaluating Seismic Stability of Steep Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 119-128.	3.0	38
58	Landslides. Earthquake Spectra, 2001, 17, 61-76.	3.1	5
59	DDAML—discontinuous deformation analysis markup language. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 467-474.	5.8	7
60	Investigation of slope-stability kinematics using discontinuous deformation analysis. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 753-762.	5.8	42
61	Effect of element size on the static finite element analysis of steep slopes. International Journal for Numerical and Analytical Methods in Geomechanics, 2001, 25, 1361-1376.	3.3	12
62	Fault-Related Surface Deformation. Earthquake Spectra, 2001, 17, 19-36.	3.1	10
63	Assessment of Seismic Slope Stability Using GIS Modeling. Annals of GIS, 2000, 6, 121-128.	3.1	10
64	Limit Equilibrium as Basis for Design of Geosynthetic Reinforced Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 286-288.	3.0	1
65	Performance of Geosynthetic Reinforced Slopes at Failure. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 281-286.	3.0	6
66	Mobilization of trichloroethene (TCE) during ethanol flooding in uniform and layered sand packs under confined conditions. Water Resources Research, 1999, 35, 3275-3289.	4.2	24
67	Horizontal ethanol floods in clean, uniform, and layered sand packs under confined conditions. Water Resources Research, 1999, 35, 3291-3302.	4.2	9
68	Limit Equilibrium as Basis for Design of Geosynthetic Reinforced Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 684-698.	3.0	80
69	Performance of Geosynthetic Reinforced Slopes at Failure. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 670-683.	3.0	128
70	Analysis of topographic amplification of inclined shear waves in a steep coastal bluff. Bulletin of the Seismological Society of America, 1997, 87, 692-700.	2.3	168
71	Formation of Shear Zones in Reinforced Sand. Journal of Geotechnical Engineering, 1996, 122, 873-885.	0.4	22
72	Shear strength and slope stability in a shallow clayey soil regolith. Reviews in Engineering Geology, 1995, , 1-11.	0.1	3

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73	Analysis of Rainfall-Induced Debris Flows. <i>Journal of Geotechnical Engineering</i> , 1995, 121, 544-552.	0.4	251
74	Reliability analysis of contaminant transport in saturated porous media. <i>Water Resources Research</i> , 1994, 30, 2435-2448.	4.2	71
75	Emplacement of nonaqueous liquids in the vadose zone. <i>Water Resources Research</i> , 1993, 29, 705-722.	4.2	55
76	Discussion by "Strain Compatibility Design Method for Reinforced Earth Walls" by Ilan Juran and Chao L. Chen (April, 1989, Vol. 115, No. 4). <i>Journal of Geotechnical Engineering</i> , 1992, 118, 318-321.	0.4	1
77	Closure to "Deformation Characteristics of Reinforced Sand in Direct Shear" by Scott E. Shewbridge and Nicholas Sitar (August, 1989, Vol. 115, No. 8). <i>Journal of Geotechnical Engineering</i> , 1991, 117, 1812-1817.	0.4	5
78	Method for Determination of Hydraulic Conductivity in Unsaturated Porous Media. <i>Journal of Irrigation and Drainage Engineering - ASCE</i> , 1991, 117, 64-78.	1.0	2
79	Deformation-Based Model for Reinforced Sand. <i>Journal of Geotechnical Engineering</i> , 1990, 116, 1153-1170.	0.4	37
80	Hydrologic conditions leading to debris-flow initiation. <i>Canadian Geotechnical Journal</i> , 1990, 27, 789-801.	2.8	233
81	Deformation Characteristics of Reinforced Sand in Direct Shear. <i>Journal of Geotechnical Engineering</i> , 1989, 115, 1134-1147.	0.4	108
82	Nonaqueous phase liquid transport and cleanup: 1. Analysis of mechanisms. <i>Water Resources Research</i> , 1988, 24, 1247-1258.	4.2	329
83	Nonaqueous phase liquid transport and cleanup: 2. Experimental studies. <i>Water Resources Research</i> , 1988, 24, 1259-1269.	4.2	105
84	Reply [to "Comments on "Particle transport through porous media" by Laura M. McDowell-Boyer, James R. Hunt, and Nicholas Sitar]. <i>Water Resources Research</i> , 1987, 23, 1699-1699.	4.2	2
85	First-order reliability approach to stochastic analysis of subsurface flow and contaminant transport. <i>Water Resources Research</i> , 1987, 23, 794-804.	4.2	96
86	Particle transport through porous media. <i>Water Resources Research</i> , 1986, 22, 1901-1921.	4.2	713
87	Uplift Pressure in Crack Below Dam. <i>Journal of Energy Engineering - ASCE</i> , 1983, 109, 207-221.	1.9	5
88	Seismic Response of Steep Slopes in Cemented Soils. <i>Journal of Geotechnical Engineering</i> , 1983, 109, 210-227.	0.4	51
89	Cemented Sands under Static Loading. <i>Journal of the Geotechnical Engineering Division, ASCE</i> , 1981, 107, 799-817.	0.2	299
90	Sensitivity analysis in aquifer studies. <i>Water Resources Research</i> , 1977, 13, 733-737.	4.2	23

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91	Effect of Water Sorption on Carbonate Rock Expansivity. Canadian Geotechnical Journal, 1975, 12, 179-186.	2.8	16