Jonathan D Bray

List of Publications by Year
in descending order

106 papers	7,049 citations	57631 44 h-index	58464 82 g-index
107 all docs	107 docs citations	107 times ranked	3336 citing authors

#	Article	IF	Citations
1	Discrete element analysis of earthquake surface fault rupture through layered media. Soil Dynamics and Earthquake Engineering, 2022, 152, 107021.	1.9	11
2	Estimating the Severity of Liquefaction Ejecta Using the Cone Penetration Test. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	1.5	11
3	DEM Analysis of the Interplay between Soil Density and Earthquake Surface Fault Rupture in Layered Soils. , 2022, , .		0
4	Examination of the Volumetric Strain Potential of Liquefied Soil with a Database of Laboratory Tests. , 2022, , .		1
5	Evaluation of Liquefaction Ejecta Case Histories in Christchurch. , 2022, , .		0
6	Evaluating the applicability of conventional CPT-based liquefaction assessment procedures to reclaimed gravelly soils. Soil Dynamics and Earthquake Engineering, 2022, 155, 107176.	1.9	7
7	Effective Stress Analysis of Liquefiable Sites to Estimate the Severity of Sediment Ejecta. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	23
8	Closure to â€œProcedure for Estimating Shear-Induced Seismic Slope Displacement for Shallow Crustal Earthquakesâ€•by Jonathan D. Bray and Jorge Macedo. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, 07021007.	1.5	2
9	Seismic Response Characteristics of Liquefiable Sites with and without Sediment Ejecta Manifestation. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	10
10	Cyclic and monotonic simple shear testing of native Christchurch silty soil. Soil Dynamics and Earthquake Engineering, 2021, 148, 106834.	1.9	12
11	Characterization of silty soil thin layering and groundwater conditions for liquefaction assessment. Canadian Geotechnical Journal, 2020, 57, 263-276.	1.4	23
12	Geotechnical characterization and liquefaction evaluation of gravelly reclamations and hydraulic fills (Port of Wellington, New Zealand). Soils and Foundations, 2020, 60, 1507-1531.	1.3	9
13	Dynamic soil-structure interaction analyses of two important structures affected by liquefaction during the Canterbury earthquake sequence. Soil Dynamics and Earthquake Engineering, 2020, 133, 106026.	1.9	10
14	Discrete Element Analysis of Earthquake Fault Rupture-Soil-Foundation Interaction. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	20
15	Discrete-Element Analysis of Influence of Granular Soil Density on Earthquake Surface Fault Rupture Interaction with Rigid Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	11
16	Procedure for Estimating Shear-Induced Seismic Slope Displacement for Shallow Crustal Earthquakes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	48
17	Recent Advances in Geotechnical Post-earthquake Reconnaissance. Frontiers in Built Environment, 2019, 5, .	1.2	11
18	Liquefaction Resistance and Steady-State Characterization of Shallow Soils within the Christchurch Central Business District. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	8

#	Article	IF	Citations
19	Simplified Procedure for Estimating Seismic Slope Displacements for Subduction Zone Earthquakes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	46
20	Laboratory-based characterization of shallow silty soils in southwest Christchurch. Soil Dynamics and Earthquake Engineering, 2018, 110, 93-109.	1.9	29
21	Liquefactionâ€Induced Damage and CPT Characterization of the Reclamations at CentrePort, Wellington. Bulletin of the Seismological Society of America, 2018, 108, 1695-1708.	1.1	34
22	Liquefaction of Reclaimed Land at Wellington Port in the 2016 Kaikoura Earthquake. , 2018, , .		0
23	Distinct element simulations of earthquake fault rupture through materials of varying density. Soils and Foundations, 2018, 58, 986-1000.	1.3	32
24	Distinct Element Simulations of Shear Rupture in Dilatant Granular Media. International Journal of Geomechanics, 2018, 18, .	1.3	30
25	Key Trends in Liquefaction-Induced Building Settlement. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	29
26	Simplified Evaluation of Liquefaction-Induced Building Settlements. , 2018, , .		0
27	Numerical Procedures for Simulating Earthquake Fault Rupture Propagation. International Journal of Geomechanics, 2017, 17, .	1.3	24
28	6th Ishihara lecture: Simplified procedure for estimating liquefaction-induced building settlement. Soil Dynamics and Earthquake Engineering, 2017, 102, 215-231.	1.9	111
29	Seismic performance of a building affected by moderate liquefaction during the Christchurch earthquake. Soil Dynamics and Earthquake Engineering, 2017, 102, 99-111.	1.9	19
30	Dynamic Analyses of Two Buildings Founded on Liquefiable Soils during the Canterbury Earthquake Sequence. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	29
31	Liquefaction assessments at shallow foundation building sites in the Central Business District of Christchurch, New Zealand. Soil Dynamics and Earthquake Engineering, 2017, 92, 153-164.	1.9	19
32	Liquefaction effects and associated damages observed at the Wellington CentrePort from the 2016 Kaikoura earthquake. Bulletin of the New Zealand Society for Earthquake Engineering, 2017, 50, 152-173.	0.2	74
33	Reprint of Liquefaction assessments at shallow foundation building sites in the Central Business District of Christchurch, New Zealand. Soil Dynamics and Earthquake Engineering, 2016, 91, 234-245.	1.9	2
34	Evaluating nonlinear effective stress site response analyses using records from the Canterbury earthquake sequence. Soil Dynamics and Earthquake Engineering, 2016, 82, 84-98.	1.9	29
35	Centrifuge Tests of Adjacent Mat-Supported Buildings Affected by Liquefaction. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	1.5	29
36	Dynamic effects of surface fault rupture interaction with structures. Soil Dynamics and Earthquake Engineering, 2015, 72, 37-47.	1.9	9

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37	Response Spectra at Liquefaction Sites during Shallow Crustal Earthquakes. Earthquake Spectra, 2015, 31, 2325-2349.	1.6	13
38	Nonlinear Soilâ€“Foundationâ€“Structure and Structureâ€“Soilâ€“Structure Interaction: Engineering Demands. Journal of Structural Engineering, 2015, 141, .	1.7	28
39	Nonlinear Soilâ€“Foundationâ€“Structure and Structureâ€“Soilâ€“Structure Interaction: Centrifuge Test Observations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, .	1.5	29
40	Selection of Near-Fault Pulse Motions. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, .	1.5	66
41	Evaluating the Reliability of Phones as Seismic Monitoring Instruments. Earthquake Spectra, 2014, 30, 721-742.	1.6	30
42	Liquefaction-induced building movements. Bulletin of Earthquake Engineering, 2014, 12, 1129-1156.	2.3	96
43	Numerical Simulation of Building Response on Liquefiable Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1235-1249.	1.5	77
44	Fault Rupture Propagation through Previously Ruptured Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1637-1647.	1.5	38
45	Geotechnical Mitigation Strategies for Earthquake Surface Fault Rupture. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1864-1874.	1.5	54
46	Surface Fault Rupture through a Ridge in an Aftershock of the 2011 Tohoku Earthquake. , 2013, , .		3
47	Drained response of municipal solid waste in large-scale triaxial shear testing. Waste Management, 2012, 32, 1873-1885.	3.7	37
48	Research Needs in Solid Waste Mechanics. , 2011, , .		0
49	Shear Strength of Municipal Solid Waste. , 2011, , .		1
50	Closure to â€œMechanisms of Seismically Induced Settlement of Buildings with Shallow Foundations on Liquefiable Soilâ€•by Shideh Dashti, Jonathan D. Bray, Juan M. Pestana, Michael Riemer, and Dan Wilson. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 309-310.	1.5	1
51	Large-scale direct shear testing of municipal solid waste. Waste Management, 2010, 30, 1544-1555.	3.7	90
52	Probabilistic Performance-Based Procedure to Evaluate Pile Foundations at Sites with Liquefaction-Induced Lateral Displacement. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 464-476.	1.5	29
53	Mechanisms of Seismically Induced Settlement of Buildings with Shallow Foundations on Liquefiable Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 151-164.	1.5	208
54	Centrifuge Testing to Evaluate and Mitigate Liquefaction-Induced Building Settlement Mechanisms. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 918-929.	1.5	176

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55	Seismic Displacement Design of Earth Retaining Structures. , 2010, , .		11
56	Closure to â€œShear Strength of Municipal Solid Wasteâ€•by J. D. Bray, D. Zekkos, E. Kavazanjian Jr., G. A. Athanasopoulos, and M. F. Riemer. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1731-1732.	1.5	1
57	Physical Characterization of Municipal Solid Waste for Geotechnical Purposes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1231-1241.	1.5	68
58	Pseudostatic Coefficient for Use in Simplified Seismic Slope Stability Evaluation. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 1336-1340.	1.5	71
59	Shear Strength of Municipal Solid Waste. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 709-722.	1.5	118
60	Zero-Displacement Lateral Spreads, 1999 Kocaeli, Turkey, Earthquake. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 46-61.	1.5	22
61	Designing Buildings to Accommodate Earthquake Surface Fault Rupture. , 2009, , .		9
62	Design ground motions near active faults. Bulletin of the New Zealand Society for Earthquake Engineering, 2009, 42, 1-8.	0.2	42
63	Shear modulus and material damping of municipal solid waste based on large-scale cyclic triaxial testing. Canadian Geotechnical Journal, 2008, 45, 45-58.	1.4	68
64	Factors that Affect the Performance of Bridge Foundations Undergoing Liquefaction-Induced Lateral Spreading. , 2008, , .		9
65	Simplified Procedure for Estimating Earthquake-Induced Deviatoric Slope Displacements. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2007, 133, 381-392.	1.5	408
66	Simplified Seismic Slope Displacement Procedures. Geotechnical, Geological and Earthquake Engineering, 2007, , 327-353.	0.1	49
67	Unit Weight of Municipal Solid Waste. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 1250-1261.	1.5	198
68	Assessment of the Liquefaction Susceptibility of Fine-Grained Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 1165-1177.	1.5	325
69	Seismic Site Response for Near-Fault Forward Directivity Ground Motions. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2006, 132, 1611-1620.	1.5	27
70	Experimental Validation of Particle-Based Discrete Element Methods. , 2006, , 1.		6
71	Observations of Surface Fault Rupture from the 1906 Earthquake in the Context of Current Practice. Earthquake Spectra, 2006, 22, 69-89.	1.6	24
72	STRONG GROUND MOTIONS AND DAMAGE PATTERNS FROM THE 1999 DUZCE EARTHQUAKE IN TURKEY. Journal of Earthquake Engineering, 2006, 10, 693-724.	1.4	9

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73	Shaking Table Modeling of Seismically Induced Deformations in Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 610-622.	1.5	148
74	Seismic Compression of Two Compacted Earth Fills Shaken by the 1994 Northridge Earthquake. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2004, 130, 461-476.	1.5	30
75	Liquefaction-Induced Lateral Spreading at Izmit Bay During the Kocaeli (Izmit)-Turkey Earthquake. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2004, 130, 1300-1313.	1.5	47
76	Subsurface Characterization at Ground Failure Sites in Adapazari, Turkey. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2004, 130, 673-685.	1.5	131
77	Characterization of forward-directivity ground motions in the near-fault region. Soil Dynamics and Earthquake Engineering, 2004, 24, 815-828.	1.9	570
78	Empirical Relationships for Frequency Content Parameters of Earthquake Ground Motions. Earthquake Spectra, 2004, 20, 119-144.	1.6	184
79	Selecting a suitable time step for discrete element simulations that use the central difference time integration scheme. Engineering Computations, 2004, 21, 278-303.	0.7	203
80	Examination of the Response of Regularly Packed Specimens of Spherical Particles Using Physical Tests and Discrete Element Simulations. Journal of Engineering Mechanics - ASCE, 2004, 130, 1140-1150.	1.6	42
81	Empirical attenuation relationship for Arias Intensity. Earthquake Engineering and Structural Dynamics, 2003, 32, 1133-1155.	2.5	200
82	A new approach for calculating strain for particulate media. International Journal for Numerical and Analytical Methods in Geomechanics, 2003, 27, 859-877.	1.7	73
83	Inclined Plane Studies of the Newmark Sliding Block Procedure. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 673-684.	1.5	125
84	Closure to â€œSeismic Performance of Hillside Fillsâ€•by Jonathan P. Stewart, Jonathan D. Bray, David J. McMahon, Patrick M. Smith, and Alan L. Kropp. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 570-571.	1.5	1
85	Modified Shear Spring Formulation for Discontinuous Deformation Analysis of Particulate Media. Journal of Engineering Mechanics - ASCE, 2003, 129, 830-834.	1.6	14
86	Influence of Particle Shape and Surface Friction Variability on Response of Rod-Shaped Particulate Media. Journal of Engineering Mechanics - ASCE, 2002, 128, 1182-1192.	1.6	57
87	Effect of Pile Driving on Static and Dynamic Properties of Soft Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 13-24.	1.5	32
88	Soil Deformation and Excess Pore Pressure Field around a Closed-Ended Pile. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2002, 128, 1-12.	1.5	82
89	Ground motion evaluation procedures for performance-based design. Soil Dynamics and Earthquake Engineering, 2002, 22, 765-772.	1.9	120
90	Liquefaction-induced ground deformations at Hotel Sapanca during Kocaeli (Izmit),Turkey earthquake. Soil Dynamics and Earthquake Engineering, 2002, 22, 1083-1092.	1.9	51

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91	An Empirical Geotechnical Seismic Site Response Procedure. Earthquake Spectra, 2001, 17, 65-87.	1.6	158
92	One- and two-dimensional seismic analysis of solid-waste landfills. Canadian Geotechnical Journal, 2001, 38, 850-862.	1.4	57
93	Seismic Performance of Hillside Fills. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2001, 127, 905-919.	1.5	51
94	Nonlinear Coupled Seismic Sliding Analysis of Earth Structures. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 1002-1014.	1.5	203
95	The Relationship of Foundation Deformation to Surface and Near-Surface Faulting Resulting from the 1992 Landers Earthquake. Earthquake Spectra, 1999, 15, 121-144.	1.6	12
96	Capturing Nonspherical Shape of Granular Media with Disk Clusters. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1999, 125, 169-178.	1.5	125
97	An examination of simplified earthquake-induced displacement procedures for earth structures. Canadian Geotechnical Journal, 1999, 36, 72-87.	1.4	119
98	Simplified Frequency Content Estimates of Earthquake Ground Motions. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 150-159.	1.5	385
99	Dynamic Properties of Solid Waste Based on Back-Analysis of OII Landfill. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 211-222.	1.5	47
100	Earthquake-Induced Displacements of Solid-Waste Landfills. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 242-253.	1.5	171
101	Closure to â€œSeismic Stability Procedures for Solidâ€Waste Landfillsâ€•by Jonathan D. Bray, Anthony J. Augello, Gerald A. Leonards, Pedro C. Repetto, and R. John Byrne. Journal of Geotechcnical Engineering, 1996, 122, 952-954.	0.4	6
102	Engineering implications of ground motions from the Northridge earthquake. Bulletin of the Seismological Society of America, 1996, 86, S270-S288.	1.1	49
103	Seismic Stability Procedures for Solid-Waste Landfills. Journal of Geotechcnical Engineering, 1995, 121, 139-151.	0.4	53
104	Earthquake Fault Rupture Propagation through Soil. Journal of Geotechcnical Engineering, 1994, 120, 543-561.	0.4	161
105	Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil. Journal of Geotechcnical Engineering, 1994, 120, 562-580.	0.4	100
106	Surface breakage of the 1992 Landers earthquake and its effects on structures. Bulletin of the Seismological Society of America, 1994, 84, 547-561.	1.1	39