Ioannis Anastasopoulos

List of Publications by Year in descending order

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126 papers

4,311 citations

94433 37 h-index 60 g-index

129 all docs

129 docs citations

times ranked

129

1636 citing authors

#	Article	IF	CITATIONS
1	Fault Rupture Propagation through Sand: Finite-Element Analysis and Validation through Centrifuge Experiments. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2007, 133, 943-958.	3.0	226
2	Soil failure can be used for seismic protection of structures. Bulletin of Earthquake Engineering, 2010, 8, 309-326.	4.1	179
3	Seismic behaviour of tunnels: From experiments to analysis. Tunnelling and Underground Space Technology, 2020, 99, 103334.	6.2	152
4	Slope Stabilizing Piles and Pile-Groups: Parametric Study and Design Insights. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 663-677.	3.0	149
5	Nonlinear Response of Deep Immersed Tunnel to Strong Seismic Shaking. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2007, 133, 1067-1090.	3.0	122
6	Simplified Constitutive Model for Simulation of Cyclic Response of Shallow Foundations: Validation against Laboratory Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 1154-1168.	3.0	117
7	Behaviour of deep immersed tunnel under combined normal fault rupture deformation and subsequent seismic shaking. Bulletin of Earthquake Engineering, 2008, 6, 213-239.	4.1	110
8	Foundation–structure systems over a rupturing normal fault: Part I. Observations after the Kocaeli 1999 earthquake. Bulletin of Earthquake Engineering, 2007, 5, 253-275.	4.1	103
9	Rocking isolation of lowâ€rise frame structures founded on isolated footings. Earthquake Engineering and Structural Dynamics, 2012, 41, 1177-1197.	4.4	98
10	Fault rupture–foundation interaction: selected case histories. Bulletin of Earthquake Engineering, 2008, 6, 557-583.	4.1	95
11	Seismic Behavior of Batter Piles: Elastic Response. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1187-1199.	3.0	92
12	Hybrid Method for Analysis and Design of Slope Stabilizing Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1-14.	3.0	91
13	Seismic behaviour of flexible retaining systems subjected to short-duration moderately strong excitation. Soil Dynamics and Earthquake Engineering, 2004, 24, 537-550.	3.8	87
14	Effects of Near-Fault Ground Shaking on Sliding Systems. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 1906-1921.	3.0	85
15	Seismic performance of bar-mat reinforced-soil retaining wall: Shaking table testing versus numerical analysis with modified kinematic hardening constitutive model. Soil Dynamics and Earthquake Engineering, 2010, 30, 1089-1105.	3.8	85
16	Nonlinear rocking stiffness of foundations. Soil Dynamics and Earthquake Engineering, 2013, 47, 83-91.	3.8	85
17	Evidence of beneficial role of inclined piles: observations and summary of numerical analyses. Bulletin of Earthquake Engineering, 2008, 6, 705-722.	4.1	83
18	Shaking Table Testing of Rockingâ€"Isolated Bridge Pier on Sand. Journal of Earthquake Engineering, 2013, 17, 1-32.	2.5	81

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19	Foundation–structure systems over a rupturing normal fault: Part II. Analysis of the Kocaeli case histories. Bulletin of Earthquake Engineering, 2007, 5, 277-301.	4.1	80
20	Rocking response of SDOF systems on shallow improved sand: An experimental study. Soil Dynamics and Earthquake Engineering, 2012, 40, 15-33.	3.8	77
21	Soil-Foundation-Structure Interaction with Mobilization of Bearing Capacity: Experimental Study on Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1369-1386.	3.0	71
22	Shaking table testing of multidrum columns and portals. Earthquake Engineering and Structural Dynamics, 2014, 43, 1703-1723.	4.4	70
23	Discrete modelling of vertical track–soil coupling for vehicle–track dynamics. Soil Dynamics and Earthquake Engineering, 2011, 31, 1711-1723.	3.8	69
24	Numerical analyses of fault–foundation interaction. Bulletin of Earthquake Engineering, 2008, 6, 645-675.	4.1	63
25	Response of three Athens metro underground structures in the 1999 Parnitha earthquake. Soil Dynamics and Earthquake Engineering, 2005, 25, 617-633.	3.8	61
26	Hybrid foundation for offshore wind turbines: Environmental and seismic loading. Soil Dynamics and Earthquake Engineering, 2016, 80, 192-209.	3.8	60
27	Normal Fault Rupture Interaction with Strip Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 359-370.	3.0	56
28	Simplified approximate method for analysis of rocking systems accounting for soil inelasticity and foundation uplifting. Soil Dynamics and Earthquake Engineering, 2014, 56, 28-43.	3.8	52
29	Effects of train impacts on urban turnouts: Modelling and validation through measurements. Journal of Sound and Vibration, 2009, 324, 666-689.	3.9	50
30	Rocking-isolated frame structures: Margins of safety against toppling collapse and simplified design approach. Soil Dynamics and Earthquake Engineering, 2012, 32, 87-102.	3.8	50
31	Centrifuge modeling of rockingâ€isolated inelastic RC bridge piers. Earthquake Engineering and Structural Dynamics, 2014, 43, 2341-2359.	4.4	50
32	Asymmetric â€~Newmark' sliding caused by motions containing severe â€~directivity' and â€~fling' pulses. Geotechnique, 2011, 61, 733-756.	4.0	47
33	Comparative Assessment of Two Rocking Isolation Techniques for a Motorway Overpass Bridge. Frontiers in Built Environment, 2017, 3, .	2.3	46
34	Seismic response of subway station in soft soil: Shaking table testing versus numerical analysis. Tunnelling and Underground Space Technology, 2020, 100, 103389.	6.2	43
35	Design of bridges against large tectonic deformation. Earthquake Engineering and Engineering Vibration, 2008, 7, 345-368.	2.3	42
36	Preliminary design recommendations for dip-slip fault–foundation interaction. Bulletin of Earthquake Engineering, 2008, 6, 677-687.	4.1	41

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37	Seismic Wave Propagation in a Very Soft Alluvial Valley: Sensitivity to Ground-Motion Details and Soil Nonlinearity, and Generation of a Parasitic Vertical Component. Bulletin of the Seismological Society of America, 2010, 100, 3035-3054.	2.3	41
38	Analysis of cut-and-cover tunnels against large tectonic deformation. Bulletin of Earthquake Engineering, 2010, 8, 283-307.	4.1	37
39	Interaction of caisson foundations with a seismically rupturing normal fault: centrifuge testing versus numerical simulation. Geotechnique, 2012, 62, 29-43.	4.0	37
40	Dimensional Analysis of SDOF Systems Rocking on Inelastic Soil. Journal of Earthquake Engineering, 2012, 16, 995-1022.	2.5	35
41	Experimental investigation of the seismic response of classical temple columns. Bulletin of Earthquake Engineering, 2015, 13, 299-310.	4.1	35
42	Caisson Foundations Subjected to Reverse Fault Rupture: Centrifuge Testing and Numerical Analysis. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 914-925.	3.0	33
43	Interaction of foundationâ^'structure systems with seismically precarious slopes: Numerical analysis with strain softening constitutive model. Soil Dynamics and Earthquake Engineering, 2010, 30, 1430-1445.	3 . 8	30
44	Nonlinear Dimensional Analysis of Trapezoidal Valleys Subjected to Vertically Propagating SV Waves. Bulletin of the Seismological Society of America, 2012, 102, 999-1017.	2.3	29
45	Centrifuge Modeling of Rocking Foundations on Improved Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	3.0	29
46	Seismic analysis of motorway bridges accounting for key structural components and nonlinear soil–structure interaction. Soil Dynamics and Earthquake Engineering, 2015, 78, 127-141.	3.8	28
47	Scaling laws for shaking table testing of reinforced concrete tunnels accounting for post-cracking lining response. Tunnelling and Underground Space Technology, 2020, 101, 103353.	6.2	28
48	Soil bentonite wall protects foundation from thrust faulting: analyses and experiment. Earthquake Engineering and Engineering Vibration, 2013, 12, 473-486.	2.3	27
49	Seismic Rocking Isolation of an Asymmetric Frame on Spread Footings. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, 133-151.	3.0	27
50	Equivalent-linear stiffness and damping in rocking of circular and strip foundations. Bulletin of Earthquake Engineering, 2014, 12, 1177-1200.	4.1	27
51	Shallow and Deep Foundations under Fault Rupture Or Strong Seismic Shaking. , 2007, , 185-215.		27
52	Rocking Isolation of Frames on Isolated Footings: Design Insights and Limitations. Journal of Earthquake Engineering, 2012, 16, 374-400.	2.5	26
53	Mitigation of reverse faulting deformation using a soil bentonite wall: Dimensional analysis, parametric study, design implications. Soil Dynamics and Earthquake Engineering, 2016, 89, 248-261.	3.8	26
54	Slab foundation subjected to thrust faulting in dry sand: Parametric analysis and simplified design method. Soil Dynamics and Earthquake Engineering, 2010, 30, 912-924.	3.8	25

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55	Performance of Rocking Systems on Shallow Improved Sand: Shaking Table Testing. Frontiers in Built Environment, $2015,1,.$	2.3	25
56	The effect of tunnel lining modelling approaches on the seismic response of sprayed concrete tunnels in coarse-grained soils. Soil Dynamics and Earthquake Engineering, 2019, 117, 122-137.	3.8	25
57	Database of rocking shallow foundation performance: Dynamic shaking. Earthquake Spectra, 2020, 36, 960-982.	3.1	24
58	Response of buried pipeline subjected to reverse faulting. Soil Dynamics and Earthquake Engineering, 2020, 132, 106090.	3.8	24
59	Interaction of piled foundation with a rupturing normal fault. Geotechnique, 2013, 63, 1042-1059.	4.0	23
60	Bridge–Pier Caisson foundations subjected to normal and thrust faulting: physical experiments versus numerical analysis. Meccanica, 2015, 50, 341-354.	2.0	23
61	Numerical and Experimental Assessment of Advanced Concepts to Reduce Noise and Vibration on Urban Railway Turnouts. Journal of Transportation Engineering, 2009, 135, 279-287.	0.9	22
62	Simple method for real-time seismic damage assessment of bridges. Soil Dynamics and Earthquake Engineering, 2015, 78, 201-212.	3.8	22
63	Assessment of Three-Dimensional Printing of Granular Media for Geotechnical Applications. Geotechnical Testing Journal, 2020, 43, 20180259.	1.0	21
64	Implications of volume loss on the seismic response of tunnels in coarse-grained soils. Tunnelling and Underground Space Technology, 2020, 95, 103127.	6.2	20
65	Fukae bridge collapse (Kobe 1995) revisited: New insights. Soils and Foundations, 2020, 60, 1450-1467.	3.1	20
66	Simplified approach for design of raft foundations against fault rupture. Part I: free-field. Earthquake Engineering and Engineering Vibration, 2008, 7, 147-163.	2.3	19
67	Costâ€effective analysis technique for the design of bridges against strikeâ€slip faulting. Earthquake Engineering and Structural Dynamics, 2020, 49, 1137-1157.	4.4	19
68	Static and cyclic rocking on sand: centrifuge versus reduced-scale 1gexperiments. Geotechnique, 2014, 64, 865-880.	4.0	16
69	Dynamic centrifuge modelling facilities at the University of Dundee and their application to studying seismic case histories., 2014,, 227-233.		16
70	On the development of novel mitigation techniques against faulting–induced deformation: "Smart― barriers and sacrificial members. Soil Dynamics and Earthquake Engineering, 2019, 124, 297-306.	3.8	16
71	Threeâ€storey building retrofit: rocking isolation versus conventional design. Earthquake Engineering and Structural Dynamics, 2015, 44, 1235-1254.	4.4	15
72	Robustness of simplified analysis methods for rocking structures on compliant soil. Earthquake Engineering and Structural Dynamics, 2020, 49, 1388-1405.	4.4	15

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73	Train-Induced Vibrations on Urban Metro and Tram Turnouts. Journal of Transportation Engineering, 2009, 135, 397-405.	0.9	14
74	Static and cyclic undrained response of square embedded foundations. Geotechnique, 2015, 65, 805-823.	4.0	14
75	Evidence of significant forward rupture directivity aggravated by soil response in an M _w 6 earthquake and the effects on monuments. Earthquake Engineering and Structural Dynamics, 2017, 46, 2103-2120.	4.4	14
76	Database of rocking shallow foundation performance: Slow-cyclic and monotonic loading. Earthquake Spectra, 2020, 36, 1585-1606.	3.1	14
77	Seismic response of a cross interchange metro station in soft soil: Physical and numerical modeling. Earthquake Engineering and Structural Dynamics, 2021, 50, 2294-2313.	4.4	14
78	Building damage during nearby construction: Forensic analysis. Engineering Failure Analysis, 2013, 34, 252-267.	4.0	12
79	Geotechnical design with apparent seismic safety factors well-bellow 1. Soil Dynamics and Earthquake Engineering, 2014, 57, 37-45.	3.8	12
80	Soil, basin and soil–building–soil interaction effects on motions of Mexico City during seven earthquakes. Geotechnique, 2020, 70, 581-607.	4.0	12
81	Numerical modelling of a structure with shallow strip foundation during earthquake-induced liquefaction. Geotechnique, 2021, 71, 1099-1113.	4.0	12
82	Rigid slab foundation subjected to strike–slip faulting: mechanisms and insights. Geotechnique, 2020, 70, 354-373.	4.0	11
83	Simplified method for the assessment of the seismic response of motorway bridges: longitudinal directionâ€"accounting for abutment stoppers. Bulletin of Earthquake Engineering, 2017, 15, 4133-4162.	4.1	10
84	Simplified method for realâ€time seismic damage assessment of motorway bridges: Transverse direction—Accounting for abutment stoppers. Earthquake Engineering and Structural Dynamics, 2018, 47, 1496-1521.	4.4	10
85	Widening of Existing Motorway Bridges: Pile Group Retrofit versus Nonlinear Pile–Soil Response. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	3.0	10
86	Shallow strip foundations subjected to earthquake-induced soil liquefaction: Validation, modelling uncertainties, and boundary effects. Soil Dynamics and Earthquake Engineering, 2021, 147, 106719.	3.8	10
87	Simplified approach for design of raft foundations against fault rupture. Part II: soil-structure interaction. Earthquake Engineering and Engineering Vibration, 2008, 7, 165-179.	2.3	9
88	Nonlinear analysis of earthquake fault rupture interaction with historic masonry buildings. Bulletin of Earthquake Engineering, 2015, 13, 83-95.	4.1	9
89	Efficiency of low-rise steel rocking frames founded on conventional and rocking foundations. Soil Dynamics and Earthquake Engineering, 2016, 84, 190-203.	3.8	9
90	Numerical analysis of surface foundation subjected to strike–slip faulting: model boundaries, pre-softening volumetric response, parametric study. Soil Dynamics and Earthquake Engineering, 2021, 151, 106979.	3.8	9

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91	Simplified method for performance-based seismic design of suction caissons supporting jacket offshore wind turbines. Soil Dynamics and Earthquake Engineering, 2022, 155, 107169.	3.8	9
92	Static and dynamic rocking stiffness of shallow footings on sand: centrifuge modelling. International Journal of Physical Modelling in Geotechnics, 2018, 18, 315-339.	0.6	8
93	3–storey building subjected to reverse faulting: Analysis and experiments. Soil Dynamics and Earthquake Engineering, 2020, 138, 106297.	3.8	8
94	Kinematic response of batter pile foundation: Centrifuge tests. , 2010, , 41-48.		7
95	Static and cyclic undrained response of square embedded foundations. Geotechnique, 2015, 65, 805-823.	4.0	6
96	A simplified numerical method to simulate the thawing of frozen soil. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2020, 173, 408-427.	1.6	6
97	Structure–soil–structure interaction (SSSI) of adjacent buildings with shallow foundations on liquefiable soil. Earthquake Engineering and Structural Dynamics, 2022, 51, 2315-2334.	4.4	6
98	Analysis of failures of guardrail base-plates in scissors crossovers of the Athens Metro: The role of foundation–structure interaction. Engineering Failure Analysis, 2007, 14, 765-782.	4.0	5
99	Experimental assessment of the performance of a bridge pier subjected to flood-induced foundation scour. Geotechnique, 2022, 72, 998-1015.	4.0	5
100	Investigation into 3D printing of granular media. , 2018, , 113-118.		5
101	The Collapse of the Hanshin Expressway (Fukae) Bridge, Kobe 1995: Soil-Foundation-Structure Interaction, Reconstruction, Seismic Isolation., 2006,, 93-120.		4
102	Use of Ricker motions as an alternative to pushover testing. International Journal of Physical Modelling in Geotechnics, 2015, 15, 44-55.	0.6	4
103	System Identification of Tunnel Response to Ground Motion Considering a Simplified Model. Frontiers in Built Environment, 2018, 4, .	2.3	4
104	Combined-intensity-measures matching approach for improved performance-based design of slopes. Soil Dynamics and Earthquake Engineering, 2019, 126, 105763.	3.8	4
105	Non-linear rocking stiffness of embedded foundations in sand. Geotechnique, 2019, 69, 767-782.	4.0	4
106	Miniaturised tsunami generator to model interaction of tsunami with coastal infrastructure. International Journal of Physical Modelling in Geotechnics, 2021, 21, 135-149.	0.6	4
107	Existing bridges on pile groups: In-situ measurement of stiffness. Soil Dynamics and Earthquake Engineering, 2021, 148, 106797.	3.8	4
108	Beyond conventional capacity design. , 2010, , 213-220.		4

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109	Surface foundation subjected to strike-slip faulting on dense sand: centrifuge testing versus numerical analysis. Geotechnique, 2023, 73, 165-182.	4.0	4
110	Numerical modelling of the effects of foundation scour on the response of a bridge pier. Acta Geotechnica, 2022, 17, 3697-3717.	5.7	4
111	A compliant guyed system for deep-sea installations of offshore wind turbines: Concept, design insights and dynamic performance. Soil Dynamics and Earthquake Engineering, 2019, 119, 235-252.	3.8	3
112	Use of Ricker wavelet ground motions as an alternative to push-over testing., 2014, , 1073-1078.		3
113	Closure to "Fault Rupture Propagation through Sand: Finite-Element Analysis and Validation through Centrifuge Experiments―by I. Anastasopoulos, G. Gazetas, M. F. Bransby, M. C. R. Davies, and A. El Nahas. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 846-850.	3.0	2
114	Soil, basin and soil–building–soil interaction effects on motions of Mexico City during seven earthquakes. Geotechnique, 2022, 72, 556-564.	4.0	2
115	Opening ceremony shaft for the Athens 2004 Olympic Games. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2007, 160, 61-71.	1.6	1
116	Static and cyclic rocking on sand: centrifuge versus reduced-scale 1gexperiments., 2015,, 155-170.		1
117	Tactile Pressure Sensors in Centrifuge Modeling of Rocking Foundations. , 2015, , .		1
118	Caisson Foundations Subjected to Seismic Faulting: Reduced-Scale Physical Modeling. Geotechnical, Geological and Earthquake Engineering, 2015, , 405-421.	0.2	1
119	USE OF THE DOMAIN REDUCTION METHOD TO SIMULATE THE SEISMIC RESPONSE OF AN EXISTING STRUCTURE PROTECTED BY RESONATING UNIT CELL METAMATERIALS. , 2020, , .		1
120	Breakwater subjected to tsunami–impact: Physical modelling of geotechnical phenomena. Soil Dynamics and Earthquake Engineering, 2022, 159, 107344.	3.8	1
121	Development of Earthquake Crisis Management Strategic Plan for Metropolitan Motorway Systems. , 2008, , .		0
122	Closure to "Seismic Behavior of Batter Piles: Elastic Response―by A. Giannakou, N. Gerolymos, G. Gazetas, T. Tazoh, and I. Anastasopoulos. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 186-187.	3.0	0
123	Seismic Resilience of Existing Infrastructure: Mitigation Schemes for Soil–Structure Systems Subjected to Shaking and Faulting, and Crisis Management System. , 2019, , 315-360.		0
124	Real-Time Seismic Damage Assessment of Various Bridge Types Using a Nonlinear Three-Stage Least Squares Approach. Journal of Infrastructure Systems, 2020, 26, 04020019.	1.8	0
125	THREE-DIMENSIONAL FINITE ELEMENT MODELLING OF DYNAMIC PILE-SOIL-PILE INTERACTION IN TIME DOMAIN. , 2014, , .		0
126	Bearing capacity of surface and embedded foundations on a slope: Centrifuge modelling. , 2018, , 1321-1325.		0