Amir M Kaynia

List of Publications by Year
in descending order

45 papers	1,866 citations	304602 22 h-index	265120 42 g-index
46 all docs	46 docs citations	46 times ranked	1198 citing authors

#	Article	IF	Citations
1	Ground Vibration from High-Speed Trains: Prediction and Countermeasure. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 531-537.	1.5	237
2	Kinematic Seismic Response of Single Piles and Pile Groups. Journal of Geotechcnical Engineering, 1991, 117, 1860-1879.	0.4	167
3	Dynamics of piles and pile groups in layered soil media. Soil Dynamics and Earthquake Engineering, 1991, 10, 386-401.	1.9	157
4	Fragility of transport assets exposed to multiple hazards: State-of-the-art review toward infrastructural resilience. Reliability Engineering and System Safety, 2019, 191, 106567.	5.1	137
5	Static and dynamic simulation of a 700-m high rock slope in western Norway. Engineering Geology, 2004, 71, 213-226.	2.9	109
6	Seismic considerations in design of offshore wind turbines. Soil Dynamics and Earthquake Engineering, 2019, 124, 399-407.	1.9	89
7	Propagation of seismic waves through liquefied soils. Soil Dynamics and Earthquake Engineering, 2010, 30, 236-257.	1.9	81
8	Dynamic response of pile groups with different configurations. Soil Dynamics and Earthquake Engineering, 1993, 12, 239-257.	1.9	66
9	Finite element analysis of failed slope by shear strength reduction technique: a case study for Surabhi Resort Landslide, Mussoorie township, Garhwal Himalaya. Geomatics, Natural Hazards and Risk, 2016, 7, 1677-1690.	2.0	61
10	Analytical seismic fragility functions for highway and railway embankments and cuts. Earthquake Engineering and Structural Dynamics, 2015, 44, 1863-1879.	2.5	58
11	Development of fragility functions for geotechnical constructions: Application to cantilever retaining walls. Soil Dynamics and Earthquake Engineering, 2013, 50, 106-116.	1.9	56
12	Earthquake Stability Analysis of Rock Slopes: a Case Study. Rock Mechanics and Rock Engineering, 2012, 45, 205-215.	2.6	53
13	Earthquake response of monopiles and caissons for Offshore Wind Turbines founded in liquefiable soil. Soil Dynamics and Earthquake Engineering, 2020, 136, 106213.	1.9	51
14	Vertical earthquake response of megawattâ€sized wind turbine with soilâ€structure interaction effects. Earthquake Engineering and Structural Dynamics, 2015, 44, 2341-2358.	2.5	49
15	Forces in Pile Foundations under Seismic Loading. Journal of Engineering Mechanics - ASCE, 1996, 122, 46-53.	1.6	44
16	Identification of substructure properties of railway tracks by dynamic stiffness measurements and simulations. Journal of Sound and Vibration, 2010, 329, 3999-4016.	2.1	44
17	Response of pile foundations to rayleigh waves and obliquely incident body waves. Earthquake Engineering and Structural Dynamics, 1992, 21, 303-318.	2.5	42
18	Dynamic behaviour of pile foundations in homogeneous and non-homogeneous media. Earthquake Engineering and Structural Dynamics, 1994, 23, 183-192.	2.5	39

#	Article	IF	Citations
19	Application of an Anisotropic Constitutive Model for Structured Clay to Seismic Slope Stability. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2011, 137, 492-504.	1.5	36
20	A Poroelastic Solution for Dynamics of Laterally Loaded Offshore Monopiles. Ocean Engineering, 2019, 179, 337-350.	1.9	27
21	Behavior of Slopes under Multiple Adjacent Footings and Buildings. International Journal of Geomechanics, 2018, 18, .	1.3	24
22	Estimation of natural frequencies and damping using dynamic field data from an offshore wind turbine. Marine Structures, 2021, 76, 102915.	1.6	24
23	Effect of foundation type and modelling on dynamic response and fatigue of offshore wind turbines. Wind Energy, 2019, 22, 1667-1683.	1.9	23
24	Influence of vertical shear stresses due to pile-soil interaction on lateral dynamic responses for offshore monopiles. Marine Structures, 2019, 64, 341-359.	1.6	22
25	Effect of track defects on vibration from high speed train. Procedia Engineering, 2017, 199, 2681-2686.	1.2	18
26	Nonlinear soilâ€pile interaction for offshore wind turbines. Wind Energy, 2018, 21, 558-574.	1.9	18
27	Effect of kinematic interaction on seismic response of offshore wind turbines on monopiles. Earthquake Engineering and Structural Dynamics, 2021, 50, 777-790.	2.5	18
28	Prediction and validation of traffic vibration reduction due to cement column stabilization. Soil Dynamics and Earthquake Engineering, 2007, 27, 793-802.	1.9	16
29	Real-time mapping of earthquake-induced landslides. Bulletin of Earthquake Engineering, 2011, 9, 955-973.	2.3	16
30	Stiffness matrices for fluid and anisotropic soil layers with applications in soil dynamics. Soil Dynamics and Earthquake Engineering, 2018, 115, 169-182.	1.9	11
31	Dynamic properties of lightweight foamed glass and their effect on railway vibration. Transportation Geotechnics, 2019, 21, 100276.	2.0	10
32	Characteristics of cyclic undrained model SANISAND-MSu and their effects on response of monopiles for offshore wind structures. Geotechnique, 2023, 73, 294-309.	2.2	9
33	Monopile responses to monotonic and cyclic loading in undrained sand using 3D FE with SANISAND-MSu. Water Science and Engineering, 2022, 15, 69-77.	1.4	9
34	Vâ€“Hâ€“M seismic capacity envelopes of strip foundations on slopes for capacity design of structure-foundation system. Bulletin of Earthquake Engineering, 2019, 17, 2963-2987.	2.3	7
35	Hysteretic damping model for laterally loaded piles. Marine Structures, 2021, 76, 102896.	1.6	7
36	Seismic response of subsea structures on caissons and mudmats due to liquefaction. Marine Structures, 2021, 78, 102972.	1.6	5

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37	Dynamic response of pile foundations with flexible slabs. Earthquake and Structures, 2012, 3, 495-506.	1.0	5
38	Numerical model for dynamic installation of large diameter monopiles. Soil Dynamics and Earthquake Engineering, 2022, 161, 107393.	1.9	5
39	Empirical-based seismically induced slope displacements in a geographic information system environment: a case study. Georisk, 2014, 8, 258-268.	2.6	4
40	Simplified computational methods for estimating dynamic impedance of batter pile groups in homogeneous soil. Earthquake Engineering and Structural Dynamics, 2021, 50, 3894-3915.	2.5	3
41	Dynamic impedances and load carrying mechanism for skirted foundations. Marine Structures, 2021, 79, 103023.	1.6	2
42	Centrifuge study ofpâ€“ycurves for verticalâ€“horizontal static loading of piles in sand. International Journal of Physical Modelling in Geotechnics, 2021, 21, 275-294.	0.5	2
43	Kinematic response of vertical and batter pile groups in nonâ€linear soft soil. Earthquake Engineering and Structural Dynamics, 2022, 51, 2248-2266.	2.5	2
44	Equivalent linear pseudostatic and dynamic modelling of vertically vibrating monopile. Marine Structures, 2021, 75, 102870.	1.6	1
45	Seismic Hazard Assessment for a Wind Farm Offshore England. Geotechnics, 2022, 2, 14-31.	1.2	1