

Assaf Klar

List of Publications by Year in descending order

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63
papers

2,290
citations

279701

23
h-index

214721

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64
all docs

64
docs citations

64
times ranked

1153
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimating the Effects of Tunneling on Existing Pipelines. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 1399-1410.	1.5	241
2	Soil-pipe interaction due to tunnelling: comparison between Winkler and elastic continuum solutions. Geotechnique, 2005, 55, 461-466.	2.2	184
3	Tunnels in sands: the effect of size, depth and volume loss on greenfield displacements. Geotechnique, 2012, 62, 385-399.	2.2	181
4	Coupled deformation-flow analysis for methane hydrate extraction. Geotechnique, 2010, 60, 765-776.	2.2	159
5	Sand production model in gas hydrate-bearing sediments. International Journal of Rock Mechanics and Minings Sciences, 2016, 86, 303-316.	2.6	134
6	Tunneling beneath Buried Pipes: View of Soil Strain and Its Effect on Pipeline Behavior. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1664-1672.	1.5	116
7	Monitoring tunneling induced ground displacements using distributed fiber-optic sensing. Tunnelling and Underground Space Technology, 2014, 40, 141-150.	3.0	95
8	Tunneling effects on jointed pipelines. Canadian Geotechnical Journal, 2008, 45, 131-139.	1.4	91
9	2D and 3D upper bound solutions for tunnel excavation using "elastic" flow fields. International Journal for Numerical and Analytical Methods in Geomechanics, 2007, 31, 1367-1374.	1.7	90
10	Elastoplastic Solution for Soil-Pipe-Tunnel Interaction. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2007, 133, 782-792.	1.5	75
11	Theoretical Study on Pile Length Optimization of Pile Groups and Piled Rafts. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 319-330.	1.5	69
12	Explicitly Coupled Thermal Flow Mechanical Formulation for Gas-Hydrate Sediments. SPE Journal, 2013, 18, 196-206.	1.7	67
13	Feasibility study of automated detection of tunnel excavation by Brillouin optical time domain reflectometry. Tunnelling and Underground Space Technology, 2010, 25, 575-586.	3.0	63
14	Shell versus beam representation of pipes in the evaluation of tunneling effects on pipelines. Tunnelling and Underground Space Technology, 2008, 23, 431-437.	3.0	60
15	Progressive waves in a compressible-ocean with an elastic bottom. Wave Motion, 2013, 50, 929-939.	1.0	50
16	Energy-based volume loss prediction for tunnel face advancement in clays. Geotechnique, 2014, 64, 776-786.	2.2	44
17	On-specimen strain measurement with fiber optic distributed sensing. Measurement: Journal of the International Measurement Confederation, 2015, 60, 104-113.	2.5	41
18	Upper Bound for Cylinder Movement Using "Elastic" Fields and Its Possible Application to Pile Deformation Analysis. International Journal of Geomechanics, 2008, 8, 162-167.	1.3	39

#	ARTICLE	IF	CITATIONS
19	Linear elastic tunnel pipeline interaction: the existence and consequence of volume loss equality. <i>Geotechnique</i> , 2015, 65, 788-792.	2.2	38
20	Design Oriented Linear-Equivalent Approach for Evaluating the Effect of Tunneling on Pipelines. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2016, 142, .	1.5	38
21	Role of Linear Elasticity in Pile Group Analysis and Load Test Interpretation. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2010, 136, 1686-1694.	1.5	32
22	Upper-bound and loadâ€“displacement solutions for laterally loaded piles in clays based on energy minimisation. <i>Geotechnique</i> , 2008, 58, 815-820.	2.2	30
23	Damage Identification in Reinforced Concrete Beams Using Spatially Distributed Strain Measurements. <i>Journal of Structural Engineering</i> , 2013, 139, .	1.7	27
24	Superstructureâ€“foundation interaction in multi-objective pile group optimization considering settlement response. <i>Canadian Geotechnical Journal</i> , 2017, 54, 1408-1420.	1.4	23
25	Nonlinear elastoplastic formulation for tunneling effects on superstructures. <i>Canadian Geotechnical Journal</i> , 2019, 56, 956-969.	1.4	23
26	Elastic Continuum Solution for Tunneling Effects on Buried Pipelines Using Fourier Expansion. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2018, 144, 04018062.	1.5	21
27	Detection of Sinkhole Formation by Strain Profile Measurements Using BOTDR: Simulation Study. <i>Journal of Engineering Mechanics - ASCE</i> , 2017, 143, .	1.6	18
28	Distributed Optical Fiber Strain Sensing in a Secant Piled Wall. , 2007, , .		17
29	Continuous velocity fields for the Tâ€“bar problem. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2008, 32, 949-963.	1.7	17
30	Micromechanical Investigation of Stress Relaxation in Gas Hydrate-Bearing Sediments Due to Sand Production. <i>Energies</i> , 2019, 12, 2131.	1.6	17
31	Three-Dimensional Analysis of Lateral Pile Response using Two-Dimensional Explicit Numerical Scheme. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2002, 128, 775-784.	1.5	16
32	A cohesionless micromechanical model for gas hydrate-bearing sediments. <i>Granular Matter</i> , 2019, 21, 1.	1.1	16
33	Seismic soilâ€“pile interaction in liquefiable soil. <i>Soil Dynamics and Earthquake Engineering</i> , 2004, 24, 551-564.	1.9	15
34	Underground solar energy storage via energy piles: An experimental study. <i>Applied Energy</i> , 2022, 306, 118042.	5.1	13
35	Simple Energy-Based Method for Nonlinear Analysis of Incompressible Pile Groups in Clays. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2009, 135, 960-965.	1.5	11
36	Rational approach for the analysis of segmental reinforced soil walls based on kinematic constraints. <i>Geotextiles and Geomembranes</i> , 2009, 27, 332-340.	2.3	8

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37	Feasibility study of the automated detection and localization of underground tunnel excavation using Brillouin optical time domain reflectometer. Proceedings of SPIE, 2009, , .	0.8	8
38	Enhanced Strain-Softening Model from Cyclic Full-Flow Penetration Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	8
39	Upper bound of tunnel face stability using asymmetric yielding. Underground Space (China), 2018, 3, 288-296.	3.4	8
40	Measures for identifying cracks within reinforced concrete beams using BOTDR. Proceedings of SPIE, 2010, , .	0.8	7
41	In Situ Profiling of Soil Stiffness Parameters Using High-Resolution Fiber-Optic Distributed Sensing. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	7
42	Spatial distribution of yield accelerations and permanent displacements: A diagnostic tool for assessing seismic slope stability. Soil Dynamics and Earthquake Engineering, 2019, 126, 105811.	1.9	7
43	A Fourier-based elastic continuum solution for jointed pipeline response to tunneling. Tunnelling and Underground Space Technology, 2022, 119, 104237.	3.0	7
44	Detection of tunnel excavation using fiber optic reflectometry: experimental validation. , 2013, , .		5
45	Evaluation of Horizontal Stresses in Soil during Direct Simple Shear by High-Resolution Distributed Fiber Optic Sensing. Sensors, 2019, 19, 3684.	2.1	5
46	Load-Independent Characterization of Plate Foundation Support Using High-Resolution Distributed Fiber-Optic Sensing. Sensors, 2019, 19, 3518.	2.1	5
47	Micromechanical modeling of the effect of dissociation on the mechanical response of hydrate-bearing sediments. Granular Matter, 2022, 24, .	1.1	5
48	Seismic analysis of infinite pile groups in liquefiable soil. Soil Dynamics and Earthquake Engineering, 2004, 24, 565-575.	1.9	4
49	Steady-state solution for cylindrical penetrometers. International Journal for Numerical and Analytical Methods in Geomechanics, 2010, 34, 645-659.	1.7	4
50	Benefits of Global Standards on the Use of Optical Fiber Sensing Systems for the Impact of Construction of New Utilities and Tunnels on Existing Utilities. , 2015, , .		4
51	Thermo-Hydro-Chemo-Mechanical Formulation for CH ₄ -CO ₂ Hydrate Conversion Based on Hydrate Formation and Dissociation in Hydrate-Bearing Sediments. , 2016, , .		4
52	Direct and relaxation methods for soil-structure interaction due to tunneling. Journal of Zhejiang University: Science A, 2010, 11, 9-17.	1.3	3
53	The KC method: Numerical investigation of a new analysis method for reinforced soil walls. Computers and Geotechnics, 2010, 37, 351-358.	2.3	3
54	Coupled Foundation-Superstructure Analysis and Influence of Building Stiffness on Foundation Response. , 2010, , .		3

#	ARTICLE	IF	CITATIONS
55	Discussion of "Evaluation of Undrained Shear Strength Using Full-Flow Penetrometers" by Jason T. DeJong, Nicholas J. Yafate, and Don J. DeGroot. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2012, 138, 763-765.	1.5	3
56	DISCUSSION: Hypoplastic Cam-clay model. D. MAÏÑ (2012) <i>Geotechnique</i> , No. 6, 549-553, http://dx.doi.org/10.1680/geot.11.T.019 . <i>Geotechnique</i> , 2013, 63, 889-890.	2.2	2
57	Mitigation of Seismic Accelerations by Soft Caissons. <i>International Journal of Geotechnical Earthquake Engineering</i> , 2013, 4, 1-17.	0.3	2
58	Evaluation of a logarithmic-law strength rate parameter using full-flow penetrometers. <i>Geotechnical Research</i> , 2014, 1, 53-59.	0.8	2
59	Optical fiber measurement of local strains in a ribbed bar. <i>Structural Concrete</i> , 2022, 23, 3383-3396.	1.5	2
60	Title is missing!. <i>Journal of Earthquake Engineering</i> , 2005, 9, 855.	1.4	1
61	Validation of a BOTDR-based system for the detection of smuggling tunnels. <i>Proceedings of SPIE</i> , 2010, , .	0.8	1
62	Discussion of "Role of Shear Deformability on the Response of Tunnels and Pipelines to Single and Twin Tunneling" by Andrea Franza and Giulia M. B. Viggiani. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2022, 148, .	1.5	1
63	Discussion of "Tunnel-Pile Interaction Analysis Using Cavity Expansion Methods" by Alec M. Marshall. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2013, 139, 2001-2002.	1.5	0