Armin W Stuedlein

List of Publications by Year
in descending order

109	2,859	182225	214428
papers	citations	30 h-index	50 g-index

112	112	112	1201
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamic, in situ, nonlinear-inelastic response and post-cyclic strength of a plastic silt deposit. Canadian Geotechnical Journal, 2022, 59, 111-128.	1.4	7
2	Quasi-site-specific multivariate probability distribution model for sparse, incomplete, and three-dimensional spatially varying soil data. Georisk, 2022, 16, 53-76.	2.6	14
3	Probabilistic Structural System Response to Differential Settlement Resulting from Spatially Variable Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	1.5	3
4	Observations and challenges in simulating post-liquefaction settlements from centrifuge and shake table tests. Soil Dynamics and Earthquake Engineering, 2022, 153, 107089.	1.9	8
5	Monotonic, Cyclic, and Post-Cyclic Response of Willamette River Silt at the Van Buren Bridge. , 2022, , .		3
6	Crystal Growth of MICP through Microfluidic Chip Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2022, 148, .	1.5	42
7	Effect of strain history on the monotonic and cyclic response of natural and reconstituted silts. Soil Dynamics and Earthquake Engineering, 2022, 160, 107329.	1.9	8
8	Recovery of small-strain stiffness following blast-induced liquefaction based on shear wave velocity measurements. Canadian Geotechnical Journal, 2021, 58, 848-865.	1.4	5
9	Deep, In Situ Nonlinear Dynamic Testing of Soil with Controlled Blasting: Instrumentation, Calibration, and Application to a Plastic Silt Deposit. Geotechnical Testing Journal, 2021, 44, 1301-1326.	0.5	7
10	Homogeneity and mechanical behaviors of sands improved by a temperature-controlled one-phase MICP method. Acta Geotechnica, 2021, 16, 1417-1427.	2.9	58
11	Monotonic, Cyclic, and Postcyclic Responses of an Alluvial Plastic Silt Deposit. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	22
12	Dynamic shear modulus and damping of cemented and uncemented lightweight expanded clay aggregate (LECA) at low strains. Soil Dynamics and Earthquake Engineering, 2021, 142, 106555.	1.9	4
13	Dynamic response of timber pile ground improvement: 3D numerical simulations. Soil Dynamics and Earthquake Engineering, 2021, 143, 106614.	1.9	5
14	Kinetic biomineralization through microfluidic chip tests. Acta Geotechnica, 2021, 16, 3229-3237.	2.9	37
15	Performance of Isolated, Cemented Stone Columns in Clayey Soils. , 2021, , .		0
16	Full-Scale Experimental pâ€“y Curves and Model for Plastic Willamette Silt. , 2021, , .		0
17	Geotechnical lessons from the M_w 7.1 2018 Anchorage Alaska earthquake. Earthquake Spectra, 2021, 37, 2372-2399.	1.6	4
18	Dynamic In Situ Nonlinear Inelastic Response of a Deep Medium Dense Sand Deposit. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	10

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19	Cyclic strength of loose anisotropically-consolidated calcareous sand under standing waves and assessment using the unified cyclic stress ratio. Engineering Geology, 2021, 289, 106171.	2.9	7
20	Lateral Responses of a Model Pile in Biocemented Sand. International Journal of Geomechanics, 2021, 21, .	1.3	13
21	Liquefaction Modeling for Biocemented Calcareous Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	1.5	45
22	Bounding surface plasticity model for stress-strain and grain-crushing behaviors of rockfill materials. Geoscience Frontiers, 2020, 11, 495-510.	4.3	36
23	Bearing capacity of spread footings on aggregate pierâ€“reinforced clay: updates and stress concentration. Canadian Geotechnical Journal, 2020, 57, 717-727.	1.4	10
24	Unified thixotropic fluid model for soil liquefaction. Geotechnique, 2020, 70, 849-862.	2.2	11
25	Grain crushing in geoscience materialsâ€“Key issues on crushing response, measurement and modeling: Review and preface. Geoscience Frontiers, 2020, 11, 363-374.	4.3	37
26	Toe-Bearing Capacity of Precast Concrete Piles through Biogrouting Improvement. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	47
27	Cyclic Response of Loose Anisotropically Consolidated Calcareous Sand under Progressive Waveâ€“Induced Elliptical Stress Paths. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	8
28	Closure to â€œUnconfined Compressive and Splitting Tensile Strength of Basalt Fiberâ€“Reinforced Biocemented Sandâ€•by Yang Xiao, Xiang He, T. Matthew Evans, Armin W. Stuedlein, and Hanlong Liu. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, 07020017.	1.5	0
29	Restraint of Particle Breakage by Biotreatment Method. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, .	1.5	109
30	SHANSEP-Based Side Resistance of Driven Pipe Piles in Plastic Soils: Revision and LRFD Calibration. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, 06020010.	1.5	3
31	Closure to â€œEffect of Particle Shape on Stress-Dilatancy Responses of Medium-Dense Sandsâ€•by Yang Xiao, Leihang Long, T. Matthew Evans, Hai Zhou, Hanlong Liu, and Armin W. Stuedlein. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2020, 146, 07020007.	1.5	0
32	Quantification of Surface Roughness Using Laser Scanning with Application to the Frictional Resistance of Sand-Timber Pile Interfaces. Geotechnical Testing Journal, 2020, 43, 966-984.	0.5	7
33	Response of pile groups with X and circular cross-sections subject to lateral spreading: 3D numerical simulations. Soil Dynamics and Earthquake Engineering, 2019, 126, 105774.	1.9	20
34	Effect of Casing and High-Strength Reinforcement on the Lateral Load Transfer Characteristics of Drilled Shaft Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	5
35	Acoustic Emission and Force Drop in Grain Crushing of Carbonate Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	47
36	Unconfined Compressive and Splitting Tensile Strength of Basalt Fiberâ€“Reinforced Biocemented Sand. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	138

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37	Effect of Particle Shape on Strength and Stiffness of Biocemented Glass Beads. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	112
38	Effect of relative density and biocementation on cyclic response of calcareous sand. Canadian Geotechnical Journal, 2019, 56, 1849-1862.	1.4	136
39	Identification of sample path smoothness in soil spatial variability. Structural Safety, 2019, 81, 101870.	2.8	42
40	Dynamic shear modulus and damping of expanded polystyrene composite soils at low strains. Geosynthetics International, 2019, 26, 436-450.	1.5	17
41	Role of Torsional Shear in Combined Loading of Drilled Shaft Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	5
42	Strength, stiffness, and microstructure characteristics of biocemented calcareous sand. Canadian Geotechnical Journal, 2019, 56, 1502-1513.	1.4	148
43	Effect of Particle Shape on Stress-Dilatancy Responses of Medium-Dense Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	1.5	207
44	Efficient methodology for probabilistic analysis of consolidation considering spatial variability. Engineering Geology, 2018, 237, 53-63.	2.9	19
45	Performance of X-shaped and circular pile-improved ground subject to liquefaction-induced lateral spreading. Soil Dynamics and Earthquake Engineering, 2018, 109, 273-281.	1.9	19
46	Effect of Cone Penetration Conditioning on Random Field Model Parameters and Impact of Spatial Variability on Liquefaction-Induced Differential Settlements. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	38
47	Liquefaction resistance of bio-cemented calcareous sand. Soil Dynamics and Earthquake Engineering, 2018, 107, 9-19.	1.9	263
48	Three-Dimensional Stress-Strain Response and Stress-Dilatancy of Well-Graded Gravel. International Journal of Geomechanics, 2018, 18, .	1.3	15
49	Estimating horizontal scale of fluctuation with limited CPT soundings. Geoscience Frontiers, 2018, 9, 1597-1608.	4.3	58
50	Stress-Strain-Strength Response and Ductility of Gravels Improved by Polyurethane Foam Adhesive. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	75
51	Simulation of Torsionally Loaded Deep Foundations Considering State-Dependent Load Transfer. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2018, 144, .	1.5	12
52	A Case History of Liquefaction Mitigation using Driven Displacement Piles. , 2018, , .		1
53	Factors Affecting the Torsional Response of Deep Foundations. , 2018, , .		0
54	Effect of Spatial Variability on Static and Liquefaction-Induced Differential Settlements. , 2017, , .		7

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55	Performance of Driven Displacement Pileâ€“Improved Ground in Controlled Blasting Field Tests. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	32
56	CPT-Based Random Field Model Parameters for Liquefiable Silty Sands. , 2017, , .		1
57	Role of Lower Bound Capacity and Shear Strength Anisotropy on Probabilistic Bearing Capacity of Plastic Fine-Grained Soils. , 2017, , .		2
58	Serviceability limit state reliability-based design of augered cast-in-place piles in granular soils. Canadian Geotechnical Journal, 2017, 54, 1704-1715.	1.4	21
59	Ultimate limit state reliability-based design of augered cast-in-place piles considering lower-bound capacities. Canadian Geotechnical Journal, 2017, 54, 1693-1703.	1.4	22
60	Torsional Load Transfer of Drilled Shaft Foundations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	18
61	Spatial Variability of CPT Parameters and Silty Fines in Liquefiable Beach Sands. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	28
62	Impact of Resistance Distribution Selection on Foundation Reliability in Consideration of Lower-Bound Limits. , 2017, , .		1
63	Effects of Driving Sequence and Spacing on Displacement-Pile Capacity. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2017, 143, .	1.5	6
64	Engineered Ecoroof Systems: Geotechnical Considerations. Journal of Infrastructure Systems, 2016, 22, 04016015.	1.0	1
65	Frictional Resistance of Closely Spaced Steel Reinforcement Strips Used in MSE Walls. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, 04016030.	1.5	10
66	Calibration and assessment of reliability-based serviceability limit state procedures for foundation engineering. Georisk, 2016, 10, 280-293.	2.6	9
67	Time-Rate Variation of the Shear Wave Velocity (Site Stiffness) Following Blast-Induced Liquefaction. , 2016, , .		9
68	Densification of Granular Soils Using Conventional and Drained Timber Displacement Piles. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	43
69	Stress-Strain Response and Dilatancy of Sandy Gravel in Triaxial Compression and Plane Strain. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2016, 142, .	1.5	45
70	Attenuation of Pipe Ramming-Induced Ground Vibrations. Journal of Pipeline Systems Engineering and Practice, 2016, 7, 04015021.	0.9	4
71	Development and Implementation of a High-Pressure, Double-Acting, Bi-Directional Loading Cell for Drilled Shafts. Geotechnical Testing Journal, 2016, 39, 196-205.	0.5	3
72	Optimal Design Conditions of Retaining Wall with Relieving Platform through Real-Scale Numerical Analysis. Journal of the Korean Geotechnical Society, 2016, 32, 55-65.	0.1	5

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73	Region-Specific Load Transfer Model for Augered Cast-in-Place Piles in Granular Soils. , 2015, , .		1
74	Reliability-based serviceability limit state design for immediate settlement of spread footings on clay. Soils and Foundations, 2015, 55, 798-812.	1.3	36
75	Discussion: Prediction of stone column ultimate capacity using cavity expansion model. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2015, 168, 231-234.	0.7	2
76	Shear Wave Velocity Measurements of Stone Column Improved Ground and Effect on Site Response. , 2015, , .		5
77	Drivability Analyses for Pipe-Ramming Installations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, 04014107.	1.5	4
78	Static Soil Resistance to Pipe Ramming in Granular Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2015, 141, .	1.5	14
79	Reliability-based ultimate limit state design of spread footings on aggregate-pier-reinforced clay. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2014, 167, 291-300.	0.7	5
80	Characterization of Ecoroofs and Ecoroof Materials. , 2014, , .		2
81	Accuracy, Uncertainty, and Reliability of the Bearing-Capacity Equation for Shallow Foundations on Saturated Clay. , 2014, , .		5
82	Field Measurements of Pipe Ramming-Induced Ground Vibrations. , 2014, , .		0
83	Analysis of a 610-mm-Diameter Pipe Installed Using Pipe Ramming. Journal of Performance of Constructed Facilities, 2014, 28, .	1.0	5
84	Serviceability limit state design for uplift of helical anchors in clay. Geomechanics and Geoengineering, 2014, 9, 173-186.	0.9	17
85	Reliability-Based Serviceability Limit State Design of Spread Footings on Aggregate Pier Reinforced Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, .	1.5	41
86	Displacement of Spread Footings on Aggregate Pier Reinforced Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2014, 140, 36-45.	1.5	22
87	Bearing Capacity of Spread Footings on Aggregate Pier Reinforced Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 49-58.	1.5	51
88	Discussion of the Paper: A State-of-the-Art Review of Stone/Sand-Column Reinforced Clay SystemsÂby Shadi S. Najjar. Geotechnical and Geological Engineering, 2013, 31, 1617-1619.	0.8	0
89	Factors Affecting the Reliability of Augered Cast-In-Place Piles in Granular Soils at the Serviceability Limit State (DFI 2013 Young Professor Paper Competition Winner). DFI Journal, 2013, 7, 46-57.	0.2	26
90	Closure to â€œAssessment of Reinforcement Strains in Very Tall Mechanically Stabilized Earth Wallsâ€•by Armin W. Stuedlein, Tony M. Allen, Robert D. Holtz, and Barry R. Christopher. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 1834-1835.	1.5	1

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91	Accuracy and reliability-based region-specific recalibration of dynamic pile formulas. Georisk, 2013, 7, 163-183.	2.6	12
92	Reliability-Based Design of Augered Cast-in-Place Piles in Granular Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 709-717.	1.5	27
93	Preliminary Design and Engineering of Pipe Ramming Installations. Journal of Pipeline Systems Engineering and Practice, 2012, 3, 125-134.	0.9	12
94	Reliability of Shaft Resistance for Augered Cast-in-Place Piles in Granular Soils. , 2012, , .		5
95	Uplift Performance of Multi-Helix Anchors in Desiccated Clay. DFI Journal, 2012, 6, 13-25.	0.2	2
96	Assessment of Reinforcement Strains in Very Tall Mechanically Stabilized Earth Walls. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 345-356.	1.5	38
97	Analysis of Footing Load Tests on Aggregate Pier Reinforced Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1091-1103.	1.5	34
98	Geotechnical Characterization and Random Field Modeling of Desiccated Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1301-1313.	1.5	104
99	Reliability of Spread Footing Performance in Desiccated Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2012, 138, 1314-1325.	1.5	31
100	Random Field Model Parameters for Columbia River Silt. , 2011, , .		6
101	Discussion of â€œPerformance Monitoring of a Rammed Aggregate Pier Foundation Supporting a Mechanically Stabilized Earth Wallâ€•by Mark J. Thompson, Kord J. Wissmann, and Ha T. V. Pham. Journal of Performance of Constructed Facilities, 2010, 24, 289-292.	1.0	4
102	Factors Affecting the Development of MSE Wall Reinforcement Strain. , 2010, , .		5
103	Undrained Displacement Behavior of Spread Footings in Clay. , 2010, , .		7
104	Shear-Wave Velocity Correlations for Puyallup River Alluvium. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1298-1304.	1.5	4
105	Design and Performance of a 46-m-High MSE Wall. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 786-796.	1.5	50
106	Discussion of â€œUse of terrestrial laser scanning for the characterization of retrogressive landslides in sensitive clay and rotational landslides in river banksâ€Appears in the Canadian Geotechnical Journal: 46(12): 1379â€“1390.. Canadian Geotechnical Journal, 2010, 47, 1164-1168.	1.4	2
107	Discussion of â€œLoad Transfer in Rammed Aggregate Piersâ€•by Muhannad T. Suleiman and David J. White. International Journal of Geomechanics, 2008, 8, 322-323.	1.3	3
108	Rapid Construction and Settlement Behavior of Embankment Systems on Soft Foundation Soils. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2008, 134, 289-301.	1.5	53

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109	Instrumentation and Performance of the Third Runway North MSE Wall at Seattle-Tacoma International Airport. , 2007, , .		5