

Sivakumar Babu G L

List of Publications by Year in descending order

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104
papers

1,801
citations

331670

21
h-index

315739

38
g-index

106
all docs

106
docs citations

106
times ranked

1100
citing authors

#	ARTICLE	IF	CITATIONS
1	Strength and Stiffness Response of Coir Fiber-Reinforced Tropical Soil. Journal of Materials in Civil Engineering, 2008, 20, 571-577.	2.9	211
2	Use of Coir Fibers for Improving the Engineering Properties of Expansive Soils. Journal of Natural Fibers, 2008, 5, 61-75.	3.1	95
3	Reliability analysis of allowable pressure on shallow foundation using response surface method. Computers and Geotechnics, 2007, 34, 187-194.	4.7	86
4	Probabilistic back analysis of rainfall induced landslideâ€•A case study of Malin landslide, India. Engineering Geology, 2016, 208, 154-164.	6.3	85
5	Optimum Design of Cantilever Retaining Walls Using Target Reliability Approach. International Journal of Geomechanics, 2008, 8, 240-252.	2.7	78
6	Effect of soil variability on reliability of soil slopes. Geotechnique, 2004, 54, 335-337.	4.0	72
7	Failure Mechanisms of Pile Foundations in Liquefiable Soil: Parametric Study. International Journal of Geomechanics, 2010, 10, 74-84.	2.7	69
8	Seismic Rotational Displacements of Gravity Walls by Pseudodynamic Method with Curved Rupture Surface. International Journal of Geomechanics, 2010, 10, 93-105.	2.7	62
9	2D Numerical Simulations of Soil Nail Walls. Geotechnical and Geological Engineering, 2010, 28, 299-309.	1.7	61
10	Reliability Analysis of Unsaturated Soil Slopes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 1423-1428.	3.0	58
11	Optimum Design for External Seismic Stability of Geosynthetic Reinforced Soil Walls: Reliability Based Approach. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 797-812.	3.0	52
12	Target reliability based design optimization of anchored cantilever sheet pile walls. Canadian Geotechnical Journal, 2008, 45, 535-548.	2.8	48
13	Analysis and Design of Vibration Isolation System Using Open Trenches. International Journal of Geomechanics, 2011, 11, 364-369.	2.7	48
14	Seepage Velocity and Piping Resistance of Coir Fiber Mixed Soils. Journal of Irrigation and Drainage Engineering - ASCE, 2008, 134, 485-492.	1.0	46
15	Reliability-based load and resistance factors for soil-nail walls. Canadian Geotechnical Journal, 2011, 48, 915-930.	2.8	32
16	Uplift capacity of horizontal anchor plate in geocell reinforced sand. Geotextiles and Geomembranes, 2019, 47, 203-216.	4.6	32
17	Model for analysis of fiber-reinforced clayey soil. Geomechanics and Geoengineering, 2010, 5, 277-285.	1.8	29
18	Reliability Analysis of Buried Flexible Pipe-Soil Systems. Journal of Pipeline Systems Engineering and Practice, 2010, 1, 33-41.	1.6	29

#	ARTICLE	IF	CITATIONS
19	Stability Analysis of a Large Gold Mine Open-Pit Slope Using Advanced Probabilistic Method. Rock Mechanics and Rock Engineering, 2018, 51, 2153-2174.	5.4	27
20	Probabilistic analysis of tunnels considering uncertainty in peak and post-peak strength parameters. Tunnelling and Underground Space Technology, 2017, 70, 375-387.	6.2	24
21	Reliability analysis of soil nail walls. Georisk, 2009, 3, 44-54.	3.5	23
22	Probabilistic Characterization of Rock Mass from Limited Laboratory Tests and Field Data: Associated Reliability Analysis and Its Interpretation. Rock Mechanics and Rock Engineering, 2019, 52, 2985-3001.	5.4	22
23	Evaluation of strength and stiffness response of coir-fibre-reinforced soil. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2007, 11, 111-116.	1.0	21
24	Performance evaluation of the bioreactor landfill in treatment and stabilisation of mechanically biologically treated municipal solid waste. Waste Management and Research, 2017, 35, 285-293.	3.9	21
25	Analysis of prototype soil-nailed retaining wall. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2002, 6, 129-136.	1.0	19
26	Landfill site selection based on reliability concepts using the DRASTIC method and AHP integrated with GIS – a case study of Bengaluru City, India. Georisk, 2018, 12, 234-252.	3.5	19
27	Constitutive Model for Strength Characteristics of Municipal Solid Waste. International Journal of Geomechanics, 2015, 15, .	2.7	18
28	Stabilisation of vertical cut supporting a retaining wall using soil nailing: a case study. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2007, 11, 157-162.	1.0	17
29	Risk analysis of landslides – A case study. Geotechnical and Geological Engineering, 2003, 21, 113-127.	1.7	15
30	Experimental and numerical study on square anchor plate groups in geogrid reinforced sand. Geosynthetics International, 2019, 26, 657-671.	2.9	15
31	Analytical Model for Stress-Strain Response of Plastic Waste Mixed Soil. Journal of Hazardous, Toxic, and Radioactive Waste, 2012, 16, 219-228.	2.0	14
32	Reliability-based robust design for reinforcement of jointed rock slope. Georisk, 2018, 12, 152-168.	3.5	13
33	Analysis of Tunnel Support Requirements Using Deterministic and Probabilistic Approaches in Average Quality Rock Mass. International Journal of Geomechanics, 2018, 18, .	2.7	13
34	Regional back analysis of landslide events using TRIGRS model and rainfall threshold: an approach to estimate landslide hazard for Kodagu, India. Bulletin of Engineering Geology and the Environment, 2022, 81, 1.	3.5	13
35	Reliability measures for pile foundations based on cone penetration test data. Canadian Geotechnical Journal, 2008, 45, 1699-1714.	2.8	12
36	Characterization of Critical Rainfall for Slopes Prone to Rainfall-Induced Landslides. Natural Hazards Review, 2020, 21, .	1.5	12

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37	Probabilistic stability assessment of tunnel-support system considering spatial variability in weak rock mass. <i>Computers and Geotechnics</i> , 2021, 137, 104242.	4.7	12
38	Buckling and bending response of slender piles in liquefiable soils during earthquakes. <i>Geomechanics and Geoengineering</i> , 2008, 3, 129-143.	1.8	11
39	Stress-Strain Response of Unbound Granular Materials Under Static and Cyclic Loading. <i>Indian Geotechnical Journal</i> , 2015, 45, 449-457.	1.4	11
40	Design approach for drainage layer in pavement subsurface drainage system considering unsaturated characteristics. <i>Transportation Geotechnics</i> , 2019, 18, 57-71.	4.5	11
41	Probabilistic Seismic Design of Pile Foundations in Non Liquefiable Soil by Response Spectrum Approach. <i>Journal of Earthquake Engineering</i> , 2009, 13, 737-757.	2.5	10
42	Reliability Based Earthquake Resistant Design for Internal Stability of Reinforced Soil Structures. <i>Geotechnical and Geological Engineering</i> , 2011, 29, 803-820.	1.7	10
43	Deterministic and probabilistic prediction of maximum wall facing displacement of geosynthetic-reinforced soil segmental walls using multivariate adaptive regression splines. <i>Transportation Geotechnics</i> , 2022, 36, 100816.	4.5	10
44	The Effect of Spatial Correlation of Cone Tip Resistance on the Bearing Capacity of Shallow Foundations. <i>Geotechnical and Geological Engineering</i> , 2008, 26, 37-46.	1.7	9
45	Deformation and stability regression models for soil nail walls. <i>Proceedings of the Institution of Civil Engineers: Geotechnical Engineering</i> , 2009, 162, 213-223.	1.6	9
46	Response of Vertically Loaded Pile in Clay: A Probabilistic Study. <i>Geotechnical and Geological Engineering</i> , 2012, 30, 187-196.	1.7	9
47	Reliability Based LRFD Approach for External Stability of Reinforced Soil Walls. <i>Indian Geotechnical Journal</i> , 2013, 43, 292-302.	1.4	9
48	Three-Dimensional Analysis of Uplift Behaviour of Square Horizontal Anchor Plate in Frictional Soil. <i>International Journal of Geosynthetics and Ground Engineering</i> , 2018, 4, 1.	2.0	9
49	Pullout resistance of inclined anchors embedded in geogrid reinforced sand. <i>Geotextiles and Geomembranes</i> , 2021, 49, 1368-1379.	4.6	9
50	Reliability analysis of strength of cement treated soils. <i>Georisk</i> , 2011, 5, 157-162.	3.5	8
51	Reliability Analysis of Anchor Foundations Subject to Vertical Uplift Forces. <i>Indian Geotechnical Journal</i> , 2020, 50, 982-993.	1.4	8
52	Reliability-Based Design Optimization of Shallow Foundation on Cohesionless Soil Based on Surrogate-Based Numerical Modeling. <i>International Journal of Geomechanics</i> , 2022, 22, .	2.7	8
53	A Bayesian framework for updating model parameters while considering spatial variability. <i>Georisk</i> , 2017, 11, 285-298.	3.5	7
54	Hydro-Mechanical Simulations of Unsaturated Soil Slope. <i>Indian Geotechnical Journal</i> , 2021, 51, 861-869.	1.4	7

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55	Probabilistic back analysis for rainfall-induced slope failure using MLS-SVR and Bayesian analysis. Georisk, 2024, 18, 107-120.	3.5	7
56	Rehabilitation of distressed retaining walls using soil nails. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2015, 168, 22-32.	1.0	6
57	Risk and Reliability Analysis of Multibarrier System for Near-Surface Disposal Facilities. Journal of Hazardous, Toxic, and Radioactive Waste, 2016, 20, 04015014.	2.0	6
58	Effects of Bentonite and Polymer Soil Amendment on Contaminant Transport Parameters. Journal of Hazardous, Toxic, and Radioactive Waste, 2019, 23, .	2.0	6
59	Remediation of Typical Municipal Solid Waste Dumpsite in Bangalore City. Journal of Hazardous, Toxic, and Radioactive Waste, 2021, 25, .	2.0	6
60	Effect of Rainfall Infiltration on the Stability of Compacted Embankments. International Journal of Geomechanics, 2022, 22, .	2.7	6
61	Optimum Design of Bridge Abutments Under High Seismic Loading Using Modified Pseudo-Static Method. Journal of Earthquake Engineering, 2010, 14, 874-897.	2.5	5
62	Role of Cover Systems to Control Methane Migration from Dumpsites. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24, .	2.0	5
63	The Role of Bioreactor Landfill Concept in Waste Management in India. Journal of the Indian Institute of Science, 2021, 101, 659-683.	1.9	5
64	Influence of Anisotropy on Pavement Responses Using Adaptive Sparse Polynomial Chaos Expansion. Journal of Materials in Civil Engineering, 2016, 28, .	2.9	4
65	Laboratory Investigation of Large Scale MSW Reactor Under Anaerobic Conditions. Indian Geotechnical Journal, 2017, 47, 395-409.	1.4	4
66	Object-Oriented Approach for Landslide Mapping Using Wavelet Transform Coupled with Machine Learning: A Case Study of Western Ghats, India. Indian Geotechnical Journal, 2022, 52, 691-706.	1.4	4
67	Global Sensitivity Analysis for a Tunnel-Support System in Weak Rock Mass for Both Uncorrelated and Correlated Input Parameters. Rock Mechanics and Rock Engineering, 2022, 55, 2787-2804.	5.4	4
68	Evaluating Soil Parameters Considering Probabilistic Back Analysis for Slope Failures. , 2022, , .		4
69	Probabilistic analysis of load-settlement response from pile load tests. Georisk, 2008, 2, 79-91.	3.5	3
70	Load and resistance factor design (LRFD) approach for the reliability-based seismic design of bridge abutments. Georisk, 2010, 4, 127-139.	3.5	3
71	Probabilistic analysis of groundwater and radionuclide transport model from near surface disposal facilities. Georisk, 2018, 12, 60-73.	3.5	3
72	Risk Analysis of Permeable Layer in Pavement Subsurface Drainage System. Journal of Transportation Engineering Part B: Pavements, 2019, 145, 04019028.	1.5	3

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73	Evaluation of engineered barrier system for hazardous waste disposal - A case study. Japanese Geotechnical Society Special Publication, 2016, 2, 54-61.	0.2	3
74	Design of gas collection systems: Issues and challenges. Waste Management and Research, 2022, 40, 1608-1617.	3.9	3
75	Prediction of the Maximum Tensile Load in Reinforcement Layers of a MSE Wall Using ANN-Based Response Surface Method and Probabilistic Assessment of Internal Stability of the Wall. International Journal of Geomechanics, 2022, 22, .	2.7	3
76	Void states perspective for critical hydraulic gradient of internally unstable non-cohesive soils. Geotechnique, 0, , 1-13.	4.0	3
77	Soil nailing for rehabilitation of reinforced earth wall distress. Proceedings of the Institution of Civil Engineers: Ground Improvement, 2011, 164, 235-244.	1.0	2
78	Stress deformation analysis of MSW landfills. Japanese Geotechnical Society Special Publication, 2016, 2, 1960-1965.	0.2	2
79	Special Issue on Hazardous Nuclear Waste Disposal. Journal of Hazardous, Toxic, and Radioactive Waste, 2017, 21, .	2.0	2
80	Reliability analysis of near-surface disposal facility using subset simulation. Environmental Geotechnics, 2019, 6, 242-249.	2.3	2
81	Stabilization of mechanically biologically treated waste in anaerobic, aerobic and semi-aerobic bioreactors. Waste Management and Research, 2022, 40, 1054-1068.	3.9	2
82	Adequacy of field pullout testing of soil nails. Georisk, 2010, 4, 93-98.	3.5	1
83	Stochastic model for settlement: footings on cohesionless soil. Georisk, 2014, 8, 269-283.	3.5	1
84	Novel Use of Geosynthetic Reinforced Chip Seal in Asphalt Pavements. Indian Geotechnical Journal, 2015, 45, 488-495.	1.4	1
85	Reliability analysis of municipal solid waste landfill settlements. Japanese Geotechnical Society Special Publication, 2016, 2, 1818-1823.	0.2	1
86	Forensic analysis of failure of retaining wall. Japanese Geotechnical Society Special Publication, 2016, 2, 2514-2519.	0.2	1
87	System reliability analysis for near-surface radioactive waste disposal facilities. Georisk, 2017, 11, 315-322.	3.5	1
88	Reliability Based Approach for the Prediction of Leachate Head in MSW Landfills. International Journal of Geosynthetics and Ground Engineering, 2017, 3, 1.	2.0	1
89	Numerical Analysis of MSW Effects on Interface Behavior of Lined Landfill System. International Journal of Geomechanics, 2018, 18, 06018008.	2.7	1
90	Effects of Compaction and Initial Degree of Saturation on Contaminant Transport through Barrier. , 2018, , .		1

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91	Sustainability in Geotechnical Engineering and Related Urban Issues – Editors' Note. Indian Geotechnical Journal, 2018, 48, 205-206.	1.4	1
92	Critical Appraisal of Codes for Foundation Design and Role of Reliability-Based Approach. Indian Geotechnical Journal, 2019, 49, 467-477.	1.4	1
93	Effect of Anisotropic Consolidation on Response of Aggregates Subjected to Repeated Loading. Indian Geotechnical Journal, 2019, 49, 328-340.	1.4	1
94	Parametric Study on Applicability of MBT Waste as Biotic Systems in Landfills for Maximum Oxidation Efficiency. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24, 04020040.	2.0	1
95	Probabilistic Analysis of Radionuclide Transport for Near-Surface Disposal Facilities in Spatially Varying Soils. Journal of Hazardous, Toxic, and Radioactive Waste, 2021, 25, 04020059.	2.0	1
96	Development of a poly-axial platen for testing true-triaxial behavior of rocks. Canadian Geotechnical Journal, 2021, 58, 1839-1854.	2.8	1
97	Probabilistic assessment of geosynthetic reinforced soil walls using ANN-based response surface method. Georisk, 2023, 17, 467-489.	3.5	1
98	Reliability-based design of geogrid reinforced soil foundation using kriging surrogates. Geosynthetics International, 2023, 30, 350-363.	2.9	1
99	Reply to the discussion by Delgado and Poyatos on –A procedure for the design of protective filters– Appears in Canadian Geotechnical Journal, 45: 437–439.. Canadian Geotechnical Journal, 2008, 45, 440-441.	2.8	0
100	Special Issue on Issues and Challenges in Geoenvironmental Engineering. Indian Geotechnical Journal, 2017, 47, 393-394.	1.4	0
101	Three-dimensional analysis of vertical square anchor plate in cohesionless soil. Geomechanics and Geoengineering, 2020, 15, 1-9.	1.8	0
102	Evaluation of resilient and permanent deformations of geogrid reinforced pavements. Japanese Geotechnical Society Special Publication, 2015, 3, 60-64.	0.2	0
103	Role of Geotechnical Properties in the Dynamic Aspects of Methane Migration in Biocovers. Journal of Hazardous, Toxic, and Radioactive Waste, 2022, 26, .	2.0	0
104	Closure to –Reliability-Based Robust Design of Raft Foundation and Effect of Spatial Variability– by K. M. Nazeem and G. L. Sivakumar Babu. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2022, 8, .	1.7	0