Andrei V Lyamin

List of Publications by Year
in descending order

68 papers	4,863 citations	76196 40 h-index	106150 65 g-index
69 all docs	69 docs citations	69 times ranked	1884 citing authors

#	Article	IF	Citations
1	Lower bound limit analysis using non-linear programming. International Journal for Numerical Methods in Engineering, 2002, 55, 573-611.	1.5	427
2	A new discontinuous upper bound limit analysis formulation. International Journal for Numerical Methods in Engineering, 2005, 63, 1069-1088.	1.5	282
3	Formulation and solution of some plasticity problems as conic programs. International Journal of Solids and Structures, 2007, 44, 1533-1549.	1.3	273
4	Quantitative risk assessment of landslide by limit analysis and random fields. Computers and Geotechnics, 2013, 53, 60-67.	2.3	177
5	Numerical limit analysis solutions for the bearing capacity factor NÎ³. International Journal of Solids and Structures, 2005, 42, 1681-1704.	1.3	170
6	Three-Dimensional Lower Bound Solutions for Stability of Plate Anchors in Clay. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 243-253.	1.5	127
7	ANN-based model for predicting the bearing capacity of strip footing on multi-layered cohesive soil. Computers and Geotechnics, 2009, 36, 503-516.	2.3	125
8	Stability of a circular tunnel in cohesive-frictional soil subjected to surcharge loading. Computers and Geotechnics, 2011, 38, 504-514.	2.3	116
9	An interior-point algorithm for elastoplasticity. International Journal for Numerical Methods in Engineering, 2007, 69, 592-626.	1.5	113
10	Particle finite element analysis of large deformation and granular flow problems. Computers and Geotechnics, 2013, 54, 133-142.	2.3	113
11	Two- and three-dimensional bearing capacity of footings in sand. Geotechnique, 2007, 57, 647-662.	2.2	110
12	Simplified quantitative risk assessment of rainfall-induced landslides modelled by infinite slopes. Engineering Geology, 2014, 179, 102-116.	2.9	108
13	Bearing capacity of a sand layer on clay by finite element limit analysis. Canadian Geotechnical Journal, 2003, 40, 900-915.	1.4	104
14	Seismic rock slope stability charts based on limit analysis methods. Computers and Geotechnics, 2009, 36, 135-148.	2.3	102
15	Undrained stability of a circular tunnel where the shear strength increases linearly with depth. Canadian Geotechnical Journal, 2011, 48, 1328-1342.	1.4	99
16	Stability of an undrained plane strain heading revisited. Computers and Geotechnics, 2003, 30, 419-430.	2.3	95
17	Lower bound limit analysis with adaptive remeshing. International Journal for Numerical Methods in Engineering, 2005, 63, 1961-1974.	1.5	94
18	Comparison of finite-element limit analysis and strength reduction techniques. Geotechnique, 2015, 65, 249-257.	2.2	94

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19	Undrained Stability of Footings on Slopes. International Journal of Geomechanics, 2011, 11, 381-390.	1.3	93
20	Effect of rock mass disturbance on the stability of rock slopes using the Hoek–Brown failure criterion. Computers and Geotechnics, 2011, 38, 546-558.	2.3	88
21	Prediction of Undrained Sinkhole Collapse. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2003, 129, 197-205.	1.5	87
22	Three-dimensional stability charts for slopes based on limit analysis methods. Canadian Geotechnical Journal, 2010, 47, 1316-1334.	1.4	85
23	Stability of a single tunnel in cohesive–frictional soil subjected to surcharge loading. Canadian Geotechnical Journal, 2011, 48, 1841-1854.	1.4	83
24	Three-dimensional lower-bound solutions for the stability of plate anchors in sand. Geotechnique, 2006, 56, 123-132.	2.2	81
25	Undrained stability of wide rectangular tunnels. Computers and Geotechnics, 2013, 53, 46-59.	2.3	76
26	Stability of dual circular tunnels in cohesive-frictional soil subjected to surcharge loading. Computers and Geotechnics, 2013, 50, 41-54.	2.3	75
27	Associated computational plasticity schemes for nonassociated frictional materials. International Journal for Numerical Methods in Engineering, 2012, 90, 1089-1117.	1.5	74
28	Undrained stability of a square tunnel where the shear strength increases linearly with depth. Computers and Geotechnics, 2013, 49, 314-325.	2.3	71
29	Limit analysis solutions for three dimensional undrained slopes. Computers and Geotechnics, 2009, 36, 1330-1351.	2.3	70
30	A C2 continuous approximation to the Mohr–Coulomb yield surface. International Journal of Solids and Structures, 2011, 48, 3001-3010.	1.3	66
31	Finite Element Limit Analysis of Passive Earth Resistance in Cohesionless Soils. Soils and Foundations, 2008, 48, 843-850.	1.3	65
32	Boundary effects of rainfall-induced landslides. Computers and Geotechnics, 2014, 61, 341-354.	2.3	63
33	Stability of Inclined Strip Anchors in Purely Cohesive Soil. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2005, 131, 792-799.	1.5	60
34	Granular contact dynamics using mathematical programming methods. Computers and Geotechnics, 2012, 43, 165-176.	2.3	60
35	Parametric Monte Carlo studies of rock slopes based on the Hoek–Brown failure criterion. Computers and Geotechnics, 2012, 45, 11-18.	2.3	59
36	Three-dimensional slope stability assessment of two-layered undrained clay. Computers and Geotechnics, 2015, 70, 1-17.	2.3	51

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37	Probabilistic stability assessment using adaptive limit analysis and random fields. Acta Geotechnica, 2017, 12, 937-948.	2.9	51
38	Undrained Stability of Dual Circular Tunnels. International Journal of Geomechanics, 2014, 14, 69-79.	1.3	50
39	Undrained stability of dual square tunnels. Acta Geotechnica, 2015, 10, 665-682.	2.9	49
40	Statistical homogenization of elastic properties of cement paste based on X-ray microtomography images. International Journal of Solids and Structures, 2013, 50, 699-709.	1.3	47
41	Parametric studies of disturbed rock slope stability based on finite element limit analysis methods. Computers and Geotechnics, 2017, 81, 155-166.	2.3	41
42	Bearing capacity of a cohesive-frictional soil under non-eccentric inclined loading. Computers and Geotechnics, 2004, 31, 491-516.	2.3	39
43	Bounds to Shakedown Loads for a Class of Deviatoric Plasticity Models. Computational Mechanics, 2007, 39, 879-888.	2.2	39
44	Granular contact dynamics with particle elasticity. Granular Matter, 2012, 14, 607-619.	1.1	39
45	Stability of dual square tunnels in cohesive-frictional soil subjected to surcharge loading. Canadian Geotechnical Journal, 2014, 51, 829-843.	1.4	39
46	Strength reduction finite-element limit analysis. Geotechnique Letters, 2015, 5, 250-253.	0.6	38
47	Rock slope stability analyses using extreme learning neural network and terminal steepest descent algorithm. Automation in Construction, 2016, 65, 42-50.	4.8	38
48	Two- and three-dimensional bearing capacity of foundations in clay. Geotechnique, 2004, 54, 297-306.	2.2	37
49	Shakedown of a cohesive-frictional half-space subjected to rolling and sliding contact. International Journal of Solids and Structures, 2007, 44, 3998-4008.	1.3	36
50	Undrained stability of a single circular tunnel in spatially variable soil subjected to surcharge loading. Computers and Geotechnics, 2017, 84, 16-27.	2.3	36
51	Bounds for shakedown of cohesive-frictional materials under moving surface loads. International Journal of Solids and Structures, 2008, 45, 3290-3312.	1.3	35
52	Ultimate lateral pressure of two side-by-side piles in clay. Geotechnique, 2013, 63, 733-745.	2.2	29
53	Undrained limiting lateral soil pressure on a row of piles. Computers and Geotechnics, 2013, 54, 175-184.	2.3	28
54	Generalised Tresca criterion for undrained total stress analysis. Geotechnique Letters, 2015, 5, 313-317.	0.6	28

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55	Trench Stability under Bentonite Pressure in Purely Cohesive Clay. International Journal of Geomechanics, 2014, 14, 151-157.	1.3	27
56	Rock mass trace line identification incorporated with grouping algorithm at tunnel faces. Tunnelling and Underground Space Technology, 2021, 110, 103810.	3.0	17
57	Effect of loading direction on the ultimate lateral soil pressure of two piles in clay. Geotechnique, 2013, 63, 1170-1175.	2.2	16
58	Kinematic limit analysis of pullout capacity for plate anchors in sandy slopes. Structural Engineering and Mechanics, 2014, 51, 565-579.	1.0	13
59	Mesh generation for lower bound limit analysis. Advances in Engineering Software, 2003, 34, 321-338.	1.8	12
60	Finite particle method for static deformation problems solved using JFNK method. Computers and Geotechnics, 2020, 122, 103502.	2.3	10
61	Application of a GPU-accelerated hybrid preconditioned conjugate gradient approach for large 3D problems in computational geomechanics. Computers and Mathematics With Applications, 2015, 69, 1114-1131.	1.4	9
62	Seismic Slope Stability Evaluation Considering Rock Mass Disturbance Varying in the Slope. KSCE Journal of Civil Engineering, 2019, 23, 1043-1054.	0.9	9
63	Discretization Errors of Random Fields in Finite Element Analysis. Applied Mechanics and Materials, 0, 553, 405-409.	0.2	5
64	Computational plasticity algorithm for particle dynamics simulations. Computational Particle Mechanics, 2018, 5, 103-111.	1.5	4
65	Slope Stability Analysis for Filled Slopes Using Finite Element Limit Analysis Method. , 2014, , .		2
66	Direct computation of shakedown loads via incremental elastoplastic analysis. Finite Elements in Analysis and Design, 2016, 122, 39-48.	1.7	2
67	A Comparison of Conic Programming Software for Finite Element Limit Analysis. Applied Mechanics and Materials, 0, 553, 439-444.	0.2	1
68	Parallel preconditioned conjugate gradient method for large sparse and highly ill-conditioned systems arising in computational geomechanics. International Journal of Computational Science and Engineering, 2015, 11, 409.	0.4	1