Fulvio Tonon

List of Publications by Year
in descending order

79	1,872	236833 25	265120 42
papers	citations	h-index	g-index

85	85	85	1446
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Model Tests to Determine Properties of Concrete and Aggregates in Verification Core Holes at the Bottom of Drilled Shafts. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, 04021092.	1.5	0
2	Simplified Consideration for Permanent Rock Dowels in Block Theory and 2-D Limit Equilibrium Analyses. Rock Mechanics and Rock Engineering, 2020, 53, 2001-2006.	2.6	3
3	Photogrammetry for the Characterization of Rock Masses: Two Case Histories for Slopes and Caverns. , 2019, , .		0
4	Ground reaction curve for tunnels with jet grouting umbrellas considering jet grouting hardening. International Journal of Rock Mechanics and Minings Sciences, 2015, 76, 200-208.	2.6	38
5	Underground Engineering for Sustainable Urban Development. , 2014, , .		5
6	Tunneling in Difficult Conditions - The Squeezing Case. , 2012, , .		0
7	Fracture Cluster Modeling for Groundwater Inflow Prediction into Rock Tunnels Using Geostatistics. , 2012, , .		0
8	Anisotropic Dilatant Behavior of Rock Fractures. , 2012, , .		1
9	Event Tree and Fault Tree Analysis in Tunneling with Imprecise Probabilities. , 2012, , .		1
10	Discrete Element Modeling of Drop Tests. Rock Mechanics and Rock Engineering, 2012, 45, 863.	2.6	4
11	Eventâ€Tree Analysis with Imprecise Probabilities. Risk Analysis, 2012, 32, 330-344.	1.5	19
12	Limiting equilibrium versus BS3D analysis of a tetrahedral rock block. International Journal for Numerical and Analytical Methods in Geomechanics, 2012, 36, 50-61.	1.7	2
13	Bounding Uncertainty in Civil Engineering: Theoretical Background and Applications. , 2012, , 227-259.		1
14	Prediction of rock block stability and scour depth in plunge pools. Journal of Hydraulic Research/De Recherches Hydrauliques, 2011, 49, 750-756.	0.7	16
15	Discrete Element Modeling of Rock Fragmentation upon Impact in Rock Fall Analysis. Rock Mechanics and Rock Engineering, 2011, 44, 23-35.	2.6	71
16	Closed-Form Solutions for a Circular Tunnel in Elastic-Brittle-Plastic Ground with the Original and Generalized Hoekâ€“Brown Failure Criteria. Rock Mechanics and Rock Engineering, 2011, 44, 169-178.	2.6	28
17	ADECO full-face tunnel excavation of two 260m2 tubes in clays with sub-horizontal jet-grouting under minimal urban cover. Tunnelling and Underground Space Technology, 2011, 26, 253-266.	3.0	25
18	Coupling of BEM with a large displacement and rotation algorithm. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 749-760.	1.7	0

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19	Degradation of rock fracture asperities in unloading, reloading, and reversal. International Journal for Numerical and Analytical Methods in Geomechanics, 2011, 35, 1334-1346.	1.7	10
20	Dynamic validation of a discrete element code in modeling rock fragmentation. International Journal of Rock Mechanics and Minings Sciences, 2011, 48, 535-545.	2.6	28
21	Reply to â€˜Comments on â€œFace stability and required support pressure for TBM driven tunnels with ideal face membrane â€“ Drained caseâ€â€™. Tunnelling and Underground Space Technology, 2011, 26, 501-505.	3.0	2
22	Constitutive model for rock fractures: Revisiting Barton's empirical model. Engineering Geology, 2010, 113, 11-32.	2.9	111
23	Experimental Validation of Modified Bartonâ€™s Model for Rock Fractures. Rock Mechanics and Rock Engineering, 2010, 43, 597-613.	2.6	31
24	On the Existence, Uniqueness and Correctness ofÂtheÂFracture Diameter Distribution Given theÂFracture Trace Length Distribution. Mathematical Geosciences, 2010, 42, 401-412.	1.4	5
25	Calibration of a discrete element model for intact rock up to its peak strength. International Journal for Numerical and Analytical Methods in Geomechanics, 2010, 34, 447-469.	1.7	85
26	Multi-stage triaxial test on brittle rock. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 678-684.	2.6	40
27	Definition of factor of safety for rock blocks. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 1384-1390.	2.6	6
28	Sequential excavation, NATM and ADECO: What they have in common and how they differ. Tunnelling and Underground Space Technology, 2010, 25, 245-265.	3.0	48
29	Face stability and required support pressure for TBM driven tunnels with ideal face membrane â€“ Drained case. Tunnelling and Underground Space Technology, 2010, 25, 526-542.	3.0	83
30	Numerical analysis on post-grouted drilled shafts: A case study at the Brazo River Bridge, TX. Computers and Geotechnics, 2010, 37, 456-465.	2.3	28
31	Effect of air-drying duration on the engineering properties of four clay-bearing rocks in Texas. Engineering Geology, 2010, 115, 58-67.	2.9	23
32	Methods for Enlarging Transportation Tunnels while Keeping Tunnels Fully Operational. Practice Periodical on Structural Design and Construction, 2010, 15, 248-271.	0.7	5
33	Numerical Study of the Effect of Verification Core Hole on the Point Bearing Capacity of Drilled Shafts. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2010, 136, 1287-1297.	1.5	2
34	Toward a definition and understanding of correlation for variables constrained by random relations. International Journal of General Systems, 2010, 39, 577-604.	1.2	4
35	Random Relations. , 2010, , 103-201.		0
36	Random Sets and Imprecise Probabilities. , 2010, , 25-101.		0

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37	Bounds on Previsions and Conditional Probabilities on Joint Finite Spaces Under the Assumption of Independence in Imprecise Probability. , 2009, , .		1
38	Modeling Lac du Bonnet granite using a discrete element model. International Journal of Rock Mechanics and Minings Sciences, 2009, 46, 1124-1135.	2.6	134
39	Numerical Models in Discontinuous Media: Review of Advances for Rock Mechanics Applications. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2009, 135, 1547-1561.	1.5	129
40	Modeling Triaxial Test on Intact Rock Using Discrete Element Method with Membrane Boundary. Journal of Engineering Mechanics - ASCE, 2009, 135, 1029-1037.	1.6	35
41	Extreme probability distributions of random sets, fuzzy sets and p-boxes. International Journal of Reliability and Safety, 2009, 3, 57.	0.2	2
42	Some properties of a random set approximation to upper and lower distribution functions. International Journal of Approximate Reasoning, 2008, 48, 174-184.	1.9	5
43	Validation of general single rock block stability analysis (BS3D) for wedge failure. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 627-637.	2.6	15
44	Probability bounds for series systems with variables constrained by sets of probability measures. International Journal of Reliability and Safety, 2008, 2, 309.	0.2	16
45	Analytical formulas for the geometric and inertia quantities of the largest removable blocks around tunnels. International Journal for Numerical and Analytical Methods in Geomechanics, 2007, 31, 1301-1327.	1.7	2
46	Analysis of single rock blocks for general failure modes under conservative and non-conservative forces. International Journal for Numerical and Analytical Methods in Geomechanics, 2007, 31, 1567-1608.	1.7	16
47	Closed-form and numerical solutions for the probability distribution function of fracture diameters. International Journal of Rock Mechanics and Minings Sciences, 2007, 44, 332-350.	2.6	41
48	A Search Algorithm for Calculating Validated Reliability Bounds. Reliable Computing, 2007, 13, 195-209.	0.8	0
49	Visualizing Uncertainty with Uncertainty Multiples. , 2006, , 1.		1
50	Renovation of the 17th-Century Ponte Lungo Bridge in Chioggia, Italy. Journal of Bridge Engineering, 2006, 11, 13-20.	1.4	2
51	Interaction Diagram and Load Effects for Vertical Pile Groups with Application to the AASHTO LRFD. Journal of Structural Engineering, 2006, 132, 460-470.	1.7	1
52	Using random set theory to calculate reliability bounds for a wing structure. Structure and Infrastructure Engineering, 2006, 2, 191-200.	2.0	18
53	Pretunnel technology: applications and design methods. Geotechnical and Geological Engineering, 2005, 23, 487-518.	0.8	3
54	Inclusion properties for random relations under the hypotheses of stochastic independence and non-interactivity. International Journal of General Systems, 2005, 34, 615-624.	1.2	6

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55	Toward a Definition and Understanding of Correlation for Variables Constrained by Random Relations. , 2005, , .		3
56	Reliability-Based Design and Construction Issues for a Micropile Foundation in Costa Rica. Practice Periodical on Structural Design and Construction, 2004, 9, 227-236.	0.7	2
57	On the Use of Random Set Theory to Bracket the Results of Monte Carlo Simulations. Reliable Computing, 2004, 10, 107-137.	0.8	9
58	Aggregation of evidence from random and fuzzy sets. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2004, 84, 700-709.	0.9	12
59	Using random set theory to propagate epistemic uncertainty through a mechanical system. Reliability Engineering and System Safety, 2004, 85, 169-181.	5.1	91
60	Replacement of Pontesei Bridge, Italy. Journal of Bridge Engineering, 2004, 9, 480-486.	1.4	3
61	Using Random Set Theory to Calculate Reliability Bounds in Situations of Little Information: An Application to a Finite Element Intermediate Complexity Wing Model. , 2004, , .		1
62	Does Elastic Anisotropy Significantly Affect a Tunnel's Plane Strain Behavior?. Transportation Research Record, 2004, 1868, 156-168.	1.0	3
63	Stresses in anisotropic rock masses: an engineering perspective building on geological knowledge. International Journal of Rock Mechanics and Minings Sciences, 2003, 40, 1099-1120.	2.6	26
64	Risk Analysis as Design Tool in Fire-Safety Retrofit of Two Italian Tunnels. Transportation Research Record, 2002, 1814, 93-102.	1.0	1
65	Effect of Elastic Anisotropy on Tunnel Wall Displacements Behind a Tunnel Face. Rock Mechanics and Rock Engineering, 2002, 35, 141-160.	2.6	30
66	Multiobjective optimization under uncertainty in tunneling: application to the design of tunnel support/reinforcement with case histories. Tunnelling and Underground Space Technology, 2002, 17, 33-54.	3.0	17
67	Greenâ€™s functions and boundary element method formulation for 3D anisotropic media. Computers and Structures, 2001, 79, 469-482.	2.4	85
68	Hybrid analysis of uncertainty: probability, fuzziness and anti-optimization. Chaos, Solitons and Fractals, 2001, 12, 1403-1414.	2.5	11
69	Bayesian estimation of rock mass boundary conditions with applications to the AECL underground research laboratory. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 995-1027.	2.6	17
70	Bayesian Estimation of Boundary Conditions with Application to Deep Tunneling. Geotechnical and Geological Engineering, 2001, 19, 43-67.	0.8	7
71	Three-dimensional Greenâ€™s functions in anisotropic piezoelectric solids. International Journal of Solids and Structures, 2000, 37, 943-958.	1.3	95
72	Determination of parameters range in rock engineering by means of Random Set Theory. Reliability Engineering and System Safety, 2000, 70, 241-261.	5.1	91

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73	Reliability analysis of rock mass response by means of Random Set Theory. Reliability Engineering and System Safety, 2000, 70, 263-282.	5.1	74
74	Closure to â€œGeneralization of Mauldon's and Goodman's Vector Analysis of Keyblock Rotationsâ€•by Fulvio Tonon. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 99-99.	1.5	0
75	Generalization of Mauldon's and Goodman's Vector Analysis of Keyblock Rotations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2000, 126, 99-99.	1.5	0
76	Concept of Random Sets as Applied to the Design of Structures and Analysis of Expert Opinions for Aircraft Crash. Chaos, Solitons and Fractals, 1999, 10, 1855-1868.	2.5	16
77	Multiobjective Optimization of Uncertain Structures Through Fuzzy Set and Random Set Theory. Computer-Aided Civil and Infrastructure Engineering, 1999, 14, 119-140.	6.3	32
78	A random set approach to the optimization of uncertain structures. Computers and Structures, 1998, 68, 583-600.	2.4	54
79	Generalization of Mauldon's and Goodman's Vector Analysis of Keyblock Rotations. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 1998, 124, 913-922.	1.5	24