

# Murat Karakus

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/813957/publications.pdf>

Version: 2024-02-01

66  
papers

3,205  
citations

109311

35  
h-index

155644

55  
g-index

68  
all docs

68  
docs citations

68  
times ranked

2260  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating Toppling Failure Mechanism of Anti-dip Layered Slope due to Excavation by Physical Modelling. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 5029-5050.	5.4	170
2	Effects of cyclic loading on the mechanical properties of a granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2015, 77, 89-96.	5.8	165
3	Three-dimensional numerical analysis for rock slope stability using shear strength reduction method. <i>Canadian Geotechnical Journal</i> , 2014, 51, 164-172.	2.8	119
4	A physical modeling-based study on the control mechanisms of Negative Poisson's ratio anchor cable on the stratified toppling deformation of anti-inclined slopes. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2021, 138, 104632.	5.8	112
5	Fuzzy and Multiple Regression Modelling for Evaluation of Intact Rock Strength Based on Point Load, Schmidt Hammer and Sonic Velocity. <i>Rock Mechanics and Rock Engineering</i> , 2006, 39, 45-57.	5.4	104
6	Effects of Thermal Damage on Strain Burst Mechanism for Brittle Rocks Under True-Triaxial Loading Conditions. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 1657-1682.	5.4	103
7	Effects of water content, water type and temperature on the rheological behaviour of slag-cement and fly ash-cement paste backfill. <i>International Journal of Mining Science and Technology</i> , 2020, 30, 271-278.	10.3	103
8	A new method estimating the 2D Joint Roughness Coefficient for discontinuity surfaces in rock masses. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 72, 191-198.	5.8	102
9	The effect of rock mass gradual deterioration on the mechanism of post-mining subsidence over shallow abandoned coal mines. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2017, 91, 59-71.	5.8	97
10	Predicting elastic properties of intact rocks from index tests using multiple regression modelling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2005, 42, 323-330.	5.8	96
11	Effects of different tunnel face advance excavation on the settlement by FEM. <i>Tunnelling and Underground Space Technology</i> , 2003, 18, 513-523.	6.2	87
12	Investigation of movement and damage of integral overburden during shallow coal seam mining. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2019, 117, 63-75.	5.8	79
13	Chart-based slope stability assessment using the Generalized Hoek-Brown criterion. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2013, 64, 210-219.	5.8	72
14	Numerical simulations of the failure process of anacinal slope physical model and control mechanism of negative Poisson's ratio cable. <i>Bulletin of Engineering Geology and the Environment</i> , 2021, 80, 3365-3380.	3.5	71
15	Determination of Mohr-Coulomb Shear Strength Parameters from Generalized Hoek-Brown Criterion for Slope Stability Analysis. <i>Rock Mechanics and Rock Engineering</i> , 2012, 45, 123-129.	5.4	70
16	Evaluation of ultimate conditions of FRP-confined concrete columns using genetic programming. <i>Computers and Structures</i> , 2016, 162, 28-37.	4.4	69
17	Application of Slag-Cement and Fly Ash for Strength Development in Cemented Paste Backfills. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 22.	2.0	69
18	Finite element analysis for the twin metro tunnel constructed in Ankara Clay, Turkey. <i>Bulletin of Engineering Geology and the Environment</i> , 2007, 66, 71-79.	3.5	67

#	ARTICLE	IF	CITATIONS
19	Experimental Study on the Damage Evolution of Brittle Rock Under Triaxial Confinement with Full Circumferential Strain Control. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 3321-3341.	5.4	65
20	Appraising the methods accounting for 3D tunnelling effects in 2D plane strain FE analysis. <i>Tunnelling and Underground Space Technology</i> , 2007, 22, 47-56.	6.2	64
21	Thermal damage constitutive model for rock considering damage threshold and residual strength. <i>Journal of Central South University</i> , 2018, 25, 2523-2536.	3.0	60
22	Volumetric deformation and damage evolution of Tibet interbedded skarn under multistage constant-amplitude-cyclic loading. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2022, 152, 105066.	5.8	58
23	A New Theoretical Method to Predict Strata Movement and Surface Subsidence due to Inclined Coal Seam Mining. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 2723-2740.	5.4	46
24	Back analysis for tunnelling induced ground movements and stress redistribution. <i>Tunnelling and Underground Space Technology</i> , 2005, 20, 514-524.	6.2	45
25	Direct expressions for linearization of shear strength envelopes given by the Generalized Hoek-Brown criterion using genetic programming. <i>Computers and Geotechnics</i> , 2012, 44, 139-146.	4.7	44
26	Analysis of support requirements for a shallow diversion tunnel at Guledar dam site, Turkey. <i>Engineering Geology</i> , 2005, 81, 131-145.	6.3	43
27	A new spectral analysis method for determining the joint roughness coefficient of rock joints. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2019, 113, 72-82.	5.8	43
28	Creep constitutive model considering the overstress theory with an associative viscoplastic flow rule. <i>Computers and Geotechnics</i> , 2020, 124, 103629.	4.7	43
29	Function identification for the intrinsic strength and elastic properties of granitic rocks via genetic programming (GP). <i>Computers and Geosciences</i> , 2011, 37, 1318-1323.	4.2	42
30	A comparative study for empirical equations in estimating deformation modulus of rock masses. <i>Tunnelling and Underground Space Technology</i> , 2012, 32, 245-250.	6.2	41
31	A Simplified Failure Criterion for Intact Rocks Based on Rock Type and Uniaxial Compressive Strength. <i>Rock Mechanics and Rock Engineering</i> , 2014, 47, 357-369.	5.4	41
32	Rockburst assessment in deep geotechnical conditions using true-triaxial tests and data-driven approaches. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2020, 128, 104279.	5.8	40
33	Evaluation of the propensity of strain burst in brittle granite based on post-peak energy analysis. <i>Underground Space (China)</i> , 2021, 6, 1-11.	7.5	38
34	Simplified Method for Estimating the Hoek-Brown Constant for Intact Rocks. <i>Journal of Geotechnical and Geoenvironmental Engineering - ASCE</i> , 2014, 140, .	3.0	37
35	Acoustic emission analysis for rock-bit interactions in impregnated diamond core drilling. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 68, 36-43.	5.8	37
36	The effect of freeze-thaw process on the physical and mechanical properties of tuff. <i>Environmental Earth Sciences</i> , 2016, 75, 1.	2.7	37

#	ARTICLE	IF	CITATIONS
37	Isotropic damage constitutive model for time-dependent behaviour of tunnels in squeezing ground. Computers and Geotechnics, 2020, 127, 103738.	4.7	37
38	Post-peak behaviour of rocks under cyclic loading using a double-criteria damage-controlled test method. Bulletin of Engineering Geology and the Environment, 2021, 80, 1713-1727.	3.5	37
39	An experimental and theoretical stress-strain-damage correlation procedure for constitutive modelling of granite. International Journal of Rock Mechanics and Minings Sciences, 2019, 116, 1-12.	5.8	33
40	The collision experiment between rolling stones of different shapes and protective cushion in open-pit mines. Journal of Mountain Science, 2021, 18, 1391-1403.	2.0	32
41	A Novel Method for Predicting Movement and Damage of Overburden Caused by Shallow Coal Mining. Rock Mechanics and Rock Engineering, 2020, 53, 1545-1563.	5.4	29
42	Proposed solution for the ground reaction of non-circular tunnels in an elastic-perfectly plastic rock mass. Computers and Geotechnics, 2020, 119, 103354.	4.7	29
43	A particle mechanics approach for the dynamic strength model of the jointed rock mass considering the joint orientation. International Journal for Numerical and Analytical Methods in Geomechanics, 2019, 43, 2797-2815.	3.3	28
44	A new protective destressing technique in underground hard coal mining. International Journal of Rock Mechanics and Minings Sciences, 2020, 130, 104327.	5.8	27
45	Theoretical study of rockfall impacts based on logistic curves. International Journal of Rock Mechanics and Minings Sciences, 2015, 78, 133-143.	5.8	26
46	A new shear strength model incorporating influence of infill materials for rock joints. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2016, 2, 183-193.	2.9	26
47	Strength Development and Strain Localization Behavior of Cemented Paste Backfills Using Portland Cement and Fly Ash. Materials, 2019, 12, 3282.	2.9	26
48	Failure Behaviour of a Sandstone Subjected to the Systematic Cyclic Loading: Insights from the Double-Criteria Damage-Controlled Test Method. Rock Mechanics and Rock Engineering, 2021, 54, 5555-5575.	5.4	26
49	Shear strength characteristics of shotcrete-rock interface for a tunnel driven in high rock temperature environment. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2016, 2, 331-341.	2.9	25
50	Influence of deviatoric stress on rockburst occurrence: An experimental study. International Journal of Mining Science and Technology, 2018, 28, 763-766.	10.3	24
51	Fatigue Failure Characteristics of Sandstone Under Different Confining Pressures. Rock Mechanics and Rock Engineering, 2022, 55, 1227-1252.	5.4	23
52	Estimation of Joint Roughness Coefficient from Three-Dimensional Discontinuity Surface. Rock Mechanics and Rock Engineering, 2017, 50, 2535-2546.	5.4	21
53	Effects of flaw width on cracking behavior of single-flawed rock specimens. Bulletin of Engineering Geology and the Environment, 2021, 80, 1701-1711.	3.5	21
54	Time-dependent solution for non-circular tunnels considering the elasto-viscoplastic rockmass. International Journal of Rock Mechanics and Minings Sciences, 2020, 133, 104395.	5.8	18

#	ARTICLE	IF	CITATIONS
55	Development of a Tool Condition Monitoring System for Impregnated Diamond Bits in Rock Drilling Applications. <i>Rock Mechanics and Rock Engineering</i> , 2017, 50, 1289-1301.	5.4	16
56	A new damage model accounting the effect of joint orientation for the jointed rock mass. <i>Arabian Journal of Geosciences</i> , 2020, 13, 1.	1.3	15
57	Estimation of REV for fractured rock masses based on Geological Strength Index. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2020, 126, 104179.	5.8	13
58	A preliminary study on the role of acoustic emission on inferring Cerchar abrasivity index of rocks using artificial neural network. <i>Wear</i> , 2015, 344-345, 1-8.	3.1	12
59	Strain burst vulnerability criterion based on energy-release rate. <i>Engineering Fracture Mechanics</i> , 2020, 237, 107232.	4.3	12
60	The propensity of the over-stressed rock masses to different failure mechanisms based on a hybrid probabilistic approach. <i>Tunnelling and Underground Space Technology</i> , 2022, 119, 104214.	6.2	12
61	Propagation and attenuation characteristics of rockburst-induced shock waves in coal-rock medium. <i>Arabian Journal of Geosciences</i> , 2019, 12, 1.	1.3	11
62	Time-dependence of mechanical behavior of Shikotsu welded tuff at sub-zero temperatures. <i>Cold Regions Science and Technology</i> , 2019, 168, 102868.	3.5	10
63	The Effect of Curing under Applied Stress on the Mechanical Performance of Cement Paste Backfill. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 1107.	2.0	9
64	Coal burst induced by rock wedge parting slip: a case study in Zhaolou coal mine. <i>International Journal of Mining, Reclamation and Environment</i> , 2018, 32, 297-311.	2.8	5
65	Investigating the Influence of Underground Ore Productions on the Overall Stability of an Existing Open Pit. <i>Procedia Engineering</i> , 2017, 191, 600-608.	1.2	2
66	Influence of specimen dimensions on bursting behaviour of rocks under true triaxial loading condition. , 2017, , .		2