

Papers accepted for RocDyn-3

Nr.	Title and authors
1. Keynotes	
1	Rock Burst Observations from Hard Rock Mines: Failures, Successes, Lessons Learned <i>B. Simser</i>
2	Dynamic and coupled static-dynamic loading theory and method in deep hard rock mining <i>X.B. Li</i>
3	A review of the development of better prediction equations for blast fragmentation <i>F. Ouchterlony & J.A. Sanchidrián</i>
4	Spalling in extreme ground motion and evidence from the 2008 Wenchuan earthquake <i>C.A. Tang & Z.Y. Liao</i>
2. Laboratory dynamic testing of rock	
5	Shear behavior of planar rock joints under dynamic normal load (DNL) conditions <i>W. Dang, H. Konietzky & T. Frühwirt</i>
6	Experimental characterization of Himalayan limestone <i>S. Mishra, T. Chakraborty, V. Matsagar & D. Basu</i>
7	Effects of water-filled rock joints on ultrasonic P-wave propagation <i>H. Yang, H.F. Duan & J.B. Zhu</i>
8	Monitoring of damage evolution in granite under uniaxial compression by AE and P-wave velocity <i>T. Zhou & J.B. Zhu</i>
9	Dynamic fracture behavior of dry and saturated sandstone <i>X. Cai, Z.L. Zhou, D. Ma, X.B. Li & G.Y. Zhao</i>
10	Two-ways dynamic shear testing of rock discontinuities <i>Ö. Aydan, N. Tokashiki, N. Z. Nasiry, N. Iwata & R. Kiyota</i>
11	Stress redistribution of dynamic loading incident through a pre-stressed cavity <i>M. Tao, H.T. Zhao, Z.W. Li, A. Ma, Z.X. Hong & S.F. Ren</i>
12	Dynamic tests of marble specimens with artificial defects under impact loading by SHPB <i>D.Y. Li, Z.Y. Han, X.B. Li, X.L. Sun, Y. Shi, & T. Zhou</i>
13	Experimental study of strength characteristics of coal specimens under static and dynamic loadings <i>W. Wang, H. Wang, H.Z. Zang, H.M. Li & D.Y. Li</i>
14	Deformation characteristics of Beishan granite under low-cyclic loading <i>L. Shi, X. Zhang & C.C. Li</i>
15	Dynamic Mode II fracture toughness determination of rocks with short cores in compression method <i>S. W. Oh, G. J. Min, S.W. Park, S. H. Cho & Y. H. You</i>
16	Thermo-mechanical properties of sandstone under coupled static and dynamic loading <i>T. B. Yin & P. Wang</i>
17	Fracture characteristics of rock under coupled static pre-load and impact disturbance <i>F.Q. Gong, S. Luo, L. Zhang & D.H. Lu</i>
18	Dynamic characteristic of rock under in-situ stress and blast loading <i>C.L. He & J. Yang</i>
19	Mechanical characteristics of sandstone under both static pre-stress and cyclic loading <i>K. Du, R. Su, C.Z. Yang & M. Tao</i>
20	Study on rock breakage by disc cutter under coupled static and dynamic loads <i>Q.B. Lin, P. Cao & Y. Chen</i>
21	Development of impact loading test device for gas-containing coal <i>Z. Q. Yin, Z. D. Wei, Z. Zhang, J. C. Chang, C. M. Li, H. F. Ma, G. M. Zhao, X. Y. Zhang, W. B. Shi & M. Tu</i>
22	Dynamic increase factors of rock strength <i>K. Liu, Q.B. Zhang & J. Zhao</i>
23	A preliminary study of using high-speed digital image correlation (DIC) to characterize the penetration on geomaterial <i>H.Z. Xing, G.LN. Wu, S. Dehkoda, Q.B. Zhang & J. Zhao</i>
24	Validation of a mathematical model for evaluating the dynamic shear strength of rock <i>T. Okada & T. Naya</i>

3. Theoretical study and numerical modelling	
25	Sensitivity analysis of block stability under seismic loading <i>A. Bolin & R. Ghazal</i>
26	Numerical study on the strain-rate sensitivity of rock: meso-mechanical approach <i>T. Saksala</i>
27	Study of the deformation property of rock under cyclic loading based on the sub-loading surface theory <i>Y.Q. Zhou, Q. Sheng, N.N. Li & Y.B. Zhou</i>
28	General invariant representations of several kinematical identities <i>H. Zuo, S.C. Deng, Z.H. Huang, C.X. Xiao, X. Zheng, R. Luo & R. Zhao</i>
29	Numerical simulations on failure and stress wave propagation in solid materials using a 3D lattice spring model <i>T. Nishimura, M. Kohno & K. Fumimura</i>
30	Analysis of elastic wave attenuation in different rock samples <i>X. L. Liu, G. Y. Zhao, J. H. Cui, X. B. Li & Q. Guo</i>
31	Application of dominant crack algorithm (DCA) to dynamic tensile failure of rocks <i>B. Wu, Q. Wang & K. Xia</i>
32	Dynamic rock slope stability analysis using UDEC software <i>B.H.V. Sekar & S. R. Naik</i>
33	DEM analysis of the effect of discontinuities on coal mass brittleness <i>O. Vardar, C. Zhang, F. Tahmasebinia, I. Canbulat & B. Hebblewhite</i>
34	Analysis of rock failure under dynamic loading based on a micromechanical damage model <i>M.H. Ahmadi & H. Molladavoodi</i>
35	A dynamic stress state analysis at the pressure tunnel of Upper Tamakoshi HPP, Nepal <i>K.K. Panthi & C.B. Basnet</i>
36	A study on the dynamic feedback characteristics of the slip body during sliding <i>L.G. Wang, G.C. Zhao, Y.H. Xi & Q. Chen</i>
37	Research on the dynamic behaviour of rock material: rate dependency and pulverization <i>X.F. Li, H.B. Li, Q.B. Zhang & J. Zhao</i>
4. Rockburst and dynamic rock support	
38	Dynamic buckling mechanism of pillar rockbursts induced by stress waves <i>J. Deng</i>
39	Strain and energy parameters of burst-prone rocks: study and analysis <i>N.N. Kuznetsov, I.V. Fedotova & A.K. Pak</i>
40	Determination of the specific rock failure energy at various structural-scale levels <i>A.V. Zemcovskii, N.N. Kuznetsov & K.N. Konstantinov</i>
41	Large scale destress blasting in roof rocks for rockburst control <i>P. Konicek</i>
42	A numerical study of spalling under different dynamic loads using PNMM <i>X. Li, Q.B. Zhang, J. Zhao & J.C. Li</i>
43	Rockbursts characteristics on twin TBM tunnels in the Lower Himalayas <i>P. Dickson, M.H. Kizilbash, G.A. Rosario, G. Peach & B. Ashcroft</i>
44	Study on the influence of aircraft load on the tunnel under airport runway <i>R.L. Shan, Y.W. Song, C.H. Wang & X.X. Fan</i>
45	Effects of the joint density and joint dip angle on the fracture energy in coal mass <i>C. Zhang, F. Tahmasebinia, I. Canbulat, O. Vardar & S. Saydam</i>
46	Rock energy evolution under triaxial cyclic loading-unloading compression <i>M.W. Zhang, S.D. Liu, Q.B. Meng, D.Y. Qian & N. Zhang</i>
47	Towards improved design of rock reinforcement systems in burst-prone rock masses <i>W. Breure, D.J.M. Ngan-Tillard & C.C. Li</i>
48	Study on the interaction between shock waves and non-uniform stresses in the rock mass <i>S.M. Pang, W.J. Tao, X.Q. Tan, J.P. Chen, D. Zhang & Z.C. Nie</i>
49	Rock fracturing related to strain burst in quartzite rock mass <i>C.C. Li, D. Sandström & A. Nyström</i>
50	The development and optimization of face-perpendicular preconditioning technique for development ends <i>F. Sengani & T. Zvarivadza</i>
51	Practice of face-perpendicular preconditioning for safe remnant extraction <i>T. Zvarivadza & F. Sengani</i>
52	Behaviour of full grouted rock bolts subjected to repeated dynamic loading <i>Q.H. Wu</i>
53	Dynamic response of support systems during the excavation of underground openings <i>Ö. Aydan, F. Ito & T. Ito</i>

54	Increased agility for the research and development of dynamic roof support products <i>G. Knox & A. Berghorst</i>
55	Relationship between energy per impulse and dynamic capacity of a rockbolt <i>K. Bosman, M. Cawood & A. Berghorst</i>
56	Mechanical response of fully bonded bolts under cyclic loading <i>X.W. Feng</i>
57	Application of the MD bolt in the Fosterville Gold Mine <i>A. Stiehl, B. Darlington, M. Rataj & P. Young</i>
58	Dynamic response of rock bolts to blasting vibrations <i>S.H. Chen & S.W. Hu</i>
59	Development of the MDX Bolt and in-situ dynamic testing at Telfer Gold Mine <i>B. Darlington, M. Rataj, G. Balog & D. Barnett</i>
60	Dynamic test of flexi-bolts reinforcement system and its performance in hard rock underground mining <i>F. Sengani & T. Zvarivadza</i>
61	Garford hybrid dynamic bolt reinforcement system on trial in deep level gold mines of South Africa <i>T. Zvarivadza & F. Sengani</i>
62	The need for additional dynamic testing methods for ground support elements <i>P. Mikula & B.M. Brown</i>
63	Monitoring pillar behaviour while driving towards a Shear Zone in highly stressed ground at Vale's Creighton Mine <i>A. Punkkinen, B. Forbes, A. Hyett & J. Whitmore</i>
5. Seismicity and seismic monitoring in underground excavations	
64	A Case Study of Mining Induced Seismicity in a Weak Rock Mine at Barrick Goldstrike in Nevada <i>R. Wu & V. Lamin</i>
65	Seismic response of shallow buried rock tunnel: shaking table test and numerical simulation <i>J.T. Chen, H.T. Yu & Y. Yuan</i>
66	Forecast the deformation of the surrounding rock using MS monitoring <i>N.W. Xu, F. Dai, T. Zhao, Z. Zhou & C. Sha</i>
67	Stress evolution and induced seismicity in mining: lab test, observation and modeling <i>L.A. Nazarova, V.N. Zakharov, L.A. Nazarov, V.L. Shkuratnik, M.I. Protasov & P.V. Nikolenko</i>
68	Monitoring of mining-induced seismicity in the Khibiny rock massif <i>A.A.Kozyrev, E.V.Kasparyan & Iu.V.Fedotova</i>
69	A numerical modeling methodology for assessing rock failure stabilities <i>Z. Khademian & U. Ozbay</i>
70	Microseismic monitoring in twin TBM tunnels in the Lower Himalayas <i>A.K. Khan, G. Peach, G.A. Rosario, H.-S. Xiong, X.-T. Feng, B. Chen, Y. Xiao & G. Feng</i>
71	Comparison of microseismic monitoring and actual rockbursts in twin TBM tunnels in the lower Himalayas <i>G. Peach, G.A. Rosario, H.-S. Xiong & X.-T. Feng</i>
72	Rockburst prediction mechanics and analysis on typical cases based on microseismic monitoring technique in tunneling <i>T.H. Ma & C.A. Tang</i>
73	Seismic characteristics of field measurements and numerical analyses of an underground quarry in Oya <i>T. Seiki, T.K.M. Dintwe, R. Yamaguchi, S. Noguchi & T. Ohmura</i>
74	Multi-factor pattern recognition method of rockburst in coal mine <i>H.W. Zhang, Y.P. Li, X.Z. Zhao, J.Q. Chen & L. Ma</i>
6. Earthquake-induced damage to engineering structures	
75	Some considerations on the stability and design of underground structures during earthquakes <i>K. Kamemura & Ö. Aydan</i>
76	Damage to rock engineering structures induced by the 2016 Kumamoto earthquakes <i>Ö. Aydan, J. Tomiyama, H. Matsubara, N. Tokashiki & N. Iwata</i>
77	Dynamic response and stability of some historical masonry structures subjected to ground shaking <i>N. Tokashiki, Ö. Aydan, N. Z. Nasiry, T. Ito & M. Geniş</i>
78	Simulation of strong motions and surface rupture of the 2014 Northern Nagano Earthquake <i>N. Iwata, R. Kiyota, et al. K. Adachi, Y. Takahashi, Ö. Aydan, F. Miura & T. Ito,</i>
79	Dynamic stability of rock slopes and the effect of reinforcement against planar sliding <i>Y. Takahashi, N. Iwata, R. Kiyota, K. Adachi, Ö. Aydan & N. Tokashiki</i>
80	Seismic response of a tunnel embedded in compacted sand through large-scale shake table testing <i>H. Zhou & X.H. Wang</i>
81	Stick-slip behavior of rock discontinuities by difference in rock types <i>R. Kiyota, N. Iwata, Y. Takahashi, K. Adachi & Ö. Aydan</i>
82	Experimental study on seismic stability of foundation rocks under critical facilities <i>M. Ishimaru, A. Sekiguchi, T. Okada, K. Hiraga & K. Ozawa</i>

83	Status of rock dynamics study in Horonobe Underground Research Laboratory, Japan <i>T. Sato, K. Aoyagi, Y. Matsuzaki, N. Miyara & K. Miyakawa</i>
84	Dynamic response of a shallow tunnel with imperfect interface in anisotropic medium <i>X.P. Zhang & Y.J. Jiang</i>
85	Design and performance of the foundation of the tsunami protection wall at the Hamaoka Nuclear Power Station <i>M. Wani</i>
86	Collapse experiment and numerical simulation of a slope under strong earthquake <i>X.F. Liu, N. Zhao & W.B. An</i>
7. Blasting	
87	A case study of determining the safety threshold of blasting vibration for tunnel lining <i>C.C. Xia, F. Xue & J.K. Gao</i>
88	Application of a new mining method to slightly inclined thin orebodies at depth <i>C.-D. Ma, Y.-S. Wang, Y.-N. Zhou, C.-Z. Guo & Z.-L. Liu</i>
89	Assessment of the damage of precise delay blasting in a metro tunnel to building structures <i>D. Zhang & S. Huan</i>
90	An experimental investigation on dynamic responses of granite blocks under blast loading <i>L. Chi, A. Aalberg, Z.X. Zhang & C.C. Li</i>
91	A case study on one shot raise driving using multi-spherical charges in an open pit mine <i>Q.Y. Li, D.Y. Luo, W.H. Wang, Z.Y. Wu & D.H. Sun</i>
8. Other topics	
92	Estimation of the strength of Konya pyroclastic rocks from P-wave velocity <i>S. Kahraman, T. K. Gun, B. Gunes & I. Ince</i>
93	Experimental protocol for stress corrosion cracking for full-size cable bolts <i>S. Wu, H. L. Ramandi, P. C. Hagan, S. Saydam & B. Hebblewhite</i>
94	Shear behavior and acoustic emission characteristics of regular dentate joint <i>C.D. Su, H.Z. Zang, J.Q. Guo, Y.N. Sun, C. S. Song & W. Wang</i>
95	Simple rock cutting testing <i>S. Yasar</i>
96	Tensile failure analysis of double-sided cracked flat mortar specimens <i>Z.H. Huang, S.C. Deng & H.B. Li</i>
97	Support mechanism of 4D force-transferring block set <i>Z.G. Ma & N. Cui & P. Gong</i>
98	Evaluation of in-stope pillar failure: a case study of deep to ultra-deep level gold mining in South Africa <i>T. Zvarivadza & F. Sengani</i>
99	The performance of mechanical anchors in South African mechanized deep level gold mining <i>F. Sengani & T. Zvarivadza</i>
100	An experimental study on mechanical behavior of joint specimens <i>F. Wang, P. Cao, Q.-P. Gao & Z. Wang</i>
101	Case studies related to real time geotechnical monitoring systems for an open pit coal mine in Western Canada <i>G. Bonci</i>
102	The effect of water saturation on P-wave velocity for igneous rocks <i>S. Kahraman & M. Fener</i>