R Paul Young

List of Publications by Year
in descending order

99 papers	3,403 citations	172207 29 h-index	149479 56 g-index
100 all docs	100 docs citations	100 times ranked	2331 citing authors

#	Article	IF	Citations
1	Using true-triaxial stress path to simulate excavation-induced rock damage: a case study. International Journal of Coal Science and Technology, 2022, 9, .	2.7	20
2	Numerical Investigation of the Mechanical and Damage Behaviors of Veined Gneiss During True-Triaxial Stress Path Loading by Simulation of In Situ Conditions. Rock Mechanics and Rock Engineering, 2020, 53, 133-151.	2.6	20
3	True Triaxial Experimental Investigation of Rock Response Around the Mine-By Tunnel Under an In Situ 3D Stress Path. Rock Mechanics and Rock Engineering, 2019, 52, 3971-3986.	2.6	33
4	ISRM Suggested Method for In Situ Acoustic Emission Monitoring of the Fracturing Process in Rock Masses. Rock Mechanics and Rock Engineering, 2019, 52, 1395-1414.	2.6	34
5	Hydro-mechanical behavior of an argillaceous limestone considered as a potential host formation for radioactive waste disposal. Journal of Rock Mechanics and Geotechnical Engineering, 2018, 10, 1063-1081.	3.7	17
6	Attenuation Properties of Fontainebleau Sandstone During True-Triaxial Deformation using Active and Passive Ultrasonics. Rock Mechanics and Rock Engineering, 2015, 48, 2551-2566.	2.6	43
7	Hydraulic fracture energy budget: Insights from the laboratory. Geophysical Research Letters, 2015, 42, 3179-3187.	1.5	103
8	Laboratory simulations of fluid/gas induced micro-earthquakes: application to volcano seismology. Frontiers in Earth Science, 2014, 2, .	0.8	7
9	Complex networks and waveforms from acoustic emissions in laboratory earthquakes. Nonlinear Processes in Geophysics, 2014, 21, 763-775.	0.6	7
10	A laboratory acoustic emission experiment under in situ conditions. Geophysical Research Letters, 2014, 41, 3422-3430.	1.5	80
11	3-D transport and acoustic properties of Fontainebleau sandstone during true-triaxial deformation experiments. International Journal of Rock Mechanics and Minings Sciences, 2014, 69, 1-18.	2.6	72
12	Faulting of Rocks in a Three-Dimensional Stress Field by Micro-Anticracks. Scientific Reports, 2014, 4, 5011.	1.6	19
13	Computation of qP- and qS-wave rays, travel times, slowness vector and polarization in general anisotropic media. , 2014, , .		2
14	Complex aperture networks. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1028-1037.	1.2	8
15	Complexity of frictional interfaces: a complex network perspective. Geomechanics and Geoengineering, 2013, 8, 167-178.	0.9	0
16	Symmetry-based automated microseismic location from data streams of surface monitoring arrays â€" A numerical study. , 2013, , .		0
17	Network configurations of dynamic friction patterns. Europhysics Letters, 2012, 98, 48003.	0.7	17
18	Engineering Hydraulic Treatment of Existing Fracture Networks. , 2012, , .		1

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19	Topological complexity of frictional interfaces: friction networks. Nonlinear Processes in Geophysics, 2012, 19, 215-225.	0.6	12
20	Acoustic emissions associated with the formation of fracture sets in sandstone under polyaxial stress conditions^{â€¡}. Geophysical Prospecting, 2012, 60, 93-102.	1.0	19
21	Numerical modeling of seismicity induced by fluid injection in naturally fractured reservoirs. Geophysics, 2011, 76, WC167-WC180.	1.4	70
22	Analysis of fracture damage zone in anisotropic granitic rock using 3D X-ray CT scanning techniques. International Journal of Fracture, 2011, 168, 1-13.	1.1	61
23	The synthetic rock mass approach for jointed rock mass modelling. International Journal of Rock Mechanics and Minings Sciences, 2011, 48, 219-244.	2.6	397
24	Fracture network engineering for hydraulic fracturing. The Leading Edge, 2011, 30, 844-853.	0.4	18
25	Numerical investigation of timeâ€lapse velocities during hydraulic fracturing. , 2011, , .		0
26	Effects of crystallographic anisotropy on fracture development and acoustic emission in quartz. Journal of Geophysical Research, 2010, 115, .	3.3	24
27	Spatio-temporal evolution of volcano seismicity: A laboratory study. Earth and Planetary Science Letters, 2010, 297, 315-323.	1.8	53
28	Fracture Toughness and Fracture Roughness Interrelationship in Thermally treated Westerly Granite. Pure and Applied Geophysics, 2009, 166, 801-822.	0.8	93
29	Common Evolution of Mechanical and Transport Properties in Thermally Cracked Westerly Granite at Elevated Hydrostatic Pressure. Pure and Applied Geophysics, 2009, 166, 927-948.	0.8	62
30	Laboratory simulation of fluidâ€driven seismic sequences in shallow crustal conditions. Geophysical Research Letters, 2009, 36, .	1.5	5
31	Using continuous microseismic records for hydrofracture diagnostics and mechanics. , 2009, , .		12
32	Threeâ€dimensional dynamic distinct element modeling applied to laboratory simulation of hydraulic fracturing in naturally fractured reservoirs. , 2009, , .		3
33	Application of Relative Location Techniques to Induced Microseismicity from Hydraulic Fracturing. , 2009, , .		9
34	Microseismic analysis for the quantification of crack interaction during hydraulic stimulation. , 2009, , .		3
35	Imaging compaction band propagation in Diemelstadt sandstone using acoustic emission locations. Geophysical Research Letters, 2008, 35, .	1.5	80
36	Laboratory Simulation of Volcano Seismicity. Science, 2008, 322, 249-252.	6.0	141

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37	Rate Dependence of Acoustic Emissions Generated during Shear of Simulated Fault Gouge. Bulletin of the Seismological Society of America, 2007, 97, 1841-1849.	1.1	24
38	Microseismic Monitoring of a Restimulation Treatment to a Permian Basin San Andres Dolomite Horizontal Well. , 2007, , .		5
39	Imaging slow failure in triaxially deformed Etna basalt using 3D acoustic-emission location and X-ray computed tomography. Geophysical Research Letters, 2007, 34, .	1.5	88
40	Acoustic emission imaging of shear failure in large reinforced concrete structures. International Journal of Fracture, 2007, 148, 29-45.	1.1	21
41	Modeling the permeability evolution of microcracked rocks from elastic wave velocity inversion at elevated isostatic pressure. Journal of Geophysical Research, 2006, 111, .	3.3	65
42	Fracture in Westerly Granite under AE Feedback and Constant Strain Rate Loading: Nucleation, Quasi-static Propagation, and the Transition to Unstable Fracture Propagation. Pure and Applied Geophysics, 2006, 163, 995-1019.	0.8	102
43	Quantifying Damage, Saturation and Anisotropy in Cracked Rocks by Inverting Elastic Wave Velocities. Pure and Applied Geophysics, 2006, 163, 947-973.	0.8	80
44	Fracture Toughness Measurements and Acoustic Emission Activity in Brittle Rocks. Pure and Applied Geophysics, 2006, 163, 917-945.	0.8	98
45	Fracture in Westerly Granite under AE Feedback and Constant Strain Rate Loading: Nucleation, Quasi-static Propagation, and the Transition to Unstable Fracture Propagation. , 2006, , 995-1019.		3
46	Quantifying Damage, Saturation and Anisotropy in Cracked Rocks by Inverting Elastic Wave Velocities. , 2006, , 947-973.		14
47	Tidal Stress/Strain and the b-values of Acoustic Emissions at the Underground Research Laboratory, Canada. Pure and Applied Geophysics, 2005, 162, 1291-1308.	0.8	7
48	Observations of premonitory acoustic emission and slip nucleation during a stick slip experiment in smooth faulted Westerly granite. Geophysical Research Letters, 2005, 32, .	1.5	77
49	Numerical investigation of induced cracking and seismic velocity changes in brittle rock. Geophysical Research Letters, 2004, 31, .	1.5	25
50	Moment tensors and micromechanical models. Tectonophysics, 2002, 356, 181-197.	0.9	133
51	High-resolution Mechanics of a Microearthquake Sequence. , 2002, , 197-219.		4
52	Simulation of Unstable Fault Slip in Granite Using a Bonded-particle Model. , 2002, , 221-245.		3
53	Tomographic Imaging of Thermally Induced Fractures in Granite Using Bayesian Inversion. , 2002, , 277-307.		1
54	Point-source inversion neglecting a nearby free surface: simulation of the Underground Research Laboratory, Canada. Geophysical Journal International, 2001, 146, 171-180.	1.0	17

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55	Controlled sources for shear-wave surveys in mines. Geophysical Prospecting, 2000, 48, 399-414.	1.0	2
56	Seismic anisotropy in granite at the Underground Research Laboratory, Manitoba. Geophysical Prospecting, 2000, 48, 415-435.	1.0	11
57	Investigating the Stability of Engineered Structures Using Acoustic Validation of Numerical Models. , 2000, , 1.		1
58	Lithological Controls on Seismicity in Granitic Rocks. Bulletin of the Seismological Society of America, 2000, 90, 709-723.	1.1	36
59	Micromechanical modeling of cracking and failure in brittle rocks. Journal of Geophysical Research, 2000, 105, 16683-16697.	3.3	230
60	Seismic and micromechanical studies of rock fracture. Geophysical Research Letters, 2000, 27, 1767-1770.	1.5	30
61	Enhanced Velocity Tomography: Practical method of combining velocity and attenuation parameters. Geophysical Research Letters, 1999, 26, 3253-3256.	1.5	1
62	Acoustic emission and ultrasonic-velocity methods used to characterise the excavation disturbance associated with deep tunnels in hard rock. Tectonophysics, 1998, 289, 1-15.	0.9	79
63	Propagation effects of an underground excavation. Tectonophysics, 1998, 289, 17-30.	0.9	10
64	Investigating the Mechanics of Microcrack Damage Induced under True-Triaxial Unloading. , 1998, , .		14
65	Application of induced seismicity to radioactive waste management programmes. Geological Society Engineering Geology Special Publication, 1996, 11, 223-230.	0.2	0
66	Source parameters of mining-induced seismic events: An evaluation of homogeneous and inhomogeneous faulting models for assessing damage potential. Pure and Applied Geophysics, 1995, 145, 3-27.	0.8	23
67	A controlledin-situinvestigation of the relationship between stress, velocity and induced seismicity. Geophysical Research Letters, 1995, 22, 1049-1052.	1.5	21
68	Microcracking during stress-relief of polycrystalline ice formed at high pressure. Geophysical Research Letters, 1995, 22, 2207-2210.	1.5	4
69	Qî²estimates from spectral ratios and multiple lapse time window Analysis: Results from an underground research laboratory in granite. Geophysical Research Letters, 1994, 21, 1503-1506.	1.5	10
70	Potential role of acoustic emission/microseismicity investigations in the site characterization and performance monitoring of nuclear waste repositories. International Journal of Rock Mechanics and Mining Sciences, 1993, 30, 797-803.	0.3	26
71	Stress dependence of the acoustic properties of Zr-2.5 wt% Nb alloy. Ultrasonics, 1993, 31, 183-192.	2.1	4
72	Nonâ€similar frequencyâ€magnitude distribution for M < 1 Seismicity. Geophysical Research Letters, 1993, 20, 427-430.	1.5	25

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73	Associations between temporal velocity changes and induced seismicity. Geophysical Research Letters, 1993, 20, 2929-2932.	1.5	8
74	Microseismicity derived faultâ€Planes and their relationship to focal mechanism, stress inversion, and geologic data. Geophysical Research Letters, 1993, 20, 2475-2478.	1.5	36
75	Moment tensor inversion of induced microseisnmic events: Evidence of nonâ€shear failures in the â^'4 < M < â^'2 moment magnitude range. Geophysical Research Letters, 1992, 19, 1503-1506.	1.5	140
76	Sequential velocity imaging and microseismic monitoring of mining-induced stress change. Pure and Applied Geophysics, 1992, 139, 421-447.	0.8	17
77	Space-time correlations ofb values with stress release. Pure and Applied Geophysics, 1992, 139, 449-462.	0.8	186
78	Mining-induced microseismicity: Monitoring and applications of imaging and source mechanism techniques. Pure and Applied Geophysics, 1992, 139, 697-719.	0.8	40
79	Influence of source region properties on scaling relations forM<0 events. Pure and Applied Geophysics, 1992, 139, 721-739.	0.8	16
80	Rock property assessment using laserâ€generated acoustic waves. Review of Scientific Instruments, 1991, 62, 1995-1998.	0.6	1
81	ACOUSTIC TOMOGRAPHY IN SOLIDS USING A BENT RAY SIRT ALGORITHM. Nondestructive Testing and Evaluation, 1991, 6, 131-148.	1.1	7
82	IMAGING DEFECTS WITH LASER ULTRASOUND. Nondestructive Testing and Evaluation, 1990, 5, 85-96.	1.1	0
83	Ultrasonic tomography of metals using noncontact transduction. Journal of the Acoustical Society of America, 1989, 85, 747-752.	0.5	13
84	Fred Leighton Memorial Workshop on mining induced seismicity August 30, 1987. Pure and Applied Geophysics, 1989, 129, 285-293.	0.8	1
85	Geotomographic imaging in the study of mining induced seismicity. Pure and Applied Geophysics, 1989, 129, 571-596.	0.8	23
86	Measuring anisotropy in rocks using laser-generated ultrasound. Geophysical Journal International, 1987, 91, 501-516.	1.0	6
87	Seismic attenuation spectra in rock mass characterization; a case study in openâ€pit mining. Geophysics, 1986, 51, 302-323.	1.4	9
88	Physical characterization of rock masses using borehole methods. Geophysics, 1985, 50, 2530-2541.	1.4	6
89	A microcomputer controlled magnetometer survey system. Journal of Microcomputer Applications, 1985, 8, 268-278.	0.1	1
90	Microcomputer based seismic instrumentation systems. Quarterly Journal of Engineering Geology and Hydrogeology, 1985, 18, 369-380.	0.8	3

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91	Seismic spectroscopy in fracture characterization. Quarterly Journal of Engineering Geology and Hydrogeology, 1985, 18, 459-479.	0.8	34
92	Microprocessors and microcomputers: a review and implications for engineering geologists. Quarterly Journal of Engineering Geology and Hydrogeology, 1985, 18, 311-325.	0.8	0
93	Applications of microcomputers in engineering geology: Introductory Note. Quarterly Journal of Engineering Geology and Hydrogeology, 1985, 18, 309-310.	0.8	0
94	Seismic remote sensing of rock masses for the optimization of excavation efficiency. IEEE Transactions on Geoscience and Remote Sensing, 1984, GE-22, 704-711.	2.7	0
95	Monitoring fragmentation efficiency of mine blasting using seismic spectroscopy. , 1984, , .		0
96	Statistical analysis of seismic spectral signatures for rock quality assessment. Geoexploration, 1982, 20, 75-91.	0.2	8
97	The design of a microprocessor-based instrument for the seismic interrogation of rock masses. Journal of Microcomputer Applications, 1982, 5, 183-194.	0.1	3
98	The scaling effect on rock behaviour by comparing compressional wave velocities measured in the lab and field. Advances in Geosciences, 0, 45, 167-176.	12.0	2
99	Simulation of seismic velocity changes in brittle rocks subjected to triaxial stresses using 3D microstructural models. Geophysical Journal International, 0, , .	1.0	0