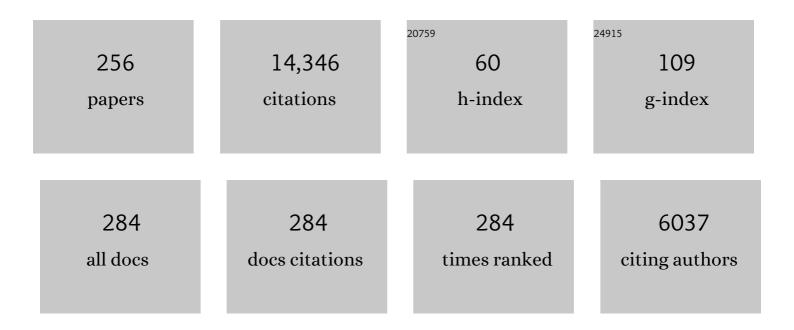
List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Multi-scale Coupled Processes Modeling of Fractures as Porous, Interfacial and Granular Systems from Rock Images with the Numerical Manifold Method. Rock Mechanics and Rock Engineering, 2022, 55, 3041-3059.	2.6	20
2	Cooling-induced reactivation of distant faults during long-term geothermal energy production in hot sedimentary aquifers. Scientific Reports, 2022, 12, 2065.	1.6	11
3	Induced and triggered seismicity by immediate stress transfer and delayed fluid migration in a fractured geothermal reservoir at Pohang, South Korea. International Journal of Rock Mechanics and Minings Sciences, 2022, 153, 105098.	2.6	12
4	Coupled Hydromechanical Modeling of Induced Seismicity From CO <sub>2</sub> Injection in the Illinois Basin. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	12
5	The propagation and interaction of cracks under freeze-thaw cycling in rock-like material. International Journal of Rock Mechanics and Minings Sciences, 2022, 154, 105112.	2.6	18
6	The hydraulic fracturing with multiple influencing factors in carbonate fracture-cavity reservoirs. Computers and Geotechnics, 2022, 147, 104773.	2.3	16
7	Determining Young's modulus of granite using accurate grain-based modeling with microscale rock mechanical experiments. International Journal of Rock Mechanics and Minings Sciences, 2022, 157, 105167.	2.6	25
8	Hydro-mechanical modeling of the first and second hydraulic stimulations in a fractured geothermal reservoir in Pohang, South Korea. Geothermics, 2021, 89, 101982.	1.5	14
9	Discrete Dilatant Pathway Modeling of Gas Migration Through Compacted Bentonite Clay. International Journal of Rock Mechanics and Minings Sciences, 2021, 137, 104569.	2.6	10
10	Estimation of stress and stress-induced permeability change in a geological nuclear waste repository in a thermo-hydrologically coupled simulation. Computers and Geotechnics, 2021, 129, 103866.	2.3	11
11	Modelling advective gas flow in compact bentonite: Lessons learnt from different numerical approaches. International Journal of Rock Mechanics and Minings Sciences, 2021, 139, 104580.	2.6	11
12	Numerical study of the chemo-mechanical behavior of FEBEX bentonite in nuclear waste disposal based on the Barcelona expansive model. Computers and Geotechnics, 2021, 132, 103968.	2.3	9
13	A reliable numerical analysis for large-scale modelling of a high-level radioactive waste repository in the Callovo-Oxfordian claystone. International Journal of Rock Mechanics and Minings Sciences, 2021, 140, 104574.	2.6	25
14	The influence of stress anisotropy and stress shadow on frost cracking in rock. Computers and Geotechnics, 2021, 133, 103967.	2.3	19
15	TOUGH-RFPA: Coupled thermal-hydraulic-mechanical Rock Failure Process Analysis with application to deep geothermal wells. International Journal of Rock Mechanics and Minings Sciences, 2021, 142, 104726.	2.6	26
16	Upscaling THM modeling from small-scale to full-scale in-situ experiments in the Callovo-Oxfordian claystone. International Journal of Rock Mechanics and Minings Sciences, 2021, 144, 104582.	2.6	19
17	Mesh generation and optimization from digital rock fractures based on neural style transfer. Journal of Rock Mechanics and Geotechnical Engineering, 2021, 13, 912-919.	3.7	3
18	Coupling dynamic in situ X-ray micro-imaging and indentation: A novel approach to evaluate micromechanics applied to oil shale. Fuel, 2021, 300, 120987.	3.4	8

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19	Field-scale fault reactivation experiments by fluid injection highlight aseismic leakage in caprock analogs: Implications for CO2 sequestration. International Journal of Greenhouse Gas Control, 2021, 111, 103471.	2.3	22
20	A comprehensive review of proppant embedment in shale reservoirs: Experimentation, modeling and future prospects. Journal of Natural Gas Science and Engineering, 2021, 95, 104143.	2.1	36
21	Evaluation of faults stability due to passing seismic waves: Study case of groundwater level changes induced by the 2011 Tohoku earthquake in Central Japan. Journal of Hydrology X, 2021, 13, 100103.	0.8	1
22	Modelling the water injection induced fault slip and its application to in-situ stress estimation. International Journal of Rock Mechanics and Minings Sciences, 2021, 137, 104537.	2.6	11
23	Convergence of micro-geochemistry and micro-geomechanics towards understanding proppant shale rock interaction: A Caney shale case study in southern Oklahoma, USA. Journal of Natural Gas Science and Engineering, 2021, 96, 104296.	2.1	7
24	Microscale Mechanicalâ€Chemical Modeling of Granular Salt: Insights for Creep. Journal of Geophysical Research: Solid Earth, 2021, 126, .	1.4	6
25	The hydration of bentonite buffer material revealed by modeling analysis of a long-term in situ test. Applied Clay Science, 2020, 185, 105360.	2.6	18
26	Special Issue "Observations of Coupled Processes in Fractured Geological Media at Various Space and Time― Rock Mechanics and Rock Engineering, 2020, 53, 4309-4311.	2.6	0
27	Influence of hysteretic stress path behavior on seal integrity during gas storage operation in a depleted reservoir. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 886-899.	3.7	19
28	Guest Editorial to the CouFrac 2018 Special Issue Coupled Thermal-Hydro-Mechanical-Chemical Processes in Fractured Media: Microscale to Macroscale Numerical Modeling. Computational Geosciences, 2020, 24, 1747-1749.	1.2	0
29	A study of thermal pressurization and potential for hydro-fracturing associated with nuclear waste disposal in argillaceous claystone. International Journal of Rock Mechanics and Minings Sciences, 2020, 136, 104536.	2.6	14
30	An international model comparison study of controlled fault activation experiments in argillaceous claystone at the Mont Terri Laboratory. International Journal of Rock Mechanics and Minings Sciences, 2020, 136, 104505.	2.6	20
31	Microscale mechanical modeling of deformable geomaterials with dynamic contacts based on the numerical manifold method. Computational Geosciences, 2020, 24, 1783-1797.	1.2	21
32	Chemicalâ€Mechanical Impacts of CO <sub>2</sub> Intrusion Into Heterogeneous Caprock. Water Resources Research, 2020, 56, e2020WR027193.	1.7	26
33	Numerical manifold method modeling of coupled processes in fractured geological media at multiple scales. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 667-681.	3.7	33
34	Modeling of fluid injection-induced fault reactivation using coupled fluid flow and mechanical interface model. International Journal of Rock Mechanics and Minings Sciences, 2020, 132, 104373.	2.6	16
35	Simulating three dimensional thermal cracking with TOUGH-FEMM. Computers and Geotechnics, 2020, 124, 103654.	2.3	16
36	Modeling of thermal pressurization in tight claystone using sequential THM coupling: Benchmarking and validation against in-situ heating experiments in COx claystone. Tunnelling and Underground Space Technology, 2020, 103, 103428.	3.0	14

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37	Thermal management associated with geologic disposal of large spent nuclear fuel canisters in tunnels with thermally engineered backfill. Tunnelling and Underground Space Technology, 2020, 102, 103454.	3.0	36
38	Estimating perturbed stress from 3-D borehole displacements induced by fluid injection in fractured or faulted shales. Geophysical Journal International, 2020, 221, 1684-1695.	1.0	15
39	Temperature response and brine availability to heated boreholes in bedded salt. Vadose Zone Journal, 2020, 19, e20019.	1.3	3
40	Finite volume modeling of coupled thermo-hydro-mechanical processes with application to brine migration in salt. Computational Geosciences, 2020, 24, 1751-1765.	1.2	14
41	Lattice modeling of excavation damage in argillaceous clay formations: Influence of deformation and strength anisotropy. Tunnelling and Underground Space Technology, 2020, 98, 103196.	3.0	11
42	Complexity of Fault Rupture and Fluid Leakage in Shale: Insights From a Controlled Fault Activation Experiment. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB017781.	1.4	30
43	TOUGH-Based Hydraulic Fracturing Models. , 2020, , 203-226.		1
44	Interactive roles of geometrical distribution and geomechanical deformation of fracture networks in fluid flow through fractured geological media. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 780-792.	3.7	34
45	The Influence of an Interlayer on Dual Hydraulic Fractures Propagation. Energies, 2020, 13, 555.	1.6	4
46	A mathematical model for fault activation by water injection. Lecture Notes in Civil Engineering, 2020, , 775-780.	0.3	0
47	Using geodetic data in geothermal areas. The Leading Edge, 2020, 39, 883-892.	0.4	0
48	Deep Fracture Zone Reactivation During CO2 Storage at In Salah (Algeria) – A Review of Recent Modeling Studies. Springer Series in Geomechanics and Geoengineering, 2019, , 394-401.	0.0	1
49	Assessing the geomechanical stability of interbedded hydrate-bearing sediments under gas production by depressurization at NGHP-02 Site 16. Marine and Petroleum Geology, 2019, 108, 648-659.	1.5	35
50	Fault Stability Perturbation by Thermal Pressurization and Stress Transfer Around a Deep Geological Repository in a Clay Formation. Journal of Geophysical Research: Solid Earth, 2019, 124, 8506-8518.	1.4	23
51	Revisiting the Analytical Solutions of Heat Transport in Fractured Reservoirs Using a Generalized Multirate Memory Function. Water Resources Research, 2019, 55, 1405-1428.	1.7	15
52	Induced seismicity in geologic carbon storage. Solid Earth, 2019, 10, 871-892.	1.2	74
53	Mathematical Modelling of Fault Reactivation Induced by Water Injection. Minerals (Basel,) Tj ETQq1 1 0.784	314 rgBT /Ov	erlock 10 T
54	The Mechanism of Methane Gas Migration Through the Gas Hydrate Stability Zone: Insights From	1.4	32

Numerical Simulations. Journal of Geophysical Research: Solid Earth, 2019, 124, 4399-4427.

1.4 32

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55	TOUGH-UDEC: A simulator for coupled multiphase fluid flows, heat transfers and discontinuous deformations in fractured porous media. Computers and Geosciences, 2019, 126, 120-130.	2.0	24
56	Joint opening or hydroshearing? Analyzing a fracture zone stimulation at Fenton Hill. Geothermics, 2019, 77, 83-98.	1.5	48
57	Field and Laboratory Studies of Geomechanical Response to the Injection of CO2. , 2019, , 209-236.		13
58	Numerical Geomechanics Studies of Geological Carbon Storage (GCS). , 2019, , 237-252.		2
59	Thermal Processes During Geological Carbon Storage. , 2019, , 253-261.		Ο
60	Role of agricultural activity on land subsidence in the San Joaquin Valley, California. Journal of Hydrology, 2019, 569, 462-469.	2.3	48
61	Modeling Three-Dimensional Fluid-Driven Propagation of Multiple Fractures using TOUGH-FEMM. Rock Mechanics and Rock Engineering, 2019, 52, 611-627.	2.6	68
62	Coupled Processes Modeling in Rock Salt and Crushed Salt Including Halite Solubility Constraints: Application to Disposal of Heat-Generating Nuclear Waste. Transport in Porous Media, 2018, 124, 159-182.	1.2	11
63	Continuum Modeling of Hydraulic Fracturing in Complex Fractured Rock Masses. , 2018, , 195-217.		9
64	Permeability Variations Associated With Fault Reactivation in a Claystone Formation Investigated by Field Experiments and Numerical Simulations. Journal of Geophysical Research: Solid Earth, 2018, 123, 1694-1710.	1.4	28
65	Comparative modelling of the coupled thermal–hydraulic-mechanical (THM) processes in a heated bentonite pellet column with hydration. Environmental Earth Sciences, 2018, 77, 1.	1.3	19
66	Evaluation of the predictive capability of coupled thermo-hydro-mechanical models for a heated bentonite/clay system (HE-E) in the Mont Terri Rock Laboratory. Environmental Earth Sciences, 2017, 76, 1.	1.3	21
67	Modeling of CO 2 sequestration in coal seams: Role of CO 2 â€induced coal softening on injectivity, storage efficiency and caprock deformation. , 2017, 7, 562-578.		12
68	Study of hydraulic fracturing processes in shale formations with complex geological settings. Journal of Petroleum Science and Engineering, 2017, 152, 361-374.	2.1	43
69	A numerical manifold method model for analyzing fully coupled hydro-mechanical processes in porous rock masses with discrete fractures. Advances in Water Resources, 2017, 102, 111-126.	1.7	68
70	Modelling the Mont Terri HE-D experiment for the Thermal–Hydraulic–Mechanical response of a bedded argillaceous formation to heating. Environmental Earth Sciences, 2017, 76, 1.	1.3	25
71	Coupled thermal–hydrological–mechanical modeling of CO2-enhanced coalbed methane recovery. International Journal of Coal Geology, 2017, 179, 81-91.	1.9	49
72	TOUCH–RBSN simulator for hydraulic fracture propagation within fractured media: Model validations against laboratory experiments. Computers and Geosciences, 2017, 108, 72-85.	2.0	19

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73	Fully coupled two-phase flow and poromechanics modeling of coalbed methane recovery: Impact of geomechanics on production rate. Journal of Natural Gas Science and Engineering, 2017, 45, 474-486.	2.1	71
74	Thermal effects on geologic carbon storage. Earth-Science Reviews, 2017, 165, 245-256.	4.0	86
75	Revisiting the Fundamental Analytical Solutions of Heat and Mass Transfer: The Kernel of Multirate and Multidimensional Diffusion. Water Resources Research, 2017, 53, 9960-9979.	1.7	9
76	Effects of the distribution and evolution of the coefficient of friction along a fault on the assessment of the seismic activity associated with a hypothetical industrial-scale geologic CO2 sequestration operation. International Journal of Greenhouse Gas Control, 2017, 66, 254-263.	2.3	4
77	Coupled THMC models for bentonite in an argillite repository for nuclear waste: Illitization and its effect on swelling stress under high temperature. Engineering Geology, 2017, 230, 118-129.	2.9	53
78	Modeling fault activation and seismicity in geologic carbon storage and shale-gas fracturing: Under what conditions could a felt seismic event be induced?. , 2017, , .		1
79	Long-term thermal effects on injectivity evolution during CO2 storage. International Journal of Greenhouse Gas Control, 2017, 64, 314-322.	2.3	50
80	Influence of injection-induced cooling on deviatoric stress and shear reactivation of preexisting fractures in Enhanced Geothermal Systems. Geothermics, 2017, 70, 367-375.	1.5	23
81	Can Fault Leakage Occur Before or Without Reactivation? Results from an in Situ Fault Reactivation Experiment at Mont Terri. Energy Procedia, 2017, 114, 3167-3174.	1.8	34
82	Modeling Ground Surface Uplift During CO2 Sequestration: The Case of in Salah, Algeria. Energy Procedia, 2017, 114, 3247-3256.	1.8	5
83	Field characterization of elastic properties across a fault zone reactivated by fluid injection. Journal of Geophysical Research: Solid Earth, 2017, 122, 6583-6598.	1.4	20
84	The effects of nearby fractures on hydraulically induced fracture propagation and permeability changes. Engineering Geology, 2017, 228, 197-213.	2.9	29
85	Fully Coupled Hydro-Thermal-Mechanical Modeling of Brine Migration in Salt for Heat-Generating Nuclear Waste. , 2017, , .		0
86	Fault Reactivation and Seismicity Associated with Shale-Gas Fracturing and Geologic Carbon Storage—A Comparison from Recent Modeling Studies. , 2017, , .		1
87	Inverse modeling of ground surface uplift and pressure with iTOUGH-PEST and TOUGH-FLAC: The case of CO2 injection at In Salah, Algeria. Computers and Geosciences, 2017, 108, 98-109.	2.0	33
88	Extension of TOUGH-FLAC to the finite strain framework. Computers and Geosciences, 2017, 108, 64-71.	2.0	20
89	An overview of TOUCH-based geomechanics models. Computers and Geosciences, 2017, 108, 56-63.	2.0	49
90	Fully coupled hydro-mechanical numerical manifold modeling of porous rock with dominant fractures. Acta Geotechnica, 2017, 12, 231-252.	2.9	48

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#	Article	IF	CITATIONS
91	Failure Monitoring and Leakage Detection for Underground Storage of Compressed Air Energy in Lined Rock Caverns. Rock Mechanics and Rock Engineering, 2016, 49, 573-584.	2.6	26
92	Thermal–hydraulic–mechanical modeling of a large-scale heater test to investigate rock salt and crushed salt behavior under repository conditions for heat-generating nuclear waste. Computers and Geotechnics, 2016, 77, 120-133.	2.3	16
93	Coupled geomechanics and flow modeling of thermally induced compaction in heavy oil diatomite reservoirs under cyclic steaming. Journal of Petroleum Science and Engineering, 2016, 147, 474-484.	2.1	12
94	Fault activation and induced seismicity in geological carbon storage – Lessons learned from recent modeling studies. Journal of Rock Mechanics and Geotechnical Engineering, 2016, 8, 789-804.	3.7	150
95	Effects of in situ stress measurement uncertainties on assessment of predicted seismic activity and risk associated with a hypothetical industrial-scale geologic CO2 sequestration operation. Journal of Rock Mechanics and Geotechnical Engineering, 2016, 8, 873-885.	3.7	10
96	A practical model for fluid flow in discrete-fracture porous media by using the numerical manifold method. Advances in Water Resources, 2016, 97, 38-51.	1.7	40
97	Dynamic simulation of CO2-injection-induced fault rupture with slip-rate dependent friction coefficient. Geomechanics for Energy and the Environment, 2016, 7, 47-65.	1.2	32
98	Thermo-hydrogeomechanical modeling of vertical ground deformation during the operation of the Mutnovskii Geothermal Field. Journal of Volcanology and Seismology, 2016, 10, 138-149.	0.2	6
99	The Northwest Geysers EGS Demonstration Project, California – Part 2: Modeling and interpretation. Geothermics, 2016, 63, 120-138.	1.5	51
100	Temperature-Dependent Deformation Prediction of Oil Sand by Coupled Geomechanical and Fluid Flow Modeling. , 2016, , .		0
101	Use of a Dual-Structure Constitutive Model for Predicting the Long-Term Behavior of an Expansive Clay Buffer in a Nuclear Waste Repository. International Journal of Geomechanics, 2016, 16, .	1.3	23
102	Coupled thermal-hydrological-mechanical behavior of rock mass surrounding a high-temperature thermal energy storage cavern at shallow depth. International Journal of Rock Mechanics and Minings Sciences, 2016, 83, 149-161.	2.6	26
103	The Northwest Geysers EGS Demonstration Project, California. Geothermics, 2016, 63, 97-119.	1.5	74
104	A new second-order numerical manifold method model with an efficient scheme for analyzing free surface flow with inner drains. Applied Mathematical Modelling, 2016, 40, 1427-1445.	2.2	41
105	Coupled Hydrological-mechanical Behavior Induced by CO2Injection into the Saline Aquifer of CO2CRC Otway Project. Tunnel and Underground Space, 2016, 26, 166-180.	0.1	1
106	Fractured rock stressâ€permeability relationships from in situ data and effects of temperature and chemicalâ€mechanical couplings. Geofluids, 2015, 15, 48-66.	0.3	127
107	Geomechanical simulation of the stress tensor rotation caused by injection of cold water in a deep geothermal reservoir. Journal of Geophysical Research: Solid Earth, 2015, 120, 8422-8438.	1.4	28
108	Seismic and aseismic deformations and impact on reservoir permeability: The case of EGS stimulation at The Geysers, California, USA. Journal of Geophysical Research: Solid Earth, 2015, 120, 7863-7882.	1.4	29

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109	Development of a discontinuous approach for modeling fluid flow in heterogeneous media using the numerical manifold method. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 1932-1952.	1.7	21
110	Fault reactivation during CO <sub>2</sub> sequestration: Effects of well orientation on seismicity and leakage. , 2015, 5, 645-656.		60
111	Coupled Thermo-Hydro-Mechanical Behavior of Natural and Engineered Clay Barriers. Developments in Clay Science, 2015, 6, 329-355.	0.3	3
112	On the impact of temperatures up to 200 °C in clay repositories with bentonite engineer barrier systems: A study with coupled thermal, hydrological, chemical, and mechanical modeling. Engineering Geology, 2015, 197, 278-295.	2.9	90
113	Modeling of fault activation and seismicity by injection directly into a fault zone associated with hydraulic fracturing of shale-gas reservoirs. Journal of Petroleum Science and Engineering, 2015, 127, 377-386.	2.1	127
114	Integrated 3-D stress determination by hydraulic fracturing in multiple inclined boreholes beneath an underground cavern. International Journal of Rock Mechanics and Minings Sciences, 2015, 75, 44-55.	2.6	8
115	An effective approach for modeling fluid flow in heterogeneous media using numerical manifold method. International Journal for Numerical Methods in Fluids, 2015, 77, 459-476.	0.9	17
116	Coupled hydro-mechanical processes and fault reactivation induced by Co2 Injection in a three-layer storage formation. International Journal of Greenhouse Gas Control, 2015, 39, 432-448.	2.3	50
117	Thermal and capillary effects on the caprock mechanical stability at In Salah, Algeria. , 2015, 5, 449-461.		37
118	On continuous and discontinuous approaches for modeling groundwater flow in heterogeneous media using the Numerical Manifold Method: Model development and comparison. Advances in Water Resources, 2015, 80, 17-29.	1.7	22
119	Long-term modeling of the thermal–hydraulic–mechanical response of a generic salt repository for heat-generating nuclear waste. Engineering Geology, 2015, 193, 198-211.	2.9	42
120	Comparison of two simulators to investigate thermal–hydraulic–mechanical processes related to nuclear waste isolation in saliferous formations. Computers and Geotechnics, 2015, 66, 219-229.	2.3	15
121	A study of changes in deep fractured rock permeability due to coupled hydro-mechanical effects. International Journal of Rock Mechanics and Minings Sciences, 2015, 79, 70-85.	2.6	55
122	Degradation of the mechanical properties imaged by seismic tomography during an EGS creation at The Geysers (California) and geomechanical modeling. Physics of the Earth and Planetary Interiors, 2015, 240, 82-94.	0.7	11
123	A sequential implicit algorithm of chemo-thermo-poro-mechanics for fractured geothermal reservoirs. Computers and Geosciences, 2015, 76, 59-71.	2.0	31
124	The Northwest Geysers EGS Demonstration Project, California: Pre-stimulation Modeling and Interpretation of the Stimulation. Mathematical Geosciences, 2015, 47, 3-29.	1.4	67
125	Coupled THM Modeling of Hydroshearing Stimulation in Tight Fractured Volcanic Rock. Transport in Porous Media, 2015, 108, 131-150.	1.2	55
126	Coupled Thermal-Hydrological-Mechanical Behavior of Rock Mass Surrounding Cavern Thermal Energy Storage. Tunnel and Underground Space, 2015, 25, 155-167.	0.1	2

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127	Effects of Hydrological Condition on the Coupled Thermal-Hydrological-Mechanical Behavior of Rock Mass Surrounding Cavern Thermal Energy Storage. Tunnel and Underground Space, 2015, 25, 168-185.	0.1	0
128	Dynamic modeling of injection-induced fault reactivation and ground motion and impact on surface structures and human perception. Energy Procedia, 2014, 63, 3379-3389.	1.8	4
129	Effects of faultâ€zone architecture on earthquake magnitude and gas leakage related to CO <sub>2</sub> injection in a multiâ€layered sedimentary system. , 2014, 4, 99-120.		60
130	Energyâ€workâ€based numerical manifold seepage analysis with an efficient scheme to locate the phreatic surface. International Journal for Numerical and Analytical Methods in Geomechanics, 2014, 38, 1633-1650.	1.7	36
131	Sensitivity analysis for fault reactivation in potential CO2-EOR site with multi-layers of permeable and impermeable formations. Geosystem Engineering, 2014, 17, 253-263.	0.7	5
132	TOUGH–RDCA modeling of multiple fracture interactions in caprock during CO2 injection into a deep brine aquifer. Computers and Geosciences, 2014, 65, 24-36.	2.0	34
133	An Approach for Modeling Rock Discontinuous Mechanical Behavior Under Multiphase Fluid Flow Conditions. Rock Mechanics and Rock Engineering, 2014, 47, 589-603.	2.6	35
134	Modeling of Coupled Thermo-Hydro-Mechanical Processes with Links to Geochemistry Associated with Bentonite-Backfilled Repository Tunnels in Clay Formations. Rock Mechanics and Rock Engineering, 2014, 47, 167-186.	2.6	92
135	ISRM Suggested Method for Step-Rate Injection Method for Fracture In-Situ Properties (SIMFIP): Using a 3-Components Borehole Deformation Sensor. Rock Mechanics and Rock Engineering, 2014, 47, 303-311.	2.6	53
136	Operator matrix and non-uniqueness of Beltrami–Schaefer stress functions. Acta Mechanica, 2014, 225, 1761-1768.	1.1	0
137	A Discontinuous Cellular Automaton Method for Modeling Rock Fracture Propagation and Coalescence Under Fluid Pressurization Without Remeshing. Rock Mechanics and Rock Engineering, 2014, 47, 2183-2198.	2.6	8
138	Reservoir structure and properties from geomechanical modeling and microseismicity analyses associated with an enhanced geothermal system at The Geysers, California. Geothermics, 2014, 51, 460-469.	1.5	35
139	Geomechanical effects on CO2 leakage through fault zones during large-scale underground injection. International Journal of Greenhouse Gas Control, 2014, 20, 117-131.	2.3	133
140	Model evaluation of geochemically induced swelling/shrinkage in argillaceous formations for nuclear waste disposal. Applied Clay Science, 2014, 97-98, 24-32.	2.6	14
141	The effects of lateral property variations on fault-zone reactivation by fluid pressurization: Application to CO2 pressurization effects within major and undetected fault zones. Journal of Structural Geology, 2014, 62, 97-108.	1.0	34
142	The impacts of mechanical stress transfers caused by hydromechanical and thermal processes on fault stability during hydraulic stimulation in a deep geothermal reservoir. International Journal of Rock Mechanics and Minings Sciences, 2014, 72, 149-163.	2.6	58
143	CO2 storage and potential fault instability in the St. Lawrence Lowlands sedimentary basin (Quebec,) Tj ETQq1 Greenhouse Gas Control, 2014, 22, 88-110.	1 0.784314 2.3	4 rgBT /Over 27
144	Hydro-mechanical model for wetting/drying and fracture development in geomaterials. Computers and Geosciences, 2014, 65, 13-23.	2.0	54

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145	A 3D hydrogeological and geomechanical model of an Enhanced Geothermal System at The Geysers, California. Geothermics, 2014, 51, 240-252.	1.5	43
146	Long term impacts of cold CO2 injection on the caprock integrity. International Journal of Greenhouse Gas Control, 2014, 24, 1-13.	2.3	93
147	Modeling of induced seismicity and ground vibrations associated with geologic CO2 storage, and assessing their effects on surface structures and human perception. International Journal of Greenhouse Gas Control, 2014, 24, 64-77.	2.3	47
148	The Effect of Stress on Flow and Transport in Fractured Rock Masses Using an Extended Multiple Interacting Continua Method with Crack Tensor Theory. Nuclear Technology, 2014, 187, 158-168.	0.7	7
149	Geomechanical Model Analysis for the Evaluation of Mechanical Stability of Unconsolidated Sediments during Gas Hydrate Development and Production. Tunnel and Underground Space, 2014, 24, 143-154.	0.1	2
150	Coupled Hydro-mechanical Processes Associated with Multiphase Flow in a Dual-continuum System: Formulations and an Application. Rock Mechanics and Rock Engineering, 2013, 46, 1103-1112.	2.6	18
151	Characterizing Excavation Damaged Zone and Stability of Pressurized Lined Rock Caverns for Underground Compressed Air Energy Storage. Rock Mechanics and Rock Engineering, 2013, 46, 1113-1124.	2.6	57
152	Probabilistic Analysis of Fracture Reactivation Associated with Deep Underground CO2 Injection. Rock Mechanics and Rock Engineering, 2013, 46, 801-820.	2.6	20
153	Modeling of caprock discontinuous fracturing during CO2 injection into a deep brine aquifer. International Journal of Greenhouse Gas Control, 2013, 19, 559-575.	2.3	35
154	Coupled seismo-hydromechanical monitoring of inelastic effects on injection-induced fracture permeability. International Journal of Rock Mechanics and Minings Sciences, 2013, 61, 266-274.	2.6	27
155	Linked multicontinuum and crack tensor approach for modeling of coupled geomechanics, fluid flow and transport in fractured rock. Journal of Rock Mechanics and Geotechnical Engineering, 2013, 5, 18-31.	3.7	74
156	Non-uniqueness of Beltrami–Schaefer Stress Functions. Journal of Elasticity, 2013, 113, 283-288.	0.9	4
157	Ground Heaving and Leakage Analysis for Sequestration of CO2 in Geological Media Considering Fractures in Caprock. Energy Procedia, 2013, 37, 4504-4510.	1.8	1
158	Impact of stress on solute transport in a fracture network: A comparison study. Journal of Rock Mechanics and Geotechnical Engineering, 2013, 5, 110-123.	3.7	33
159	Geomechanical Modeling of Fault Responses and the Potential for Notable Seismic Events During Underground CO2 Injection. Energy Procedia, 2013, 37, 4774-4784.	1.8	14
160	Modeling of deep fracture zone opening and transient ground surface uplift at KB-502 CO2 injection well, In Salah, Algeria. International Journal of Greenhouse Gas Control, 2013, 12, 155-167.	2.3	132
161	Development of TOUGH-FrontISTR, a Numerical Simulator for Environmental Impact Assessment of CO2 Geological Storage. Energy Procedia, 2013, 37, 3655-3662.	1.8	4
162	Gas Hydrates as a Potential Energy Source: State of Knowledge and Challenges. , 2013, , 977-1033.		21

#	Article	IF	CITATIONS
163	Modeling of fault reactivation and induced seismicity during hydraulic fracturing of shale-gas reservoirs. Journal of Petroleum Science and Engineering, 2013, 107, 31-44.	2.1	216
164	Normal-stress dependence of fracture hydraulic properties including two-phase flow properties. Hydrogeology Journal, 2013, 21, 371-382.	0.9	68
165	Monitoring deformation at the Geysers Geothermal Field, California using Câ€band and Xâ€band interferometric synthetic aperture radar. Geophysical Research Letters, 2013, 40, 2567-2572.	1.5	50
166	Modeling Ground Deformations and Potential for Induced Micro-Seismicity at the In Salah CO 2 Storage Operation, Algeria. , 2013, , .		1
167	ISRM Suggested Method for Step-Rate Injection Method for Fracture In-Situ Properties (SIMFIP): Using a 3-Components Borehole Deformation Sensor. , 2013, , 179-186.		7
168	The fracturing of heterogeneous caprock during CO2 injection into a brine aquifer. , 2013, , 415-418.		0
169	Numerical Studies on Two-Way Coupled Fluid Flow and Geomechanics in Hydrate Deposits. SPE Journal, 2012, 17, 485-501.	1.7	67
170	Seismic rupture and ground accelerations induced by CO2 injection in the shallow crust. Geophysical Journal International, 2012, 190, 1784-1789.	1.0	78
171	Coupled multiphase fluid flow and wellbore stability analysis associated with gas production from oceanic hydrate-bearing sediments. Journal of Petroleum Science and Engineering, 2012, 92-93, 65-81.	2.1	133
172	Multiphysics processes in partially saturated fractured rock: Experiments and models from Yucca Mountain. Reviews of Geophysics, 2012, 50, .	9.0	21
173	Coupled flow and geomechanical analysis for gas production in the Prudhoe Bay Unit L-106 well Unit C gas hydrate deposit in Alaska. Journal of Petroleum Science and Engineering, 2012, 92-93, 143-157.	2.1	28
174	Induced seismicity within geological carbon sequestration projects: Maximum earthquake magnitude and leakage potential from undetected faults. International Journal of Greenhouse Gas Control, 2012, 10, 434-442.	2.3	142
175	Formulation and sequential numerical algorithms of coupled fluid/heat flow and geomechanics for multiple porosity materials. International Journal for Numerical Methods in Engineering, 2012, 92, 425-456.	1.5	91
176	The Geomechanics of CO2 Storage in Deep Sedimentary Formations. Geotechnical and Geological Engineering, 2012, 30, 525-551.	0.8	496
177	Exploring the concept of compressed air energy storage (CAES) in lined rock caverns at shallow depth: A modeling study of air tightness and energy balance. Applied Energy, 2012, 92, 653-667.	5.1	133
178	Modeling of coupled thermodynamic and geomechanical performance of underground compressed air energy storage in lined rock caverns. International Journal of Rock Mechanics and Minings Sciences, 2012, 52, 71-81.	2.6	106
179	Impact of CO <sub>2</sub> geological sequestration on the nucleation of earthquakes. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	168
180	Status of the TOUGH-FLAC simulator and recent applications related to coupled fluid flow and crustal deformations. Computers and Geosciences, 2011, 37, 739-750.	2.0	277

#	Article	IF	CITATIONS
181	Implementation of the Barcelona Basic Model into TOUGH–FLAC for simulations of the geomechanical behavior of unsaturated soils. Computers and Geosciences, 2011, 37, 751-762.	2.0	63
182	Geomechanical Performance Analysis of Potential Long-Term Tests of Gas Production from Hydrate Deposits in North Slope, Alaska. , 2011, , .		8
183	Constitutive Relationships for Elastic Deformation of Clay Rock: Data Analysis. Rock Mechanics and Rock Engineering, 2011, 44, 463-468.	2.6	21
184	Modeling of coupled deformation and permeability evolution during fault reactivation induced by deep underground injection of CO2. International Journal of Greenhouse Gas Control, 2011, 5, 336-346.	2.3	357
185	Non-isothermal flow in low permeable porous media: a comparison of Richards' and two-phase flow approaches. Environmental Earth Sciences, 2011, 62, 1197-1207.	1.3	68
186	Coupled non-isothermal, multiphase fluid flow, and geomechanical modeling of ground surface deformations and potential for induced micro-seismicity at the In Salah CO2 storage operation. Energy Procedia, 2011, 4, 3542-3549.	1.8	50
187	Challenges, Uncertainties, and Issues Facing Gas Production From Gas-Hydrate Deposits. SPE Reservoir Evaluation and Engineering, 2011, 14, 76-112.	1.1	257
188	Geomechanical aspects of CO2 sequestration and modeling. , 2011, , 1803-1808.		1
189	Challenges, Uncertainties and Issues Facing Gas Production from Hydrate Deposits in Geologic Systems. , 2010, , .		13
190	Coupled reservoir-geomechanical analysis of CO2 injection and ground deformations at In Salah, Algeria. International Journal of Greenhouse Gas Control, 2010, 4, 225-230.	2.3	301
191	A New Coal-Permeability Model: Internal Swelling Stress and Fracture–Matrix Interaction. Transport in Porous Media, 2010, 82, 157-171.	1.2	320
192	Estimation of deformation and stiffness of fractures close to tunnels using data from single-hole hydraulic testing and grouting. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 887-893.	2.6	25
193	Geomechanical response of permafrost-associated hydrate deposits to depressurization-induced gas production. Journal of Petroleum Science and Engineering, 2009, 67, 1-12.	2.1	175
194	Pressure analysis of the hydromechanical fracture behaviour in stimulated tight sedimentary geothermal reservoirs. Geothermics, 2009, 38, 211-226.	1.5	19
195	Model development and calibration for the coupled thermal, hydraulic and mechanical phenomena of the bentonite. Environmental Geology, 2009, 57, 1255-1261.	1.2	15
196	Modeling of damage, permeability changes and pressure responses during excavation of the TSX tunnel in granitic rock at URL, Canada. Environmental Geology, 2009, 57, 1263-1274.	1.2	52
197	A multiple-code simulation study of the long-term EDZ evolution of geological nuclear waste repositories. Environmental Geology, 2009, 57, 1313-1324.	1.2	42
198	A comparative simulation study of coupled THM processes and their effect on fractured rock permeability around nuclear waste repositories. Environmental Geology, 2009, 57, 1347-1360.	1.2	50

#	Article	IF	CITATIONS
199	Characterising and modelling the excavation damaged zone in crystalline rock in the context of radioactive waste disposal. Environmental Geology, 2009, 57, 1275-1297.	1.2	81
200	A case study on the influence of THM coupling on the near field safety of a spent fuel repository in sparsely fractured granite. Environmental Geology, 2009, 57, 1239-1254.	1.2	19
201	Chemically and mechanically mediated influences on the transport and mechanical characteristics of rock fractures. International Journal of Rock Mechanics and Minings Sciences, 2009, 46, 80-89.	2.6	67
202	On the relationship between stress and elastic strain for porous and fractured rock. International Journal of Rock Mechanics and Minings Sciences, 2009, 46, 289-296.	2.6	189
203	Coupled reservoir-geomechanical analysis of CO2 injection at In Salah, Algeria. Energy Procedia, 2009, 1, 1847-1854.	1.8	76
204	Modeling crustal deformation and rupture processes related to upwelling of deep CO <sub>2</sub> â€rich fluids during the 1965–1967 Matsushiro earthquake swarm in Japan. Journal of Geophysical Research, 2009, 114, .	3.3	109
205	Numerical Studies on the Geomechanical Stability of Hydrate-Bearing Sediments. SPE Journal, 2009, 14, 267-282.	1.7	117
206	Mesoscale characterization of coupled hydromechanical behavior of a fractured-porous slope in response to free water-surface movement. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 862-878.	2.6	21
207	A comparative review of hydrologic issues involved in geologic storage of CO2 and injection disposal of liquid waste. Environmental Geology, 2008, 54, 1723-1737.	1.2	89
208	A method for quick assessment of CO2 storage capacity in closed and semi-closed saline formations. International Journal of Greenhouse Gas Control, 2008, 2, 626-639.	2.3	343
209	Coupled reservoir–geomechanical analysis of the potential for tensile and shear failure associated with CO2 injection in multilayered reservoir–caprock systems. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 132-143.	2.6	290
210	Analysis of thermally induced changes in fractured rock permeability during 8 years of heating and cooling at the Yucca Mountain Drift Scale Test. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 1373-1389.	2.6	78
211	Estimation of fracture flow parameters through numerical analysis of hydromechanical pressure pulses. Water Resources Research, 2008, 44, .	1.7	32
212	Results from an International Simulation Study on Coupled Thermal, Hydrological, and Mechanical Processes near Geological Nuclear Waste Repositories. Nuclear Technology, 2008, 163, 101-109.	0.7	54
213	Coupled Hydrologic, Thermal and Geomechanical Analysis of Well Bore Stability in Hydrate-Bearing Sediments. , 2008, , .		16
214	A new approach to in situ characterization of rock slope discontinuities. , 2008, , 711-717.		0
215	Numerical Studies on the Geomechanical Stability of Hydrate-Bearing Sediments. , 2007, , .		40
216	Fractured rock hydromechanics: from borehole testing to solute transport and CO <sub>2</sub> storage. Geological Society Special Publication, 2007, 284, 15-34.	0.8	12

#	Article	IF	CITATIONS
217	A new parameter to assess hydromechanical effects in single-hole hydraulic testing and grouting. International Journal of Rock Mechanics and Minings Sciences, 2007, 44, 1011-1021.	2.6	21
218	Estimating maximum sustainable injection pressure during geological sequestration of CO2 using coupled fluid flow and geomechanical fault-slip analysis. Energy Conversion and Management, 2007, 48, 1798-1807.	4.4	382
219	Fractured reservoirs: An analysis of coupled elastodynamic and permeability changes from pore-pressure variation. Geophysics, 2006, 71, O33-O41.	1.4	36
220	Hydromechanical modelling of pulse tests that measure fluid pressure and fracture normal displacement at the Coaraze Laboratory site, France. International Journal of Rock Mechanics and Minings Sciences, 2006, 43, 1062-1082.	2.6	64
221	Coupled thermal–hydrological–mechanical analyses of the Yucca Mountain Drift Scale Test—Comparison of field measurements to predictions of four different numerical models. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 680-697.	2.6	89
222	Numerical study of the THM effects on the near-field safety of a hypothetical nuclear waste repository—BMT1 of the DECOVALEX III project. Part 1: Conceptualization and characterization of the problems and summary of results. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 720-730.	2.6	28
223	Numerical study of the THM effects on the near-field safety of a hypothetical nuclear waste repository—BMT1 of the DECOVALEX III project. Part 2: Effects of THM coupling in continuous and homogeneous rocks. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 731-744.	2.6	29
224	A numerical study of THM effects on the near-field safety of a hypothetical nuclear waste repository—BMT1 of the DECOVALEX III project. Part 3: Effects of THM coupling in sparsely fractured rocks. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 745-755.	2.6	64
225	Thermally induced mechanical and permeability changes around a nuclear waste repository—a far-field study based on equivalent properties determined by a discrete approach. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 765-780.	2.6	46
226	The FEBEX benchmark test: case definition and comparison of modelling approaches. International Journal of Rock Mechanics and Minings Sciences, 2005, 42, 611-638.	2.6	125
227	Coupled hydromechanical effects of CO2 injection. Developments in Water Science, 2005, 52, 649-679.	0.1	11
228	A Fully Coupled Three-Dimensional THM Analysis of the Febex in Situ Test with the Rocmas Code: Prediction of THM Behavior in a Bentonite Barrier. Elsevier Geo-Engineering Book Series, 2004, 2, 143-148.	0.0	7
229	Evaluation of the Impact of Thermal-Hydrological-Mechanical Couplings in Bentonite and Near-Field Rock Barriers of a Nuclear Waste Repository in Sparsely Fractured Hard Rock. Elsevier Geo-Engineering Book Series, 2004, 2, 217-223.	0.0	1
230	A Block-Scale Stress-Permeability Relationship of a Fractured Rock Determined by Numerical Experiments. Elsevier Geo-Engineering Book Series, 2004, 2, 269-274.	0.0	1
231	Analysis of Stress and Moisture Induced Changes in Fractured Rock Permeability at the Yucca Mountain Drift Scale Test. Elsevier Geo-Engineering Book Series, 2004, 2, 161-166.	0.0	6
232	Comparative Analyses of Predicted and Measured Displacements During the Heating Phase of the Yucca Mountain Drift Scale Test. Elsevier Geo-Engineering Book Series, 2004, , 187-192.	0.0	1
233	Building Confidence in the Mathematical Models by Calibration with a T-H-M Field Experiment. Elsevier Geo-Engineering Book Series, 2004, 2, 193-198.	0.0	6
234	Upscaling of Normal Stress-Permeability Relationships for Fracture Networks Obeying Fractional Levy Motion. Elsevier Geo-Engineering Book Series, 2004, , 263-268.	0.0	3

#	Article	IF	CITATIONS
235	Analyses of Coupled Hydrological-Mechanical Effects During Drilling of the FEBEX Tunnel at Grimsel. Elsevier Geo-Engineering Book Series, 2004, 2, 131-136.	0.0	2
236	Code intercomparison builds confidence in numerical simulation models for geologic disposal of CO2. Energy, 2004, 29, 1431-1444.	4.5	174
237	Modeling of recent volcanic episodes at Phlegrean Fields (Italy): geochemical variations and ground deformation. Geothermics, 2004, 33, 531-547.	1.5	100
238	Stress-dependent permeability of fractured rock masses: a numerical study. International Journal of Rock Mechanics and Minings Sciences, 2004, 41, 1191-1210.	2.6	417
239	Evaluation of Thm Coupling on the Safety Assessment of a Nuclear Fuel Waste Repository in a Homogeneous Hard Rock. Elsevier Geo-Engineering Book Series, 2004, 2, 211-216.	0.0	2
240	The role of hydromechanical coupling in fractured rock engineering. Hydrogeology Journal, 2003, 11, 7-40.	0.9	526
241	Analysis of thermal–hydrologic–mechanical behavior near an emplacement drift at Yucca Mountain. Journal of Contaminant Hydrology, 2003, 62-63, 637-652.	1.6	69
242	Code Intercomparison Builds Confidence in Numerical Models for Geologic Disposal of CO2. , 2003, , 463-468.		14
243	A study of caprock hydromechanical changes associated with CO2-injection into a brine formation. Environmental Geology, 2002, 42, 296-305.	1.2	389
244	A modeling approach for analysis of coupled multiphase fluid flow, heat transfer, and deformation in fractured porous rock. International Journal of Rock Mechanics and Minings Sciences, 2002, 39, 429-442.	2.6	667
245	Hydro-mechanical response of a fractured granitic rock mass to excavation of a test pit — the Kamaishi Mine experiment in Japan. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 79-94.	2.6	34
246	Thermo-hydro-mechanical characterisation of a bentonite-based buffer material by laboratory tests and numerical back analyses. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 95-104.	2.6	71
247	Thermohydromechanics of partially saturated geological media: governing equations and formulation of four finite element models. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 105-127.	2.6	214
248	Coupled thermo-hydro-mechanical analysis of a heater test in fractured rock and bentonite at Kamaishi Mine — comparison of field results to predictions of four finite element codes. International Journal of Rock Mechanics and Minings Sciences, 2001, 38, 129-142.	2.6	81
249	Uncertainty in the maximum principal stress estimated from hydraulic fracturing measurements due to the presence of the induced fracture. International Journal of Rock Mechanics and Minings Sciences, 2000, 37, 107-120.	2.6	108
250	Determination of fracture storativity in hard rocks using high-pressure injection testing. Water Resources Research, 1998, 34, 2551-2560.	1.7	92
251	Hydraulic field measurements of incompletely closed fractures in granite. International Journal of Rock Mechanics and Minings Sciences, 1997, 34, 267.e1-267.e13.	2.6	3
252	A cyclic hydraulic jacking test to determine the in situ stress normal to a fracture. International Journal of Rock Mechanics and Mining Sciences, 1996, 33, 695-711.	0.3	48

#	Article	IF	CITATIONS
253	Hydraulic pulse testing of single fractures in porous and deformable hard rocks. Quarterly Journal of Engineering Geology and Hydrogeology, 1996, 29, 181-192.	0.8	16
254	The DECOVALEX test—Case one. International Journal of Rock Mechanics and Mining Sciences, 1995, 32, 399-408.	0.3	13
255	Determination of hydraulic normal stiffness of fractures in hard rock from well testing. International Journal of Rock Mechanics and Mining Sciences, 1995, 32, 513-523.	0.3	50
256	Theoretical and field studies of coupled hydromechanical behaviour of fractured rocks—2. Field experiment and modelling. International Journal of Rock Mechanics and Mining Sciences, 1992, 29, 411-419.	0.3	23