Antonio P Rinaldi

List of Publications by Year
in descending order

68	2,852	201385	189595
papers	citations	27 h-index	50 g-index

96	96	96	2308
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The November 2017 M _w 5.5 Pohang earthquake: A possible case of induced seismicity in South Korea. Science, 2018, 360, 1003-1006.	6.0	325
2	Current challenges in monitoring, discrimination, and management of induced seismicity related to underground industrial activities: A European perspective. Reviews of Geophysics, 2017, 55, 310-340.	9.0	235
3	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
4	Fault activation and induced seismicity in geological carbon storage â€“ Lessons learned from recent modeling studies. Journal of Rock Mechanics and Geotechnical Engineering, 2016, 8, 789-804.	3.7	150
5	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
6	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
7	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
8	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
9	Modeling of unrest signals in heterogeneous hydrothermal systems. Journal of Geophysical Research, 2010, 115, .	3.3	64
10	Hydrothermal instability and ground displacement at the Campi Flegrei caldera. Physics of the Earth and Planetary Interiors, 2010, 178, 155-161.	0.7	63
11	Buoyancy Effects on Upward Brine Displacement Caused by CO2 Injection. Transport in Porous Media, 2011, 87, 525-540.	1.2	62
12	Effects of faultâ€zone architecture on earthquake magnitude and gas leakage related to CO₂ injection in a multiâ€layered sedimentary system. , 2014, 4, 99-120.		60
13	Fault reactivation during CO₂ sequestration: Effects of well orientation on seismicity and leakage. , 2015, 5, 645-656.		60
14	Coupled THM Modeling of Hydroshearing Stimulation in Tight Fractured Volcanic Rock. Transport in Porous Media, 2015, 108, 131-150.	1.2	55
15	On the physicsâ€based processes behind productionâ€induced seismicity in natural gas fields. Journal of Geophysical Research: Solid Earth, 2017, 122, 3792-3812.	1.4	55
16	The Effect of a Mainshock on the Size Distribution of the Aftershocks. Geophysical Research Letters, 2018, 45, 13,277.	1.5	52
17	The importance of earthquake interactions for injectionâ€induced seismicity: Retrospective modeling of the Basel Enhanced Geothermal System. Geophysical Research Letters, 2016, 43, 4992-4999.	1.5	51
18	Long-term thermal effects on injectivity evolution during CO2 storage. International Journal of Greenhouse Gas Control, 2017, 64, 314-322.	2.3	50

#	Article	IF	Citations
19	Joint opening or hydroshearing? Analyzing a fracture zone stimulation at Fenton Hill. Geothermics, 2019, 77, 83-98.	1.5	48
20	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
21	Electrical conductivity, ground displacement, gravity changes, and gas flow at Solfatara crater (Campi Flegrei caldera, Italy): Results from numerical modeling. Journal of Volcanology and Geothermal Research, 2011, 207, 93-105.	0.8	37
22	Thermal and capillary effects on the caprock mechanical stability at In Salah, Algeria. , 2015, 5, 449-461.		37
23	The influence of faulting style on the size-distribution of global earthquakes. Earth and Planetary Science Letters, 2019, 527, 115791.	1.8	36
24	Effects of atmospheric conditions on surface diffuse degassing. Journal of Geophysical Research, 2012, 117, .	3.3	34
25	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
26	Periodic behavior of soil CO₂ emissions in diffuse degassing areas of the Azores archipelago: Application to seismovolcanic monitoring. Journal of Geophysical Research: Solid Earth, 2014, 119, 7578-7597.	1.4	33
27	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
28	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
29	Fault sealing and caprock integrity for CO₂ storage: an in situ injection experiment. Solid Earth, 2021, 12, 319-343.	1.2	32
30	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
31	Evaluating thermal losses and storage capacity in high-temperature aquifer thermal energy storage (HT-ATES) systems with well operating limits: insights from a study-case in the Greater Geneva Basin, Switzerland. Geothermics, 2020, 85, 101773.	1.5	28
32	Anatomy of a fumarolic system inferred from a multiphysics approach. Scientific Reports, 2018, 8, 7580.	1.6	27
33	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
34	Induced seismicity risk analysis of the hydraulic stimulation of a geothermal well on Geldinganes, Iceland. Natural Hazards and Earth System Sciences, 2020, 20, 1573-1593.	1.5	23
35	TOUGH2-seed: A coupled fluid flow and mechanical-stochastic approach to model injection-induced seismicity. Computers and Geosciences, 2017, 108, 86-97.	2.0	21
36	Modeling earthquake effects on groundwater levels: evidences from the 2012 Emilia earthquake (Italy). Geofluids, 2016, 16, 452-463.	0.3	19

#	Article	IF	Citations
37	Combined approach of poroelastic and earthquake nucleation applied to the reservoir-induced seismic activity in the Val dâ€™Agri area, Italy. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 802-810.	3.7	17
38	Shale fault zone structure and stress dependent anisotropic permeability and seismic velocity properties (Opalinus Clay, Switzerland). Journal of Structural Geology, 2021, 144, 104273.	1.0	17
39	Multi-disciplinary characterizations of the BedrettoLab â€“ a new underground geoscience research facility. Solid Earth, 2022, 13, 301-322.	1.2	17
40	Hydromechanical Modeling of Fault Reactivation in the St.ÂGallen Deep Geothermal Project (Switzerland): Poroelasticity or Hydraulic Connection?. Geophysical Research Letters, 2020, 47, e2019GL085201.	1.5	15
41	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
42	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
43	Fault reactivation induced by tunneling activity in clay material: Hints from numerical modeling. Tunnelling and Underground Space Technology, 2020, 102, 103453.	3.0	14
44	Impact of injection rate ramp-up on nucleation and arrest of dynamic fault slip. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2022, 8, .	1.3	13
45	Accuracy of fully coupled and sequential approaches for modeling hydro- and geomechanical processes. Computational Geosciences, 2020, 24, 1707-1723.	1.2	12
46	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
47	Simultaneous Dependence of the Earthquakeâ€Size Distribution on Faulting Style and Depth. Geophysical Research Letters, 2019, 46, 11044-11053.	1.5	10
48	Effects of layered crust on the coseismic slip inversion and related CFF variations: Hints from the 2012 Emilia Romagna earthquake. Physics of the Earth and Planetary Interiors, 2017, 273, 23-35.	0.7	9
49	Monitoring microseismicity of the Hengill Geothermal Field in Iceland. Scientific Data, 2022, 9, 220.	2.4	9
50	The Effect of Fault Architecture on Slip Behavior in Shale Revealed by Distributed Fiber Optic Strain Sensing. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	7
51	Potential influence of overpressurized gas on the induced seismicity in the St.ÂGallen deep geothermal project (Switzerland). Solid Earth, 2020, 11, 909-933.	1.2	6
52	Modeling Ground Surface Uplift During CO2 Sequestration: The Case of in Salah, Algeria. Energy Procedia, 2017, 114, 3247-3256.	1.8	5
53	Preface: Interdisciplinary contributions from the Division on Energy, Resources and the Environment at the EGU General Assembly 2019. Advances in Geosciences, 0, 49, 31-35.	12.0	5
54	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

#	Article	IF	Citations
55	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
56	Hydro-mechanical fault reactivation modeling based on elasto-plasticity with embedded weakness planes. Journal of Rock Mechanics and Geotechnical Engineering, 2020, 12, 877-885.	3.7	4
57	Preface: Special issue from the Division on Energy, Resources and the Environment at EGU2020: Sharing geoscience online. Advances in Geosciences, 0, 54, 1-5.	12.0	4
58	Numerical Geomechanics Studies of Geological Carbon Storage (GCS). , 2019, , 237-252.		2
59	Preface to the special issue of the Division Energy, Resources and the Environment at vEGU2021: Gather onlineâ€‹â€‹â€‹â€‹â€‹â€‹â€‹. Advances in Geosciences, 0, 56, 13-18.	12.0	2
60	CO2 Sequestration: Studying Caprock And Fault Sealing Integrity, The CS-D Experiment In Mont Terri. , 2018, , .		2
61	Spectral boundary integral method for simulating static and dynamic fields from a fault rupture in a poroelastodynamic solid. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2022, 8, 73.	1.3	2
62	Modeling Ground Deformations and Potential for Induced Micro-Seismicity at the In Salah CO 2 Storage Operation, Algeria. , 2013, , .		1
63	Fault Reactivation and Seismicity Associated with Shale-Gas Fracturing and Geologic Carbon Storageâ€”A Comparison from Recent Modeling Studies. , 2017, , .		1
64	Deep Fracture Zone Reactivation During CO2 Storage at In Salah (Algeria) â€“ A Review of Recent Modeling Studies. Springer Series in Geomechanics and Geoengineering, 2019, , 394-401.	0.0	1
65	Preface to the special issue â€œInduced seismicity: observations, monitoring, and risk management strategiesâ€• Journal of Seismology, 2020, 24, 917-919.	0.6	1
66	Fluid pressure monitoring during hydraulic testing in faulted Opalinus Clay using seismic velocity observations. Geophysics, 0, , 1-41.	1.4	1
67	Effects of Asperity Distribution on Fluid Flow and Induced Seismicity During Deep Geothermal Exploitation. Energy Procedia, 2016, 97, 470-477.	1.8	0
68	Seismicity Rate Change as a Tool to Investigate Delayed and Remote Triggering of the 2010â€“2011 Canterbury Earthquake Sequence, New Zealand. Bulletin of the Seismological Society of America, 0, , .	1.1	0