Satya Harpalani

List of Publications by Year in descending order

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Version: 2024-02-01

40 papers	2,623 citations	236925 25 h-index	315739 38 g-index
40 all docs	40 docs citations	40 times ranked	1349 citing authors

#	Article	IF	Citations
1	Flow regime evolution and stress-dependent permeability in nanoporous rocks. Fuel, 2022, 310, 122413.	6.4	3
2	Geomechanical and flow implications with continued bioconversion of coal to methane: Experiments and modeling. Fuel, 2021, 292, 120293.	6.4	6
3	The role of sorption-induced coal matrix shrinkage on permeability and stress evolutions under replicated in situ condition for CBM reservoirs. Fuel, 2021, 294, 120530.	6.4	27
4	Impact of bioconversion on matrix strain response of coal reservoirs: Part 2-Reservoir insights. Fuel, 2019, 239, 1376-1387.	6.4	3
5	Impact of bioconversion on matrix strain response of coal reservoirs: Part 1-Experimental insights. Fuel, 2019, 239, 1363-1375.	6.4	8
6	Anisotropy of coal at various scales and its variation with sorption. International Journal of Coal Geology, 2019, 201, 14-25.	5.0	16
7	Experimental investigation of in situ stress relaxation on deformation behavior and permeability variation of coalbed methane reservoirs during primary depletion. Journal of Natural Gas Science and Engineering, 2018, 53, 1-11.	4.4	20
8	Modeling of microbial methane generation from coal and assessment of its impact on flow behavior. Fuel, 2018, 216, 274-283.	6.4	11
9	The effective stress law for stress-sensitive transversely isotropic rocks. International Journal of Rock Mechanics and Minings Sciences, 2018, 101, 69-77.	5.8	30
10	Stress path with depletion in coalbed methane reservoirs and stress based permeability modeling. International Journal of Coal Geology, 2018, 185, 12-22.	5.0	38
11	An imaging and fractal approach towards understanding reservoir scale changes in coal due to bioconversion. Fuel, 2018, 230, 282-297.	6.4	30
12	Optimized pressure pulse-decay method for laboratory estimation of gas permeability of sorptive reservoirs: Part 1 â€“ Background and numerical analysis. Fuel, 2017, 191, 555-564.	6.4	31
13	Optimized pressure pulse-decay method for laboratory estimation of gas permeability of sorptive reservoirs: Part 2 - Experimental study. Fuel, 2017, 191, 565-573.	6.4	27
14	A formation water-based nutrient recipe for potentially increasing methane release from coal in situ. Fuel, 2017, 209, 498-508.	6.4	26
15	Characterization of Swelling Modulus and Effective Stress Coefficient Accommodating Sorption-Induced Swelling in Coal. Energy & Fuels, 2017, 31, 8843-8851.	5.1	25
16	Evaluation of Various Pulse-Decay Laboratory Permeability Measurement Techniques for Highly Stressed Coals. Rock Mechanics and Rock Engineering, 2017, 50, 297-308.	5.4	36
17	Anisotropy characteristics of coal shrinkage/swelling and its impact on coal permeability evolution with CO₂ injection. , 2016, 6, 615-632.		64
18	Changes in gas storage and transport properties of coal as a result of enhanced microbial methane generation. Fuel, 2016, 179, 114-123.	6.4	22

#	Article	IF	Citations
19	Optimization of methane production from bituminous coal through biogasification. Applied Energy, 2016, 183, 31-42.	10.1	45
20	Coal depolymerization using permanganate under optimal conditions. International Journal of Coal Geology, 2016, 168, 214-221.	5.0	11
21	Finding cost-effective nutrient solutions and evaluating environmental conditions for biogasifying bituminous coal to methane ex situ. Applied Energy, 2016, 165, 559-568.	10.1	45
22	Laboratory measurement of stress-dependent coal permeability using pulse-decay technique and flow modeling with gas depletion. Fuel, 2016, 177, 76-86.	6.4	65
23	Characterizing microbial communities dedicated for conversion of coal to methane in situ and ex situ. International Journal of Coal Geology, 2015, 146, 145-154.	5.0	65
24	A metaproteomic approach for identifying proteins in anaerobic bioreactors converting coal to methane. International Journal of Coal Geology, 2015, 146, 91-103.	5.0	31
25	Evaluation of in situ stress changes with gas depletion of coalbed methane reservoirs. Journal of Geophysical Research: Solid Earth, 2014, 119, 6263-6276.	3.4	71
26	Compressibility of sorptive porous media: Part 1. Background and theory. AAPG Bulletin, 2014, 98, 1761-1772.	1.5	30
27	Compressibility of sorptive porous media: Part 2. Experimental study on coal. AAPG Bulletin, 2014, 98, 1773-1788.	1.5	30
28	Determination of the Effective Stress Law for Deformation in Coalbed Methane Reservoirs. Rock Mechanics and Rock Engineering, 2014, 47, 1809-1820.	5.4	57
29	A new theoretical approach to model sorption-induced coal shrinkage or swelling. AAPG Bulletin, 2013, 97, 1033-1049.	1.5	98
30	Permeability prediction of coalbed methane reservoirs during primary depletion. International Journal of Coal Geology, 2013, 113, 1-10.	5.0	139
31	Laboratory measurement and modeling of coal permeability with continued methane production: Part 1 â€“ Laboratory results. Fuel, 2012, 94, 110-116.	6.4	186
32	Laboratory measurement and modeling of coal permeability with continued methane production: Part 2 â€“ Modeling results. Fuel, 2012, 94, 117-124.	6.4	125
33	A simplified permeability model for coalbed methane reservoirs based on matchstick strain and constant volume theory. International Journal of Coal Geology, 2011, 85, 43-48.	5.0	121
34	Gas diffusion behavior of coal and its impact on production from coalbed methane reservoirs. International Journal of Coal Geology, 2011, 86, 342-348.	5.0	392
35	Impact of CO2 Injection on Flow Behavior of Coalbed Methane Reservoirs. Transport in Porous Media, 2010, 82, 141-156.	2.6	73
36	Modeling Incremental Swelling of Coal Matrix with CO2 Injection in Coalbed Methane Reservoirs. , 2007, , .		6

#	Article	IF	Citations
37	Methane/CO2Sorption Modeling for Coalbed Methane Production and CO2Sequestration. Energy & Fuels, 2006, 20, 1591-1599.	5.1	236
38	Influence of gas production induced volumetric strain on permeability of coal. Geotechnical and Geological Engineering, 1997, 15, 303-325.	1.7	1
39	Influence of gas production induced volumetric strain on permeability of coal. Geotechnical and Geological Engineering, 1997, 15, 303-325.	1.7	352
40	Microstructure of Coal and Its Influence on Flow of Gas. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 1991, 13, 229-242.	0.5	21