Marc Prat

List of Publications by Year
in descending order

23 papers	614 citations	623734 14 h-index	677142 22 g-index
23 all docs	23 docs citations	23 times ranked	457 citing authors

#	Article	IF	Citations
1	Percolating and nonpercolating liquid phase continuum model of drying in capillary porous media with application to solute transport in the very low PÃ©clet number limit. Physical Review Fluids, 2022, 7, .	2.5	0
2	Evaluation of pore size distribution via fluid-fluid displacement porosimetry: The viscous bias. International Journal of Multiphase Flow, 2022, 149, 103983.	3.4	3
3	From micro-scale to macro-scale modeling of solute transport in drying capillary porous media. International Journal of Heat and Mass Transfer, 2021, 165, 120722.	4.8	15
4	Determination of the throat size distribution of a porous medium as an inverse optimization problem combining pore network modeling and genetic and hill climbing algorithms. Physical Review E, 2021, 103, 023303.	2.1	10
5	Pore network model of drying with Kelvin effect. Physics of Fluids, 2021, 33, .	4.0	19
6	Identification of local contact angle distribution inside a porous medium from an inverse optimization procedure. Physical Review Fluids, 2021, 6, .	2.5	2
7	Coupling between internal and external mass transfer during stage-1 evaporation in capillary porous media: Interfacial resistance approach. Physical Review E, 2021, 104, 055102.	2.1	2
8	Non-local equilibrium continuum modeling of partially saturated drying porous media: Comparison with pore network simulations. Chemical Engineering Science, 2020, 228, 115957.	3.8	14
9	Combined wicking and evaporation of NaCl solution with efflorescence formation: The efflorescence exclusion zone. Physics of Fluids, 2020, 32, .	4.0	8
10	Optimisation of Gas Access Through a Thin Porous Layer with a Partially Occluded Inlet Surface. Transport in Porous Media, 2020, 133, 49-69.	2.6	1
11	On the current distribution at the channel â€“ rib scale in polymer-electrolyte fuel cells. International Journal of Hydrogen Energy, 2018, 43, 5112-5123.	7.1	11
12	A pore network study of evaporation from the surface of a drying nonâ€hygroscopic porous medium. AIChE Journal, 2018, 64, 1435-1447.	3.6	19
13	Locus of first crystals on the evaporative surface of a vertically textured porous medium. EPJ Applied Physics, 2018, 81, 11102.	0.7	7
14	Coupled continuum and condensationâ€“evaporation pore network model of the cathode inÂpolymer-electrolyte fuel cell. International Journal of Hydrogen Energy, 2017, 42, 8150-8165.	7.1	31
15	Kinematics in a slowly drying porous medium: Reconciliation of pore network simulations and continuum modeling. Physics of Fluids, 2017, 29, 022102.	4.0	22
16	Evaporation in Capillary Porous Media at the Perfect Pistonâ€Like Invasion Limit: Evidence of Nonlocal Equilibrium Effects. Water Resources Research, 2017, 53, 10433-10449.	4.2	23
17	Validation of pore network simulations of ex-situ water distributions in a gas diffusion layer of proton exchange membrane fuel cells with X-ray tomographic images. Journal of Power Sources, 2016, 331, 462-474.	7.8	45
18	Evaporation of a sodium chloride solution from a saturated porous medium with efflorescence formation. Journal of Fluid Mechanics, 2014, 749, 701-749.	3.4	53

#	Article	IF	Citations
19	Characterization of pore network structure in catalyst layers of polymer electrolyte fuel cells. Journal of Power Sources, 2014, 247, 322-326.	7.8	32
20	Paradoxical drying of a fired-clay brick due to salt crystallization. Chemical Engineering Science, 2014, 109, 204-211.	3.8	56
21	Invasion percolation with inlet multiple injections and the water management problem in proton exchange membrane fuel cells. Journal of Power Sources, 2010, 195, 825-828.	7.8	46
22	Effect of Efflorescence Formation on Drying Kinetics of Porous Media. Transport in Porous Media, 2009, 80, 441-454.	2.6	67
23	Numerical and experimental network study of evaporation in capillary porous media. Phase distributions. Chemical Engineering Science, 1996, 51, 5171-5185.	3.8	128