Faal Larachi

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250 papers	5,866 citations	39 h-index	63 g-index
256 ext. papers	6,437 ext. citations	4.8 avg, IF	6.2 L-index

#	Paper	IF	Citations
250	High-Pressure Trickle-Bed Reactors: A Review. *Industrial & Engineering Chemistry Research*, **1997**, 36, 3292-3314	3.9	273
249	Multiphase catalytic reactors: a perspective on current knowledge and future trends. *Catalysis Reviews - Science and Engineering*, **2002**, 44, 123-246	12.6	254
248	Multiphase reactors revisited. *Chemical Engineering Science*, **1999**, 54, 1975-1995	4.4	253
247	Noninvasive Tomographic and Velocimetric Monitoring of Multiphase Flows. *Industrial & Engineering Chemistry Research*, **1997**, 36, 4476-4503	3.9	229
246	CFD simulation of bubble column flows: Investigations on turbulence models in RANS approach. *Chemical Engineering Science*, **2009**, 64, 4399-4413	4.4	156
245	Wet oxidation of phenolic solutions over heterogeneous catalysts: Degradation profile and catalyst behavior. *Journal of Catalysis*, **1998**, 177, 247-258	7.3	135
244	Stabilization of basic oxygen furnace slag by hot-stage carbonation treatment. *Chemical Engineering Journal*, **2012**, 203, 239-250	14.7	96
243	A ray detection system for 3-D particle tracking in multiphase reactors. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **1994**, 338, 568-576	1.2	94
242	CO2 capture in alkanolamine/room-temperature ionic liquid emulsions: A viable approach with carbamate crystallization and curbed corrosion behavior. *International Journal of Greenhouse Gas Control*, **2012**, 6, 246-252	4.2	88
241	Carbon sequestration kinetic and storage capacity of ultramafic mining waste. *Environmental Science & Technology*, **2011**, 45, 9413-20	10.3	85
240	A noninvasive X-ray technique for determination of liquid holdup in a rotating packed bed. *Chemical Engineering Science*, **2015**, 138, 244-255	4.4	68
239	Pressure Drop and Liquid Holdup in Trickle Flow Reactors: Improved Ergun Constants and Slip Correlations for the Slit Model. *Industrial & Engineering Chemistry Research*, **1998**, 37, 4542-4550	3.9	65
238	A study of solid behavior in spouted beds using 3-D particle tracking. *Canadian Journal of Chemical Engineering*, **1994**, 72, 945-952	2.3	65
237	3-D mapping of solids flow fields in multiphase reactors with RPT. *AICHE Journal*, **1995**, 41, 439-443	3.6	65
236	Optimal design of radioactive particle tracking experiments for flow mapping in opaque multiphase reactors. *Applied Radiation and Isotopes*, **2002**, 56, 485-503	1.7	62
235	Hydrogen production by glycerol steam reforming catalyzed by Ni-promoted Fe/Mg-bearing metallurgical wastes. *Applied Catalysis B: Environmental*, **2017**, 219, 183-193	21.8	61
234	Analysis of flow in rotating packed beds via CFD simulations Dry pressure drop and gas flow maldistribution. *Chemical Engineering Science*, **2009**, 64, 2113-2126	4.4	61

233	Surface interactions and flotation behavior of calcite, dolomite and ankerite with alkyl hydroxamic acid bearing collector and sodium silicate. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 537, 126-138	5.1	60
232	Modelling and simulation of trickle-bed reactors using computational fluid dynamics: A state-of-the-art review. *Canadian Journal of Chemical Engineering*, **2013**, 91, 136-180	2.3	59
231	Fixation of CO2 by chrysotile in low-pressure dry and moist carbonation: Ex-situ and in-situ characterizations. *Geochimica Et Cosmochimica Acta*, **2010**, 74, 3051-3075	5.5	59
230	CO2 capture in alkanolamine-RTIL blends via carbamate crystallization: route to efficient regeneration. *Environmental Science & Technology*, **2012**, 46, 11443-50	10.3	58
229	Dynamics of carbon dioxide uptake in chrysotile mining residues Effect of mineralogy and liquid saturation. *International Journal of Greenhouse Gas Control*, **2013**, 12, 124-135	4.2	56
228	CO2 Sequestration in Chrysotile Mining Residues Implication of Watering and Passivation under Environmental Conditions. *Industrial & Engineering Chemistry Research*, **2012**, 51, 8726-8734	3.9	56
227	Sorption-enhanced dimethyl ether synthesis Multiscale reactor modeling. *Chemical Engineering Science*, **2011**, 66, 2241-2251	4.4	54
226	Mass transfer intensification in a rotating packed bed with surface-modified nickel foam packing. *Chemical Engineering Journal*, **2016**, 285, 236-242	14.7	53
225	CO2-depleted warm air venting from chrysotile milling waste (Thetford Mines, Canada): Evidence for in-situ carbon capture from the atmosphere. *Geology*, **2012**, 40, 275-278	5	53
224	Some experimental liquid saturation results in fixed-bed reactors operated under elevated pressure in cocurrent upflow and downflow of the gas and the liquid. *Industrial & Engineering Chemistry Research*, **1991**, 30, 2404-2410	3.9	53
223	CO2 absorption in diethanolamine/ionic liquid emulsions Chemical kinetics and mass transfer study. *Chemical Engineering Journal*, **2014**, 240, 16-23	14.7	52
222	Wet Oxidation of Phenol Catalyzed by Unpromoted and Platinum-Promoted Manganese/Cerium Oxide. *Industrial & Engineering Chemistry Research*, **1998**, 37, 3561-3566	3.9	49
221	Heat and Mass Transfer in Cocurrent Gas Liquid Packed Beds. Analysis, Recommendations, and New Correlations. *Industrial & Engineering Chemistry Research*, **2003**, 42, 222-242	3.9	48
220	Methane Nonoxidative Aromatization over Ru Mo/HZSM-5 in a Membrane Catalytic Reactor. *Industrial & Engineering Chemistry Research*, **2002**, 41, 2371-2378	3.9	46
219	Oxygen-Free Methane Aromatization in a Catalytic Membrane Reactor. *Industrial & Engineering Chemistry Research*, **2001**, 40, 2212-2219	3.9	46
218	Distillation studies in a two-stage counter-current rotating packed bed. *Separation and Purification Technology*, **2013**, 102, 62-66	8.3	45
217	Comparative study of five Qubec ultramafic mining residues for use in direct ambient carbon dioxide mineral sequestration. *Chemical Engineering Journal*, **2014**, 245, 56-64	14.7	44
216	Synthesis of CaCO3 nanoparticles by controlled precipitation of saturated carbonate and calcium nitrate aqueous solutions. *Canadian Journal of Chemical Engineering*, **2012**, 90, 26-33	2.3	44

215	Micromixing Efficiency Enhancement in a Rotating Packed Bed Reactor with Surface-Modified Nickel Foam Packing. *Industrial & Engineering Chemistry Research*, **2015**, 54, 1697-1702	3.9	43
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213	CFD study on hydrodynamics in three-phase fluidized beds-Application of turbulence models and experimental validation. *Chemical Engineering Science*, **2012**, 78, 167-180	4.4	41
212	Hydrodynamics of cocurrent two-phase flows in slanted porous media-Modulation of pulse flow via bed obliquity. *AICHE Journal*, **2010**, 56, 3189-3205	3.6	40
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209	Solubility of carbon dioxide in aqueous solutions of 2-amino-2-hydroxymethyl-1,3-propanediol. *Fluid Phase Equilibria*, **2008**, 268, 121-129	2.5	37
208	Cyclic operation of trickle bed reactors: A review. *Chemical Engineering Science*, **2014**, 115, 205-214	4.4	35
207	Catalytic wet oxidation: micro-meso-macro methodology from catalyst synthesis to reactor design. *Topics in Catalysis*, **2005**, 33, 109-134	2.3	35
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205	Electrochemical behavior of gold cyanidation in the presence of a sulfide-rich industrial ore versus its major constitutive sulfide minerals. *Hydrometallurgy*, **2010**, 101, 108-119	4	34
204	Hydrodynamics of gas-liquid cocurrent downflow in floating packed beds. *Chemical Engineering Science*, **2015**, 137, 665-676	4.4	33
203	Emulation of gas-liquid flow in packed beds for offshore floating applications using a swell simulation hexapod. *AICHE Journal*, **2015**, 61, 2354-2367	3.6	33
202	Monitoring Filtration in Trickle Beds Using Electrical Capacitance Tomography. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1140-1153	3.9	33
201	Improving the prediction of liquid back-mixing in trickle-bed reactors using a neural network approach. *Journal of Chemical Technology and Biotechnology*, **2002**, 77, 989-998	3.5	33
200	Flooding Capacity in Packed Towers: Database, Correlations, and Analysis. *Industrial & Engineering Chemistry Research*, **2001**, 40, 476-487	3.9	33
199	Nesquehonite as a carbon sink in ambient mineral carbonation of ultramafic mining wastes. *Chemical Engineering Journal*, **2017**, 314, 160-168	14.7	32
198	Hydrodynamics of co-current two-phase flow in an inclined rotating tubular fixed bed reactor - Wetting intermittency via periodic catalyst immersion. *Chemical Engineering Science*, **2015**, 128, 147-158	4.4	32

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191	CFD study and experimental validation of trickle bed hydrodynamics under gas, liquid and gas/liquid alternating cyclic operations. *Chemical Engineering Science*, **2013**, 89, 158-170	4.4	28
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183	Studies of CO2 absorption and effective interfacial area in a two-stage rotating packed bed with nickel foam packing. *Chemical Engineering and Processing: Process Intensification*, **2015**, 90, 34-40	3.7	25
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164	Multivariate study of the dynamics of CO2 reaction with brucite-rich ultramafic mine tailings. *International Journal of Greenhouse Gas Control*, **2016**, 52, 110-119	4.2	21
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161	Three-dimensional simulations of gas-liquid cocurrent downflow in vertical, inclined, and oscillating packed beds. *AICHE Journal*, **2016**, 62, 916-927	3.6	20
160	Liquid microflow inside the packing of a rotating packed bed reactor: Computational, observational and experimental studies. *Chemical Engineering Journal*, **2020**, 386, 121134	14.7	20
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157	Enzymatic CO2 capture by immobilized hCA II in an intensified microreactor: Kinetic study of the catalytic hydration. *International Journal of Greenhouse Gas Control*, **2013**, 15, 78-85	4.2	18
156	New tools for stimulating dissolution and carbonation of ultramafic mining residues. *Canadian Journal of Chemical Engineering*, **2014**, 92, 2029-2038	2.3	18
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150	Two-phase flow hydrodynamic study in micro-packed beds – Effect of bed geometry and particle size. *Chemical Engineering and Processing: Process Intensification*, **2014**, 78, 27-36	3.7	17
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148	Hydrodynamics of Gas−Liquid Cocurrent Flows in Micropacked Beds: Wall Visualization Study. *Industrial & Engineering Chemistry Research*, **2012**, 51, 16495-16504	3.9	17
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138	Dynamics of filtration in monolith reactors using electrical capacitance tomography. *Chemical Engineering Science*, **2010**, 65, 504-510	4.4	16
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135	Investigation of the mean and turbulent particle velocity fields in a spouted bed using radioactive particle tracking. *Canadian Journal of Chemical Engineering*, **1998**, 76, 190-195	2.3	15
134	Integrated Genetic Algorithm Artificial Neural Network Strategy for Modeling Important Multiphase-Flow Characteristics. *Industrial & Engineering Chemistry Research*, **2002**, 41, 2543-2551	3.9	15
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