Faal Larachi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Electronic simulations of alanine and water coadsorption over Defect-free and Sulfur-depleted sphalerite surfaces. *Applied Surface Science*, **2022**, 576, 151899	6.7	1
249	Simulation Algorithm for Water Elutriators: Model Calibration with Plant Data and Operational Simulations. *Minerals (Basel, Switzerland)*, **2022**, 12, 316	2.4	0
248	Performance of catalytic cycloaddition of CO2 to styrene oxide in three-phase co-current (micro)fixed-bed and monolith reactors. *Journal of CO2 Utilization*, **2022**, 60, 101977	7.6	0
247	Computational fluid dynamic simulation of gas-liquid flow in rotating packed bed: A review. *Chinese Journal of Chemical Engineering*, **2021**,	3.2	3
246	How Do Surface Defects Change Local Wettability of the Hydrophilic ZnS Surface? Insights into Sphalerite Flotation from Density Functional Theory Calculations. *Journal of Physical Chemistry C*, **2021**, 125, 998-1009	3.8	4
245	Reaction-Diffusion Model for Gasification of a Shrinking Single Carbon-Anode Particle. *ACS Omega*, **2021**, 6, 8002-8015	3.9	1
244	Multistep concentration of lizardite/antigorite from chrysotile mine tailings □ase of the Carey Mine site in East-Broughton (Qu□ec). *International Journal of Chemical Reactor Engineering*, **2021**, 19, 483-498	1.2	
243	Mechanism of Liquid Dispersion Enhancement by the Hydrophobic Wire Mesh at Macro- and Micro-Scale. *Industrial & Engineering Chemistry Research*, **2021**, 60, 8927-8934	3.9	
242	Insights into the Solubility of Carbon Dioxide in Grafted Mesoporous Silica for the Catalytic Synthesis of Cyclic Carbonates by Nanoconfinement. *ACS Applied Materials & Interfaces*, **2021**, 13, 27019-27028	9.5	4
241	Efficient Displacement of Fluids Using a Viscous Shear-Thinning Spacer. *Industrial & Engineering Chemistry Research*, **2021**, 60, 10376-10392	3.9	1
240	A continuous-flow surface flotation cell for the separation of scanty mineral samples based on wettability contrast. *Canadian Journal of Chemical Engineering*, **2021**, 99, 1490-1497	2.3	1
239	Sorption of aqueous amino acid species on sulphidic mineral surfaces□DFT study and insights on biosourced-reagent mineral flotation. *Canadian Journal of Chemical Engineering*, **2021**, 99, 1758-1779	2.3	3
238	Styrene hydrogenation in inclined packed-bed bubble reactors: A reaction-transport model for the catalytic hydrogenation of pyrolysis gasoline on-board floating reactors. *Canadian Journal of Chemical Engineering*, **2021**, 99, 1792-1810	2.3	0
237	Chemical transformation and dissociation of amino acids on metal sulfide surface: Insights from DFT into the effect of surface vacancies on alanine-sphalerite system. *Applied Surface Science*, **2021**, 540, 148304	6.7	10
236	Enhanced Enzymatic Synthesis of Nicotinamide in Laminar Flow Intensified Microreactors: Models and Simulations. *Industrial & Engineering Chemistry Research*, **2021**, 60, 12210-12219	3.9	1
235	A comparative study on the performance of M (Rh, Ru, Ni)-promoted metallurgical waste driven catalysts for H2 production by glycerol steam reforming. *International Journal of Hydrogen Energy*, **2021**, 46, 32017-32035	6.7	8
234	Influence of Rotational and Translational Oscillations on the Drainage of Liquid in Floating Packed Beds. *Industrial & Engineering Chemistry Research*, **2021**, 60, 1452-1462	3.9	2

233	Selective Recovery of Molybdenum over Rhenium from Molybdenite Flue Dust Leaching Solution Using PC88A Extractant. *Metals*, **2020**, 10, 1423	2.3	5
232	Bio-Foam Internals for Potential Water Treatment Units Adapted to Marine Applications: Hydrodynamic Study. *Theoretical Foundations of Chemical Engineering*, **2020**, 54, 104-115	0.9	0
231	Ni-Fe catalyst derived from mixed oxides Fe/Mg-bearing metallurgical waste for hydrogen production by steam reforming of biodiesel by-product: Investigation of catalyst synthesis parameters and temperature dependency of the reaction network. *Applied Catalysis B: Environmental*, **2020**, 279, 119330	21.8	8
230	DFT simulations of pyrite galvanic interactions with bulk, solid-solution and nanoparticle Au occurrences Insights into gold cyanidation. *Minerals Engineering*, **2020**, 149, 106239	4.9	7
229	Residence time distribution of passive scalars in magnetic nanofluid Poiseuille flow under uniform rotating magnetic fields. *Chemical Engineering Science*, **2020**, 224, 115770	4.4	2
228	Enhanced Methanol Synthesis Process via an Integrated Process Involving CO2 Hydrogenation under Plasma Conditions. *Industrial & Engineering Chemistry Research*, **2020**, 59, 6815-6827	3.9	4
227	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
226	Tracer dispersion in trickle beds under tilts and roll motions CFD study and experimental validation. *Chemical Engineering Journal*, **2020**, 386, 122845	14.7	3
225	Anomalous anisotropic transport of scalars in dilute ferrofluids under uniform rotating magnetic fields Mixing time measurements and ferrohydrodynamic simulations. *Chemical Engineering Journal*, **2020**, 380, 122504	14.7	5
224	Bubble Behavior in Marine Applications of Bubble Columns: Case of Ellipsoidal Bubbles in Slanted and Rolling Columns. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2343-2355	3.9	2
223	110th Anniversary: Marinization of Multiphase Reactors through the Prism of Chemical Engineers. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2607-2630	3.9	6
222	Galvanic interaction of pyrite with Cu activated sphalerite and its effect on xanthate adsorption. *Canadian Journal of Chemical Engineering*, **2019**, 97, 2671-2677	2.3	2
221	Modeling and Simulations of NOx and SO2 Seawater Scrubbing in Packed-Bed Columns for Marine Applications. *Catalysts*, **2019**, 9, 489	4	7
220	CFD Simulation and High-Speed Photography of Liquid Flow in the Outer Cavity Zone of a Rotating Packed Bed Reactor. *Industrial & Engineering Chemistry Research*, **2019**, 58, 5280-5290	3.9	12
219	Gas-liquid mass-transfer behavior of packed-bed scrubbers for floating/offshore CO2 capture. *Chemical Engineering Journal*, **2019**, 377, 119236	14.7	9
218	Assessment of the Resilience against Liquid Maldistribution of Monolith Packings under Offshore Floating Conditions. *Industrial & Engineering Chemistry Research*, **2019**, 58, 21739-21751	3.9	3
217	CFD study and experimental validation of multiphase packed bed hydrodynamics in the context of Rolling Sea conditions. *AICHE Journal*, **2019**, 65, 385-397	3.6	12
216	Kinetics of Enzymatic Hydroxylation by Free and MNPs-Immobilized NADH-Dependent Cytochrome P450 BM3 from Bacillus megaterium. *Industrial & Engineering Chemistry Research*, **2019**, 58, 808-815	3.9	2

215	Selective dissolution of rare-earth element carbonates in deep eutectic solvents. *Journal of Rare Earths*, **2019**, 37, 528-533	3.7	17
214	Surface Speciation of Brucite Dissolution in Aqueous Mineral Carbonation: Insights from Density-Functional Theory Simulations. *Journal of Physical Chemistry A*, **2019**, 123, 889-905	2.8	10
213	Hydrodynamics and Reaction Performances of Multiphase Reactors for Marine Applications – A Review. *International Journal of Chemical Reactor Engineering*, **2019**, 17,	1.2	4
212	The effect of flotation collectors on the electrochemical dissolution of gold during cyanidation. *Minerals Engineering*, **2019**, 130, 48-56	4.9	4
211	Covalent immobilization of cytochrome P450 BM3 (R966D/W1046S) on glutaraldehyde activated SPIONs. *Canadian Journal of Chemical Engineering*, **2018**, 96, 2227-2235	2.3	5
210	Impact of silver sulphides on gold cyanidation with polymetal sulphides. *Transactions of Nonferrous Metals Society of China*, **2018**, 28, 542-555	3.3	9
209	Cyanidation of Gold Associated with Silver Minerals in Sulfide Mineral Matrices. *Chemical Engineering and Technology*, **2018**, 41, 1282-1293	2	4
208	The effect of pyrite particle size on the electrochemical dissolution of gold during cyanidation. *Hydrometallurgy*, **2018**, 175, 367-375	4	8
207	Behavior of bifunctional phosphonium-based ionic liquids in solvent extraction of rare earth elements - quantum chemical study. *Journal of Molecular Liquids*, **2018**, 263, 96-108	6	10
206	The role of silver minerals on the cyanidation of gold particles embedded within multi-sulphidic mineral matrices. *Canadian Journal of Chemical Engineering*, **2018**, 96, 2299-2307	2.3	3
205	Immiscible dual ionic liquid-ionic liquid mineral separation of rare-earth minerals. *Separation and Purification Technology*, **2018**, 191, 340-353	8.3	17
204	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
203	Prospect of open-cell solid foams for floating-platform multiphase reactor applications – Maldistribution susceptibility and hydrodynamic behavior. *Chemical Engineering Journal*, **2018**, 332, 596-607	14.7	9
202	Atmospheric Carbon Mineralization in an Industrial-Scale Chrysotile Mining Waste Pile. *Environmental Science & Technology*, **2018**, 52, 8050-8057	10.3	8
201	Fischer-Tropsch synthesis in vertical, inclined and oscillating trickle-bed reactors for offshore floating applications. *Chemical Engineering Science*, **2018**, 177, 509-522	4.4	9
200	CO2 and H2S absorption by MEA solution in packed-bed columns under inclined and heaving motion conditions - Hydrodynamics and reactions performance for marine applications. *International Journal of Greenhouse Gas Control*, **2018**, 79, 1-13	4.2	11
199	A Journey across Food & Chemical Engineering Dyad: Symposium in memory of Professor Khaled Belkacemi. *Canadian Journal of Chemical Engineering*, **2018**, 96, 2125-2126	2.3	0
198	Thermal regeneration of amines in vertical, inclined and oscillating CO2 packed-bed strippers for offshore floating applications. *International Journal of Greenhouse Gas Control*, **2018**, 74, 229-250	4.2	8

197	Nesquehonite as a carbon sink in ambient mineral carbonation of ultramafic mining wastes. *Chemical Engineering Journal*, **2017**, 314, 160-168	14.7	32
196	Dry reforming of methane with a new catalyst derived from a negative value mining residue spinellized with nickel. *Catalysis Today*, **2017**, 291, 86-98	5.3	17
195	Liquid-liquid mineral separation via ionic-liquid complexation of monazite and bastnäsite: An alternate route for rare-earth mineral beneficiation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 520, 301-323	5.1	18
194	Impact of silver sulphide on gold cyanidation with conductive sulphide minerals. *Canadian Journal of Chemical Engineering*, **2017**, 95, 1875-1884	2.3	5
193	CO2 abatement in oscillating packed-bed scrubbers: Hydrodynamics and reaction performances for marine applications. *AICHE Journal*, **2017**, 63, 1064-1076	3.6	13
192	Offshore Floating Packed-Bed Reactors: Key Challenges and Potential Solutions. *Chemical Engineering and Technology*, **2017**, 40, 1975-1984	2	13
191	Pyrolysis Kinetics of Pre-Torrefied Woody Biomass Based on Torrefaction Severity: Experiments and Model Verification. *Industrial & Engineering Chemistry Research*, **2017**, 56, 12972-12983	3.9	3
190	Hydrodynamics of inclined packed beds under flow modulation - CFD simulation and experimental validation. *AICHE Journal*, **2017**, 63, 4161-4176	3.6	10
189	Effect of silver on gold cyanidation in mixed and segregated sulphidic minerals. *Canadian Journal of Chemical Engineering*, **2017**, 95, 698-707	2.3	6
188	Hydrodynamics of gas-liquid cocurrent upflow in oscillating packed beds for offshore marine applications. *Chemical Engineering Science*, **2017**, 170, 583-596	4.4	15
187	Passive Mineral Carbonation of Mg-rich Mine Wastes by Atmospheric CO2. *Energy Procedia*, **2017**, 114, 6083-6086	2.3	13
186	Noncovalent Immobilization of Optimized Bacterial Cytochrome P450 BM3 on Functionalized Magnetic Nanoparticles. *Industrial & Engineering Chemistry Research*, **2017**, 56, 10981-10989	3.9	13
185	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
184	Tuning mass transport in magnetic nanoparticle-filled viscoelastic hydrogels using low-frequency rotating magnetic fields. *Soft Matter*, **2017**, 13, 6259-6269	3.6	6
183	Preface of the 66th Canadian Chemical Engineering Conference: Sustainability and Prosperity. *Canadian Journal of Chemical Engineering*, **2017**, 95, 1841-1841	2.3	0
182	Enzyme-mediated CO 2 capture in oscillating structured packed-bed columns - Hydrodynamics and process performance for offshore applications. *Ocean Engineering*, **2017**, 144, 157-174	3.9	14
181	Ambient mineral carbonation of different lithologies of mafic to ultramafic mining wastes/tailings – A comparative study. *International Journal of Greenhouse Gas Control*, **2017**, 63, 392-400	4.2	17
180	Development of a water-selective zeolite composite membrane by a new pore-plugging technique. *Microporous and Mesoporous Materials*, **2017**, 237, 49-59	5.3	12

179	Process intensification of gas–liquid downflow and upflow packed beds by a new low-shear rotating reactor concept. *AICHE Journal*, **2017**, 63, 283-294	3.6	20
178	Enhancing liquid micromixing using low-frequency rotating nanoparticles. *AICHE Journal*, **2017**, 63, 337-346	3.6	12
177	Hydrocarbon hydrodesulfurization in vertical, inclined and oscillating trickle beds – Hydrodynamics & reactor performance for offshore petroleum marine applications. *Fuel*, **2016**, 186, 35-49	7.1	16
176	Three-phase fixed-bed reactors **2016**, 95-131		4
175	Ionic-liquid collectors for rare-earth minerals flotation?Case of tetrabutylammonium bis(2-ethylhexyl)-phosphate for monazite and bastnäsite recovery. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 506, 74-86	5.1	32
174	Cyclic operation strategies in inclined and moving packed beds—Potential marine applications for floating systems. *AICHE Journal*, **2016**, 62, 4157-4172	3.6	18
173	Mass transfer intensification in a rotating packed bed with surface-modified nickel foam packing. *Chemical Engineering Journal*, **2016**, 285, 236-242	14.7	53
172	Three-dimensional simulations of gas-liquid cocurrent downflow in vertical, inclined, and oscillating packed beds. *AICHE Journal*, **2016**, 62, 916-927	3.6	20
171	Two-fluid simulation of liquid drainage in oscillating packed beds for offshore floating applications. *Chemical Engineering Science*, **2016**, 149, 51-62	4.4	7
170	Effects of heat treatment and acid washing on properties and reactivity of charcoal. *Biomass and Bioenergy*, **2016**, 90, 101-113	5.3	23
169	Role of magnetic nanoparticles in mixing, transport phenomena and reaction engineering – challenges and opportunities. *Current Opinion in Chemical Engineering*, **2016**, 13, 91-99	5.4	10
168	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
167	Liquid residence time distribution in a two-compartment wastewater treatment bioreactor. *Canadian Journal of Chemical Engineering*, **2015**, 93, 599-612	2.3	5
166	A novel inclined rotating tubular fixed bed reactor concept for enhancement of reaction rates and adjustment of flow regimes. *Chemical Engineering Journal*, **2015**, 281, 931-944	14.7	17
165	Hydrodynamics of gas–liquid cocurrent downflow in floating packed beds. *Chemical Engineering Science*, **2015**, 137, 665-676	4.4	33
164	Liquid backmixing in an inclined rotating tubular fixed bed reactor – Augmenting liquid residence time via flow regime adjustment. *Chemical Engineering and Processing: Process Intensification*, **2015**, 94, 2-10	3.7	13
163	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
162	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

161	Hydrodynamics of countercurrent gas–liquid flow in inclined packed beds – A prospect for stretching flooding capacity with small packings. *Chemical Engineering Science*, **2015**, 138, 256-265	4.4	24
160	Traitement solvothermique superficiel de la biomasse lignocellulosique dans les liquides ioniques – hygroscopicité, morphologie et propriétés mécaniques. *Canadian Journal of Chemical Engineering*, **2015**, 93, 29-36	2.3	
159	Inception of vortical coherent structures from spinning magnetic nanoparticles in rotating magnetic fields – New nanofluid microscale mixing tool. *Chemical Engineering Journal*, **2015**, 260, 338-346	14.7	7
158	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
157	Allothermal Fluidized Bed Reactor for Steam Gasification of Biomass. *Instrumentation Science and Technology*, **2015**, 43, 390-428	1.4	4
156	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
155	Capacitance wire mesh imaging of bubbly flows for offshore treatment applications. *Flow Measurement and Instrumentation*, **2015**, 45, 298-307	2.2	10
154	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
153	Emulation of ambient carbon dioxide diffusion and carbonation within nickel mining residues. *Minerals Engineering*, **2014**, 59, 39-44	4.9	21
152	Cyclic operation of trickle bed reactors: A review. *Chemical Engineering Science*, **2014**, 115, 205-214	4.4	35
151	CO2 absorption in diethanolamine/ionic liquid emulsions – Chemical kinetics and mass transfer study. *Chemical Engineering Journal*, **2014**, 240, 16-23	14.7	52
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
149	Comparative study of five Québec ultramafic mining residues for use in direct ambient carbon dioxide mineral sequestration. *Chemical Engineering Journal*, **2014**, 245, 56-64	14.7	44
148	Detection and Identification of Cobalt Cyanide Complexes using Capillary Electrophoresis. *Separation Science and Technology*, **2014**, 49, 691-701	2.5	4
147	New tools for stimulating dissolution and carbonation of ultramafic mining residues. *Canadian Journal of Chemical Engineering*, **2014**, 92, 2029-2038	2.3	18
146	Efficient strategies to enhance gold leaching during cyanidation of multi-sulfidic ores. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1687-1692	2.3	8
145	Torréfaction de la biomasse lignocellulosique dans les liquides ioniques: Analyse comparative par spectroscopies de surface. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1839-1858	2.3	1
144	Biomass torrefaction and CO2 capture using mining wastes – A new approach for reducing greenhouse gas emissions of co-firing plants. *Fuel*, **2014**, 115, 749-757	7.1	30

143	Impact of temperature and oxygen availability on the dynamics of ambient CO2 mineral sequestration by nickel mining residues. *Chemical Engineering Journal*, **2014**, 240, 394-403	14.7	30
142	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
141	Giant effective liquid-self diffusion in stagnant liquids by magnetic nanomixing. *Chemical Engineering and Processing: Process Intensification*, **2013**, 71, 77-82	3.7	21
140	Controlling lateral nanomixing and velocity profile of dilute ferrofluid capillary flows in uniform stationary, oscillating and rotating magnetic fields. *Chemical Engineering Journal*, **2013**, 223, 454-466	14.7	27
139	Catalytic CO2 hydration by immobilized and free human carbonic anhydrase II in a laminar flow microreactor Model and simulations. *Separation and Purification Technology*, **2013**, 107, 61-69	8.3	16
138	Hydrodynamics of an inclined gasquid cocurrent upflow packed bed. *Chemical Engineering Science*, **2013**, 102, 397-404	4.4	25
137	Enzymatic CO2 capture by immobilized hCA II in an intensified microreactorKinetic study of the catalytic hydration. *International Journal of Greenhouse Gas Control*, **2013**, 15, 78-85	4.2	18
136	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
135	Kinetic behavior of carbon dioxide absorption in diethanolamine/ionic-liquid emulsions. *Separation and Purification Technology*, **2013**, 118, 757-761	8.3	16
134	Hydrodynamics of gasquid micro-fixed beds Measurement approaches and technical challenges. *Chemical Engineering Journal*, **2013**, 223, 425-435	14.7	22
133	Accurate and direct quantification of native brucite in serpentine oresNew methodology and implications for CO2 sequestration by mining residues. *Thermochimica Acta*, **2013**, 566, 281-291	2.9	34
132	Remotely excited magnetic nanoparticles and gasquid mass transfer in Taylor flow regime. *Chemical Engineering Science*, **2013**, 93, 257-265	4.4	21
131	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
130	Distillation studies in a two-stage counter-current rotating packed bed. *Separation and Purification Technology*, **2013**, 102, 62-66	8.3	45
129	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
128	Catalytic Wet Oxidation in Three-Phase Moving-Bed Reactors: Modeling Framework and Simulations for On-Stream Replacement of a Deactivating Catalyst. *Industrial & Engineering Chemistry Research*, **2012**, 121220085307008	3.9	
127	Prediction of Solids Accumulation in Slurry Bubble Columns with Polydispersed Solid Loadings. *Industrial & Engineering Chemistry Research*, **2012**, 51, 13100-13112	3.9	
126	Hydrodynamics of Gasliquid Cocurrent Flows in Micropacked BedsWall Visualization Study. *Industrial & Engineering Chemistry Research*, **2012**, 51, 16495-16504	3.9	17

125	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
124	Reducing Taylor dispersion in capillary laminar flows using magnetically excited nanoparticles: Nanomixing mechanism for micro/nanoscale applications. *Chemical Engineering Journal*, **2012**, 203, 492-498	14.7	23
123	Stabilization of basic oxygen furnace slag by hot-stage carbonation treatment. *Chemical Engineering Journal*, **2012**, 203, 239-250	14.7	96
122	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
121	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
120	CO2 capture in alkanolamine-RTIL blends via carbamate crystallization: route to efficient regeneration. *Environmental Science & Technology*, **2012**, 46, 11443-50	10.3	58
119	Integrated aqueous-phase glycerol reforming to dimethyl ether synthesis A novel allothermal dual bed membrane reactor concept. *Chemical Engineering Journal*, **2012**, 187, 311-327	14.7	17
118	CO2 hydration by immobilized carbonic anhydrase in Robinson Mahoney and packed-bed scrubbers Role of mass transfer and inhibitor removal. *Chemical Engineering Science*, **2012**, 73, 99-115	4.4	24
117	Leveraging strategies to increase gold cyanidation in the presence of sulfide minerals Packed-bed electrochemical reactor approach. *Hydrometallurgy*, **2012**, 111-112, 73-81	4	16
116	The role of multi-sulfidic mineral binary and ternary galvanic interactions in gold cyanidation in a multi-layer packed-bed electrochemical reactor. *Hydrometallurgy*, **2012**, 113-114, 51-59	4	13
115	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
114	Determination of free cyanide and zinc cyanide complex by capillary electrophoresis. *Journal of Separation Science*, **2011**, 34, 1568-73	3.4	6
113	Modulation of suspension electrical conductivity to counter fines plugging in trickle-bed reactors. *AICHE Journal*, **2011**, 57, 1829-1839	3.6	6
112	Sorption-enhanced dimethyl ether synthesis Multiscale reactor modeling. *Chemical Engineering Science*, **2011**, 66, 2241-2251	4.4	54
111	Carbon sequestration kinetic and storage capacity of ultramafic mining waste. *Environmental Science & Technology*, **2011**, 45, 9413-20	10.3	85
110	Untangling galvanic and passivation phenomena induced by sulfide minerals on precious metal leaching using a new packed-bed electrochemical cyanidation reactor. *Hydrometallurgy*, **2011**, 107, 101-111	4	31
109	ANALYSIS OF FORCED GAS COMPOSITION PERTURBATIONS ON THE CALIBRATION OF A QUADRUPOLE MASS SPECTROMETER: APPLICATION TO GASES EVOLVING FROM BIOMASS GASIFICATION. *Instrumentation Science and Technology*, **2011**, 39, 121-134	1.4	2
108	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

107	Co-current descending two-phase flows in inclined packed beds: Experiments versus simulations. *Canadian Journal of Chemical Engineering*, **2010**, 88, n/a-n/a	2.3	3
106	CFD simulations of hydrodynamic/thermal coupling phenomena in a bubble column with internals. *AICHE Journal*, **2010**, 56, NA-NA	3.6	2
105	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
104	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
103	Dynamics of filtration in monolith reactors using electrical capacitance tomography. *Chemical Engineering Science*, **2010**, 65, 504-510	4.4	16
102	Propagation of slow/fast-mode solitary liquid waves in trickle beds via electrical capacitance tomography and computational fluid dynamics. *Chemical Engineering Science*, **2010**, 65, 1144-1150	4.4	31
101	Magnetic emulation of microgravity for earth-bound multiphase catalytic reactor studies: Potentialities and limitations. *AICHE Journal*, **2009**, 55, 1200-1216	3.6	7
100	Trickle bed mechanistic model for (non-)Newtonian power-law foaming liquids. *Chemical Engineering Science*, **2009**, 64, 1654-1664	4.4	5
99	Flow regimes in trickle beds using magnetic emulation of micro/macrogravity. *Chemical Engineering Science*, **2009**, 64, 391-402	4.4	7
98	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
97	CFD simulation of bubble column flows: Investigations on turbulence models in RANS approach. *Chemical Engineering Science*, **2009**, 64, 4399-4413	4.4	156
96	Phase Holdups in Three-Phase Semifluidized Beds and the Generalized Bubble Wake Model. *Industrial & Engineering Chemistry Research*, **2009**, 48, 8393-8401	3.9	3
95	Monitoring Filtration in Trickle Beds Using Electrical Capacitance Tomography. *Industrial & Engineering Chemistry Research*, **2009**, 48, 1140-1153	3.9	33
94	Grafted Amine/CO2 Interactions in (Gas)−Liquid−Solid Adsorption/Absorption Equilibria. *Journal of Physical Chemistry C*, **2009**, 113, 21866-21876	3.8	13
93	Seamless Mass Transfer Correlations for Packed Beds Bridging Random and Structured Packings. *Industrial & Engineering Chemistry Research*, **2008**, 47, 3274-3284	3.9	9
92	Polymer-Filled Composite Porous Catalytic Particles for Hydrodynamic Studies in Trickle-Bed Reactors. *Industrial & Engineering Chemistry Research*, **2008**, 47, 2569-2578	3.9	4
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