

# Jcb Lopes

## List of Publications by Year in descending order

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85  
papers

1,814  
citations

236925

25  
h-index

302126

39  
g-index

87  
all docs

87  
docs citations

87  
times ranked

1486  
citing authors

#	ARTICLE	IF	CITATIONS
1	Importance of intraparticle convection in the performance of chromatographic processes. <i>Journal of Chromatography A</i> , 1992, 590, 93-100.	3.7	104
2	Homogeneous and heterogeneous photo-Fenton degradation of antibiotics using an innovative static mixer photoreactor. <i>Chemical Engineering Journal</i> , 2017, 310, 342-351.	12.7	94
3	Intensification of heterogeneous TiO <sub>2</sub> photocatalysis using an innovative micro-meso-structured-reactor for Cr(VI) reduction under simulated solar light. <i>Chemical Engineering Journal</i> , 2017, 318, 76-88.	12.7	76
4	Experimental study of flow regime and mixing in T-jets mixers. <i>Chemical Engineering Science</i> , 2012, 73, 388-399.	3.8	62
5	Ozonation and ozone-enhanced photocatalysis for VOC removal from air streams: Process optimization, synergy and mechanism assessment. <i>Science of the Total Environment</i> , 2019, 687, 1357-1368.	8.0	62
6	Droplet entrainment in vertical annular flow and its contribution to momentum transfer. <i>AIChE Journal</i> , 1986, 32, 1500-1515.	3.6	60
7	Flow imbalance and Reynolds number impact on mixing in Confined Impinging Jets. <i>Chemical Engineering Journal</i> , 2015, 260, 316-330.	12.7	56
8	Intensification of heterogeneous TiO <sub>2</sub> photocatalysis using an innovative micro-meso-structured-photoreactor for n-decane oxidation at gas phase. <i>Chemical Engineering Journal</i> , 2017, 310, 331-341.	12.7	56
9	Spray-drying microencapsulation of synergistic antioxidant mushroom extracts and their use as functional food ingredients. <i>Food Chemistry</i> , 2015, 188, 612-618.	8.2	55
10	Study of mixing and chemical reaction in RIM. <i>Chemical Engineering Science</i> , 2005, 60, 2381-2398.	3.8	53
11	Hydrodynamics of the mixing chamber in RIM: PIV flow-field characterization. <i>AIChE Journal</i> , 2008, 54, 1153-1163.	3.6	46
12	Spray drying as a viable process to produce nano-hydroxyapatite/chitosan (n-HAp/CS) hybrid microparticles mimicking bone composition. <i>Advanced Powder Technology</i> , 2016, 27, 575-583.	4.1	43
13	NETmix <sup>®</sup> , a new type of static mixer: Modeling, simulation, macromixing, and micromixing characterization. <i>AIChE Journal</i> , 2009, 55, 2226-2243.	3.6	39
14	Hydrodynamics of the mixing head in RIM: LDA flow-field characterization. <i>AIChE Journal</i> , 2005, 51, 1608-1619.	3.6	38
15	NETmix <sup>®</sup> , a new type of static mixer: Experimental characterization and model validation. <i>AIChE Journal</i> , 2011, 57, 1020-1032.	3.6	37
16	Intensification of heterogeneous TiO <sub>2</sub> photocatalysis using the NETmix mini-photoreactor under microscale illumination for oxytetracycline oxidation. <i>Science of the Total Environment</i> , 2019, 681, 467-474.	8.0	37
17	Gas-liquid flow in a 2D column: Comparison between experimental data and CFD modelling. <i>Chemical Engineering Science</i> , 2001, 56, 6367-6383.	3.8	34
18	Dynamic behavior of the flow field in a RIM machine mixing chamber. <i>AIChE Journal</i> , 2009, 55, 1338-1351.	3.6	34

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19	Characterization of mixing in T-jets mixers. <i>Chemical Engineering Journal</i> , 2012, 207-208, 931-937.	12.7	31
20	Strategies to reduce mass and photons transfer limitations in heterogeneous photocatalytic processes: Hexavalent chromium reduction studies. <i>Journal of Environmental Management</i> , 2018, 217, 555-564.	7.8	29
21	Operational and Design Study of RIM Machines. <i>International Polymer Processing</i> , 2002, 17, 387-394.	0.5	28
22	Continuous flow photo-Fenton treatment of ciprofloxacin in aqueous solutions using homogeneous and magnetically recoverable catalysts. <i>Environmental Science and Pollution Research</i> , 2014, 21, 11116-11125.	5.3	28
23	The NETmix reactor: Pressure drop measurements and 3D CFD modeling. <i>Chemical Engineering Research and Design</i> , 2013, 91, 2250-2258.	5.6	27
24	Study of different designs of methanol steam reformers: Experiment and modeling. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19970-19981.	7.1	26
25	Effect of catalyst coated surface, illumination mechanism and light source in heterogeneous TiO <sub>2</sub> photocatalysis using a mini-photoreactor for n-decane oxidation at gas phase. <i>Chemical Engineering Journal</i> , 2019, 366, 560-568.	12.7	26
26	High-Throughput T-jets Mixers: An Innovative Scale-Up Concept. <i>Chemical Engineering and Technology</i> , 2013, 36, 323-331.	1.5	25
27	Selecting the best piping arrangement for scaling-up an annular channel reactor: An experimental and computational fluid dynamics study. <i>Science of the Total Environment</i> , 2019, 667, 821-832.	8.0	25
28	Micromixing assessment of confined impinging jet mixers used in RIM. <i>Chemical Engineering Science</i> , 2012, 74, 276-286.	3.8	24
29	Intensifying heterogeneous TiO <sub>2</sub> photocatalysis for bromate reduction using the NETmix photoreactor. <i>Science of the Total Environment</i> , 2019, 664, 805-816.	8.0	24
30	A Highly Reproducible Continuous Process for Hydroxyapatite Nanoparticles Synthesis. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 3387-3395.	0.9	23
31	Numerical study of active mixing over a dynamic flow field in a T-jets mixer—Induction of resonance. <i>Chemical Engineering Research and Design</i> , 2016, 106, 74-91.	5.6	23
32	Droplet dynamics in vertical gas-liquid annular flow. <i>AIChE Journal</i> , 1987, 33, 1013-1024.	3.6	21
33	Diffusion, convection, and reaction in catalyst particles: analogy between slab and sphere geometries. <i>Industrial &amp; Engineering Chemistry Research</i> , 1993, 32, 1839-1852.	3.7	21
34	Network modeling of flow in a packed bed. <i>AIChE Journal</i> , 2007, 53, 91-107.	3.6	21
35	Mixing dynamics control in RIM machines. <i>Chemical Engineering Science</i> , 2007, 62, 5276-5281.	3.8	18
36	Heat transfer performance of NETmix—A novel micro-meso structured mixer and reactor. <i>AIChE Journal</i> , 2017, 63, 2496-2508.	3.6	18

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37	Validation of a 2D CFD Model for Hydrodynamics' Studies in CIJ Mixers. International Journal of Chemical Reactor Engineering, 2010, 8, .	1.1	16
38	Preparation of nano-hydroxyapatite/chitosan aqueous dispersions: From lab scale to continuous production using an innovative static mixer. Carbohydrate Polymers, 2018, 202, 20-28.	10.2	16
39	Overcoming limitations in photochemical UVC/H2O2 systems using a mili-photoreactor (NETmix): Oxytetracycline oxidation. Science of the Total Environment, 2019, 660, 982-992.	8.0	16
40	Flow Field and Non-Isothermal Effects on Diffusion, Convection, and Reaction in Permeable Catalysts. Industrial & Engineering Chemistry Research, 1995, 34, 148-157.	3.7	15
41	Supercritical CO <sub>2</sub> assisted process for the production of high-purity and sterile nano-hydroxyapatite/chitosan hybrid scaffolds. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 965-975.	3.4	15
42	An innovative static mixer photoreactor: Proof of concept. Chemical Engineering Journal, 2016, 287, 419-424.	12.7	14
43	On the 2D nature of flow dynamics in opposed jets mixers. AIChE Journal, 2017, 63, 2335-2347.	3.6	14
44	Continuous production of hydroxyapatite Pickering emulsions using a mesostructured reactor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 616, 126365.	4.7	14
45	Continuous Production of Melamine-Formaldehyde Microcapsules Using a Mesostructured Reactor. Industrial & Engineering Chemistry Research, 2020, 59, 18510-18519.	3.7	13
46	Prediction of the Induced Gas Flow Rate from a Self-Inducing Impeller with CFD. Chemical Engineering and Technology, 2014, 37, 571-579.	1.5	12
47	An elastic analog model for controlling the impingement point position in confined impinging jets. AIChE Journal, 2016, 62, 2200-2212.	3.6	12
48	Porous Media Characterization Using Mercury Porosimetry Simulation. 2. An Iterative Method for the Determination of the Real Pore Size Distribution and the Mean Coordination Number. Industrial & Engineering Chemistry Research, 2001, 40, 4836-4843.	3.7	11
49	Porous Media Characterization Using Mercury Porosimetry Simulation. 1. Description of the Simulator and Its Sensitivity to Model Parameters. Industrial & Engineering Chemistry Research, 2001, 40, 3511-3522.	3.7	11
50	Fully resolved modelling and simulation of micromixing in confined impinging jets. Chemical Engineering Science, 2020, 211, 115299.	3.8	11
51	Diffusion and convection in permeable particles: Analogy between slab and sphere geometries. Separation and Purification Technology, 1992, 2, 208-211.	0.7	10
52	The effect of intraparticle convection on conversion in heterogeneous isothermal fixed-bed reactors with large-pore catalysts for first-order reactions. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1994, 54, 41-50.	0.1	10
53	Hydrodynamics of gas-liquid flow in 2D packed/unpacked rectangular reactor. Chemical Engineering Science, 1999, 54, 5127-5137.	3.8	10
54	Real time control of mixing in Reaction Injection Moulding. Chemical Engineering Research and Design, 2016, 105, 31-43.	5.6	9

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55	Lagrangian mixing simulation and quantification of scales. Chemical Engineering Science, 2018, 192, 199-210.	3.8	9
56	3D Mixing Dynamics in Tâ€jet Mixers. Chemical Engineering and Technology, 2019, 42, 119-128.	1.5	9
57	Numerical study of transient flow dynamics in a core-type transformer windings. Electric Power Systems Research, 2020, 187, 106423.	3.6	9
58	Modelling of Selfâ€induced Oscillations in the Mixing Head of a RIM Machine. Canadian Journal of Chemical Engineering, 2007, 85, 45-54.	1.7	8
59	Mixing of fluids with dissimilar viscosities in Confined Impinging Jets. Chemical Engineering Research and Design, 2018, 134, 392-404.	5.6	8
60	Effect of Coke in the Equilibrium and Kinetics of Sorption on 5A Molecular Sieve Zeolites. Industrial & Engineering Chemistry Research, 2000, 39, 1030-1034.	3.7	7
61	Quantification of Mixing in RIM Using a Non-Diffusive Two-Phase Flow Numerical Model. International Journal of Chemical Reactor Engineering, 2011, 9, .	1.1	7
62	Estimation of $k_L$ Values in Benchâ€Scale Stirred Tank Reactors with Selfâ€Inducing Impeller by Multiphase CFD Simulations. Chemical Engineering and Technology, 2019, 42, 1545-1554.	1.5	7
63	Nanohydroxyapatite (n-HAp) as a pickering stabilizer in oil-in-water (O/W) emulsions: a stability study. Journal of Dispersion Science and Technology, 2022, 43, 814-826.	2.4	6
64	Effective mixing of dissimilar fluids in asymmetric Confined Impinging Jets mixers. Chemical Engineering Science, 2022, 258, 117756.	3.8	6
65	Application of a micro-meso-structured reactor (NETmix) to promote photochemical UVC/H2O2 processes â€ oxidation of As(iii) to As(v). Photochemical and Photobiological Sciences, 2018, 17, 1179-1188.	2.9	5
66	Proper Orthogonal Decomposition and Statistical Analysis of 2D Confined Impinging Jets Chaotic Flow. Chemical Engineering and Technology, 2019, 42, 1709-1716.	1.5	5
67	Removal of bromate from drinking water using a heterogeneous photocatalytic mili-reactor: impact of the reactor material and water matrix. Environmental Science and Pollution Research, 2019, 26, 33281-33293.	5.3	5
68	Flow Regimes and Mixing of Dissimilar Fluids in Tâ€jets Mixers. Chemical Engineering and Technology, 2022, 45, 355-364.	1.5	5
69	Effect of temperature, pH and ionic strength on hydroxyapatite stabilised Pickering emulsions produced in batch and continuous mode. Food Biophysics, 2022, 17, 422-436.	3.0	5
70	Carbon Capture and Storage Toward Industrialization: A Novel Continuous Process for the Production of Carbon Dioxide Clathrates. Energy Technology, 2022, 10, .	3.8	4
71	Monitoring in real time the production of Fe-oxide nanoparticles. Chemical Engineering Science, 2015, 138, 600-606.	3.8	3
72	Activated Sludge Models Coupled to CFD Simulations. , 2012, , 153-173.		3

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73	Mixing in the NETmix Reactor. <i>Frontiers in Chemical Engineering</i> , 2021, 3, .	2.7	3
74	Development of water-in-oil Pickering emulsions from sodium oleate surface-modified nano-hydroxyapatite. <i>Surfaces and Interfaces</i> , 2022, 29, 101759.	3.0	3
75	Diffusion, convection and reaction in catalyst particles: analogy between slab and cylinder geometries. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , 1996, 61, 113-122.	0.1	2
76	New insights into nanohydroxyapatite/chitosan nanocomposites for bone tissue regeneration. , 2019, , 331-371.		2
77	Continuous production of cellulose acetate microspheres for textile impregnation using a mesostructured reactor. <i>Cellulose</i> , 2022, 29, 3595.	4.9	2
78	Mass Transport Modelling in Porous Media Using Delay Differential Equations. <i>Defect and Diffusion Forum</i> , 2006, 258-260, 586-591.	0.4	1
79	Mixing Through Half a Century of Chemical Engineering. , 2012, , 79-112.		1
80	Striation Thickness Distribution in Split-and-Recombine Mixers in the Stokes Regime. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 170, 108714.	3.6	1
81	Diffusive lagrangian mixing simulation. <i>Chemical Engineering Research and Design</i> , 2020, 163, 307-319.	5.6	1
82	Computational aspects of the dynamics of sorption operations. <i>Computers and Chemical Engineering</i> , 1979, 3, 548.	3.8	0
83	Small-scale GTL Applications with Heat Integration in Reforming and Fischer-Tropsch Stages. <i>Computer Aided Chemical Engineering</i> , 2021, , 203-208.	0.5	0
84	Rheokinematics for Product Development – Formulation Screening in Rotational Rheometers. <i>AICHE Journal</i> , 0, , e17597.	3.6	0
85	Onset of Turbulence in T-jet Mixers. , 2007, , 728-728.		0