Carlos O Castillo-Araiza

List of Publications by Citations

42 papers	437 citations	12 h-index	18 g-index
52 ext. papers	569 ext. citations	6.3 avg, IF	3.81 L-index

#	Paper	IF	Citations
42	Kinetic modeling of the oxidative dehydrogenation of ethane to ethylene over a MoVTeNbO catalytic system. *Chemical Engineering Journal*, **2014**, 252, 75-88	14.7	48
41	Modeling of oxidative dehydrogenation of ethane to ethylene on a MoVTeNbO/TiO2 catalyst in an industrial-scale packed bed catalytic reactor. *Chemical Engineering Journal*, **2015**, 280, 682-694	14.7	37
40	Kinetics of HDS and of the inhibitory effect of quinoline on HDS of 4,6-DMDBT over a NiMoP/Al2O3 catalyst: Part I. *Chemical Engineering Journal*, **2012**, 210, 53-62	14.7	32
39	Kinetic Assessment of the Simultaneous Hydrodesulfurization of Dibenzothiophene and the Hydrogenation of Diverse Polyaromatic Structures. *ACS Catalysis*, **2018**, 8, 3926-3942	13.1	27
38	Modeling the Partial Oxidation ofo-Xylene in an Industrial Packed-Bed Catalytic Reactor: The Role of Hydrodynamics and Catalyst Activity in the Heat Transport. *Industrial & Engineering Chemistry Research*, **2010**, 49, 6845-6853	3.9	21
37	A simple approach to describe hydrodynamics and its effect on heat and mass transport in an industrial wall-cooled fixed bed catalytic reactor: ODH of ethane on a MoVNbTeO formulation. *Chemical Engineering Journal*, **2017**, 321, 584-599	14.7	19
36	Heat-Transfer Studies in Packed-Bed Catalytic Reactors of Low Tube/Particle Diameter Ratio. *Industrial & Engineering Chemistry Research*, **2007**, 46, 7426-7435	3.9	19
35	Mathematical model of a three phase partitioning bioreactor for conversion of ketones using whole cells. *Chemical Engineering Journal*, **2015**, 260, 765-775	14.7	16
34	Whole cell bioconversion of (+)-valencene to (+)-nootkatone by Yarrowia lipolytica using a three phase partitioning bioreactor. *Journal of Chemical Technology and Biotechnology*, **2016**, 91, 1164-1172	3.5	16
33	Role of PtPd/Al2O3 on the HDS of 4,6-DMBT: Kinetic modeling & contribution analysis. *Fuel Processing Technology*, **2015**, 132, 164-172	7.2	15
32	Effect of diffusion on the conceptual design of a fixed-bed adsorber. *Fuel*, **2015**, 149, 100-108	7.1	13
31	Cadmium(II), Lead(II), and Copper(II) Biosorption on Baker's Yeast (Saccharomyces cerevesiae). *Journal of Environmental Engineering, ASCE*, **2016**, 142,	2	13
30	Evaluation of ionic liquids as dispersed phase during the production of lactones with E. coli in a three phase partitioning bioreactor. *Chemical Engineering Journal*, **2015**, 279, 379-386	14.7	11
29	Kinetic, oxygen mass transfer and hydrodynamic studies in a three-phase stirred tank bioreactor for the bioconversion of (+)-valencene on Yarrowia lipolytica 2.2ab. *Biochemical Engineering Journal*, **2016**, 113, 37-46	4.2	11
28	The role of catalyst activity on the steady state and transient behavior of an industrial-scale fixed bed catalytic reactor for the partial oxidation of o-xylene on V2O5/TiO2 catalysts. *Chemical Engineering Journal*, **2011**, 176-177, 26-32	14.7	11
27	Zinc-aluminates for an in situ sulfur reduction in cracked gasoline. *Applied Catalysis B: Environmental*, **2008**, 81, 1-13	21.8	11
26	On the ultrasonic degradation of Rhodamine B in water: kinetics and operational conditions effect. *Environmental Technology (United Kingdom)*, **2014**, 35, 1183-9	2.6	10

25	On the conceptual design of a partitioning technology for the bioconversion of (+)-valencene to (+)-nootkatone on whole cells: Experimentation and modelling. *Chemical Engineering and Processing: Process Intensification*, **2017**, 122, 493-507	3.7	10
24	Engineering Considerations to Produce Bioactive Compounds from Plant Cell Suspension Culture in Bioreactors.. *Plants*, **2021**, 10,	4.5	10
23	Exploring the potential of graphene oxide as a functional material to produce hydrocarbons via photocatalysis: Theory meets experiment. *Fuel*, **2020**, 271, 117616	7.1	9
22	Mass transfer coefficient determination in three biphasic systems (water□onic liquid) using a modified Lewis cell. *Chemical Engineering Journal*, **2012**, 181-182, 702-707	14.7	8
21	Hydrodynamic Models for Packed Beds with Low Tube-to-Particle Diameter Ratio. *International Journal of Chemical Reactor Engineering*, **2008**, 6,	1.2	8
20	The role of kinetics and heat transfer on the performance of an industrial wall-cooled packed-bed reactor: Oxidative dehydrogenation of ethane. *AICHE Journal*, **2020**, 66, e16900	3.6	7
19	Revisiting Electrochemical Techniques to Characterize the Solid-State Diffusion Mechanism in Lithium-Ion Batteries. *International Journal of Chemical Reactor Engineering*, **2019**, 17,	1.2	7
18	Whole-Cell Bioconversion of Citrus Flavonoids to Enhance Their Biological Properties. *Studies in Natural Products Chemistry*, **2019**, 61, 335-367	1.5	5
17	On the dynamics of the catalytic surface of a bimetallic mixed-oxide formulation during the oxidative dehydrogenation of ethane. *Catalysis Today*, **2021**,	5.3	5
16	Assessment of hydrodynamics in a novel bench-scale wall-cooled packed bioreactor under abiotic conditions. *Chemical Engineering Journal*, **2019**, 375, 121945	14.7	4
15	Kinetic and reactor performance of a Ni-based catalyst during the production of ethene. *Chemical Engineering Communications*, **2018**, 205, 372-386	2.2	4
14	Hydrodesulfurization of Dibenzothiophene in a Micro Trickle Bed Catalytic Reactor under Operating Conditions from Reactive Distillation. *International Journal of Chemical Reactor Engineering*, **2016**, 14, 769-783	1.2	4
13	STUDY OF THE AGGLOMERATION MECHANISM OF A NATURAL ORGANIC SOLID IN A BENCH-SCALE WET FLUIDIZED BED USING STATISTICAL ANALYSIS AND DISCRETIZED POPULATION BALANCE. *Chemical Engineering Communications*, **2014**, 201, 23-40	2.2	4
12	Unravelling the redox mechanism and kinetics of a highly active and selective Ni-based material for the oxidative dehydrogenation of ethane. *Reaction Chemistry and Engineering*,	4.9	3
11	Solid/gas biocatalysis for aroma production: An alternative process of white biotechnology. *Biochemical Engineering Journal*, **2020**, 164, 107767	4.2	3
10	One-Pot Isomerization of n-Alkanes by Super Acidic Solids: Sulfated Aluminum-Zirconium Binary Oxides. *International Journal of Chemical Reactor Engineering*, **2016**, 14, 795-807	1.2	3
9	Elucidating Kinetic, Adsorption and Partitioning Phenomena from a Single Well Tracer Method: Laboratory and Bench Scale Studies. *International Journal of Chemical Reactor Engineering*, **2016**, 14, 1149-1168	1.2	3
8	Kinetic Assessment of the Dry Reforming of Methane over a Ni□a2O3 Catalyst. *ACS Catalysis*, **2021**, 11, 11478-11493	13.1	3

7	Framing a novel approach for pseudo continuous modeling using Direct Numerical Simulations (DNS): Fluid dynamics in a packed bed reactor. *Chemical Engineering Journal*, **2022**, 429, 132061	14.7	3
6	Assessing the effect of light intensity and light wavelength spectra on the photoreduction of formic acid using a graphene oxide material. *International Journal of Chemical Reactor Engineering*, **2020**, 18,	1.2	2
5	Degradation and Mineralization of a Cationic Dye by a Sequential Photo-Sono Catalytic Process. *International Journal of Chemical Reactor Engineering*, **2017**, 15,	1.2	1
4	On the engineering of a laboratory LED-based photocatalytic reactor for radiative and kinetic studies. *Canadian Journal of Chemical Engineering*, **2021**, 99, 959-970	2.3	1
3	Degradation of Rhodamine B in water alone or as part of a mixture by advanced oxidation processes. *Chemical Engineering Communications*, **2020**, 1-14	2.2	0
2	On the modelling and surface response analysis of a non-conventional wall-cooled solid/gas bioreactor with application in esterification. *Chemical Engineering Journal*, **2022**, 437, 135063	14.7	0
1	Prediction of Thermodynamic Consistency of Vapour-liquid Equilibrium of a Two-Phase System in the Presence of the Salting-in and Salting-out Effects. *Indian Chemical Engineer*, **2016**, 58, 106-117	1	