Jan J Verstraete

List of Publications by Year
in descending order

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41 papers	1,278 citations	346980 22 h-index	388640 36 g-index
41 all docs	41 docs citations	41 times ranked	1105 citing authors

#	Article	IF	Citations
1	Modelling textural and mass transfer properties for gammaâ€alumina catalysts using randomly generated pore networks. Canadian Journal of Chemical Engineering, 2023, 101, 1068-1082.	0.9	1
2	Computational Characterization of a Pore Network Model by Using a Fast Nitrogen Porosimetry Simulation. Computer Aided Chemical Engineering, 2021, 50, 1111-1116.	0.3	2
3	Experimental and Mesoscopic Modeling Study of Water/Crude Oil Interfacial Tension. Energy & Fuels, 2021, 35, 11858-11868.	2.5	5
4	Generation of Î³-Alumina Digital Twins Using a Nitrogen Porosimetry Simulation. Industrial & Engineering Chemistry Research, 2021, 60, 16728-16738.	1.8	4
5	A Monte Carlo method for the simulating hydrotreating of bio-oil model compounds. Chemical Engineering Journal, 2019, 377, 120144.	6.6	7
6	Adaptation of a Monte Carlo method to the hydrotreating of bio-oil model compounds. Computer Aided Chemical Engineering, 2018, 43, 1559-1564.	0.3	0
7	Tortuosity and mass transfer limitations in industrial hydrotreating catalysts: effect of particle shape and size distribution. Catalysis Science and Technology, 2018, 8, 4537-4549.	2.1	14
8	Tortuosity of mesoporous alumina catalyst supports: Influence of the pore network organization. Microporous and Mesoporous Materials, 2017, 248, 91-98.	2.2	36
9	Random porous network generation and 1D mass transfer simulation for gamma-alumina supports. Computer Aided Chemical Engineering, 2017, 40, 91-96.	0.3	5
10	A Review of Kinetic Modeling Methodologies for Complex Processes. Oil and Gas Science and Technology, 2016, 71, 45.	1.4	93
11	Application of Monte Carlo techniques to LCO gas oil hydrotreating: Molecular reconstruction and kinetic modelling. Catalysis Today, 2016, 271, 188-198.	2.2	15
12	Dealing with uncertainties: Sensitivity analysis of vacuum gas oil hydrotreatment. Chemical Engineering Journal, 2015, 278, 469-478.	6.6	10
13	Applications of Pulsed Electron Paramagnetic Resonance Spectroscopy to the Identification of Vanadyl Complexes in Asphaltene Molecules. Part 1: Influence of the Origin of the Feed. Energy & Fuels, 2015, 29, 4608-4615.	2.5	32
14	Simulating vacuum residue hydroconversion by means of Monte-Carlo techniques. Catalysis Today, 2014, 220-222, 208-220.	2.2	41
15	Molecular Reconstruction of Petroleum Fractions: Application to Vacuum Residues from Different Origins. Energy & Fuels, 2013, 27, 3622-3641.	2.5	47
16	Molecule-based kinetic modeling by Monte Carlo methods for heavy petroleum conversion. Science China Chemistry, 2013, 56, 1608-1622.	4.2	22
17	Development of a General Modelling Methodology for Vacuum Residue Hydroconversion. Oil and Gas Science and Technology, 2013, 68, 1027-1038.	1.4	11
18	The Eurokin consortium: origin, topics and aims. Green Processing and Synthesis, 2013, 2, .	1.3	1

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19	A Monte Carlo modeling methodology for the simulation of hydrotreating processes. Chemical Engineering Journal, 2012, 207-208, 94-102.	6.6	46
20	Improvement of Ebullated-Bed Effluent Stability at High Conversion Operation. Energy & Fuels, 2011, 25, 3867-3874.	2.5	25
21	Statistical Reconstruction of Gas Oil Cuts. Oil and Gas Science and Technology, 2011, 66, 461-477.	1.4	25
22	Kinetic Modeling using the Single-Event Methodology: Application to the Isomerization of Light Paraffins. Oil and Gas Science and Technology, 2011, 66, 343-365.	1.4	29
23	Reduction of Single Event Kinetic Models by Rigorous Relumping: Application to Catalytic Reforming. Oil and Gas Science and Technology, 2011, 66, 367-397.	1.4	20
24	Reconstruction of Petroleum Feedstocks by Entropy Maximization. Application to FCC Gasolines. Oil and Gas Science and Technology, 2011, 66, 437-460.	1.4	36
25	Single Event Kinetic Modelling without Explicit Generation of Large Networks: Application to Hydrocracking of Long Paraffins. Oil and Gas Science and Technology, 2011, 66, 399-422.	1.4	17
26	Molecular reconstruction of heavy petroleum residue fractions. Chemical Engineering Science, 2010, 65, 304-312.	1.9	93
27	In-depth modeling of gas oil hydrotreating: From feedstock reconstruction to reactor stability analysis. Catalysis Today, 2010, 150, 279-299.	2.2	45
28	Effect of Chemical Composition on Asphaltenes Aggregation. Energy & Fuels, 2010, 24, 1051-1062.	2.5	105
29	Aggregation States of Asphaltenes: Evidence of Two Chemical Behaviors by ¹H Diffusion-Ordered Spectroscopy Nuclear Magnetic Resonance. Journal of Physical Chemistry C, 2009, 113, 16266-16276.	1.5	55
30	¹H Diffusion-Ordered Spectroscopy (DOSY) Nuclear Magnetic Resonance (NMR) as a Powerful Tool for the Analysis of Hydrocarbon Mixtures and Asphaltenes. Energy & Fuels, 2008, 22, 2604-2610.	2.5	58
31	Kinetic Modeling of Acid Catalyzed Hydrocracking of Heavy Molecules:Â Application to Squalane. Industrial & Engineering Chemistry Research, 2007, 46, 4755-4763.	1.8	29
32	Molecular reconstruction of naphtha steam cracking feedstocks based on commercial indices. Computers and Chemical Engineering, 2007, 31, 1020-1034.	2.0	84
33	Dynamic modelling of an industrial R2R FCC unit. Chemical Engineering Science, 2007, 62, 1184-1198.	1.9	45
34	Modeling fixed-bed residue hydrotreating processes. Chemical Engineering Science, 2007, 62, 5402-5408.	1.9	46
35	Impact of vaporization in a residue hydroconversion process. Chemical Engineering Science, 2007, 62, 5409-5417.	1.9	16
36	Study of direct and indirect naphtha recycling to a resid FCC unit for maximum propylene production. Catalysis Today, 2005, 106, 62-71.	2.2	39

#	Article	IF	Citations
37	Mechanistic dynamic modelling of an industrial FCC Unit. Computer Aided Chemical Engineering, 2005, , 589-594.	0.3	5
38	Industrial Development and Operation of an Efficient Riser Separation System for FCC Units. International Journal of Chemical Reactor Engineering, 2005, 3, .	0.6	5
39	Molecular reconstruction of LCO gasoils from overall petroleum analyses. Chemical Engineering Science, 2004, 59, 4755-4763.	1.9	87
40	Study of the cracking reaction of linear and branched hexanes under protolytic conditions by non-stationary kinetics. Chemical Engineering Journal, 2002, 90, 139-147.	6.6	14
41	Residence time distributions with a radiotracer in a hydrotreating pilot plant: Upflow versus downflow operation. Chemical Engineering Science, 2002, 57, 1859-1866.	1.9	8