Gurutze Arzamendi

List of Publications by Year
in descending order

83 papers	4,226 citations	76326 40 h-index	114465 63 g-index
84 all docs	84 docs citations	84 times ranked	3189 citing authors

#	Article	IF	Citations
1	Reaction Monitoring by Ultrasounds in a Pseudohomogeneous Medium: Triglyceride Ethanolysis for Biodiesel Production. Processes, 2022, 10, 12.	2.8	1
2	Pseudo-Homogeneous and Heterogeneous Kinetic Models of the NaOH-Catalyzed Methanolysis Reaction for Biodiesel Production. Energies, 2021, 14, 4192.	3.1	2
3	Comprehensive Kinetics of Hydrolysis of Organotriethoxysilanes by ²⁹Si NMR. Journal of Physical Chemistry A, 2019, 123, 10364-10371.	2.5	5
4	Kinetics of the acid-catalyzed hydrolysis of tetraethoxysilane (TEOS) by 29Si NMR spectroscopy and mathematical modeling. Journal of Sol-Gel Science and Technology, 2018, 86, 316-328.	2.4	28
5	Outstanding performance of rehydrated Mg-Al hydrotalcites as heterogeneous methanolysis catalysts for the synthesis of biodiesel. Fuel, 2018, 211, 173-181.	6.4	89
6	Effect of the thermal conductivity of metallic monoliths on methanol steam reforming. Catalysis Today, 2016, 273, 131-139.	4.4	55
7	Entropy of chemical processes versus numerical representability of orderings. Journal of Mathematical Chemistry, 2016, 54, 503-526.	1.5	4
8	Issues concerning the use of renewable Ca-based solids as transesterification catalysts. Fuel, 2015, 158, 558-564.	6.4	18
9	Kinetics of the NaOH-catalyzed transesterification of sunflower oil with ethanol to produce biodiesel. Fuel Processing Technology, 2015, 129, 147-155.	7.2	118
10	Ecodesign of PVC packing tape using life cycle assessment. International Journal of Life Cycle Assessment, 2014, 19, 218-230.	4.7	15
11	Influence of vegetable oil fatty acid composition on ultrasound-assisted synthesis of biodiesel. Fuel, 2014, 125, 183-191.	6.4	35
12	Monitoring of the methanolysis reaction for biodiesel production by off-line and on-line refractive index and speed of sound measurements. Fuel, 2014, 121, 157-164.	6.4	19
13	Gold supported on CuOx/CeO2 catalyst for the purification of hydrogen by the CO preferential oxidation reaction (PROX). Fuel, 2014, 118, 176-185.	6.4	46
14	Heterogenization of the biodiesel synthesis catalysis: CaO and novel calcium compounds as transesterification catalysts. Chemical Engineering Research and Design, 2014, 92, 1519-1530.	5.6	96
15	CFD analysis of the effects of the flow distribution and heat losses on the steam reforming of methanol in catalytic (Pd/ZnO) microreactors. Chemical Engineering Journal, 2014, 238, 37-44.	12.7	39
16	Development of eggshell derived catalyst for transesterification of used cooking oil for biodiesel production. Asia-Pacific Journal of Chemical Engineering, 2013, 8, 742-748.	1.5	39
17	Structured catalysts based on Mgâ€“Al hydrotalcite for the synthesis of biodiesel. Catalysis Today, 2013, 216, 211-219.	4.4	48
18	Preferential oxidation of CO over Au/CuOxâ€“CeO2 catalyst in microstructured reactors studied through CFD simulations. Catalysis Today, 2013, 216, 283-291.	4.4	15

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19	Influence of the O2/CO ratio and the presence of H2O and CO2 in the feed-stream during the preferential oxidation of CO (PROX) over a CuOx/CeO2-coated microchannel reactor. Catalysis Today, 2013, 203, 182-187.	4.4	31
20	Kinetic analysis and microstructured reactors modeling for the Fischerâ€“Tropsch synthesis over a Coâ€“Re/Al2O3 catalyst. Catalysis Today, 2013, 215, 103-111.	4.4	54
21	Renewable Hydrogen Energy. , 2013, , 1-17.		17
22	Computational Fluid Dynamics as a Tool for Designing Hydrogen Energy Technologies. , 2013, , 401-435.		5
23	Hydrogen Hazards and Risks Analysis through CFD Simulations. , 2013, , 437-452.		2
24	A CFD study on the effect of the characteristic dimension of catalytic wall microreactors. AICHE Journal, 2012, 58, 2785-2797.	3.6	27
25	DRIFTS study of methanol adsorption on Mgâ€“Al hydrotalcite catalysts for the transesterification of vegetable oils. Catalysis Communications, 2012, 17, 189-193.	3.3	23
26	Preferential oxidation of CO (CO-PROX) over CuOx/CeO2 coated microchannel reactor. Catalysis Today, 2012, 180, 105-110.	4.4	42
27	Branching at High Frequency Pulsed Laser Polymerizations of Acrylate Monomers. Macromolecules, 2011, 44, 3674-3679.	4.8	23
28	VOCs combustion catalysed by platinum supported on manganese octahedral molecular sieves. Applied Catalysis B: Environmental, 2011, 110, 231-237.	20.2	54
29	Conversion of a gasoline engine-generator set to a bi-fuel (hydrogen/gasoline) electronic fuel-injected power unit. International Journal of Hydrogen Energy, 2011, 36, 13781-13792.	7.1	32
30	Influence of vegetable oils fatty acid composition on reaction temperature and glycerides conversion to biodiesel during transesterification. Bioresource Technology, 2011, 102, 1044-1050.	9.6	44
31	Fischerâ€“Tropsch synthesis in microchannels. Chemical Engineering Journal, 2011, 167, 536-544.	12.7	91
32	Computational fluid dynamics simulation of ethanol steam reforming in catalytic wall microchannels. Chemical Engineering Journal, 2011, 167, 603-609.	12.7	66
33	Selective CO removal over Au/CeFe and CeCu catalysts in microreactors studied through kinetic analysis and CFD simulations. Chemical Engineering Journal, 2011, 167, 588-596.	12.7	38
34	Design and testing of a microchannel reactor for the PROX reaction. Chemical Engineering Journal, 2011, 167, 634-642.	12.7	40
35	Multiple response optimization of vegetable oils fatty acid composition to improve biodiesel physical properties. Bioresource Technology, 2011, 102, 7280-7288.	9.6	91
36	Computational fluid dynamics study of heat transfer in a microchannel reactor for low-temperature Fischerâ€“Tropsch synthesis. Chemical Engineering Journal, 2010, 160, 915-922.	12.7	68

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37	Synthesis of biodiesel from the methanolysis of sunflower oil using PURALÂ® Mgâ€“Al hydrotalcites as catalyst precursors. Applied Catalysis B: Environmental, 2010, 100, 299-309.	20.2	62
38	Iron-modified ceria and Au/ceria catalysts for Total and Preferential Oxidation of CO (TOX and PROX). Catalysis Today, 2010, 157, 155-159.	4.4	94
39	Kinetics and selectivity of methyl-ethyl-ketone combustion in air over alumina-supported PdOxâ€“MnOx catalysts. Journal of Catalysis, 2009, 261, 50-59.	6.2	45
40	Integration of methanol steam reforming and combustion in a microchannel reactor for H2 production: A CFD simulation study. Catalysis Today, 2009, 143, 25-31.	4.4	80
41	Methane steam reforming in a microchannel reactor for GTL intensification: A computational fluid dynamics simulation study. Chemical Engineering Journal, 2009, 154, 168-173.	12.7	80
42	Methyl ethyl ketone combustion over La-transition metal (Cr, Co, Ni, Mn) perovskites. Applied Catalysis B: Environmental, 2009, 92, 445-453.	20.2	54
43	Synthesis of biodiesel from sunflower oil with silicaâ€supported NaOH catalysts. Journal of Chemical Technology and Biotechnology, 2008, 83, 862-870.	3.2	26
44	Alkaline and alkaline-earth metals compounds as catalysts for the methanolysis of sunflower oil. Catalysis Today, 2008, 133-135, 305-313.	4.4	152
45	Molecular Weight Distribution (Soluble and Insoluble Fraction) in Emulsion Polymerization of Acrylate Monomers by Monte Carlo Simulations. Industrial & Engineering Chemistry Research, 2008, 47, 5934-5947.	3.7	59
46	Kinetics of Methyl Ethyl Ketone Combustion in Air at Low Concentrations over a Commercial Pt/Al2O3Catalyst. Industrial & Engineering Chemistry Research, 2007, 46, 9037-9044.	3.7	12
47	Synthesis of biodiesel with heterogeneous NaOH/alumina catalysts: Comparison with homogeneous NaOH. Chemical Engineering Journal, 2007, 134, 123-130.	12.7	249
48	Monitoring of biodiesel production: Simultaneous analysis of the transesterification products using size-exclusion chromatography. Chemical Engineering Journal, 2006, 122, 31-40.	12.7	80
49	Unexpected Crosslinking During Acetoacetoxy Group Protection on Waterborne Crosslinkable Latexes. Macromolecular Materials and Engineering, 2006, 291, 1185-1193.	3.6	13
50	Model Reduction in Emulsion Polymerization Using Hybrid First Principles/Artificial Neural Networks Models, 2. Macromolecular Theory and Simulations, 2005, 14, 125-132.	1.4	4
51	Seeded Semibatch Emulsion Copolymerization ofn-Butyl Acrylate and Methyl Methacrylate. Industrial & Engineering Chemistry Research, 2004, 43, 7401-7409.	3.7	57
52	Branching and crosslinking in emulsion polymerization. Macromolecular Symposia, 2004, 206, 149-164.	0.7	15
53	Evidence of Branching in Poly(butyl acrylate) Produced in Pulsed-Laser Polymerization Experiments. Macromolecular Rapid Communications, 2003, 24, 173-177.	3.9	128
54	Model Reduction in Emulsion Polymerization Using Hybrid First-Principles/Artificial Neural Network Models. Macromolecular Theory and Simulations, 2003, 12, 42-56.	1.4	15

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55	Effect of the Intramolecular Chain Transfer to Polymer on PLP/SEC Experiments of Alkyl Acrylates. Macromolecular Theory and Simulations, 2003, 12, 315-324.	1.4	107
56	Molecular weight development in emulsion copolymerization ofn-butyl acrylate and styrene. Journal of Applied Polymer Science, 2003, 87, 1918-1926.	2.6	12
57	Dynamic optimization of non-linear emulsion copolymerization systems Open-loop control of composition and molecular weight distribution. Chemical Engineering Journal, 2002, 85, 339-349.	12.7	45
58	Seeded semibatch emulsion polymerization ofn-butyl acrylate: Effect of the seed properties. Journal of Polymer Science Part A, 2002, 40, 2878-2883.	2.3	13
59	Modeling of Seeded Semibatch Emulsion Polymerization of n-BA. Industrial & Engineering Chemistry Research, 2001, 40, 3883-3894.	3.7	115
60	Kinetics and Polymer Microstructure of the Seeded Semibatch Emulsion Copolymerization ofn-Butyl Acrylate and Styrene. Macromolecules, 2001, 34, 5147-5157.	4.8	102
61	Intramolecular Chain Transfer to Polymer in the Emulsion Polymerization of 2-Ethylhexyl Acrylate. Macromolecules, 2001, 34, 6138-6143.	4.8	86
62	Dynamic optimization of semicontinuous emulsion copolymerization reactions: composition and molecular weight distribution. Computers and Chemical Engineering, 2001, 25, 839-849.	3.8	50
63	Modeling molecular weight distribution in emulsion polymerization reactions with transfer to polymer. Journal of Polymer Science Part A, 2001, 39, 3513-3528.	2.3	30
64	Stereoregulation in cationic polymerization. III. High isospecificity with the bulky phosphoric acid [(RO)2PO2H]/SnCl4 initiating systems: Design of counteranions via initiators. Journal of Polymer Science Part A, 2001, 39, 1067-1074.	2.3	32
65	Seeded semibatch emulsion polymerization of butyl acrylate: Effect of the chain-transfer agent on the kinetics and structural properties. Journal of Polymer Science Part A, 2001, 39, 1106-1119.	2.3	80
66	Dynamic optimization of semicontinuous emulsion copolymerization reactions: Composition and molecular weight distribution. Computer Aided Chemical Engineering, 2000, , 457-462.	0.5	1
67	Kinetics of the seeded semicontinuous emulsion copolymerization of methyl methacrylate and butyl acrylate. Journal of Polymer Science Part A, 2000, 38, 367-375.	2.3	17
68	Molecular weight distribution in composition controlled emulsion copolymerization. Journal of Polymer Science Part A, 2000, 38, 1100-1109.	2.3	35
69	A Decrease in Effective Acrylate Propagation Rate Constants Caused by Intramolecular Chain Transfer. Macromolecules, 2000, 33, 4-7.	4.8	180
70	Seeded Semibatch Emulsion Polymerization ofn-Butyl Acrylate. Kinetics and Structural Properties. Macromolecules, 2000, 33, 5041-5047.	4.8	160
71	Modeling of MWD in Emulsion Polymerization: Partial Distinction Approach. Polymer-Plastics Technology and Engineering, 1998, 6, 193-223.	0.7	25
72	Modeling Gelation and Sol Molecular Weight Distribution in Emulsion Polymerization. Macromolecules, 1995, 28, 7479-7490.	4.8	69

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73	High solids content emulsion terpolymerization of vinyl acetate, methyl methacrylate and butyl acrylate. II. Open loop composition control. Journal of Polymer Science Part A, 1994, 32, 1779-1788.	2.3	21
74	Kinetics of Long-Chain Branching in Emulsion Polymerization. Macromolecules, 1994, 27, 6068-6079.	4.8	21
75	Copolymer composition control in emulsion polymerization using technical grade monomers. Polymer International, 1993, 30, 455-460.	3.1	23
76	Optimal monomer addition policies for composition control of emulsion terpolymers. Angewandte Makromolekulare Chemie, 1992, 194, 47-64.	0.2	30
77	Modeling semicontinuous emulsion terpolymerization. Chemical Engineering Science, 1992, 47, 2579-2584.	3.8	45
78	Copolymer composition control of emulsion copolymers in reactors with limited capacity for heat removal. Industrial & Engineering Chemistry Research, 1991, 30, 1342-1350.	3.7	82
79	Semicontinuous seeded emulsion copolymerization of vinyl acetate and methyl acrylate. Journal of Polymer Science Part A, 1991, 29, 169-186.	2.3	25
80	Semicontinuous emulsion copolymerization of methyl methacrylate and ethyl acrylate. Journal of Polymer Science Part A, 1991, 29, 1549-1559.	2.3	30
81	Copolymer composition control during the seeded emulsion copolymerization of vinyl acetate and methyl acrylate. Makromolekulare Chemie Macromolecular Symposia, 1990, 35-36, 249-268.	0.6	46
82	Monomer addition policies for copolymer composition control in semicontinuous emulsion copolymerization. Journal of Applied Polymer Science, 1989, 38, 2019-2036.	2.6	93
83	Hydrotalcites as Catalysts and Catalysts Precursors for the Synthesis of Biodiesel. Key Engineering Materials, 0, 571, 1-26.	0.4	6