

Gurutze Arzamendi

List of Publications by Year in descending order

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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	Synthesis of biodiesel with heterogeneous NaOH/alumina catalysts: Comparison with homogeneous NaOH. <i>Chemical Engineering Journal</i> , 2007, 134, 123-130.	12.7	249
2	A Decrease in Effective Acrylate Propagation Rate Constants Caused by Intramolecular Chain Transfer. <i>Macromolecules</i> , 2000, 33, 4-7.	4.8	180
3	Seeded Semibatch Emulsion Polymerization of n-Butyl Acrylate. Kinetics and Structural Properties. <i>Macromolecules</i> , 2000, 33, 5041-5047.	4.8	160
4	Alkaline and alkaline-earth metals compounds as catalysts for the methanolysis of sunflower oil. <i>Catalysis Today</i> , 2008, 133-135, 305-313.	4.4	152
5	Evidence of Branching in Poly(butyl acrylate) Produced in Pulsed-Laser Polymerization Experiments. <i>Macromolecular Rapid Communications</i> , 2003, 24, 173-177.	3.9	128
6	Kinetics of the NaOH-catalyzed transesterification of sunflower oil with ethanol to produce biodiesel. <i>Fuel Processing Technology</i> , 2015, 129, 147-155.	7.2	118
7	Modeling of Seeded Semibatch Emulsion Polymerization of n-BA. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 3883-3894.	3.7	115
8	Effect of the Intramolecular Chain Transfer to Polymer on PLP/SEC Experiments of Alkyl Acrylates. <i>Macromolecular Theory and Simulations</i> , 2003, 12, 315-324.	1.4	107
9	Kinetics and Polymer Microstructure of the Seeded Semibatch Emulsion Copolymerization of n-Butyl Acrylate and Styrene. <i>Macromolecules</i> , 2001, 34, 5147-5157.	4.8	102
10	Heterogenization of the biodiesel synthesis catalysis: CaO and novel calcium compounds as transesterification catalysts. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1519-1530.	5.6	96
11	Iron-modified ceria and Au/ceria catalysts for Total and Preferential Oxidation of CO (TOX and PROX). <i>Catalysis Today</i> , 2010, 157, 155-159.	4.4	94
12	Monomer addition policies for copolymer composition control in semicontinuous emulsion copolymerization. <i>Journal of Applied Polymer Science</i> , 1989, 38, 2019-2036.	2.6	93
13	Fischer-Tropsch synthesis in microchannels. <i>Chemical Engineering Journal</i> , 2011, 167, 536-544.	12.7	91
14	Multiple response optimization of vegetable oils fatty acid composition to improve biodiesel physical properties. <i>Bioresource Technology</i> , 2011, 102, 7280-7288.	9.6	91
15	Outstanding performance of rehydrated Mg-Al hydrotalcites as heterogeneous methanolysis catalysts for the synthesis of biodiesel. <i>Fuel</i> , 2018, 211, 173-181.	6.4	89
16	Intramolecular Chain Transfer to Polymer in the Emulsion Polymerization of 2-Ethylhexyl Acrylate. <i>Macromolecules</i> , 2001, 34, 6138-6143.	4.8	86
17	Copolymer composition control of emulsion copolymers in reactors with limited capacity for heat removal. <i>Industrial & Engineering Chemistry Research</i> , 1991, 30, 1342-1350.	3.7	82
18	Seeded semibatch emulsion polymerization of butyl acrylate: Effect of the chain-transfer agent on the kinetics and structural properties. <i>Journal of Polymer Science Part A</i> , 2001, 39, 1106-1119.	2.3	80

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19	Monitoring of biodiesel production: Simultaneous analysis of the transesterification products using size-exclusion chromatography. <i>Chemical Engineering Journal</i> , 2006, 122, 31-40.	12.7	80
20	Integration of methanol steam reforming and combustion in a microchannel reactor for H ₂ production: A CFD simulation study. <i>Catalysis Today</i> , 2009, 143, 25-31.	4.4	80
21	Methane steam reforming in a microchannel reactor for GTL intensification: A computational fluid dynamics simulation study. <i>Chemical Engineering Journal</i> , 2009, 154, 168-173.	12.7	80
22	Modeling Gelation and Sol Molecular Weight Distribution in Emulsion Polymerization. <i>Macromolecules</i> , 1995, 28, 7479-7490.	4.8	69
23	Computational fluid dynamics study of heat transfer in a microchannel reactor for low-temperature Fischer-Tropsch synthesis. <i>Chemical Engineering Journal</i> , 2010, 160, 915-922.	12.7	68
24	Computational fluid dynamics simulation of ethanol steam reforming in catalytic wall microchannels. <i>Chemical Engineering Journal</i> , 2011, 167, 603-609.	12.7	66
25	Synthesis of biodiesel from the methanolysis of sunflower oil using PURAL [®] Mg-Al hydrotalcites as catalyst precursors. <i>Applied Catalysis B: Environmental</i> , 2010, 100, 299-309.	20.2	62
26	Molecular Weight Distribution (Soluble and Insoluble Fraction) in Emulsion Polymerization of Acrylate Monomers by Monte Carlo Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 5934-5947.	3.7	59
27	Seeded Semibatch Emulsion Copolymerization of n-Butyl Acrylate and Methyl Methacrylate. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 7401-7409.	3.7	57
28	Effect of the thermal conductivity of metallic monoliths on methanol steam reforming. <i>Catalysis Today</i> , 2016, 273, 131-139.	4.4	55
29	Methyl ethyl ketone combustion over La-transition metal (Cr, Co, Ni, Mn) perovskites. <i>Applied Catalysis B: Environmental</i> , 2009, 92, 445-453.	20.2	54
30	VOCs combustion catalysed by platinum supported on manganese octahedral molecular sieves. <i>Applied Catalysis B: Environmental</i> , 2011, 110, 231-237.	20.2	54
31	Kinetic analysis and microstructured reactors modeling for the Fischer-Tropsch synthesis over a Co-Re/Al ₂ O ₃ catalyst. <i>Catalysis Today</i> , 2013, 215, 103-111.	4.4	54
32	Dynamic optimization of semicontinuous emulsion copolymerization reactions: composition and molecular weight distribution. <i>Computers and Chemical Engineering</i> , 2001, 25, 839-849.	3.8	50
33	Structured catalysts based on Mg-Al hydrotalcite for the synthesis of biodiesel. <i>Catalysis Today</i> , 2013, 216, 211-219.	4.4	48
34	Copolymer composition control during the seeded emulsion copolymerization of vinyl acetate and methyl acrylate. <i>Makromolekulare Chemie Macromolecular Symposia</i> , 1990, 35-36, 249-268.	0.6	46
35	Gold supported on CuOx/CeO ₂ catalyst for the purification of hydrogen by the CO preferential oxidation reaction (PROX). <i>Fuel</i> , 2014, 118, 176-185.	6.4	46
36	Modeling semicontinuous emulsion terpolymerization. <i>Chemical Engineering Science</i> , 1992, 47, 2579-2584.	3.8	45

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37	Dynamic optimization of non-linear emulsion copolymerization systems Open-loop control of composition and molecular weight distribution. <i>Chemical Engineering Journal</i> , 2002, 85, 339-349.	12.7	45
38	Kinetics and selectivity of methyl-ethyl-ketone combustion in air over alumina-supported PdOx-MnOx catalysts. <i>Journal of Catalysis</i> , 2009, 261, 50-59.	6.2	45
39	Influence of vegetable oils fatty acid composition on reaction temperature and glycerides conversion to biodiesel during transesterification. <i>Bioresource Technology</i> , 2011, 102, 1044-1050.	9.6	44
40	Preferential oxidation of CO (CO-PROX) over CuOx/CeO2 coated microchannel reactor. <i>Catalysis Today</i> , 2012, 180, 105-110.	4.4	42
41	Design and testing of a microchannel reactor for the PROX reaction. <i>Chemical Engineering Journal</i> , 2011, 167, 634-642.	12.7	40
42	Development of eggshell derived catalyst for transesterification of used cooking oil for biodiesel production. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2013, 8, 742-748.	1.5	39
43	CFD analysis of the effects of the flow distribution and heat losses on the steam reforming of methanol in catalytic (Pd/ZnO) microreactors. <i>Chemical Engineering Journal</i> , 2014, 238, 37-44.	12.7	39
44	Selective CO removal over Au/CeFe and CeCu catalysts in microreactors studied through kinetic analysis and CFD simulations. <i>Chemical Engineering Journal</i> , 2011, 167, 588-596.	12.7	38
45	Molecular weight distribution in composition controlled emulsion copolymerization. <i>Journal of Polymer Science Part A</i> , 2000, 38, 1100-1109.	2.3	35
46	Influence of vegetable oil fatty acid composition on ultrasound-assisted synthesis of biodiesel. <i>Fuel</i> , 2014, 125, 183-191.	6.4	35
47	Stereoregulation in cationic polymerization. III. High isospecificity with the bulky phosphoric acid [(RO)2PO2H]/SnCl4 initiating systems: Design of counteranions via initiators. <i>Journal of Polymer Science Part A</i> , 2001, 39, 1067-1074.	2.3	32
48	Conversion of a gasoline engine-generator set to a bi-fuel (hydrogen/gasoline) electronic fuel-injected power unit. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 13781-13792.	7.1	32
49	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. <i>Catalysis Today</i> , 2013, 203, 182-187.	4.4	31
50	Semicontinuous emulsion copolymerization of methyl methacrylate and ethyl acrylate. <i>Journal of Polymer Science Part A</i> , 1991, 29, 1549-1559.	2.3	30
51	Optimal monomer addition policies for composition control of emulsion terpolymers. <i>Angewandte Makromolekulare Chemie</i> , 1992, 194, 47-64.	0.2	30
52	Modeling molecular weight distribution in emulsion polymerization reactions with transfer to polymer. <i>Journal of Polymer Science Part A</i> , 2001, 39, 3513-3528.	2.3	30
53	Kinetics of the acid-catalyzed hydrolysis of tetraethoxysilane (TEOS) by 29Si NMR spectroscopy and mathematical modeling. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 86, 316-328.	2.4	28
54	A CFD study on the effect of the characteristic dimension of catalytic wall microreactors. <i>AICHE Journal</i> , 2012, 58, 2785-2797.	3.6	27

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55	Synthesis of biodiesel from sunflower oil with silica-supported NaOH catalysts. <i>Journal of Chemical Technology and Biotechnology</i> , 2008, 83, 862-870.	3.2	26
56	Semicontinuous seeded emulsion copolymerization of vinyl acetate and methyl acrylate. <i>Journal of Polymer Science Part A</i> , 1991, 29, 169-186.	2.3	25
57	Modeling of MWD in Emulsion Polymerization: Partial Distinction Approach. <i>Polymer-Plastics Technology and Engineering</i> , 1998, 6, 193-223.	0.7	25
58	Copolymer composition control in emulsion polymerization using technical grade monomers. <i>Polymer International</i> , 1993, 30, 455-460.	3.1	23
59	Branching at High Frequency Pulsed Laser Polymerizations of Acrylate Monomers. <i>Macromolecules</i> , 2011, 44, 3674-3679.	4.8	23
60	DRIFTS study of methanol adsorption on Mg-Al hydrotalcite catalysts for the transesterification of vegetable oils. <i>Catalysis Communications</i> , 2012, 17, 189-193.	3.3	23
61	High solids content emulsion terpolymerization of vinyl acetate, methyl methacrylate and butyl acrylate. II. Open loop composition control. <i>Journal of Polymer Science Part A</i> , 1994, 32, 1779-1788.	2.3	21
62	Kinetics of Long-Chain Branching in Emulsion Polymerization. <i>Macromolecules</i> , 1994, 27, 6068-6079.	4.8	21
63	Monitoring of the methanolysis reaction for biodiesel production by off-line and on-line refractive index and speed of sound measurements. <i>Fuel</i> , 2014, 121, 157-164.	6.4	19
64	Issues concerning the use of renewable Ca-based solids as transesterification catalysts. <i>Fuel</i> , 2015, 158, 558-564.	6.4	18
65	Kinetics of the seeded semicontinuous emulsion copolymerization of methyl methacrylate and butyl acrylate. <i>Journal of Polymer Science Part A</i> , 2000, 38, 367-375.	2.3	17
66	Renewable Hydrogen Energy. , 2013, , 1-17.		17
67	Model Reduction in Emulsion Polymerization Using Hybrid First-Principles/Artificial Neural Network Models. <i>Macromolecular Theory and Simulations</i> , 2003, 12, 42-56.	1.4	15
68	Branching and crosslinking in emulsion polymerization. <i>Macromolecular Symposia</i> , 2004, 206, 149-164.	0.7	15
69	Preferential oxidation of CO over Au/CuO-CeO ₂ catalyst in microstructured reactors studied through CFD simulations. <i>Catalysis Today</i> , 2013, 216, 283-291.	4.4	15
70	Ecodesign of PVC packing tape using life cycle assessment. <i>International Journal of Life Cycle Assessment</i> , 2014, 19, 218-230.	4.7	15
71	Seeded semibatch emulsion polymerization of n-butyl acrylate: Effect of the seed properties. <i>Journal of Polymer Science Part A</i> , 2002, 40, 2878-2883.	2.3	13
72	Unexpected Crosslinking During Acetoacetoxy Group Protection on Waterborne Crosslinkable Latexes. <i>Macromolecular Materials and Engineering</i> , 2006, 291, 1185-1193.	3.6	13

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73	Molecular weight development in emulsion copolymerization of n-butyl acrylate and styrene. Journal of Applied Polymer Science, 2003, 87, 1918-1926.	2.6	12
74	Kinetics of Methyl Ethyl Ketone Combustion in Air at Low Concentrations over a Commercial Pt/Al ₂ O ₃ Catalyst. Industrial & Engineering Chemistry Research, 2007, 46, 9037-9044.	3.7	12
75	Hydrotalcites as Catalysts and Catalysts Precursors for the Synthesis of Biodiesel. Key Engineering Materials, 0, 571, 1-26.	0.4	6
76	Computational Fluid Dynamics as a Tool for Designing Hydrogen Energy Technologies. , 2013, , 401-435.		5
77	Comprehensive Kinetics of Hydrolysis of Organotriethoxysilanes by ²⁹ Si NMR. Journal of Physical Chemistry A, 2019, 123, 10364-10371.	2.5	5
78	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
79	Entropy of chemical processes versus numerical representability of orderings. Journal of Mathematical Chemistry, 2016, 54, 503-526.	1.5	4
80	Hydrogen Hazards and Risks Analysis through CFD Simulations. , 2013, , 437-452.		2
81	Pseudo-Homogeneous and Heterogeneous Kinetic Models of the NaOH-Catalyzed Methanolysis Reaction for Biodiesel Production. Energies, 2021, 14, 4192.	3.1	2
82	Dynamic optimization of semicontinuous emulsion copolymerization reactions: Composition and molecular weight distribution. Computer Aided Chemical Engineering, 2000, , 457-462.	0.5	1
83	Reaction Monitoring by Ultrasounds in a Pseudohomogeneous Medium: Triglyceride Ethanolysis for Biodiesel Production. Processes, 2022, 10, 12.	2.8	1