

# Guy B Marin

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

496  
papers

17,259  
citations

64  
h-index

99  
g-index

514  
ext. papers

19,547  
ext. citations

6  
avg, IF

7.04  
L-index

#	Paper	IF	Citations
496	Decarbonisation of steel mill gases in an energy-neutral chemical looping process. <i>Energy Conversion and Management</i> , <b>2022</b> , 254, 115248	10.6	2
495	Carbon monoxide production using a steel mill gas in a combined chemical looping process. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 811-825	12	2
494	Looking inside a Ni-Fe/MgAl <sub>2</sub> O <sub>4</sub> catalyst for methane dry reforming via Mössbauer spectroscopy and in situ QXAS. <i>Applied Catalysis B: Environmental</i> , <b>2022</b> , 300, 120720	21.8	4
493	Speeding up turbulent reactive flow simulation via a deep artificial neural network: A methodology study. <i>Chemical Engineering Journal</i> , <b>2022</b> , 429, 132442	14.7	2
492	Shadowing Effect in Catalyst Activity: Experimental Observation. <i>ACS Catalysis</i> , <b>2022</b> , 12, 5455-5463	13.1	0
491	Intensifying blue hydrogen production by in situ CO <sub>2</sub> utilisation. <i>Journal of CO<sub>2</sub> Utilization</i> , <b>2022</b> , 61, 102014	7.6	2
490	Reducing CO <sub>2</sub> emissions of existing ethylene plants: Evaluation of different revamp strategies to reduce global CO <sub>2</sub> emission by 100 million tonnes. <i>Journal of Cleaner Production</i> , <b>2022</b> , 132127	10.3	0
489	Egalitarian Kinetic Models: Concepts and Results. <i>Energies</i> , <b>2021</b> , 14, 7230	3.1	1
488	From 3D to 1D: Capturing the effect of particle clusters in downers in the fluid catalytic cracking of gasoil. <i>Chemical Engineering Research and Design</i> , <b>2021</b> , 170, 366-379	5.5	
487	Biomass fast pyrolysis in an innovative gas-solid vortex reactor: Experimental proof of concept. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2021</b> , 156, 105165	6	9
486	From catalyst to process: bridging the scales in modeling the OCM reaction. <i>Catalysis Today</i> , <b>2021</b> , 365, 35-45	5.3	3
485	On the primary thermal decomposition pathways of hydroxycinnamic acids. <i>Proceedings of the Combustion Institute</i> , <b>2021</b> , 38, 4207-4214	5.9	6
484	Combustion of ethylamine, dimethylamine and diethylamine: Theoretical and kinetic modeling study. <i>Proceedings of the Combustion Institute</i> , <b>2021</b> , 38, 585-592	5.9	2
483	Thermal decomposition of furans with oxygenated substituents: A combined experimental and quantum chemical study. <i>Proceedings of the Combustion Institute</i> , <b>2021</b> , 38, 699-707	5.9	3
482	catchyFOAM: Euler-Euler CFD Simulations of Fluidized Bed Reactors with Microkinetic Modeling of Gas-Phase and Catalytic Surface Chemistry. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 2545-2561	4.1	7
481	Bond additivity corrections for CBS-QB3 calculated standard enthalpies of formation of H, C, O, N, and S containing species. <i>International Journal of Chemical Kinetics</i> , <b>2021</b> , 53, 345-355	1.4	2
480	Reuse of CO in energy intensive process industries. <i>Chemical Communications</i> , <b>2021</b> , 57, 10967-10982	5.8	10

479	An assessment of electrified methanol production from an environmental perspective. <i>Green Chemistry</i> , <b>2021</b> , 23, 7243-7258	10	6
478	A Boudart Number for the Assessment of Irreducible Pellet-Scale Mass Transfer Limitations: Application to Oxidative Coupling of Methane. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 6538-6553	3.9	3
477	Impact of the Spatial Distribution of Active Material on Bifunctional Hydrocracking. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2021</b> , 60, 6357-6378	3.9	2
476	Behaviour of Platinum-Tin during CO <sub>2</sub> -assisted propane dehydrogenation: Insights from quick X-ray absorption spectroscopy. <i>Journal of Catalysis</i> , <b>2021</b> ,	7.3	2
475	CFD-based assessment of steady-state multiplicity in a gas-solid vortex reactor for oxidative coupling of methane. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2021</b> , 165, 108434	3.7	5
474	Kinetics of chemical processes: From molecular to industrial scale. <i>Journal of Catalysis</i> , <b>2021</b> , 404, 745-7453	4.3	4
473	Microkinetic Model Validation for Fischer-Tropsch Synthesis at Methanation Conditions based on Steady State Isotopic Transient Kinetic Analysis. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2021</b> , 105, 191-191	6.3	2
472	Microstructured ZrO <sub>2</sub> coating of iron oxide for enhanced CO <sub>2</sub> conversion. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 292, 120194	21.8	5
471	Coupling CO <sub>2</sub> utilization and NO reduction in chemical looping manner by surface carbon. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 297, 120472	21.8	4
470	Fast estimation of standard enthalpy of formation with chemical accuracy by artificial neural network correction of low-level-of-theory ab initio calculations. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 131304	14.7	2
469	Intensifying Mass and Heat Transfer using a High-g Stator-Rotor Vortex Chamber. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2021</b> , 169, 108638	3.7	1
468	Computational fluid dynamics-based optimization of dimpled steam cracking reactors for reduced CO <sub>2</sub> emissions. <i>AIChE Journal</i> , <b>2020</b> , 66, e16255	3.6	4
467	What Makes Fe-Modified MgAl <sub>2</sub> O <sub>4</sub> an Active Catalyst Support? Insight from X-ray Raman Scattering. <i>ACS Catalysis</i> , <b>2020</b> , 10, 6613-6622	13.1	11
466	Experimental and kinetic modeling study of the pyrolysis and oxidation of diethylamine. <i>Fuel</i> , <b>2020</b> , 275, 117744	7.1	6
465	Reactor Engineering Aspects of the Lateral Flow Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 11157-11169	3.9	0
464	Alumina-based Coating for Coke Reduction in Steam Crackers. <i>Materials</i> , <b>2020</b> , 13,	3.5	3
463	Approaches for Selective Oxidation of Methane to Methanol. <i>Catalysts</i> , <b>2020</b> , 10, 194	4	20
462	Crude to Olefins: Effect of Feedstock Composition on Coke Formation in a Bench-Scale Steam Cracking Furnace. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 2849-2859	3.9	4

461	Effect of Rh in Ni-based catalysts on sulfur impurities during methane reforming. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 267, 118691	21.8	16
460	Catalyst screening for the oxidative coupling of methane: from isothermal to adiabatic operation via microkinetic simulations. <i>Reaction Chemistry and Engineering</i> , <b>2020</b> , 5, 584-596	4.9	13
459	New Invariant Expressions in Chemical Kinetics. <i>Entropy</i> , <b>2020</b> , 22,	2.8	4
458	Steam Cracking Coke Properties and Their Influence on Furnace Run Length Predictions: Experimental and Modeling Study. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 22460-22472	3.9	1
457	The role of chemistry in the oscillating combustion of hydrocarbons: An experimental and theoretical study. <i>Chemical Engineering Journal</i> , <b>2020</b> , 385, 123401	14.7	12
456	A multi-layered view of chemical and biochemical engineering. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 155, A133-A145	5.5	43
455	Sustainable innovations in steam cracking: CO2 neutral olefin production. <i>Reaction Chemistry and Engineering</i> , <b>2020</b> , 5, 239-257	4.9	24
454	FeO controls the sintering of iron-based oxygen carriers in chemical looping CO2 conversion. <i>Journal of CO2 Utilization</i> , <b>2020</b> , 40, 101216	7.6	7
453	Joint kinetics: a new paradigm for chemical kinetics and chemical engineering. <i>Current Opinion in Chemical Engineering</i> , <b>2020</b> , 29, 83-88	5.4	2
452	Single-Route Linear Catalytic Mechanism: A New, Kinetico-Thermodynamic Form of the Complex Reaction Rate. <i>Symmetry</i> , <b>2020</b> , 12, 1748	2.7	2
451	Hierarchical Fe-modified MgAl2O4 as a Ni-catalyst support for methane dry reforming. <i>Catalysis Science and Technology</i> , <b>2020</b> , 10, 6987-7001	5.5	11
450	Ethanol dehydration pathways in H-ZSM-5: Insights from temporal analysis of products. <i>Catalysis Today</i> , <b>2020</b> , 355, 822-831	5.3	12
449	Large eddy simulation of tubular reactors with spherical dimples. <i>Chemical Engineering Journal</i> , <b>2020</b> , 380, 122463	14.7	4
448	Pyrometer-based control of a steam cracking furnace. <i>Chemical Engineering Research and Design</i> , <b>2020</b> , 153, 380-390	5.5	4
447	CO2 sorption properties of Li4SiO4 with a Li2ZrO3 coating. <i>Journal of CO2 Utilization</i> , <b>2019</b> , 34, 688-699	7.6	10
446	Particle by Particle Kinetic Monte Carlo Tracking of Reaction and Mass Transfer Events in Miniemulsion Free Radical Polymerization. <i>Macromolecules</i> , <b>2019</b> , 52, 1408-1423	5.5	26
445	Process Intensification in a Gas-Solid Vortex Unit: Computational Fluid Dynamics Model Based Analysis and Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 12751-12765	3.9	8
444	Azimuthal and radial flow patterns of 1g-Geldart B-type particles in a gas-solid vortex reactor. <i>Powder Technology</i> , <b>2019</b> , 354, 410-422	5.2	6

443	Descriptor-property relationships in heterogeneous catalysis: exploiting synergies between statistics and fundamental kinetic modelling. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 3109-3125	5.5	19
442	Interplay of Head, Tail, and Mid-Chain Radicals in Bulk Free-Radical and Reversible Degenerative Addition Fragmentation Chain-Transfer Polymerizations of Vinyl Acetate. <i>Macromolecules</i> , <b>2019</b> , 52, 4555-4569	5.5	12
441	Making chemicals with electricity. <i>Science</i> , <b>2019</b> , 364, 734-735	33.3	53
440	Fe <sub>2</sub> O <sub>3</sub> /MgAl <sub>2</sub> O <sub>4</sub> for CO Production from CO <sub>2</sub> : Mössbauer Spectroscopy and in Situ X-ray Diffraction. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 9553-9565	8.3	11
439	An experimental and numerical study of the suppression of jets, counterflow, and backflow in vortex units. <i>AIChE Journal</i> , <b>2019</b> , 65, e16614	3.6	9
438	Swapping the equilibrium. <i>Chemical Engineering Science</i> , <b>2019</b> , 205, 165-173	4.4	4
437	Analytical Py-GC/MS of Genetically Modified Poplar for the Increased Production of Bio-aromatics. <i>Computational and Structural Biotechnology Journal</i> , <b>2019</b> , 17, 599-610	6.8	3
436	Formation and Functioning of Bimetallic Nanocatalysts: The Power of X-ray Probes. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 13220-13230	16.4	20
435	Formation and Functioning of Bimetallic Nanocatalysts: The Power of X-ray Probes. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 13354-13364	3.6	3
434	Pressure-induced deactivation of core-shell nanomaterials for catalyst-assisted chemical looping. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 247, 86-99	21.8	14
433	On-the-fly ab initio calculations toward accurate rate coefficients. <i>Proceedings of the Combustion Institute</i> , <b>2019</b> , 37, 283-290	5.9	13
432	From n-butyl acrylate Arrhenius parameters for backbiting and tertiary propagation to scission via stepwise pulsed laser polymerization. <i>Polymer Chemistry</i> , <b>2019</b> , 10, 4116-4125	4.9	22
431	110th Anniversary: Carbon Dioxide and Chemical Looping: Current Research Trends. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 16235-16257	3.9	25
430	Artificial Intelligence in Steam Cracking Modeling: A Deep Learning Algorithm for Detailed Effluent Prediction. <i>Engineering</i> , <b>2019</b> , 5, 1027-1040	9.7	25
429	QUANTIS: Data quality assessment tool by clustering analysis. <i>International Journal of Chemical Kinetics</i> , <b>2019</b> , 51, 872-885	1.4	3
428	The Relevance of Multi-Injection and Temperature Profiles to Design Multi-Phase Reactive Processing of Polyolefins. <i>Macromolecular Theory and Simulations</i> , <b>2019</b> , 28, 1900035	1.5	6
427	Carbon capture and utilization in the steel industry: challenges and opportunities for chemical engineering. <i>Current Opinion in Chemical Engineering</i> , <b>2019</b> , 26, 81-87	5.4	29
426	Exploring Microemulsion-Prepared Lanthanum Catalysts for Natural Gas Valorisation. <i>Johnson Matthey Technology Review</i> , <b>2019</b> , 63, 265-276	2.5	3

425	Chemical and Structural Configuration of Pt-Doped Metal Oxide Thin Films Prepared by Atomic Layer Deposition. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9673-9683	9.6	5
424	First-Principles-Based Simulation of an Industrial Ethanol Dehydration Reactor. <i>Catalysts</i> , <b>2019</b> , 9, 921	4	3
423	Catalyst ignition and extinction: A microkinetics-based bifurcation study of adiabatic reactors for oxidative coupling of methane. <i>Chemical Engineering Science</i> , <b>2019</b> , 199, 635-651	4.4	17
422	Balance between model detail and experimental information in steam methane reforming over a Ni/MgO-SiO <sub>2</sub> catalyst. <i>AIChE Journal</i> , <b>2019</b> , 65, 1222-1233	3.6	8
421	Conservatively Perturbed Equilibrium (CPE) in chemical kinetics. <i>Chemical Engineering Science</i> , <b>2019</b> , 196, 384-390	4.4	21
420	Methane reforming to valuable products by an atmospheric pressure direct current discharge. <i>Journal of Cleaner Production</i> , <b>2019</b> , 209, 655-664	10.3	9
419	Exploring the stability of Fe <sub>2</sub> O <sub>3</sub> -MgAl <sub>2</sub> O <sub>4</sub> oxygen storage materials for CO production from CO <sub>2</sub> . <i>Journal of CO<sub>2</sub> Utilization</i> , <b>2019</b> , 29, 36-45	7.6	19
418	Measuring biomass fast pyrolysis kinetics: State of the art. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , <b>2019</b> , 8, e326	4.7	27
417	The role of mass and heat transfer in the design of novel reactors for oxidative coupling of methane. <i>Chemical Engineering Science</i> , <b>2019</b> , 198, 268-289	4.4	30
416	How Does the Surface Structure of Ni-Fe Nanoalloys Control Carbon Formation During Methane Steam/Dry Reforming? <b>2019</b> , 177-225		2
415	The switching point between kinetic and thermodynamic control. <i>Computers and Chemical Engineering</i> , <b>2019</b> , 125, 606-611	4	6
414	Catalyst-assisted chemical looping auto-thermal dry reforming: Spatial structuring effects on process efficiency. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 231, 123-136	21.8	35
413	Detailed Experimental and Kinetic Modeling Study of Cyclopentadiene Pyrolysis in the Presence of Ethene. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 3920-3934	4.1	15
412	Coking Tendency of 25Cr-35Ni Alloys: Influence of Temperature, Sulfur Addition, and Cyclic Aging. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 3138-3148	3.9	9
411	Automated reaction database and reaction network analysis: extraction of reaction templates using cheminformatics. <i>Journal of Cheminformatics</i> , <b>2018</b> , 10, 11	8.6	17
410	Ab initio derived group additivity model for intramolecular hydrogen abstraction reactions. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 10877-10894	3.6	7
409	Catalytic Reductive Aminolysis of Reducing Sugars: Elucidation of Reaction Mechanism. <i>ACS Catalysis</i> , <b>2018</b> , 8, 4201-4212	13.1	9
408	New invariances for chemical reactions from Scaled Incremental Conversion (SIC). <i>Chemical Engineering Science</i> , <b>2018</b> , 184, 25-32	4.4	13

407	Gateway analysis for complex reaction mechanisms: Kinetic Informative Detachable (KID) sub-mechanisms. <i>Chemical Engineering Science</i> , <b>2018</b> , 178, 183-193	4.4	4
406	Application of Py-GC/MS coupled with PARAFAC2 and PLS-DA to study fast pyrolysis of genetically engineered poplars. <i>Journal of Analytical and Applied Pyrolysis</i> , <b>2018</b> , 129, 101-111	6	7
405	Experimental and modeling study of the pyrolysis and combustion of dimethoxymethane. <i>Combustion and Flame</i> , <b>2018</b> , 190, 270-283	5.3	51
404	Compositional Characterization of Pyrolysis Fuel Oil from Naphtha and Vacuum Gas Oil. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 1276-1286	4.1	10
403	Kinetics of homogeneous and heterogeneous reactions in the reductive aminolysis of glucose with dimethylamine. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 227, 161-169	21.8	8
402	On the mechanisms of secondary flows in a gas vortex unit. <i>AIChE Journal</i> , <b>2018</b> , 64, 1859-1873	3.6	9
401	Upgrading the value of anaerobic digestion via chemical production from grid injected biomethane. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1788-1802	35.4	64
400	Fast pyrolysis oil stabilization kinetics over a Ni-Cu catalyst using propionic acid as a model compound. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 233, 46-57	21.8	11
399	Ab-Initio-Based Kinetic Modeling to Understand RAFT Exchange: The Case of 2-Cyano-2-Propyl Dodecyl Trithiocarbonate and Styrene. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, 1700403	4.8	10
398	Bifunctional Co- and Ni- ferrites for catalyst-assisted chemical looping with alcohols. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 222, 59-72	21.8	25
397	Pressure dependent kinetic analysis of pathways to naphthalene from cyclopentadienyl recombination. <i>Combustion and Flame</i> , <b>2018</b> , 187, 247-256	5.3	42
396	Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick X-ray Absorption Spectroscopy. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 12430-12434	16.4	10
395	Experimental confirmation of a new invariant for a non-linear chemical reaction. <i>Chemical Engineering Science</i> , <b>2018</b> , 191, 262-267	4.4	15
394	Advanced Chemical Looping Materials for CO <sub>2</sub> Utilization: A Review. <i>Materials</i> , <b>2018</b> , 11,	3.5	54
393	An evaluation of the impact of SG1 disproportionation and the addition of styrene in NMP of methyl methacrylate. <i>AIChE Journal</i> , <b>2018</b> , 64, 2545-2559	3.6	11
392	Mechanism of carbon deposits removal from supported Ni catalysts. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 239, 502-512	21.8	25
391	Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick X-ray Absorption Spectroscopy. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 12610-12614	3.6	2
390	Operational range of a Gas-Solid Vortex Unit. <i>Powder Technology</i> , <b>2018</b> , 338, 702-715	5.2	3

389	Fe-Based Nano-Materials in Catalysis. <i>Materials</i> , <b>2018</b> , 11,	3.5	26
388	Computational Fluid Dynamics-Assisted Process Intensification Study for Biomass Fast Pyrolysis in a GasSolid Vortex Reactor. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 10169-10183	4.1	21
387	Numerical and experimental evaluation of heat transfer in helically corrugated tubes. <i>AIChE Journal</i> , <b>2018</b> , 64, 1702-1713	3.6	14
386	Insight in kinetics from pre-edge features using time resolved in situ XAS. <i>AIChE Journal</i> , <b>2018</b> , 64, 1339-1349	3.49	11
385	How chain length dependencies interfere with the bulk RAFT polymerization rate and microstructural control. <i>Chemical Engineering Science</i> , <b>2018</b> , 177, 163-179	4.4	28
384	Computational Fluid Dynamics-Based Study of a High Emissivity Coil Coating in an Industrial Steam Cracker. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 16782-16794	3.9	6
383	Model-Based Catalyst Selection for the Oxidative Coupling of Methane in an Adiabatic Fixed-Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 16295-16307	3.9	18
382	Combined characterization using HT-GC GC-FID and FT-ICR MS: A pyrolysis fuel oil case study. <i>Fuel Processing Technology</i> , <b>2018</b> , 182, 15-25	7.2	10
381	State-of-the-art of Coke Formation during Steam Cracking: Anti-Coking Surface Technologies. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 16117-16136	3.9	32
380	Sensitivity Analysis of Single-Phase Isothermal Free RadicalInduced Grafting of Polyethylene. <i>Macromolecular Theory and Simulations</i> , <b>2018</b> , 27, 1800036	1.5	8
379	Access to the scission rate coefficient in acrylate radical polymerization by careful scanning of pulse laser frequencies at elevated temperature. <i>Reaction Chemistry and Engineering</i> , <b>2018</b> , 3, 807-815	4.9	16
378	Fe-Containing Magnesium Aluminate Support for Stability and Carbon Control during Methane Reforming. <i>ACS Catalysis</i> , <b>2018</b> , 8, 5983-5995	13.1	52
377	Experimental and Kinetic Modeling Study of Cyclohexane Pyrolysis. <i>Energy &amp; Fuels</i> , <b>2018</b> , 32, 7153-7168	4.68	7
376	Decomposition and isomerization of 1-pentanol radicals and the pyrolysis of 1-pentanol. <i>Combustion and Flame</i> , <b>2018</b> , 196, 500-514	5.3	13
375	Modeling of thermodynamics of substituted toluene derivatives and benzylic radicals via group additivity. <i>AIChE Journal</i> , <b>2018</b> , 64, 3649-3661	3.6	5
374	Thiol-Michael addition in polar aprotic solvents: nucleophilic initiation or base catalysis?. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 1341-1352	4.9	17
373	Periodic reactive flow simulation: Proof of concept for steam cracking coils. <i>AIChE Journal</i> , <b>2017</b> , 63, 1715-1726	3.6	12
372	A comprehensive kinetic model for Cu catalyzed liquid phase glycerol hydrogenolysis. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 205, 469-480	21.8	43



371	Techno-economic analysis of an absorption based methanol to olefins recovery section. <i>Applied Thermal Engineering</i> , <b>2017</b> , 115, 477-490	5.8	9
370	Mechanistic insights into the formation of butene isomers from 1-butanol in H-ZSM-5: DFT based microkinetic modelling. <i>Catalysis Science and Technology</i> , <b>2017</b> , 7, 1055-1072	5.5	19
369	Interplay of Kinetics and Thermodynamics in Catalytic Steam Methane Reforming over Ni/MgO-SiO <sub>2</sub> . <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 1148-1158	3.9	9
368	Kinetic Monte Carlo Modeling Extracts Information on Chain Initiation and Termination from Complete PLP-SEC Traces. <i>Macromolecules</i> , <b>2017</b> , 50, 1371-1385	5.5	41
367	Controlling the stability of a FeNi reforming catalyst: Structural organization of the active components. <i>Applied Catalysis B: Environmental</i> , <b>2017</b> , 209, 405-416	21.8	65
366	Optimization of the in Situ Pretreatment of High Temperature NiCr Alloys for Ethane Steam Cracking. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 1424-1438	3.9	22
365	Computational fluid dynamics-based steam cracking furnace optimization using feedstock flow distribution. <i>AIChE Journal</i> , <b>2017</b> , 63, 3199-3213	3.6	9
364	A drag model for the gas-solid vortex unit. <i>Powder Technology</i> , <b>2017</b> , 312, 210-221	5.2	9
363	Kinetic Monte Carlo Generation of Complete Electron Spray Ionization Mass Spectra for Acrylate Macromonomer Synthesis. <i>Macromolecules</i> , <b>2017</b> , 50, 2625-2636	5.5	36
362	Estimating the photodissociation quantum yield from PLP-SEC peak heights. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 3124-3128	4.9	19
361	Analytical Rate Expressions Accounting for the Elementary Steps in Benzene Hydrogenation on Pt. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 12953-12962	3.9	7
360	Quantitative on-line analysis of sulfur compounds in complex hydrocarbon matrices. <i>Journal of Chromatography A</i> , <b>2017</b> , 1509, 102-113	4.5	13
359	New Trends in Olefin Production. <i>Engineering</i> , <b>2017</b> , 3, 171-178	9.7	320
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