

# Raghunath V Chaudhari

## List of Publications by Year in descending order

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75  
papers

2,830  
citations

218381

26  
h-index

182168

51  
g-index

78  
all docs

78  
docs citations

78  
times ranked

3576  
citing authors

#	ARTICLE	IF	CITATIONS
1	Solubility of Carbon Dioxide in Carboxylation Reaction Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 8375-8385.	1.8	1
2	Selective Oxidation of Glycerol: A Biomass-Derived Feedstock Using the Pt–Cu Janus Catalyst for Value-Added Products. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 185-195.	1.8	7
3	Kinetic modeling and mechanistic investigations of transesterification of propylene carbonate with methanol over an Fe–Mn double metal cyanide catalyst. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 101-111.	1.9	7
4	Lattice strained bimetallic PtPd nanocatalysts display multifunctional nature for transfer hydrogenolysis of sorbitol in base-free medium. <i>Materials Today Sustainability</i> , 2020, 10, 100047.	1.9	1
5	Chemical Synthesis of Adipic Acid from Glucose and Derivatives: Challenges for Nanocatalyst Design. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 18732-18754.	3.2	8
6	Enriching Propane/Propylene Mixture by Selective Propylene Hydroformylation: Economic and Environmental Impact Analyses. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5140-5146.	3.2	2
7	Continuous Process for the Production of Taurine from Monoethanolamine. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 13007-13015.	1.8	9
8	Enhanced Acid-Catalyzed Lignin Depolymerization in a Continuous Reactor with Stable Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4096-4106.	3.2	25
9	Rh-Catalyzed Hydroformylation of 1,3-Butadiene and Pent-4-enal to Adipaldehyde in CO <sub>2</sub> -Expanded Media. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 22526-22533.	1.8	4
10	Liquid-Phase Oxidation of Ethylene Glycol on Pt and Pt–Fe Catalysts for the Production of Glycolic Acid: Remarkable Bimetallic Effect and Reaction Mechanism. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 18561-18568.	1.8	17
11	Catalytic conversion of CO <sub>2</sub> and shale gas-derived substrates into saturated carbonates and derivatives: Catalyst design, performances and reaction mechanism. <i>Journal of CO<sub>2</sub> Utilization</i> , 2019, 34, 115-148.	3.3	32
12	Aqueous-Phase Glycerol Catalysis and Kinetics with in Situ Hydrogen Formation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11323-11333.	3.2	14
13	Nanostructured Metal Catalysts for Selective Hydrogenation and Oxidation of Cellulosic Biomass to Chemicals. <i>Chemical Record</i> , 2019, 19, 1952-1994.	2.9	10
14	Transesterification of Propylene Carbonate with Methanol Using Fe–Mn Double Metal Cyanide Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5698-5710.	3.2	31
15	Dual Function Lewis Acid Catalyzed Depolymerization of Industrial Corn Stover Lignin into Stable Monomeric Phenols. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1362-1371.	3.2	25
16	Enhanced hydroformylation of 1-octene in n-butane expanded solvents with Co-based complexes. <i>Reaction Chemistry and Engineering</i> , 2018, 3, 344-352.	1.9	6
17	Homogeneous catalytic hydroformylation of propylene in propane-expanded solvent media. <i>Chemical Engineering Science</i> , 2018, 187, 148-156.	1.9	12
18	Catalytic H <sub>2</sub> auto transfer amination of polyols to alkyl amines in one pot using supported Ru catalysts. <i>Catalysis Today</i> , 2018, 302, 227-232.	2.2	8

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19	Enhanced solubility of hydrogen and carbon monoxide in propane and propylene-expanded liquids. <i>AIChE Journal</i> , 2018, 64, 970-980.	1.8	7
20	Oxidation of Glucose Using Mono- and Bimetallic Catalysts under Base-Free Conditions. <i>Organic Process Research and Development</i> , 2018, 22, 1653-1662.	1.3	21
21	Kinetic Study of CaO-Catalyzed Transesterification of Cyclic Carbonates with Methanol. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 14977-14987.	1.8	16
22	Structurally Strained Bimetallic PtFe Nanocatalysts Show Tunable Catalytic Selectivity in Aqueous Oxidation of Bio-Polyols to Dicarboxylic Acids. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 12078-12086.	1.8	9
23	Effects of tunable acidity and basicity of Nb catalysts on ethanol conversion: Experiments and kinetic modeling. <i>AIChE Journal</i> , 2017, 63, 2888-2899.	1.8	13
24	Lattice distortion induced electronic coupling results in exceptional enhancement in the activity of bimetallic PtMn nanocatalysts. <i>Applied Catalysis A: General</i> , 2017, 534, 46-57.	2.2	24
25	Kinetic modeling of carboxylation of propylene oxide to propylene carbonate using ion-exchange resin catalyst in a semi-batch slurry reactor. <i>Chemical Engineering Science</i> , 2017, 168, 189-203.	1.9	16
26	Intriguing Catalyst (CaO) Pretreatment Effects and Mechanistic Insights during Propylene Carbonate Transesterification with Methanol. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4718-4729.	3.2	31
27	Phase Transformed PtFe Nanocomposites Show Enhanced Catalytic Performances in Oxidation of Glycerol to Tartronic Acid. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 13157-13164.	1.8	24
28	Zirconium-Incorporated Mesoporous Silicates Show Remarkable Lignin Depolymerization Activity. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 7155-7164.	3.2	38
29	Kinetic modeling of Pt/C catalyzed aqueous phase glycerol conversion with <i>in situ</i> formed hydrogen. <i>AIChE Journal</i> , 2016, 62, 1162-1173.	1.8	23
30	Anisotropic growth of PtFe nanoclusters induced by lattice-mismatch: Efficient catalysts for oxidation of biopolyols to carboxylic acid derivatives. <i>Journal of Catalysis</i> , 2016, 337, 272-283.	3.1	43
31	Kinetic Modeling of Sorbitol Hydrogenolysis over Bimetallic RuRe/C Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6037-6047.	3.2	24
32	Oxidation of Glycerol to Dicarboxylic Acids Using Cobalt Catalysts. <i>ACS Catalysis</i> , 2016, 6, 4576-4583.	5.5	68
33	Synergistic Effects of Bimetallic PtPd/TiO <sub>2</sub> Nanocatalysts in Oxidation of Glucose to Glucaric Acid: Structure Dependent Activity and Selectivity. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 2932-2945.	1.8	73
34	Rhodium complex with unsymmetrical vicinal diamine ligand: excellent catalyst for asymmetric transfer hydrogenation of ketones. <i>RSC Advances</i> , 2015, 5, 51722-51729.	1.7	8
35	Importance of Long-Range Noncovalent Interactions in the Regioselectivity of Rhodium-Xantphos-Catalyzed Hydroformylation. <i>Organometallics</i> , 2015, 34, 1062-1073.	1.1	23
36	Sorbitol Hydrogenolysis over Hybrid Cu/CaO-Al <sub>2</sub> O <sub>3</sub> Catalysts: Tunable Activity and Selectivity with Solid Base Incorporation. <i>ACS Catalysis</i> , 2015, 5, 6545-6558.	5.5	76

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37	Exceptional performance of bimetallic Pt <sub>1</sub> Cu <sub>3</sub> /TiO <sub>2</sub> nanocatalysts for oxidation of gluconic acid and glucose with O <sub>2</sub> to glucaric acid. <i>Journal of Catalysis</i> , 2015, 330, 323-329.	3.1	88
38	Kinetic investigations of unusual solvent effects during Ru/C catalyzed hydrogenation of model oxygenates. <i>Journal of Catalysis</i> , 2014, 309, 174-184.	3.1	91
39	Supercritical fluids and gas-expanded liquids as tunable media for multiphase catalytic reactions. <i>Chemical Engineering Science</i> , 2014, 115, 3-18.	1.9	40
40	Graphene oxide stabilized Cu <sub>2</sub> O for shape selective nanocatalysis. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7147.	5.2	28
41	Synthesis and Dehydration Activity of Novel Lewis Acidic Ordered Mesoporous Silicate: Zr-KIT-6. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 15481-15487.	1.8	60
42	Vapor-phase methanol and ethanol coupling reactions on CuMgAl mixed metal oxides. <i>Applied Catalysis A: General</i> , 2013, 455, 234-246.	2.2	51
43	Lattice-Matched Bimetallic CuPd-Graphene Nanocatalysts for Facile Conversion of Biomass-Derived Polyols to Chemicals. <i>ACS Nano</i> , 2013, 7, 1309-1316.	7.3	112
44	Activity and Selectivity of Base Promoted Mono and Bimetallic Catalysts for Hydrogenolysis of Xylitol and Sorbitol. <i>ACS Symposium Series</i> , 2013, , 273-285.	0.5	6
45	Multiphase Catalytic Hydrogenolysis/Hydrodeoxygenation Processes for Chemicals from Renewable Feedstocks: Kinetics, Mechanism, and Reaction Engineering. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 15226-15243.	1.8	35
46	Aqueous Phase Hydrogenation of Acetic Acid and Its Promotional Effect on <i>p</i> -Cresol Hydrodeoxygenation. <i>Energy &amp; Fuels</i> , 2013, 27, 487-493.	2.5	76
47	Atom Economical Aqueous-Phase Conversion (APC) of Biopolyols to Lactic Acid, Glycols, and Linear Alcohols Using Supported Metal Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 1453-1462.	3.2	59
48	Ultraviolet-Visible Spectroscopy and Temperature-Programmed Techniques as Tools for Structural Characterization of Cu in CuMgAlO <sub>x</sub> Mixed Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18207-18221.	1.5	43
49	Homogeneous Catalytic Carbonylation and Hydroformylation for Synthesis of Industrial Chemicals. <i>Topics in Catalysis</i> , 2012, 55, 439-445.	1.3	26
50	Cu-Based Catalysts Show Low Temperature Activity for Glycerol Conversion to Lactic Acid. <i>ACS Catalysis</i> , 2011, 1, 548-551.	5.5	147
51	Catalytic Asymmetric Transfer Hydrogenation of Ketones Using [Ru( <i>p</i> -cymene)Cl <sub>2</sub> ] <sub>2</sub> with Chiral Amino Alcohol Ligands. <i>Catalysis Letters</i> , 2010, 138, 231-238.	1.4	17
52	Heterogenized copper catalysts for the amination of arylhalide: Synthesis, characterization and catalytic applications. <i>Applied Catalysis A: General</i> , 2010, 372, 73-81.	2.2	10
53	Aqueous phase hydrogenolysis of glycerol to 1,2-propanediol without external hydrogen addition. <i>Catalysis Today</i> , 2010, 156, 31-37.	2.2	157
54	Supercritical Deoxygenation of a Model Bio-Oil Oxygenate. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 10852-10858.	1.8	10

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55	Kinetic Modeling of Aqueous-Phase Glycerol Hydrogenolysis in a Batch Slurry Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 10826-10835.	1.8	66
56	Hydroesterification of 2-vinyl-6-methoxynaphthalene using palladium complexes containing chelating nitrogen ligands. <i>Journal of Molecular Catalysis A</i> , 2009, 307, 134-141.	4.8	12
57	Kinetics of arylation of 3-bromo-benzophenone with n-butylacrylate using NC palladacycle catalyst. <i>Journal of Molecular Catalysis A</i> , 2009, 309, 111-116.	4.8	2
58	NC palladacycles in the Heck arylation of ethylene: Synthesis, structure and their reactivity. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 683-690.	0.8	28
59	Hydroformylation of 1,4-Diacetoxy-2-butene Using HRh(CO)(PPh <sub>3</sub> ) <sub>3</sub> Tethered on Alumina as a Catalyst: Kinetic Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 9479-9489.	1.8	5
60	Ultrasound promoted asymmetric transfer hydrogenation of ketones using Ru(II)arene/amino alcohol catalyst system. <i>Ultrasonics Sonochemistry</i> , 2008, 15, 289-293.	3.8	12
61	Hydroformylation and carbonylation processes: new trends in the synthesis of pharmaceuticals. <i>Current Opinion in Drug Discovery &amp; Development</i> , 2008, 11, 820-8.	1.9	1
62	Environmentally Benign Catalytic Hydroformylation~Oxidation Route for Naproxen Synthesis. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 8480-8489.	1.8	11
63	Biphasic Hydroformylation of 1,4-Diacetoxy-2-butene: A Kinetic Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 8629-8637.	1.8	7
64	Kinetics of Reductive Alkylation of p-Phenylenediamine with Methyl Ethyl Ketone Using 3% Pt/Al <sub>2</sub> O <sub>3</sub> Catalyst in a Slurry Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 3243-3254.	1.8	14
65	{ }Preface:~ CAMURE-6 & ISMR-5 Symposium in Pune, India. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 8291-8291.	1.8	0
66	Kinetics of vinylation of 4-bromoacetophenone with n-butyl acrylate using palladacycle catalyst. <i>Journal of Molecular Catalysis A</i> , 2007, 270, 144-152.	4.8	6
67	Ossification: A new approach to immobilize metal complex catalysts~ applications to carbonylation and Suzuki coupling reactions. <i>Journal of Catalysis</i> , 2006, 242, 231-238.	3.1	14
68	Isolation and characterization of an iodide bridged dimeric palladium complex in carbonylation of methanol. <i>Journal of Organometallic Chemistry</i> , 2005, 690, 1677-1681.	0.8	18
69	Carbonylation of Alkynes, Alkenes and Alcohols using Metal Complex Catalysts. <i>Catalysis Surveys From Asia</i> , 2005, 9, 193-205.	1.0	29
70	New Route for the Synthesis of Propylene Glycols via Hydroformylation of Vinyl Acetate. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 9601-9608.	1.8	17
71	Pt and Pd Nanoparticles Immobilized on Amine-Functionalized Zeolite: Excellent Catalysts for Hydrogenation and Heck Reactions. <i>Chemistry of Materials</i> , 2004, 16, 3714-3724.	3.2	351
72	Modeling of hydrogenation of maleic acid in a bubble-column slurry reactor. <i>AIChE Journal</i> , 2003, 49, 3199-3212.	1.8	5

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73	Gold Nanoparticles Assembled on Amine-Functionalized Na <sup>+</sup> Y Zeolite: A Biocompatible Surface for Enzyme Immobilization. <i>Langmuir</i> , 2003, 19, 3858-3863.	1.6	90
74	Anchored Pd Complex in MCM-41 and MCM-48: Novel Heterogeneous Catalysts for Hydrocarboxylation of Aryl Olefins and Alcohols. <i>Journal of the American Chemical Society</i> , 2002, 124, 9692-9693.	6.6	166
75	Copper-catalyzed amination of aryl halides: single-step synthesis of triaryl amines. <i>Tetrahedron Letters</i> , 2002, 43, 7143-7146.	0.7	164