Jim Patel

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Recent trend in thermal catalytic low temperature CO2 methanation: A critical review. Catalysis Today, 2021, 368, 2-19.	4.4	227
2	Design and Performance of Rigid Nanosize Multimetallic Cartwheel Pincer Compounds as Lewis-Acid Catalysts. Organometallics, 2001, 20, 3159-3168.	2.3	125
3	A study of the synergy between support surface properties and catalyst deactivation for CO 2 reforming over supported Ni nanoparticles. Applied Catalysis A: General, 2017, 545, 113-126.	4.3	108
4	High conversion and productive catalyst turnovers in cross-metathesis reactions of natural oils with 2-butene. Green Chemistry, 2006, 8, 450.	9.0	96
5	Reactivity of Diaryliodine(III) Triflates toward Palladium(II) and Platinum(II):â€‰ Reactions of C(sp2)âˆ'I Bonds to Form Arylmetal(IV) Complexes; Access to Dialkyl(aryl)metal(IV), 1,4-Benzenediyl-Bridged Platinum(IV), and Triphenylplatinum(IV) Species; and Structural Studies of Platinum(IV) Complexes. Organometallics, 2004, 23, 3466-3473.	2.3	91
6	Cross-metathesis of unsaturated natural oils with 2-butene. High conversion and productive catalyst turnovers. Chemical Communications, 2005, , 5546.	4.1	58
7	Facial and meridional [Nî—,Cî—,N]â^' intramolecular coordination systems: structure of fac-PtBrMe2{2,6-(pzCH2)2C6H3}Â·1/2C6H6 {[2,6-(pzCH2)2C6H3]â^'=2,6-(bis{(pyrazol-1-yl)methyl}phenyl)} and mer-PtBr{2,6-(3,5-Me2pzCH2)2C6H3}, and an alternative synthetic route to the platinum(II) [Nî—,Cî—,N]â^' kernel. Journal of Organometallic Chemistry, 2000, 599, 195-199.	1.8	53
8	Sustainable options for the utilization of solid residues from wine production. Waste Management, 2017, 60, 173-183.	7.4	51
9	Controlled Synthesis of (S,S)-2,7-Diaminosuberic Acid:Â A Method for Regioselective Construction of Dicarba Analogues of Multicystine-Containing Peptides. Journal of Organic Chemistry, 2006, 71, 7538-7545.	3.2	48
10	Water and Protic Acids as Oxidants for Platinum(II):Â Diorgano(hydrido)platinum(IV) and Diorgano(hydroxo)platinum(IV) Chemistry, Including Structural Studies of Poly(pyrazol-1-yl)borate Complexes Pt(OH)R2{(pz)3BH} (R = Methyl,p-Tolyl) and Pt(OH)Me2{(pz)4B}Â·H2O. Organometallics, 1997, 16, 2175-2182.	2.3	46
11	Preparation of terminal oxygenates from renewable natural oils by a one-pot metathesisâ€"isomerisationâ€"methoxycarbonylationâ€"transesterification reaction sequence. Green Chemistry, 2006, 8, 746-749.	9.0	41
12	Acetylene Cyclotrimerization with an Iron(II) Bis(imino)pyridine Catalyst. Organometallics, 2012, 31, 3439-3442.	2.3	38
13	Nano size Hî² zeolite as an effective support for Ni and Ni Cu for CO x free hydrogen production by catalytic decomposition of methane. International Journal of Hydrogen Energy, 2016, 41, 19855-19862.	7.1	35
14	Organoplatinum(IV) and Palladium(IV) Complexes Containing Intramolecular Coordination Systems Based on the 8-Methylquinolinyl Group (mq), Including Structures of the Cation [Pt(mq)Me2(bpy)]+(bpy = 2,2â€²-bipyridine) and the Palladium(IV) Complexes Pd(mq)MeR{(pz)2BH2} (R = Me,) Tj ETQq0 0 0 rgBT /Ove	2.3	34
15	Cî—,H activation at the 3-position of pentane chains to form [Nî—,C(sp3)î—,N]â^' complexes incorporating six-membered pallada(II)cyclic rings and pyridine, pyrazole and N-methylimidazole donor groups. Structural studies and comparison with [Nî—,C(sp2)î—,N]â^' complexes. Journal of Organometallic Chemistry, 2000, 607, 194-202.	1.8	34
16	Reversible oxidative addition of a diaryl diselenide to a diorganopalladium(II) complex, carbonâ€"selenium bond formation at palladium(IV), and structural studies of palladium(II) and platinum(IV) selenolates. Journal of Organometallic Chemistry, 2004, 689, 672-677.	1.8	31
17	Effect of a Swelling Agent on the Performance of Ni/Porous Silica Catalyst for CH₄â€"CO₂ Reforming. Langmuir, 2017, 33, 10632-10644.	3.5	30
18	Promotional Effect of Cu and Influence of Surface Niâ€"Cu Alloy for Enhanced H₂ Yields from CH₄ Decomposition over Cu-Modified Ni Supported on MCM-41 Catalyst. Energy & Fuels, 2018, 32, 4008-4015.	5.1	27

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19	Unveiling the structural transitions during activation of a CO2 methanation catalyst Ru0/ZrO2 synthesised from a MOF precursor. Catalysis Today, 2021, 368, 66-77.	4.4	27
20	Liquefied synthetic methane from ambient CO2 and renewable H2 - A technoeconomic study. Journal of Natural Gas Science and Engineering, 2021, 94, 104079.	4.4	22
21	The undiluted, non-catalytic partial oxidation of methane in a flow tube reactor â€“ An experimental study using indirect induction heating. Fuel, 2013, 109, 409-416.	6.4	21
22	Feasibility and sustainability analyses of carbon dioxide â€“ hydrogen separation via de-sublimation process in comparison with other processes. International Journal of Hydrogen Energy, 2019, 44, 23120-23134.	7.1	20
23	Mono(p-tolyl)platinum(II) and bis(p-tolyl)platinum(II) complexes of diethylsulfide as reagents for organoplatinum synthesis. Structures of [Pt(p-Tol)2(Î¼-SEt2)]2 and PtCl(p-Tol)(bpy) (bpy=2,2â€²-bipyridine). Inorganica Chimica Acta, 2002, 327, 15-19.	2.4	18
24	A structurally characterised ruthenium bis(pyrazolyl)borate benzylidene complex containing an agostic Ruâ‹¯Hâ€“C interaction: synthesis and catalytic activity. Inorganica Chimica Acta, 2004, 357, 2374-2378.	2.4	16
25	A one pot, metathesisâ€“hydrogenation sequence for the selective formation of carbonâ€“carbon bonds. Chemical Communications, 2005, , 5544.	4.1	15
26	Is the structure of anisotropic pyrolytic carbon a consequence of growth by the Volmer-Weber island growth mechanism?. Carbon, 2012, 50, 4773-4780.	10.3	15
27	Kinetic modelling of temperature-programmed reduction of cobalt oxide by hydrogen. Applied Catalysis A: General, 2017, 537, 1-11.	4.3	15
28	Processes for the production of oxymethylene ethers: promising synthetic diesel additives. Asia-Pacific Journal of Chemical Engineering, 2017, 12, 827-837.	1.5	15
29	CH₄ Cracking over the Cuâ€“Ni/Al-MCM-41 Catalyst for the Simultaneous Production of H₂ and Highly Ordered Graphitic Carbon Nanofibers. Energy & Fuels, 2019, 33, 12656-12665.	5.1	15
30	Thermal Dehydroboration: Experimental and Theoretical Studies of Olefin Elimination from Trialkylboranes and Its Relationship to Alkylborane Isomerization and Transalkylation. Organometallics, 2014, 33, 4251-4259.	2.3	14
31	The non-catalytic partial oxidation of methane in a flow tube reactor using indirect induction heating â€“ An experimental and kinetic modelling study. Chemical Engineering Science, 2018, 187, 189-199.	3.8	14
32	Neopentyl- and trimethylsilylmethylpalladium chemistry: synthesis of reagents for organopalladium chemistry and the crystal structure of the neopentyl(phenyl)palladium(IV) complex [Pd(mq)(CH2CMe3)Ph(bpy)]Br (mq=8-methylquinolinyl, bpy=2,2â€²-bipyridine). Inorganica Chimica Acta, 2002, 338, 94-98.	2.4	12
33	An Evaluation of Some Hindered Diamines as Chiral Modifiers of Metal-Promoted Reactions. Australian Journal of Chemistry, 2004, 57, 167.	0.9	12
34	Mesoporous Carbon-supported Cu/ZnO for Methanol Synthesis from Carbon Dioxide. Australian Journal of Chemistry, 2014, 67, 907.	0.9	12
35	Organopalladium(IV) and platinum(IV) complexes containing the bis(pyrazol-1-yl)borate ligand. Structures of PtMe3{(pz)2BH2}(py) (py=pyridine) and Pt(mq)Me2{(pz)2BH2} (mq=8-methylquinolinyl) and detection of a neutral organopalladium(IV) phosphine complex. Inorganica Chimica Acta, 2002, 327, 20-25.	2.4	11
36	Acetylene Oligomerization with Metallocene Catalysts and Triethylaluminum: The Peculiar Course of the Aufbau Reaction with Acetylene. Organometallics, 2009, 28, 5722-5732.	2.3	11

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37	Intensified isothermal reactor for methanol synthesis. Chemical Engineering and Processing: Process Intensification, 2019, 143, 107606.	3.6	11
38	Revisiting the Aufbau Reaction with Acetylene: Further Insights from Experiment and Theory. Organometallics, 2011, 30, 1569-1576.	2.3	10
39	The effect of metal additives in Cu/Zn/Al2O3 as a catalyst for low-pressure methanol synthesis in an oil-cooled annulus reactor. Catalysis Today, 2020, 343, 183-190.	4.4	10
40	The pyrolysis of natural gas: A study of carbon deposition and the suitability of reactor materials. AIChE Journal, 2019, 65, 1035-1046.	3.6	9
41	High activity acetylene polymerisation with a bis(imino)pyridine iron(ii) catalyst. Chemical Communications, 2011, 47, 6945.	4.1	8
42	A facile method to synthesis a mesoporous carbon supported methanol catalyst containing well dispersed Cu/ZnO. Materials Research Bulletin, 2014, 60, 232-237.	5.2	8
43	Insertion, elimination and isomerisation of olefins at alkylaluminium hydride: an experimental and theoretical study. Dalton Transactions, 2015, 44, 15286-15296.	3.3	8
44	Aerosol generation related to respiratory interventions and the effectiveness of a personal ventilation hood. Critical Care and Resuscitation: Journal of the Australasian Academy of Critical Care Medicine, 2020, 22, 212-220.	0.1	8
45	Revisiting the Aufbau Reaction with Acetylene: Growth at Aluminium Producing a Unique Oligomer Distribution. Chemistry - A European Journal, 2009, 15, 1082-1085.	3.3	7
46	The growth and morphology of core/shell heterostructured conical carbon fibers. Carbon, 2011, 49, 2735-2741.	10.3	7
47	Insertion and isomerisation of internal olefins at alkylaluminium hydride: catalysis with zirconocene dichloride. Dalton Transactions, 2015, 44, 20098-20107.	3.3	7
48	Cobalt-bis(imino)pyridine complexes as catalysts for hydroaluminationâ€“isomerisation of internal olefins. Dalton Transactions, 2016, 45, 10842-10849.	3.3	7
49	Insights into mesoporous nitrogen-rich carbon induced synergy for the selective synthesis of ethanol. Carbon, 2020, 168, 337-353.	10.3	7
50	A method for the quantitative analysis of gaseous mixtures by online mass spectrometry. International Journal of Mass Spectrometry, 2018, 434, 23-28.	1.5	6
51	Upgrading of Bio-Syngas via Steam-CO2 Reforming Using Rh/Alumina Monolith Catalysts. Catalysts, 2021, 11, 180.	3.5	6
52	Evaluation of mid-to-late transition metal imine catalysts for acetylene oligomerisation: A high activity bis(imino)pyridine iron(II) catalyst. Catalysis Today, 2011, 178, 64-71.	4.4	5
53	The growth of 3D carbon fiber lattices based on silicon oxide micro-wires. Carbon, 2011, 49, 1167-1172.	10.3	5
54	Heat treatment of 6H-SiC under different gaseous environments. Ceramics International, 2014, 40, 4149-4154.	4.8	4

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55	DFT Study of Nickelâ€Catalyzed Lowâ€Temperature Methanol Synthesis. ChemCatChem, 2017, 9, 1837-1844.	3.7	4
56	Experimental and Kinetic Study of the Direct Synthesis of Hydrogen Peroxide from Hydrogen and Oxygen over Palladium Catalysts. Industrial & Engineering Chemistry Research, 2019, 58, 20573-20584.	3.7	4
57	Microstructure formation on exposure of silicon carbide surfaces to the partial oxidation of methane. Catalysis Today, 2011, 178, 85-97.	4.4	3
58	Kinetic modelling of the reversible additionâ€“fragmentation chain transfer polymerisation of N-isopropylacrylamide. European Polymer Journal, 2019, 120, 109193.	5.4	3
59	In Situ MOF-Templating of Rh Nanocatalysts under Reducing Conditions. Australian Journal of Chemistry, 2020, 73, 1271.	0.9	3
60	Experimental and Theoretical Studies on Water-Added Thermal Processing of Model Biosyngas for Improving Hydrogen Production and Restraining Soot Formation. Industrial & Engineering Chemistry Research, 2022, 61, 9262-9273.	3.7	2
61	The thickening of carbon fibers via a 3D island growth mechanism: New insights from a theoretical and experimental study. Carbon, 2019, 152, 851-854.	10.3	1
62	Pyrolysis of Natural Gas: Effects of Process Variables and Reactor Materials on the Product Gas Composition. Chemical Engineering and Technology, 2019, 42, 690-698.	1.5	1
63	Metal effects in Mn-Na₂WO₄/SiO₂ upon the conversion of methane to higher hydrocarbons. Advances in Energy Research, 2017, 5, 13-29.	0.4	1