Cecilia Mondelli

List of Publications by Year
in descending order

91 papers	6,353 citations	61857 43 h-index	66788 78 g-index
108 all docs	108 docs citations	108 times ranked	6066 citing authors

#	Article	IF	Citations
1	Synthesis of Florol via Prins cyclization over heterogeneous catalysts. Journal of Catalysis, 2022, 405, 288-302.	3.1	3
2	Atomic Pd-promoted ZnZrO solid solution catalyst for CO2 hydrogenation to methanol. Applied Catalysis B: Environmental, 2022, 304, 120994.	10.8	59
3	Flame Spray Pyrolysis as a Synthesis Platform to Assess Metal Promotion in In₂O₃â€Catalyzed CO₂ Hydrogenation. Advanced Energy Materials, 2022, 12, .	10.2	34
4	ZnO-Promoted Inverse ZrO₂â€“Cu Catalysts for CO₂-Based Methanol Synthesis under Mild Conditions. ACS Sustainable Chemistry and Engineering, 2022, 10, 81-90.	3.2	12
5	Microfabrication Enables Quantification of Interfacial Activity in Thermal Catalysis. Small Methods, 2021, 5, 2001231.	4.6	2
6	Nanostructure of nickel-promoted indium oxide catalysts drives selectivity in CO2 hydrogenation. Nature Communications, 2021, 12, 1960.	5.8	90
7	Inside Back Cover: Microfabrication Enables Quantification of Interfacial Activity in Thermal Catalysis (Small Methods 5/2021). Small Methods, 2021, 5, 2170021.	4.6	0
8	Impact of hybrid CO2-CO feeds on methanol synthesis over In2O3-based catalysts. Applied Catalysis B: Environmental, 2021, 285, 119878.	10.8	30
9	Methanol Synthesis by Hydrogenation of Hybrid CO₂â^'CO Feeds. ChemSusChem, 2021, 14, 2914-2923.	3.6	8
10	Catalytic processing of plastic waste on the rise. CheM, 2021, 7, 1487-1533.	5.8	236
11	Sustainability Assessment of Thermocatalytic Conversion of CO₂ to Transportation Fuels, Methanol, and 1-Propanol. ACS Sustainable Chemistry and Engineering, 2021, 9, 10591-10600.	3.2	20
12	Role of Zirconia in Indium Oxide-Catalyzed CO₂Hydrogenation to Methanol. ACS Catalysis, 2020, 10, 1133-1145.	5.5	177
13	Methanol as a Hydrogen Carrier: Kinetic and Thermodynamic Drivers for its CO₂â€Based Synthesis and Reforming over Heterogeneous Catalysts. ChemSusChem, 2020, 13, 6330-6337.	3.6	18
14	Biomass valorisation over metal-based solid catalysts from nanoparticles to single atoms. Chemical Society Reviews, 2020, 49, 3764-3782.	18.7	163
15	Hydrocracking of hexadecane to jet fuel components over hierarchical Ru-modified faujasite zeolite. Fuel, 2020, 278, 118193.	3.4	20
16	CO 2 â€Promoted Catalytic Process Forming Higher Alcohols with Tunable Nature at Record Productivity. ChemCatChem, 2020, 12, 2732-2744.	1.8	14
17	Development of In2O3-based Catalysts for CO2-based Methanol Production. Chimia, 2020, 74, 257.	0.3	13
18	Atomic-scale engineering of indium oxide promotion by palladium for methanol production via CO2 hydrogenation. Nature Communications, 2019, 10, 3377.	5.8	261

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19	Catalytic Byproduct Valorization in Future Biorefineries. ACS Sustainable Chemistry and Engineering, 2019, 7, 2878-2878.	3.2	4
20	Impact of carrier acidity on the conversion of syngas to higher alcohols over zeolite-supported copper-iron catalysts. Journal of Catalysis, 2019, 371, 116-125.	3.1	20
21	Plant-to-planet analysis of CO₂-based methanol processes. Energy and Environmental Science, 2019, 12, 3425-3436.	15.6	160
22	Environmental and economical perspectives of a glycerol biorefinery. Energy and Environmental Science, 2018, 11, 1012-1029.	15.6	162
23	Towards sustainable manufacture of epichlorohydrin from glycerol using hydrotalcite-derived basic oxides. Green Chemistry, 2018, 20, 148-159.	4.6	44
24	Carbon nanofibres-supported KCoMo catalysts for syngas conversion into higher alcohols. Catalysis Science and Technology, 2018, 8, 187-200.	2.1	24
25	SCS Seminar 2018/1: Catalysis Across Scales. Chimia, 2018, 72, 822.	0.3	1
26	Techno-Economic Analysis of a Glycerol Biorefinery. ACS Sustainable Chemistry and Engineering, 2018, 6, 16563-16572.	3.2	64
27	Role of Carbonaceous Supports and Potassium Promoter on Higher Alcohols Synthesis over Copperâ€“Iron Catalysts. ACS Catalysis, 2018, 8, 9604-9618.	5.5	58
28	Enhanced Base-Free Formic Acid Production from CO2 on Pd/g-C3 N4 by Tuning of the Carrier Defects. ChemSusChem, 2018, 11, 2841-2841.	3.6	0
29	Enhanced Baseâ€Free Formic Acid Production from CO₂ on Pd/gâ€C₃N₄ by Tuning of the Carrier Defects. ChemSusChem, 2018, 11, 2859-2869.	3.6	47
30	Bifunctional Hierarchical Zeoliteâ€Supported Silver Catalysts for the Conversion of Glycerol to Allyl Alcohol. ChemCatChem, 2017, 9, 2195-2202.	1.8	20
31	Design of a technical Mgâ€“Al mixed oxide catalyst for the continuous manufacture of glycerol carbonate. Journal of Materials Chemistry A, 2017, 5, 16200-16211.	5.2	46
32	Status and prospects in higher alcohols synthesis from syngas. Chemical Society Reviews, 2017, 46, 1358-1426.	18.7	513
33	Indium Oxide as a Superior Catalyst for Methanol Synthesis by CO₂ Hydrogenation. Angewandte Chemie, 2016, 128, 6369-6373.	1.6	78
34	Titelbild: Indium Oxide as a Superior Catalyst for Methanol Synthesis by CO₂ Hydrogenation (Angew. Chem. 21/2016). Angewandte Chemie, 2016, 128, 6215-6215.	1.6	0
35	Catalyst and Process Design for the Continuous Manufacture of Rare Sugar Alcohols by Epimerization-Hydrogenation of Aldoses. ChemSusChem, 2016, 9, 3373-3373.	3.6	2
36	Glycerol oxidehydration to pyruvaldehyde over silver-based catalysts for improved lactic acid production. Green Chemistry, 2016, 18, 4682-4692.	4.6	32

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37	Operando Synchrotron Xâ€ray Powder Diffraction and Modulatedâ€Excitation Infrared Spectroscopy Elucidate the CO₂ Promotion on a Commercial Methanol Synthesis Catalyst. Angewandte Chemie - International Edition, 2016, 55, 11031-11036.	7.2	64
38	Operando Synchrotron Xâ€ray Powder Diffraction and Modulatedâ€Excitation Infrared Spectroscopy Elucidate the CO₂ Promotion on a Commercial Methanol Synthesis Catalyst. Angewandte Chemie, 2016, 128, 11197-11202.	1.6	51
39	Catalyst and Process Design for the Continuous Manufacture of Rare Sugar Alcohols by Epimerizationâ€“Hydrogenation of Aldoses. ChemSusChem, 2016, 9, 3407-3418.	3.6	23
40	Indium Oxide as a Superior Catalyst for Methanol Synthesis by CO₂ Hydrogenation. Angewandte Chemie - International Edition, 2016, 55, 6261-6265.	7.2	769
41	Impact of Daily Startupâ€“Shutdown Conditions on the Production of Solar Methanol over a Commercial Cuâ€“ZnOâ€“Al₂O₃ Catalyst. Energy Technology, 2016, 4, 565-572.	1.8	14
42	Hierarchical NaY Zeolites for Lactic Acid Dehydration to Acrylic Acid. ChemCatChem, 2016, 8, 1507-1514.	1.8	38
43	Selective dehydrogenation of bioethanol to acetaldehyde over basic USY zeolites. Catalysis Science and Technology, 2016, 6, 2706-2714.	2.1	14
44	Environmental and economic assessment of glycerol oxidation to dihydroxyacetone over technical iron zeolite catalysts. Reaction Chemistry and Engineering, 2016, 1, 106-118.	1.9	30
45	Deactivation mechanisms of tin-zeolites in biomass conversions. Green Chemistry, 2016, 18, 1249-1260.	4.6	80
46	Alkaline-assisted stannation of beta zeolite as a scalable route to Lewis-acid catalysts for the valorisation of renewables. New Journal of Chemistry, 2016, 40, 4136-4139.	1.4	17
47	Gas-Phase Oxidation of Glycerol to Dihydroxyacetone over Tailored Iron Zeolites. ACS Catalysis, 2015, 5, 1453-1461.	5.5	78
48	Continuous Transfer Hydrogenation of Sugars to Alditols with Bioderived Donors over Cu-Ni-Al Catalysts. ChemCatChem, 2015, 7, 1503-1503.	1.8	1
49	Hemicellulose arabinogalactan hydrolytic hydrogenation over Ru-modified H-USY zeolites. Journal of Catalysis, 2015, 330, 93-105.	3.1	34
50	Design of Lewis-acid centres in zeolitic matrices for the conversion of renewables. Chemical Society Reviews, 2015, 44, 7025-7043.	18.7	175
51	Continuous Transfer Hydrogenation of Sugars to Alditols with Bioderived Donors over Cuâ€“Niâ€“Al Catalysts. ChemCatChem, 2015, 7, 1551-1558.	1.8	26
52	Zinc-Rich Copper Catalysts Promoted by Gold for Methanol Synthesis. ACS Catalysis, 2015, 5, 5607-5616.	5.5	78
53	Environmental and economic assessment of lactic acid production from glycerol using cascade bio- and chemocatalysis. Energy and Environmental Science, 2015, 8, 558-567.	15.6	134
54	When catalyst meets reactor: continuous biphasic processing of xylan to furfural over GaUSY/Amberlyst-36. Catalysis Science and Technology, 2015, 5, 142-149.	2.1	35

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55	Hierarchical Sn-MFI zeolites prepared by facile top-down methods for sugar isomerisation. Catalysis Science and Technology, 2014, 4, 2302.	2.1	99
56	Structural Changes of a U₃O₈/ZrO₂ Catalyst During HCl Oxidation â€“ a HAADFâ€STEM Study. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 768-773.	0.6	5
57	A continuous process for glyoxal valorisation using tailored Lewis-acid zeolite catalysts. Green Chemistry, 2014, 16, 1176-1186.	4.6	59
58	Production of bio-derived ethyl lactate on GaUSY zeolites prepared by post-synthetic galliation. Green Chemistry, 2014, 16, 589-593.	4.6	42
59	Gallium-modified zeolites for the selective conversion of bio-based dihydroxyacetone into C1â€“C4 alkyl lactates. Journal of Molecular Catalysis A, 2014, 388-389, 141-147.	4.8	39
60	CuCrO₂ Delafossite: A Stable Copper Catalyst for Chlorine Production. Angewandte Chemie - International Edition, 2013, 52, 9772-9775.	7.2	72
61	Solid-State Chemistry of Cuprous Delafossites: Synthesis and Stability Aspects. Chemistry of Materials, 2013, 25, 4423-4435.	3.2	114
62	HCl Oxidation on IrO₂-Based Catalysts: From Fundamentals to Scale-Up. ACS Catalysis, 2013, 3, 2813-2822.	5.5	52
63	Superior activity of rutile-supported ruthenium nanoparticles for HCl oxidation. Catalysis Science and Technology, 2013, 3, 2555.	2.1	26
64	Do observations on surface coverage-reactivity correlations always describe the true catalytic process? A case study on ceria. Journal of Catalysis, 2013, 297, 119-127.	3.1	42
65	Structural properties of alumina- and silica-supported Iridium catalysts and their behavior in the enantioselective hydrogenation of ethyl pyruvate. Applied Catalysis A: General, 2013, 451, 14-20.	2.2	12
66	Supported CeO2 catalysts in technical form for sustainable chlorine production. Applied Catalysis B: Environmental, 2013, 132-133, 123-131.	10.8	64
67	Depleted uranium catalysts for chlorine production. Chemical Science, 2013, 4, 2209.	3.7	45
68	Industrial RuO₂â€Based Deacon Catalysts: Carrier Stabilization and Active Phase Content Optimization. ChemCatChem, 2013, 5, 748-756.	1.8	39
69	Highly Selective Lewis Acid Sites in Desilicated MFI Zeolites for Dihydroxyacetone Isomerization to Lactic Acid. ChemSusChem, 2013, 6, 831-839.	3.6	105
70	Titelbild: CuCrO2Delafossite: A Stable Copper Catalyst for Chlorine Production (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14	1.6	1
71	Development of Industrial Catalysts for Sustainable Chlorine Production. Chimia, 2012, 66, 694.	0.3	4
72	Kinetic aspects and deactivation behaviour of chromia-based catalysts in hydrogen chloride oxidation. Catalysis Science and Technology, 2012, 2, 2057.	2.1	48

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73	Biobased Chemicals from Conception toward Industrial Reality: Lessons Learned and To Be Learned. ACS Catalysis, 2012, 2, 1487-1499.	5.5	163
74	An integrated approach to Deacon chemistry on RuO2-based catalysts. Journal of Catalysis, 2012, 285, 273-284.	3.1	111
75	Performance, structure, and mechanism of CeO2 in HCl oxidation to Cl2. Journal of Catalysis, 2012, 286, 287-297.	3.1	185
76	A delafossite-based copper catalyst for sustainable Cl2 production by HCl oxidation. Chemical Communications, 2011, 47, 7173.	2.2	50
77	Mechanismâ€“Performance Relationships of Metal Oxides in Catalyzed HCl Oxidation. ACS Catalysis, 2011, 1, 583-590.	5.5	66
78	Temporal Analysis of Products Study of HCl Oxidation on Copper- and Ruthenium-Based Catalysts. Journal of Physical Chemistry C, 2011, 115, 1056-1063.	1.5	62
79	Sustainable chlorine recycling via catalysed HCl oxidation: from fundamentals to implementation. Energy and Environmental Science, 2011, 4, 4786.	15.6	179
80	Redox properties of supported copper catalysts studied in liquid and gas phase by in situ ATR-IR and XAS. Catalysis Today, 2011, 178, 124-131.	2.2	10
81	Shaped RuO₂/SnO₂â€“Al₂O₃ Catalyst for Largeâ€Scale Stable Cl₂ Production by HCl Oxidation. ChemCatChem, 2011, 3, 657-660.	1.8	80
82	A novel class of fluorinated cinchona alkaloids as surface modifiers for the enantioselective heterogeneous hydrogenation of Î±-ketoesters. Journal of Molecular Catalysis A, 2010, 327, 87-91.	4.8	28
83	Role of Bi promotion and solvent in platinum-catalyzed alcohol oxidation probed by in situ X-ray absorption and ATR-IR spectroscopy. Physical Chemistry Chemical Physics, 2010, 12, 5307.	1.3	54
84	Fundamental Aspects of the Chiral Modification of Platinum with Peptides: Asymmetric Induction in Hydrogenation of Activated Ketones. Journal of Physical Chemistry C, 2009, 113, 15246-15259.	1.5	16
85	Supported Rh catalysts for methane partial oxidation prepared by OM-CVD of Rh(acac)(CO)2. Applied Catalysis A: General, 2008, 346, 126-133.	2.2	30
86	Ruthenium at work in Ru-hydroxyapatite during the aerobic oxidation of benzyl alcohol: An in situ ATR-IR spectroscopy study. Journal of Catalysis, 2008, 258, 170-176.	3.1	41
87	Structure Sensitivity of Palladium-Catalyzed Liquid-Phase Alcohol Oxidation. A Combined <I>in situ</I> ATR-IR and Selective Site Blocking Study. Chimia, 2007, 61, 175-178.	0.3	2
88	Combined liquid-phase ATR-IR and XAS study of the Bi-promotion in the aerobic oxidation of benzyl alcohol over Pd/Al2O3. Journal of Catalysis, 2007, 252, 77-87.	3.1	85
89	Discrimination of Active Palladium Sites in Catalytic Liquid-Phase Oxidation of Benzyl Alcohol. Journal of Physical Chemistry B, 2006, 110, 22982-22986.	1.2	115
90	An operando DRIFTSâ€“MS study on model Ce0.5Zr0.5O2 redox catalyst: A critical evaluation of DRIFTS and MS data on CO abatement reaction. Catalysis Today, 2006, 113, 81-86.	2.2	37

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91	Fast transient infrared studies in material science: development of a novel low dead-volume, high temperature DRIFTS cell. Talanta, 2005, 66, 674-682.	2.9	43