David Linke

List of Publications by Year
in descending order

34 papers	1,675 citations	304743 22 h-index	361022 35 g-index
36 all docs	36 docs citations	36 times ranked	1112 citing authors

#	Article	IF	Citations
1	Effects of N₂O and Water on Activity and Selectivity in the Oxidative Coupling of Methane over Mnâ€“Na₂WO₄/SiO₂: Role of Oxygen Species. ACS Catalysis, 2022, 12, 1298-1309.	11.2	20
2	Revealing fundamentals affecting activity and product selectivity in non-oxidative propane dehydrogenation over bare Al₂O₃. Catalysis Science and Technology, 2021, 11, 1386-1394.	4.1	14
3	Elucidating the effects of individual components in K_{<i>x</i>}MnO_{<i>y</i>}/SiO₂and water on selectivity enhancement in the oxidative coupling of methane. Catalysis Science and Technology, 2021, 11, 5827-5838.	4.1	6
4	A Unified Research Data Infrastructure for Catalysis Research â€“ Challenges and Concepts. ChemCatChem, 2021, 13, 3223-3236.	3.7	45
5	In situ formation of ZnOx species for efficient propane dehydrogenation. Nature, 2021, 599, 234-238.	27.8	133
6	1,3-Thiazole-4-carbonitrile. IUCrData, 2021, 6, .	0.3	1
7	Unraveling the Origins of the Synergy Effect between ZrO₂ and CrO<i>_x</i> in Supported CrZrO<i>_x</i> for Propene Formation in Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2020, 10, 1575-1590.	11.2	46
8	The effect of ZrO2 crystallinity in CrZrOx/SiO2 on non-oxidative propane dehydrogenation. Applied Catalysis A: General, 2020, 590, 117350.	4.3	21
9	Elucidating the Nature of Active Sites and Fundamentals for their Creation in Zn-Containing ZrO₂â€“Based Catalysts for Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2020, 10, 8933-8949.	11.2	62
10	Structureâ€“Activityâ€“Selectivity Relationships in Propane Dehydrogenation over Rh/ZrO₂ Catalysts. ACS Catalysis, 2020, 10, 6377-6388.	11.2	47
11	Study of reaction network of the ethylene-to-propene reaction by means of isotopically labelled reactants. Journal of Catalysis, 2020, 389, 317-327.	6.2	4
12	Revisiting Activity- and Selectivity-Enhancing Effects of Water in the Oxidative Coupling of Methane over MnO<i>_x</i>-Na₂WO₄/SiO₂and Proving for Other Materials. ACS Catalysis, 2020, 10, 8751-8764.	11.2	33
13	The effect of supported Rh, Ru, Pt or Ir nanoparticles on activity and selectivity of ZrO2-based catalysts in non-oxidative dehydrogenation of propane. Applied Catalysis A: General, 2020, 602, 117731.	4.3	27
14	Catalytic non-oxidative propane dehydrogenation over promoted Cr-Zr-Ox: Effect of promoter on propene selectivity and stability. Catalysis Communications, 2020, 138, 105956.	3.3	12
15	Understanding trends in methane oxidation to formaldehyde: statistical analysis of literature data and based hereon experiments. Catalysis Science and Technology, 2019, 9, 5111-5121.	4.1	16
16	Controlling activity and selectivity of bare ZrO2 in non-oxidative propane dehydrogenation. Applied Catalysis A: General, 2019, 585, 117189.	4.3	32
17	The role of speciation of Ni²⁺ and its interaction with the support for selectivity and stability in the conversion of ethylene to propene. Catalysis Science and Technology, 2019, 9, 3137-3148.	4.1	11
18	The effect of phase composition and crystallite size on activity and selectivity of ZrO2 in non-oxidative propane dehydrogenation. Journal of Catalysis, 2019, 371, 313-324.	6.2	74

#	Article	IF	Citations
19	A chemical titration method for quantification of carbenes in Mo- or W-containing catalysts for metathesis of ethylene with 2-butenes: verification and application potential. Catalysis Science and Technology, 2019, 9, 5660-5667.	4.1	10
20	Oxidative coupling of methane at elevated pressures: reactor concept and its validation. Reaction Chemistry and Engineering, 2018, 3, 151-154.	3.7	11
21	Metathesis of ethylene and 2-butene over MoOx/Al2O3-SiO2: Effect of MoOx structure on formation of active sites and propene selectivity. Journal of Catalysis, 2018, 360, 135-144.	6.2	16
22	Control of coordinatively unsaturated Zr sites in ZrO2 for efficient Câ€“H bond activation. Nature Communications, 2018, 9, 3794.	12.8	133
23	Influence of the kind of VOx structures in VOx/MCM-41 on activity, selectivity and stability in dehydrogenation of propane and isobutane. Journal of Catalysis, 2017, 352, 256-263.	6.2	98
24	ZrO 2 -based unconventional catalysts for non-oxidative propane dehydrogenation: Factors determining catalytic activity. Journal of Catalysis, 2017, 348, 282-290.	6.2	80
25	Non-oxidative dehydrogenation of propane, n-butane, and isobutane over bulk ZrO₂-based catalysts: effect of dopant on the active site and pathways of product formation. Catalysis Science and Technology, 2017, 7, 4499-4510.	4.1	71
26	Synergy effect between Zr and Cr active sites in binary CrZrOx or supported CrOx/LaZrOx: Consequences for catalyst activity, selectivity and durability in non-oxidative propane dehydrogenation. Journal of Catalysis, 2017, 356, 197-205.	6.2	73
27	Unexpectedly high activity of bare alumina for non-oxidative isobutane dehydrogenation. Chemical Communications, 2016, 52, 12222-12225.	4.1	53
28	Bulk binary ZrO₂-based oxides as highly active alternative-type catalysts for non-oxidative isobutane dehydrogenation. Chemical Communications, 2016, 52, 8164-8167.	4.1	51
29	Influence of support and kind of VO species on isobutene selectivity and coke deposition in non-oxidative dehydrogenation of isobutane. Journal of Catalysis, 2016, 338, 174-183.	6.2	66
30	Effect of VO_{<i>x</i>} Species and Support on Coke Formation and Catalyst Stability in Nonoxidative Propane Dehydrogenation. ChemCatChem, 2015, 7, 1691-1700.	3.7	60
31	ZrO₂â€Based Alternatives to Conventional Propane Dehydrogenation Catalysts: Active Sites, Design, and Performance. Angewandte Chemie - International Edition, 2015, 54, 15880-15883.	13.8	156
32	Developing catalytic materials for the oxidative coupling of methane through statistical analysis of literature data. Catalysis Science and Technology, 2015, 5, 1668-1677.	4.1	86
33	The Enhancing Effect of BrÃ¸nsted Acidity of Supported MoO_{<i>x</i>} Species on their Activity and Selectivity in Ethylene/<i>trans</i>â€2â€Butene Metathesis. ChemCatChem, 2014, 6, 1664-1672.	3.7	43
34	Effect of support on selectivity and on-stream stability of surface VOx species in non-oxidative propane dehydrogenation. Catalysis Science and Technology, 2014, 4, 1323.	4.1	62