

Evgenii Kondratenko

List of Publications by Year in descending order

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78
papers

5,056
citations

109321

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88630

70
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80
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docs citations

80
times ranked

5419
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of N ₂ O and Water on Activity and Selectivity in the Oxidative Coupling of Methane over Mn ₂ WO ₄ /SiO ₂ : Role of Oxygen Species. ACS Catalysis, 2022, 12, 1298-1309.	11.2	20
2	Ceria-Supported Gold Nanoparticles as a Superior Catalyst for Nitrous Oxide Production via Ammonia Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
3	Rücktitelbild: Ceria-Supported Gold Nanoparticles as a Superior Catalyst for Nitrous Oxide Production via Ammonia Oxidation (Angew. Chem. 19/2022). Angewandte Chemie, 2022, 134, .	2.0	0
4	Identifying Performance Descriptors in CO ₂ Hydrogenation over Iron-Based Catalysts Promoted with Alkali Metals. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
5	Controlling Reaction-Induced Loss of Active Sites in ZnO _x /Silicalite-1 for Durable Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 4608-4617.	11.2	20
6	Performance descriptors of nanostructured metal catalysts for acetylene hydrochlorination. Nature Nanotechnology, 2022, 17, 606-612.	31.5	39
7	Dynamics of Reaction-Induced Changes of Model-Type Iron Oxide Phases in the CO ₂ -Fischer-Tropsch Synthesis. ChemCatChem, 2022, 14, .	3.7	1
8	Oxide-Supported Carbonates Reveal a Unique Descriptor for Catalytic Performance in the Oxidative Coupling of Methane (OCM). ACS Catalysis, 2022, 12, 9325-9338.	11.2	5
9	Revealing property-performance relationships for efficient CO ₂ hydrogenation to higher hydrocarbons over Fe-based catalysts: Statistical analysis of literature data and its experimental validation. Applied Catalysis B: Environmental, 2021, 282, 119554.	20.2	51
10	Revealing fundamentals affecting activity and product selectivity in non-oxidative propane dehydrogenation over bare Al ₂ O ₃ . Catalysis Science and Technology, 2021, 11, 1386-1394.	4.1	14
11	Elucidating the effects of individual components in K _x MnO _y /SiO ₂ and water on selectivity enhancement in the oxidative coupling of methane. Catalysis Science and Technology, 2021, 11, 5827-5838.	4.1	6
12	Current status and perspectives in oxidative, non-oxidative and CO ₂ -mediated dehydrogenation of propane and isobutane over metal oxide catalysts. Chemical Society Reviews, 2021, 50, 473-527.	38.1	166
13	Factors affecting primary and secondary pathways in CO ₂ hydrogenation to methanol over CuZnIn/MZrO _x (La, Ti or Y). Catalysis Today, 2021, , .	4.4	6
14	Understanding reaction-induced restructuring of well-defined Fe _x O _y C _z compositions and its effect on CO ₂ hydrogenation. Applied Catalysis B: Environmental, 2021, 291, 120121.	20.2	29
15	Enhancing Propene Formation in the Metathesis of Ethylene with 2-Butene at Close to Room Temperature over MoO _x /SiO ₂ through Support Promotion with P, Cl, or S. ACS Catalysis, 2021, 11, 14159-14167.	11.2	6
16	In situ formation of ZnO _x species for efficient propane dehydrogenation. Nature, 2021, 599, 234-238.	27.8	133
17	Unraveling the Origins of the Synergy Effect between ZrO ₂ and CrO _x in Supported CrZrO _x for Propene Formation in Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2020, 10, 1575-1590.	11.2	46
18	The effect of ZrO ₂ crystallinity in CrZrO _x /SiO ₂ on non-oxidative propane dehydrogenation. Applied Catalysis A: General, 2020, 590, 117350.	4.3	21

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19	Elucidating the Nature of Active Sites and Fundamentals for their Creation in Zn-Containing ZrO ₂ -Based Catalysts for Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2020, 10, 8933-8949.	11.2	62
20	Oxide of lanthanoids can catalyse non-oxidative propane dehydrogenation: mechanistic concept and application potential of Eu ₂ O ₃ - or Gd ₂ O ₃ -based catalysts. Chemical Communications, 2020, 56, 13021-13024.	4.1	6
21	Effect of Formaldehyde in Selective Catalytic Reduction of NO _x by Ammonia (NH ₃ -SCR) on a Commercial V ₂ O ₅ -WO ₃ /TiO ₂ Catalyst under Model Conditions. Environmental Science & Technology, 2020, 54, 11753-11761.	10.0	26
22	TiO ₂ -Supported catalysts with ZnO and ZrO ₂ for non-oxidative dehydrogenation of propane: mechanistic analysis and application potential. Catalysis Science and Technology, 2020, 10, 7046-7055.	4.1	11
23	Structure-Activity-Selectivity Relationships in Propane Dehydrogenation over Rh/ZrO ₂ Catalysts. ACS Catalysis, 2020, 10, 6377-6388.	11.2	47
24	Effect of hydrogen and supported metal on selectivity and on-stream stability of ZrO ₂ -based catalysts in non-oxidative propane dehydrogenation. Catalysis Communications, 2020, 144, 106068.	3.3	9
25	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
26	Revisiting Activity- and Selectivity-Enhancing Effects of Water in the Oxidative Coupling of Methane over MnO _x -Na ₂ WO ₄ /SiO ₂ and Proving for Other Materials. ACS Catalysis, 2020, 10, 8751-8764.	11.2	33
27	The effect of supported Rh, Ru, Pt or Ir nanoparticles on activity and selectivity of ZrO ₂ -based catalysts in non-oxidative dehydrogenation of propane. Applied Catalysis A: General, 2020, 602, 117731.	4.3	27
28	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
29	Nonoxidative Dehydrogenation of Isobutane over MZrO _x (M = La or Y) with Supported Ir, Pt, Rh, or Ru: Effects of Promoters and Supported Metals. Industrial & Engineering Chemistry Research, 2020, 59, 21729-21735.	3.7	2
30	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
31	Controlling activity and selectivity of bare ZrO ₂ in non-oxidative propane dehydrogenation. Applied Catalysis A: General, 2019, 585, 117189.	4.3	32
32	A meta-analysis of catalytic literature data reveals property-performance correlations for the OCM reaction. Nature Communications, 2019, 10, 441.	12.8	61
33	Controlling the speciation and reactivity of carbon-supported gold nanostructures for catalysed acetylene hydrochlorination. Chemical Science, 2019, 10, 359-369.	7.4	76
34	The role of speciation of Ni ²⁺ 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
35	ZnO Nanoparticles Encapsulated in Nitrogen-Doped Carbon Material and Silicalite-1 Composites for Efficient Propane Dehydrogenation. IScience, 2019, 13, 269-276.	4.1	33
36	The effect of phase composition and crystallite size on activity and selectivity of ZrO ₂ in non-oxidative propane dehydrogenation. Journal of Catalysis, 2019, 371, 313-324.	6.2	74

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37	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. <i>Catalysis Science and Technology</i> , 2019, 9, 5660-5667.	4.1	10
38	An Approach Using Oxidative Coupling of Methane for Converting Biogas and Acid Natural Gas into High-Calorific Fuels. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 2454-2459.	3.7	8
39	Oxidative coupling of methane at elevated pressures: reactor concept and its validation. <i>Reaction Chemistry and Engineering</i> , 2018, 3, 151-154.	3.7	11
40	Metathesis of ethylene and 2-butene over MoO _x /Al ₂ O ₃ -SiO ₂ : Effect of MoO _x structure on formation of active sites and propene selectivity. <i>Journal of Catalysis</i> , 2018, 360, 135-144.	6.2	16
41	Control of coordinatively unsaturated Zr sites in ZrO ₂ for efficient C-H bond activation. <i>Nature Communications</i> , 2018, 9, 3794.	12.8	133
42	Porous silicon carbide as a support for Mn/Na/W/SiC catalyst in the oxidative coupling of methane. <i>Applied Catalysis A: General</i> , 2017, 537, 33-39.	4.3	46
43	Influence of the kind of VO _x structures in VO _x /MCM-41 on activity, selectivity and stability in dehydrogenation of propane and isobutane. <i>Journal of Catalysis</i> , 2017, 352, 256-263.	6.2	98
44	Forty years of temporal analysis of products. <i>Catalysis Science and Technology</i> , 2017, 7, 2416-2439.	4.1	116
45	ZrO ₂ -based unconventional catalysts for non-oxidative propane dehydrogenation: Factors determining catalytic activity. <i>Journal of Catalysis</i> , 2017, 348, 282-290.	6.2	80
46	Methane conversion into different hydrocarbons or oxygenates: current status and future perspectives in catalyst development and reactor operation. <i>Catalysis Science and Technology</i> , 2017, 7, 366-381.	4.1	200
47	Non-oxidative dehydrogenation of propane, n-butane, and isobutane over bulk ZrO ₂ -based catalysts: effect of dopant on the active site and pathways of product formation. <i>Catalysis Science and Technology</i> , 2017, 7, 4499-4510.	4.1	71
48	Synergy effect between Zr and Cr active sites in binary CrZrO _x or supported CrO _x /LaZrO _x : Consequences for catalyst activity, selectivity and durability in non-oxidative propane dehydrogenation. <i>Journal of Catalysis</i> , 2017, 356, 197-205.	6.2	73
49	Unexpectedly efficient CO ₂ hydrogenation to higher hydrocarbons over non-doped Fe ₂ O ₃ . <i>Applied Catalysis B: Environmental</i> , 2017, 204, 119-126.	20.2	137
50	Effect of Support and Promoter on Activity and Selectivity of Gold Nanoparticles in Propanol Synthesis from CO ₂ , C ₂ H ₄ , and H ₂ . <i>ACS Catalysis</i> , 2016, 6, 3317-3325.	11.2	25
51	Unexpectedly high activity of bare alumina for non-oxidative isobutane dehydrogenation. <i>Chemical Communications</i> , 2016, 52, 12222-12225.	4.1	53
52	Bulk binary ZrO ₂ -based oxides as highly active alternative-type catalysts for non-oxidative isobutane dehydrogenation. <i>Chemical Communications</i> , 2016, 52, 8164-8167.	4.1	51
53	Influence of support and kind of VO species on isobutene selectivity and coke deposition in non-oxidative dehydrogenation of isobutane. <i>Journal of Catalysis</i> , 2016, 338, 174-183.	6.2	66
54	Effect of VO _x Species and Support on Coke Formation and Catalyst Stability in Nonoxidative Propane Dehydrogenation. <i>ChemCatChem</i> , 2015, 7, 1691-1700.	3.7	60

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55	ZrO ₂ -Based Alternatives to Conventional Propane Dehydrogenation Catalysts: Active Sites, Design, and Performance. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15880-15883.	13.8	156
56	Investigation of the Enhancing Effect of Solid Cocatalysts on Propene Formation in Ethene/ <i>trans</i> -2-Butene Metathesis over MoO _x /SiO ₂ -Al ₂ O ₃ . <i>ACS Catalysis</i> , 2015, 5, 7437-7445.	11.2	18
57	Developing catalytic materials for the oxidative coupling of methane through statistical analysis of literature data. <i>Catalysis Science and Technology</i> , 2015, 5, 1668-1677.	4.1	86
58	The Enhancing Effect of Brønsted Acidity of Supported MoO _x Species on their Activity and Selectivity in Ethylene/ <i>trans</i> -2-Butene Metathesis. <i>ChemCatChem</i> , 2014, 6, 1664-1672.	3.7	43
59	Effect of support on selectivity and on-stream stability of surface VO _x species in non-oxidative propane dehydrogenation. <i>Catalysis Science and Technology</i> , 2014, 4, 1323.	4.1	62
60	The effect of supported MoO _x structures on the reaction pathways of propene formation in the metathesis of ethylene and 2-butene. <i>Chemical Communications</i> , 2014, 50, 9060-9063.	4.1	20
61	Partial Oxidation of Methane to Syngas Over γ -Al ₂ O ₃ -Supported Rh Nanoparticles: Kinetic and Mechanistic Origins of Size Effect on Selectivity and Activity. <i>ACS Catalysis</i> , 2014, 4, 3136-3144.	11.2	73
62	Status and perspectives of CO ₂ conversion into fuels and chemicals by catalytic, photocatalytic and electrocatalytic processes. <i>Energy and Environmental Science</i> , 2013, 6, 3112.	30.8	1,475
63	A Dual-Reacto Concept for the High-Yielding Conversion of Methane into Higher Hydrocarbons. <i>ChemCatChem</i> , 2013, 5, 697-700.	3.7	14
64	From Mechanistic and Kinetic Understanding of Heterogeneously Catalyzed Reactions to Tuning Catalysts Performance. <i>Topics in Catalysis</i> , 2013, 56, 858-866.	2.8	7
65	Comparative study of propane dehydrogenation over V-, Cr-, and Pt-based catalysts: Time on-stream behavior and origins of deactivation. <i>Journal of Catalysis</i> , 2012, 293, 67-75.	6.2	133
66	Tailored Noble Metal Nanoparticles on γ -Al ₂ O ₃ for High Temperature CH ₄ Conversion to Syngas. <i>ChemCatChem</i> , 2012, 4, 1368-1375.	3.7	27
67	Comparison of oxidizing agents for the oxidative coupling of methane over state-of-the-art catalysts. <i>Applied Catalysis A: General</i> , 2012, 417-418, 145-152.	4.3	29
68	Stable low-temperature dry reforming of methane over mesoporous La ₂ O ₃ -ZrO ₂ supported Ni catalyst. <i>Applied Catalysis B: Environmental</i> , 2012, 113-114, 19-30.	20.2	154
69	Mechanistic origins of the promoting effect of tiny amounts of Rh on the performance of NiO _x /Al ₂ O ₃ in partial oxidation of methane. <i>Journal of Catalysis</i> , 2011, 280, 116-124.	6.2	40
70	Using time-resolved methods to monitor and understand catalytic oxidation reactions. <i>Catalysis Today</i> , 2010, 157, 16-23.	4.4	23
71	Selective and stable iso-butene production over highly dispersed VO _x species on SiO ₂ supports via combining oxidative and non-oxidative iso-butane dehydrogenation. <i>Chemical Communications</i> , 2010, 46, 4974.	4.1	30
72	Dynamics of redox behavior of nano-sized VO _x species over Ti-Si-MCM-41 from time-resolved in situ UV/Vis analysis. <i>Journal of Catalysis</i> , 2009, 265, 8-18.	6.2	45

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73	In-Situ UV/vis and Transient Isotopic Analysis of the Role of Oxidizing Agent in the Oxidative Dehydrogenation of Propane over Silica-Supported Vanadia Catalysts. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8594-8602.	3.1	31
74	Evolution, achievements, and perspectives of the TAP technique. <i>Catalysis Today</i> , 2007, 121, 160-169.	4.4	130
75	Influence of reaction conditions on catalyst composition and selective/non-selective reaction pathways of the ODP reaction over V ₂ O ₃ , VO ₂ and V ₂ O ₅ with O ₂ and N ₂ O. <i>Applied Catalysis A: General</i> , 2007, 319, 98-110.	4.3	50
76	Room-Temperature Metathesis of Ethylene with 2-Butene to Propene Over MoO _x -Based Catalysts: Mixed Oxides as Perspective Support Materials. <i>Catalysis Letters</i> , 0, , 1.	2.6	4
77	Ceria-Supported Gold Nanoparticles as a Superior Catalyst for Nitrous Oxide Production via Ammonia Oxidation. <i>Angewandte Chemie</i> , 0, , .	2.0	0
78	Bestimmung von Performance-Deskriptoren für die CO ₂ -Hydrierung an alkalimetallpromotierten Katalysatoren auf Eisenbasis. <i>Angewandte Chemie</i> , 0, , .	2.0	0