Andrei Khodakov

List of Publications by Year
in descending order

174 papers	12,049 citations	30070 54 h-index	28297 105 g-index
179 all docs	179 docs citations	179 times ranked	8028 citing authors

#	Article	IF	Citations
1	Advances in the Development of Novel Cobalt Fischerâ˘Tropsch Catalysts for Synthesis of Long-Chain Hydrocarbons and Clean Fuels. Chemical Reviews, 2007, 107, 1692-1744.	47.7	2,045
2	Structure and Catalytic Properties of Supported Vanadium Oxides: Support Effects on Oxidative Dehydrogenation Reactions. Journal of Catalysis, 1999, 181, 205-216.	6.2	573
3	Pore Size Effects in Fischer Tropsch Synthesis over Cobalt-Supported Mesoporous Silicas. Journal of Catalysis, 2002, 206, 230-241.	6.2	462
4	Reducibility of Cobalt Species in Silica-Supported Fischerâ€"Tropsch Catalysts. Journal of Catalysis, 1997, 168, 16-25.	6.2	310
5	Isotopic Tracer and Kinetic Studies of Oxidative Dehydrogenation Pathways on Vanadium Oxide Catalysts. Journal of Catalysis, 1999, 186, 325-333.	6.2	295
6	Structure and properties of vanadium oxide-zirconia catalysts for propane oxidative dehydrogenation. Journal of Catalysis, 1998, 177, 343-351.	6.2	267
7	Cobalt species in promoted cobalt alumina-supported Fischerâ€"Tropsch catalysts. Journal of Catalysis, 2007, 252, 215-230.	6.2	262
8	Highlights and challenges in the selective reduction of carbon dioxide to methanol. Nature Reviews Chemistry, 2021, 5, 564-579.	30.2	253
9	Fischer-Tropsch synthesis: Relations between structure of cobalt catalysts and their catalytic performance. Catalysis Today, 2009, 144, 251-257.	4.4	239
10	Fischerâ€"Tropsch synthesis over silica supported cobalt catalysts: mesoporous structure versus cobalt surface density. Applied Catalysis A: General, 2003, 254, 273-288.	4.3	218
11	Structure and catalytic performance of Pt-promoted alumina-supported cobalt catalysts under realistic conditions of Fischerâ€"Tropsch synthesis. Journal of Catalysis, 2011, 277, 14-26.	6.2	211
12	Pore-Size Control of Cobalt Dispersion and Reducibility in Mesoporous Silicas. Journal of Physical Chemistry B, 2001, 105, 9805-9811.	2.6	194
13	Carbon-based catalysts for Fischerâ€"Tropsch synthesis. Chemical Society Reviews, 2021, 50, 2337-2366.	38.1	188
14	Structure and catalytic performance of alumina-supported copperâ€"cobalt catalysts for carbon monoxide hydrogenation. Journal of Catalysis, 2012, 286, 51-61.	6.2	186
15	Effects of Support Composition and Pretreatment Conditions on the Structure of Vanadia Dispersed on SiO2, Al2O3, TiO2, ZrO2, and HfO2. Journal of Physical Chemistry B, 2000, 104, 1516-1528.	2.6	180
16	Cobalt dispersion, reducibility, and surface sites in promoted silica-supported Fischerâ€"Tropsch catalysts. Journal of Catalysis, 2007, 248, 143-157.	6.2	178
17	Effect of cobalt precursor and pretreatment conditions on the structure and catalytic performance of cobalt silica-supported Fischer?Tropsch catalysts. Journal of Catalysis, 2005, 230, 339-352.	6.2	173
18	Promotion of Cobalt Fischer-Tropsch Catalysts with Noble Metals: a Review. Oil and Gas Science and Technology, 2009, 64, 11-24.	1.4	156

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19	Pore size effects in high-temperature Fischerâ€“Tropsch synthesis over supported iron catalysts. Journal of Catalysis, 2015, 328, 139-150.	6.2	151
20	Glowâ€Discharge Plasmaâ€Assisted Design of Cobalt Catalysts for Fischerâ€“Tropsch Synthesis. Angewandte Chemie - International Edition, 2008, 47, 5052-5055.	13.8	149
21	Stoichiometric methane conversion to ethane using photochemical looping at ambient temperature. Nature Energy, 2020, 5, 511-519.	39.5	130
22	Impact of aqueous impregnation on the long-range ordering and mesoporous structure of cobalt containing MCM-41 and SBA-15 materials. Microporous and Mesoporous Materials, 2005, 79, 29-39.	4.4	114
23	In situXRD investigation of the evolution of alumina-supported cobaltcatalysts under realistic conditions of Fischer-Tropsch synthesis. Chemical Communications, 2010, 46, 788-790.	4.1	110
24	Cobalt species and cobalt-support interaction in glow discharge plasma-assisted Fischerâ€“Tropsch catalysts. Journal of Catalysis, 2010, 273, 9-17.	6.2	103
25	De Novo Design of Nanostructured Ironâ€“Cobalt Fischerâ€“Tropsch Catalysts. Angewandte Chemie - International Edition, 2013, 52, 4397-4401.	13.8	103
26	Selective photocatalytic conversion of methane into carbon monoxide over zinc-heteropolyacid-titania nanocomposites. Nature Communications, 2019, 10, 700.	12.8	98
27	Support effects in high temperature Fischer-Tropsch synthesis on iron catalysts. Applied Catalysis A: General, 2014, 488, 66-77.	4.3	92
28	The nature of cobalt species in carbon nanotubes and their catalytic performance in Fischerâ€“Tropsch reaction. Journal of Materials Chemistry, 2009, 19, 9241.	6.7	88
29	Characterization of the Initial Stages of SBA-15 Synthesis by in Situ Time-Resolved Small-Angle X-ray Scattering. Journal of Physical Chemistry B, 2005, 109, 22780-22790.	2.6	87
30	Identification of the active species in the working alumina-supported cobalt catalyst under various conditions of Fischerâ€“Tropsch synthesis. Catalysis Today, 2011, 164, 62-67.	4.4	87
31	In situ characterization of the genesis of cobalt metal particles in silica-supported Fischer-Tropsch catalysts using Foner magnetic method. Applied Catalysis A: General, 2006, 306, 108-119.	4.3	86
32	Effects of Î²-cyclodextrin introduction to zirconia supported-cobalt oxide catalysts: From molecule-ion associations to complete oxidation of formaldehyde. Applied Catalysis B: Environmental, 2013, 138-139, 381-390.	20.2	82
33	Vanadyltert-Butoxy Orthosilicate, OV[OSi(OtBu)3]3:Â A Model for Isolated Vanadyl Sites on Silica and a Precursor to Vanadiaâ˘'Silica Xerogelsâ€. Chemistry of Materials, 1999, 11, 2966-2973.	6.7	79
34	Sodium-promoted iron catalysts prepared on different supports for high temperature Fischerâ€“Tropsch synthesis. Applied Catalysis A: General, 2015, 502, 204-214.	4.3	78
35	Major routes in the photocatalytic methane conversion into chemicals and fuels under mild conditions. Applied Catalysis B: Environmental, 2021, 286, 119913.	20.2	78
36	Speciation of Ruthenium as a Reduction Promoter of Silica-Supported Co Catalysts: A Time-Resolved in Situ XAS Investigation. ACS Catalysis, 2015, 5, 1273-1282.	11.2	76

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37	Initial stages of SBA-15 synthesis: An overview. Advances in Colloid and Interface Science, 2008, 142, 67-74.	14.7	75
38	Investigation of the different states of gallium in crystalline gallosilicates with pentasil structure and their role in propane aromatization. Zeolites, 1990, 10, 603-607.	0.5	74
39	The role of carbon atoms of supported iron carbides in Fischerâ€"Tropsch synthesis. Catalysis Science and Technology, 2015, 5, 1433-1437.	4.1	73
40	The role of carbon pre-coating for the synthesis of highly efficient cobalt catalysts for Fischerâ€"Tropsch synthesis. Journal of Catalysis, 2016, 337, 260-271.	6.2	72
41	Direct dimethyl ether synthesis from syngas on copperâ€"zeolite hybrid catalysts with a wide range of zeolite particle sizes. Journal of Catalysis, 2016, 338, 227-238.	6.2	71
42	Nanoreactors: An Efficient Tool To Control the Chain-Length Distribution in Fischerâ€"Tropsch Synthesis. ACS Catalysis, 2016, 6, 1785-1792.	11.2	70
43	Mechanistic Modeling of Cobalt Based Catalyst Sintering in a Fixed Bed Reactor under Different Conditions of Fischerâ€"Tropsch Synthesis. Industrial & Engineering Chemistry Research, 2012, 51, 11955-11964.	3.7	69
44	Effects of the promotion with bismuth and lead on direct synthesis of light olefins from syngas over carbon nanotube supported iron catalysts. Applied Catalysis B: Environmental, 2018, 234, 153-166.	20.2	68
45	Dual Metalâ€"Acid Pd-Br Catalyst for Selective Hydrodeoxygenation of 5-Hydroxymethylfurfural (HMF) to 2,5-Dimethylfuran at Ambient Temperature. ACS Catalysis, 2021, 11, 19-30.	11.2	65
46	Direct Evidence of Surface Oxidation of Cobalt Nanoparticles in Alumina-Supported Catalysts for Fischerâ€"Tropsch Synthesis. ACS Catalysis, 2014, 4, 4510-4515.	11.2	62
47	The role of external acid sites of ZSM-5 in deactivation of hybrid CuZnAl/ZSM-5 catalyst for direct dimethyl ether synthesis from syngas. Applied Catalysis A: General, 2014, 486, 266-275.	4.3	62
48	Structure-Sensitive and Insensitive Reactions in Alcohol Amination over Nonsupported Ru Nanoparticles. ACS Catalysis, 2018, 8, 11226-11234.	11.2	60
49	Optimization of the pretreatment procedure in the design of cobalt silica supported Fischerâ€"Tropsch catalysts. Catalysis Today, 2005, 106, 161-165.	4.4	58
50	Effect of promotion with ruthenium on the structure and catalytic performance of mesoporous silica (smaller and larger pore) supported cobalt Fischerâ€"Tropsch catalysts. Catalysis Today, 2009, 140, 135-141.	4.4	57
51	Influence of the support and promotion on the structure and catalytic performance of copperâ€"cobalt catalysts for carbon monoxide hydrogenation. Fuel, 2013, 103, 1111-1122.	6.4	57
52	Cobalt and iron species in alumina supported bimetallic catalysts for Fischerâ€"Tropsch reaction. Applied Catalysis A: General, 2014, 481, 116-126.	4.3	57
53	Support mesoporosity: a tool for better control of catalytic behavior of cobalt supported Fischer Tropsch catalysts. Studies in Surface Science and Catalysis, 2002, 144, 609-616.	1.5	56
54	Design of efficient Fischer Tropsch cobalt catalysts via plasma enhancement: Reducibility and performance (Review). Catalysis Today, 2015, 256, 41-48.	4.4	55

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55	Fischerâ€“Tropsch synthesis in milli-fixed bed reactor: Comparison with centimetric fixed bed and slurry stirred tank reactors. Catalysis Today, 2011, 171, 201-206.	4.4	53
56	In Situ Generation of BrÃ¸nsted Acidity in the Pd-I Bifunctional Catalysts for Selective Reductive Etherification of Carbonyl Compounds under Mild Conditions. ACS Catalysis, 2019, 9, 2940-2948.	11.2	53
57	Lignin Compounds to Monoaromatics: Selective Cleavage of Câˆ’O Bonds over a Brominated Ruthenium Catalyst. Angewandte Chemie - International Edition, 2021, 60, 12513-12523.	13.8	53
58	Influence of copper and potassium on the structure and carbidisation of supported iron catalysts for Fischerâ€“Tropsch synthesis. Catalysis Science and Technology, 2017, 7, 2325-2334.	4.1	52
59	Surface molecular imprinting over supported metal catalysts for size-dependent selective hydrogenation reactions. Nature Catalysis, 2021, 4, 595-606.	34.4	52
60	Effects of Metal Promotion on the Performance of CuZnAl Catalysts for Alcohol Synthesis. ChemCatChem, 2014, 6, 1788-1793.	3.7	50
61	Deactivation of a Co/Al2O3 Fischerâ€“Tropsch catalyst by water-induced sintering in slurry reactor: Modeling and experimental investigations. Catalysis Today, 2013, 215, 52-59.	4.4	49
62	Impact and Detailed Action of Sulfur in Syngas on Methane Synthesis on Ni/Î³-Al₂O₃ Catalyst. ACS Catalysis, 2014, 4, 2785-2791.	11.2	49
63	IR study of the active sites formed by H2 treatment of Ga/HZSM-5 catalysts. Journal of Molecular Catalysis, 1991, 70, 111-117.	1.2	47
64	Magnetic Characterization of Fischer-Tropsch Catalysts. Oil and Gas Science and Technology, 2009, 64, 25-48.	1.4	47
65	The Role of Steric Effects and Acidity in the Direct Synthesis of <i>iso</i>â€Paraffins from Syngas on Cobalt Zeolite Catalysts. ChemCatChem, 2016, 8, 380-389.	3.7	47
66	Kinetic investigation of carbon monoxide hydrogenation under realistic conditions of methanation of biomass derived syngas. Fuel, 2013, 111, 845-854.	6.4	45
67	Identification of efficient promoters and selectivity trends in high temperature Fischer-Tropsch synthesis over supported iron catalysts. Applied Catalysis B: Environmental, 2020, 273, 119028.	20.2	45
68	Infrared spectroscopic study of the interaction of cations in zeolites with simple molecular probes. Part 3.â€"Adsorption and polarization of methane and ethane on cationic forms of high-silica zeolites. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 1393-1395.	1.7	44
69	Cobalt supported on alumina and silica-doped alumina: Catalyst structure and catalytic performance in Fischerâ€“Tropsch synthesis. Comptes Rendus Chimie, 2009, 12, 660-667.	0.5	44
70	External surface phenomena in dealumination and desilication of large single crystals of ZSM-5 zeolite synthesized from a sustainable source. Microporous and Mesoporous Materials, 2019, 286, 57-64.	4.4	44
71	Solid micellar Ru single-atom catalysts for the water-free hydrogenation of CO2 to formic acid. Applied Catalysis B: Environmental, 2021, 290, 120036.	20.2	43
72	Effect of Different Reaction Conditions on the Deactivation of Alumina-Supported Cobalt Fischerâ€“Tropsch Catalysts in a Milli-Fixed-Bed Reactor: Experiments and Modeling. Industrial & Engineering Chemistry Research, 2014, 53, 6913-6922.	3.7	42

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73	Soldering of Iron Catalysts for Direct Synthesis of Light Olefins from Syngas under Mild Reaction Conditions. ACS Catalysis, 2017, 7, 6445-6452.	11.2	42
74	Design of nanocomposites with cobalt encapsulated in the zeolite micropores for selective synthesis of isoparaffins in Fischerâ€“Tropsch reaction. Catalysis Science and Technology, 2017, 7, 5019-5027.	4.1	40
75	New insights into the initial steps of the formation of SBA-15 materials: an in situ small angle neutron scattering investigation. Chemical Communications, 2007, , 834-836.	4.1	39
76	Impact of sorbitol addition on the structure and performance of silica-supported cobalt catalysts for Fischerâ€“Tropsch synthesis. Catalysis Today, 2011, 175, 528-533.	4.4	39
77	Influence of operating conditions in a continuously stirred tank reactor on the formation of carbon species on alumina supported cobalt Fischerâ€“Tropsch catalysts. Catalysis Today, 2013, 215, 43-51.	4.4	39
78	New molybdenum-based catalysts for dry reforming of methane in presence of sulfur: A promising way for biogas valorization. Catalysis Today, 2017, 289, 143-150.	4.4	39
79	Tuning the Metalâ€“Support Interaction and Enhancing the Stability of Titania-Supported Cobalt Fischerâ€“Tropsch Catalysts via Carbon Nitride Coating. ACS Catalysis, 2020, 10, 5554-5566.	11.2	39
80	Opportunities for intensification of Fischerâ€“Tropsch synthesis through reduced formation of methane over cobalt catalysts in microreactors. Catalysis Science and Technology, 2015, 5, 1400-1411.	4.1	38
81	Elucidation of deactivation phenomena in cobalt catalyst for Fischer-Tropsch synthesis using SSITKA. Journal of Catalysis, 2016, 344, 669-679.	6.2	37
82	Effects of zirconia promotion on the structure and performance of smaller and larger pore silica-supported cobalt catalysts for Fischerâ€“Tropsch synthesis. Applied Catalysis A: General, 2010, 382, 28-35.	4.3	36
83	Î²-Cyclodextrin for design of alumina supported cobalt catalysts efficient in Fischerâ€“Tropsch synthesis. Chemical Communications, 2011, 47, 10767.	4.1	36
84	Catalyst Deactivation for Enhancement of Selectivity in Alcohols Amination to Primary Amines. ACS Catalysis, 2019, 9, 5986-5997.	11.2	36
85	Effect of potassium promotion on the structure and performance of alumina supported carburized molybdenum catalysts for Fischer-Tropsch synthesis. Applied Catalysis A: General, 2017, 542, 154-162.	4.3	35
86	Active phases for high temperature Fischer-Tropsch synthesis in the silica supported iron catalysts promoted with antimony and tin. Applied Catalysis B: Environmental, 2021, 292, 120141.	20.2	35
87	Modeling of fixed bed methanation reactor for syngas production: Operating window and performance characteristics. Fuel, 2013, 107, 254-260.	6.4	34
88	Coreâ€“Shell Metal Zeolite Composite Catalysts for In Situ Processing of Fischerâ€“Tropsch Hydrocarbons to Gasoline Type Fuels. ACS Catalysis, 2020, 10, 2544-2555.	11.2	34
89	Molecular structure and localization of carbon species in alumina supported cobalt Fischerâ€“Tropsch catalysts in a slurry reactor. Catalysis Today, 2014, 228, 65-76.	4.4	32
90	Synthesis and performance of vanadium-based catalysts for the selective oxidation of light alkanes. Catalysis Today, 2017, 298, 145-157.	4.4	32

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91	Influence of syngas composition on the transient behavior of a Fischerâ€“Tropsch continuous slurry reactor. Catalysis Today, 2005, 106, 137-142.	4.4	31
92	Effect of Sn additives on the CuZnAlâ€“HZSM-5 hybrid catalysts for the direct DME synthesis from syngas. Applied Catalysis A: General, 2015, 502, 370-379.	4.3	31
93	Enhancing cobalt dispersion in supported Fischer-Tropsch catalysts via controlled decomposition of cobalt precursors. Brazilian Journal of Physics, 2009, 39, 171-175.	1.4	30
94	Synchrotron X-ray diffractionâ€“diffusion studies of the preparation of SBA-15 materials. Microporous and Mesoporous Materials, 2003, 66, 297-302.	4.4	29
95	Efficient Promoters and Reaction Paths in the CO₂ Hydrogenation to Light Olefins over Zirconia-Supported Iron Catalysts. ACS Catalysis, 2022, 12, 3211-3225.	11.2	29
96	Impact of potassium content on the structure of molybdenum nanophases in alumina supported catalysts and their performance in carbon monoxide hydrogenation. Applied Catalysis A: General, 2015, 504, 565-575.	4.3	28
97	Selective Deposition of Cobalt and Copper Oxides on BiVO₄ Facets for Enhancement of CO₂ Photocatalytic Reduction to Hydrocarbons. ChemCatChem, 2020, 12, 740-749.	3.7	28
98	Influence of sub-stoichiometric sorbitol addition modes on the structure and catalytic performance of alumina-supported cobalt Fischerâ€“Tropsch catalysts. Catalysis Today, 2011, 171, 180-185.	4.4	27
99	Nickelâ€“zeolite composite catalysts with metal nanoparticles selectively encapsulated in the zeolite micropores. Journal of Materials Science, 2019, 54, 5399-5411.	3.7	27
100	Infrared spectroscopic study of the interactions of cations in zeolites with simple molecular probes. Part 2.â€”Adsorption and polarization of molecular hydrogen on zeolites containing polyvalent cations. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 3251-3253.	1.7	26
101	Design of iron catalysts supported on carbonâ€“silica composites with enhanced catalytic performance in high-temperature Fischerâ€“Tropsch synthesis. Catalysis Science and Technology, 2016, 6, 4953-4961.	4.1	26
102	Synergy of nanoconfinement and promotion in the design of efficient supported iron catalysts for direct olefin synthesis from syngas. Journal of Catalysis, 2019, 376, 1-16.	6.2	26
103	Direct Production of Isoâ€Paraffins from Syngas over Hierarchical Cobaltâ€ZSMâ€5 Nanocomposites Synthetized by using Carbon Nanotubes as Sacrificial Templates. ChemCatChem, 2018, 10, 2291-2299.	3.7	25
104	A Timeâ€Resolved In Situ Quickâ€XAS Investigation of Thermal Activation of Fischerâ€“Tropsch Silicaâ€Supported Cobalt Catalysts. Chemistry - A European Journal, 2012, 18, 2802-2805.	3.3	24
105	Highly Efficient and Selective N-Alkylation of Amines with Alcohols Catalyzed by in Situ Rehydrated Titanium Hydroxide. ACS Catalysis, 2020, 10, 3404-3414.	11.2	24
106	A new experimental cell forin situandoperandoX-ray absorption measurements in heterogeneous catalysis. Journal of Synchrotron Radiation, 2005, 12, 680-684.	2.4	23
107	Kinetic study and modeling of Fischerâ€“Tropsch reaction over aCo/Al2O3catalyst in a slurry reactor. Chemical Engineering Science, 2007, 62, 5353-5356.	3.8	23
108	Fischerâ€“Tropsch synthesis on a ruthenium catalyst in two-phase systems: an excellent opportunity for the control of reaction rate and selectivity. Catalysis Science and Technology, 2014, 4, 2896-2899.	4.1	23

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109	Chemisorption of C3 hydrocarbons on cobalt silica supported Fischer?Tropsch catalysts. Catalysis Letters, 2005, 101, 117-126.	2.6	22
110	Effects of co-feeding with nitrogen-containing compounds on the performance of supported cobalt and iron catalysts in Fischerâ€“Tropsch synthesis. Catalysis Today, 2016, 275, 84-93.	4.4	22
111	Localization of polyvalent cations in pentasil catalysts modified by metal oxides. Zeolites, 1992, 12, 866-869.	0.5	21
112	Preparation of alumina based tubular asymmetric membranes incorporated with coal fly ash by centrifugal casting. Ceramics International, 2021, 47, 4187-4196.	4.8	21
113	Genesis of active sites in silica supported cobalt Fischer-Tropsch catalysts: effect of cobalt precursor and support texture. Studies in Surface Science and Catalysis, 2004, 147, 295-300.	1.5	20
114	Promotion of lanthanum-supported cobalt-based catalysts for the Fischerâ€“Tropsch reaction. Comptes Rendus Chimie, 2017, 20, 40-46.	0.5	20
115	Influence of Impregnation and Ion Exchange Sequence on Metal Localization, Acidity and Catalytic Performance of Cobalt BEA Zeolite Catalysts in Fischerâ€Tropsch Synthesis. ChemCatChem, 2019, 11, 568-574.	3.7	20
116	A multifaceted role of a mobile bismuth promoter in alcohol amination over cobalt catalysts. Green Chemistry, 2020, 22, 4270-4278.	9.0	19
117	Selectivity shift from paraffins to Î±-olefins in low temperature Fischerâ€“Tropsch synthesis in the presence of carboxylic acids. Chemical Communications, 2018, 54, 2345-2348.	4.1	18
118	Agglomeration at the Micrometer Length Scale of Cobalt Nanoparticles in Aluminaâ€Supported Fischerâ€“Tropsch Catalysts in a Slurry Reactor. ChemCatChem, 2013, 5, 728-731.	3.7	17
119	Mechanistic Aspects of the Activation of Silicaâ€Supported Iron Catalysts for Fischerâ€“Tropsch Synthesis in Carbon Monoxide and Syngas. ChemCatChem, 2016, 8, 390-395.	3.7	17
120	Size and promoter effects on iron nanoparticles confined in carbon nanotubes and their catalytic performance in light olefin synthesis from syngas. Catalysis Today, 2020, 357, 203-213.	4.4	17
121	Mobility and versatility of the liquid bismuth promoter in the working iron catalysts for light olefin synthesis from syngas. Chemical Science, 2020, 11, 6167-6182.	7.4	17
122	Potassium promotion effects in carbon nanotube supported molybdenum sulfide catalysts for carbon monoxide hydrogenation. Catalysis Today, 2016, 261, 137-145.	4.4	16
123	Ion-exchanged zeolite P as a nanostructured catalyst for biodiesel production. Energy Reports, 2019, 5, 357-363.	5.1	16
124	Multi-output machine learning models for kinetic data evaluation : A Fischerâ€“Tropsch synthesis case study. Chemical Engineering Journal, 2022, 446, 137186.	12.7	16
125	Investigation of Dispersion and Localization of Platinum Species in Mazzite Using EXAFS. Journal of Physical Chemistry B, 1997, 101, 766-770.	2.6	15
126	Alcohol amination over titania-supported ruthenium nanoparticles. Catalysis Science and Technology, 2020, 10, 4396-4404.	4.1	15

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127	Self-Regeneration of Cobalt and Nickel Catalysts Promoted with Bismuth for Non-deactivating Performance in Carbon Monoxide Hydrogenation. ACS Catalysis, 2019, 9, 991-1000.	11.2	14
128	Ruthenium silica nanoreactors with varied metalâ€“wall distance for efficient control of hydrocarbon distribution in Fischerâ€“Tropsch synthesis. Journal of Catalysis, 2018, 365, 429-439.	6.2	13
129	Structural Modification of Cobalt Catalysts: Effect of Wetting Studied by X-Ray and Infrared Techniques. Oil and Gas Science and Technology, 1999, 54, 525-536.	1.4	12
130	Transient studies of the elementary steps of Fischerâ€“Tropsch synthesis. Catalysis Today, 2005, 106, 132-136.	4.4	12
131	Solvent-free synthesis of alumina supported cobalt catalysts for Fischerâ€“Tropsch synthesis. Journal of Energy Chemistry, 2016, 25, 1001-1007.	12.9	12
132	Machine learning based interpretation of microkinetic data: a Fischerâ€“Tropsch synthesis case study. Reaction Chemistry and Engineering, 2021, 7, 101-110.	3.7	12
133	Effect of Pt particle size on H/D exchange of methane over alumina- and zeolite-supported catalysts. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 569.	1.7	11
134	New shearing mechanical coating technology for synthesis of alumina-supported cobalt Fischerâ€“Tropsch solid catalysts. Journal of Materials Chemistry A, 2017, 5, 9148-9155.	10.3	11
135	Optimization of solvent-free mechanochemical synthesis of Co/Al2O3 catalysts using low- and high-energy processes. Journal of Materials Science, 2017, 52, 12031-12043.	3.7	11
136	TAP investigation of hydrogen and carbon monoxide adsorption on a silica-supported cobalt catalyst. Applied Catalysis A: General, 2010, 375, 116-123.	4.3	10
137	Dimensional Effects in the Carbidization of Supported Iron Nanoparticles. ChemCatChem, 2013, 5, 1758-1761.	3.7	10
138	Lignin Compounds to Monoaromatics: Selective Cleavage of Câˆ’O Bonds over a Brominated Ruthenium Catalyst. Angewandte Chemie, 2021, 133, 12621-12631.	2.0	10
139	Unravelling the influence of catalyst properties on light olefin production via Fischerâ€“Tropsch synthesis: A descriptor space investigation using Single-Event MicroKinetics. Chemical Engineering Journal, 2021, 419, 129633.	12.7	10
140	Syngas to Chemicals: The Incorporation of Aldehydes into Fischerâ€“Tropsch Synthesis. ChemCatChem, 2017, 9, 1040-1046.	3.7	9
141	Versatile Roles of Metal Species in Carbon Nanotube Templates for the Synthesis of Metalâ€“Zeolite Nanocomposite Catalysts. ACS Applied Nano Materials, 2019, 2, 4507-4517.	5.0	9
142	Embryonic zeolites for highly efficient synthesis of dimethyl ether from syngas. Microporous and Mesoporous Materials, 2021, 322, 111138.	4.4	9
143	Bismuth mobile promoter and cobalt-bismuth nanoparticles in carbon nanotube supported Fischer-Tropsch catalysts with enhanced stability. Journal of Catalysis, 2021, 401, 102-114.	6.2	9
144	Iron and copper nanoparticles inside and outside carbon nanotubes: Nanoconfinement, migration, interaction and catalytic performance in Fischer-Tropsch synthesis. Journal of Catalysis, 2021, 404, 306-323.	6.2	9

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145	Effect of propane on the kinetics of carbon dioxide adsorption in NaA zeolites. Separation and Purification Technology, 1995, 9, 253-257.	0.3	8
146	The influence of the temperature of calcining on Co particle-size distribution in the Co/Al2O3 catalyst for the Fischer-Tropsch synthesis. Russian Journal of Physical Chemistry A, 2008, 82, 951-955.	0.6	8
147	Plasma-assisted design of supported cobalt catalysts for Fischer-Tropsch synthesis. Studies in Surface Science and Catalysis, 2010, , 253-257.	1.5	8
148	Structureâ€“performance correlations in the hybrid oxide-supported copperâ€“zinc SAPO-34 catalysts for direct synthesis of dimethyl ether from CO2. Journal of Materials Science, 2022, 57, 3268-3279.	3.7	8
149	Hybrid monometallic and bimetallic copperâ€“palladium zeolite catalysts for direct synthesis of dimethyl ether from CO₂. New Journal of Chemistry, 2022, 46, 3889-3900.	2.8	8
150	Synthesis of Moâ€“W carbide via propane carburization of the precursor sulfide: Kinetic analysis. Journal of Chemical Technology and Biotechnology, 2004, 79, 286-290.	3.2	6
151	SANS study of the mechanisms and kinetics of the synthesis of mesoporous materials from micelles of tri-block copolymers. Studies in Surface Science and Catalysis, 2008, , 805-810.	1.5	6
152	Design of coreâ€“shell titaniaâ€“heteropolyacidâ€“metal nanocomposites for photocatalytic reduction of CO2 to CO at ambient temperature. Nanoscale Advances, 2019, 1, 4321-4330.	4.6	6
153	The Fischerâ€“Tropsch reaction in the aqueous phase over rhodium catalysts: a promising route to selective synthesis and separation of oxygenates and hydrocarbons. Chemical Communications, 2020, 56, 277-280.	4.1	6
154	Surface modification of metallic catalysts for the design of selective processes. Catalysis Reviews - Science and Engineering, 0, , 1-47.	12.9	6
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