Vitaly Ordomsky

List of Publications by Year
in descending order

120	4,866	76326	106344
papers	citations	40 h-index	65 g-index

121	121	121	4815
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Glucose dehydration to 5-hydroxymethylfurfural over phosphate catalysts. Journal of Catalysis, 2013, 300, 37-46.	6.2	198
2	Carbon-based catalysts for Fischerâ€“Tropsch synthesis. Chemical Society Reviews, 2021, 50, 2337-2366.	38.1	188
3	The effect of solvent addition on fructose dehydration to 5-hydroxymethylfurfural in biphasic system over zeolites. Journal of Catalysis, 2012, 287, 68-75.	6.2	187
4	Initial stages of propane activation over Zn/MFI catalyst studied by in situ NMR and IR spectroscopic techniques. Journal of Catalysis, 2006, 238, 122-133.	6.2	168
5	Design of a Metalâ€Promoted Oxide Catalyst for the Selective Synthesis of Butadiene from Ethanol. ChemSusChem, 2014, 7, 2527-2536.	6.8	152
6	Pore size effects in high-temperature Fischerâ€“Tropsch synthesis over supported iron catalysts. Journal of Catalysis, 2015, 328, 139-150.	6.2	151
7	Fructose Dehydration to 5â€Hydroxymethylfurfural over Solid Acid Catalysts in a Biphasic System. ChemSusChem, 2012, 5, 1812-1819.	6.8	134
8	Stoichiometric methane conversion to ethane using photochemical looping at ambient temperature. Nature Energy, 2020, 5, 511-519.	39.5	130
9	Study of acetaldehyde condensation chemistry over magnesia and zirconia supported on silica. Journal of Molecular Catalysis A, 2010, 333, 85-93.	4.8	128
10	Nature, strength and accessibility of acid sites in micro/mesoporous catalysts obtained by recrystallization of zeolite BEA. Microporous and Mesoporous Materials, 2007, 105, 101-110.	4.4	108
11	Biphasic single-reactor process for dehydration of xylose and hydrogenation of produced furfural. Applied Catalysis A: General, 2013, 451, 6-13.	4.3	102
12	Methane Activation over Zn-Modified MFI Zeolite: NMR Evidence for Znâ’Methyl Surface Species Formation. Journal of Physical Chemistry C, 2008, 112, 20065-20069.	3.1	101
13	Recent Breakthroughs in the Conversion of Ethanol to Butadiene. Catalysts, 2016, 6, 203.	3.5	100
14	Selective photocatalytic conversion of methane into carbon monoxide over zinc-heteropolyacid-titania nanocomposites. Nature Communications, 2019, 10, 700.	12.8	98
15	Support effects in high temperature Fischer-Tropsch synthesis on iron catalysts. Applied Catalysis A: General, 2014, 488, 66-77.	4.3	92
16	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
17	Major routes in the photocatalytic methane conversion into chemicals and fuels under mild conditions. Applied Catalysis B: Environmental, 2021, 286, 119913.	20.2	78
18	The role of carbon atoms of supported iron carbides in Fischerâ€“Tropsch synthesis. Catalysis Science and Technology, 2015, 5, 1433-1437.	4.1	73

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19	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
20	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
21	Nanoreactors: An Efficient Tool To Control the Chain-Length Distribution in Fischerâ€“Tropsch Synthesis. ACS Catalysis, 2016, 6, 1785-1792.	11.2	70
22	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
23	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
24	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
25	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
26	Structure-Sensitive and Insensitive Reactions in Alcohol Amination over Nonsupported Ru Nanoparticles. ACS Catalysis, 2018, 8, 11226-11234.	11.2	60
27	Surface species formed during propane aromatization over Zn/MFI catalyst as determined by in situ spectroscopic techniques. Journal of Molecular Catalysis A, 2009, 305, 47-53.	4.8	58
28	Cobalt and iron species in alumina supported bimetallic catalysts for Fischerâ€“Tropsch reaction. Applied Catalysis A: General, 2014, 481, 116-126.	4.3	57
29	Cumene disproportionation over micro/mesoporous catalysts obtained by recrystallization of mordenite. Journal of Catalysis, 2012, 295, 207-216.	6.2	55
30	Synthesis of isoprene from formaldehyde and isobutene over phosphate catalysts. Applied Catalysis A: General, 2012, 441-442, 21-29.	4.3	55
31	Glucose Dehydration to 5â€Hydroxymethylfurfural in a Biphasic System over Solid Acid Foams. ChemSusChem, 2013, 6, 1697-1707.	6.8	54
32	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
33	Lignin Compounds to Monoaromatics: Selective Cleavage of Câ^'O Bonds over a Brominated Ruthenium Catalyst. Angewandte Chemie - International Edition, 2021, 60, 12513-12523.	13.8	53
34	Surface molecular imprinting over supported metal catalysts for size-dependent selective hydrogenation reactions. Nature Catalysis, 2021, 4, 595-606.	34.4	52
35	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
36	Direct synthesis of hydrogen peroxide over Auâ€“Pd catalyst in a wall-coated microchannel. Journal of Catalysis, 2014, 309, 325-332.	6.2	48

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37	The Role of Steric Effects and Acidity in the Direct Synthesis of isoâ€Paraffins from Syngas on Cobalt Zeolite Catalysts. ChemCatChem, 2016, 8, 380-389.	3.7	47
38	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
39	Selective Electrogenerative Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandialdehyde. ChemSusChem, 2017, 10, 4851-4854.	6.8	44
40	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
41	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
42	Foam supported sulfonated polystyrene as a new acidic material for catalytic reactions. Chemical Engineering Journal, 2012, 207-208, 218-225.	12.7	42
43	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
44	Aqueous phase reforming in a microchannel reactor: the effect of mass transfer on hydrogen selectivity. Catalysis Science and Technology, 2013, 3, 2834.	4.1	41
45	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
46	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
47	Elucidation of deactivation phenomena in cobalt catalyst for Fischer-Tropsch synthesis using SSITKA. Journal of Catalysis, 2016, 344, 669-679.	6.2	37
48	Catalyst Deactivation for Enhancement of Selectivity in Alcohols Amination to Primary Amines. ACS Catalysis, 2019, 9, 5986-5997.	11.2	36
49	Tuning Zeolite Properties for a Highly Efficient Synthesis of Propylene from Methanol. Chemistry - A European Journal, 2018, 24, 13136-13149.	3.3	35
50	Continuous hydrogen stripping during aqueous phase reforming of sorbitol in a washcoated microchannel reactor with a Ptâ€“Ru bimetallic catalyst. International Journal of Hydrogen Energy, 2014, 39, 18069-18076.	7.1	34
51	Fischerâ€“Tropsch synthesis catalysed by small TiO2 supported cobalt nanoparticles prepared by sodium borohydride reduction. Applied Catalysis A: General, 2016, 513, 39-46.	4.3	34
52	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
53	Isoprene synthesis from formaldehyde and isobutene over Keggin-type heteropolyacids supported on silica. Catalysis Science and Technology, 2016, 6, 6354-6364.	4.1	33
54	Catalysis by Coke Deposits: Synthesis of Isoprene over Solid Catalysts. Angewandte Chemie - International Edition, 2013, 52, 12961-12964.	13.8	32

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55	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
56	How metallic is gold in the direct epoxidation of propene: an FTIR study. Catalysis Science and Technology, 2013, 3, 3042.	4.1	28
57	Selective Oxidation of Alcohols to Carbonyl Compounds over Small Size Colloidal Ru Nanoparticles. ChemCatChem, 2020, 12, 238-247.	3.7	28
58	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
59	Nickelâ€“zeolite composite catalysts with metal nanoparticles selectively encapsulated in the zeolite micropores. Journal of Materials Science, 2019, 54, 5399-5411.	3.7	27
60	Direct aerobic oxidation of monoalcohol and diols to acetals using tandem Ru@MOF catalysts. Nano Research, 2021, 14, 479-485.	10.4	27
61	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
62	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
63	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
64	Hydrogen Production through Aqueousâ€Phase Reforming of Ethylene Glycol in a Washcoated Microchannel. ChemSusChem, 2013, 6, 1708-1716.	6.8	24
65	Carbonâ€Coated Ceramic Membrane Reactor for the Production of Hydrogen by Aqueousâ€Phase Reforming of Sorbitol. ChemSusChem, 2014, 7, 2007-2015.	6.8	24
66	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
67	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
68	Direct Synthesis of Hydrogen Peroxide over Auâ€Pd Catalystâ€”The Effect of Coâ€Solvent Addition. ChemCatChem, 2015, 7, 1161-1176.	3.7	22
69	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
70	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
71	A multifaceted role of a mobile bismuth promoter in alcohol amination over cobalt catalysts. Green Chemistry, 2020, 22, 4270-4278.	9.0	19
72	Carbon-supported Fe catalysts with well-defined active sites for highly selective alcohol production from Fischer-Tropsch synthesis. Applied Catalysis B: Environmental, 2022, 312, 121393.	20.2	19

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73	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
74	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
75	The application of palladium and zeolite incorporated chip-based microreactors. Applied Catalysis A: General, 2016, 515, 72-82.	4.3	17
76	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
77	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
78	Zirconium Phosphate Coating on Aluminum Foams by Electrophoretic Deposition for Acidic Catalysis. ChemCatChem, 2012, 4, 129-133.	3.7	15
79	Alcohol amination over titania-supported ruthenium nanoparticles. Catalysis Science and Technology, 2020, 10, 4396-4404.	4.1	15
80	Multilevel rotating foam biphasic reactor for combination of processes in biomass transformation. Chemical Engineering Journal, 2013, 231, 12-17.	12.7	14
81	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
82	Catalyst Coating on Prefabricated Capillary Microchannels for the Direct Synthesis of Hydrogen Peroxide. Industrial & Engineering Chemistry Research, 2015, 54, 2919-2929.	3.7	13
83	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
84	Non-metallic Aerobic Oxidation of Alcohols over Anthraquinone Based Compounds. Applied Catalysis A: General, 2020, 590, 117277.	4.3	13
85	Preparation of ZSM-5 zeolite coatings within capillary microchannels. Journal of Materials Chemistry, 2012, 22, 15976.	6.7	12
86	Dehydroalkylation of Benzene with Ethane over Pt/Hâ€MFI in the Presence of Hydrogen Scavengers. ChemCatChem, 2012, 4, 681-686.	3.7	12
87	Ru(III) single site solid micellar catalyst for selective aqueous phase hydrogenation of carbonyl groups in biomass-derived compounds. Applied Catalysis B: Environmental, 2022, 300, 120730.	20.2	12
88	Selective Production of Methane from Aqueous Biocarbohydrate Streams over a Mixture of Platinum and Ruthenium Catalysts. ChemSusChem, 2014, 7, 627-630.	6.8	10
89	Lignin Compounds to Monoaromatics: Selective Cleavage of Cârˆ'O Bonds over a Brominated Ruthenium Catalyst. Angewandte Chemie, 2021, 133, 12621-12631.	2.0	10
90	Syngas to Chemicals: The Incorporation of Aldehydes into Fischerâ€“Tropsch Synthesis. ChemCatChem, 2017, 9, 1040-1046.	3.7	9

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91	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
92	Embryonic zeolites for highly efficient synthesis of dimethyl ether from syngas. Microporous and Mesoporous Materials, 2021, 322, 111138.	4.4	9
93	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
94	Effect of polymeric stabilizers on Fischerâ€“Tropsch synthesis catalyzed by cobalt nanoparticles supported on TiO2. Journal of Molecular Catalysis A, 2016, 417, 43-52.	4.8	8
95	Decomposition of Supported Pd Hydride Nanoparticles for the Synthesis of Highly Dispersed Metallic Catalyst. Chemistry of Materials, 2018, 30, 8116-8120.	6.7	7
96	Self-Encapsulation of Heteropolyacids in a 3D-Ordered Coke Framework for Heterogeneous Catalysis in Homogeneous Way. Chemistry of Materials, 2017, 29, 2676-2680.	6.7	6
97	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
98	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
99	Nanocell type Ru@quinone core-shell catalyst for selective oxidation of alcohols to carbonyl compounds. Applied Catalysis A: General, 2020, 602, 117693.	4.3	6
100	Surface modification of metallic catalysts for the design of selective processes. Catalysis Reviews - Science and Engineering, 0, , 1-47.	12.9	6
101	â€œFishingâ€•of heteropolyacids into carbonaceous seine via coking. Chemical Communications, 2015, 51, 17120-17123.	4.1	5
102	Disassembly of Supported Co and Ni Nanoparticles by Carbon Deposition for the Synthesis of Highly Dispersed and Active Catalysts. ACS Catalysis, 2020, 10, 6231-6239.	11.2	5
103	Design of ruthenium-zeolite nanocomposites for enhanced hydrocarbon synthesis from syngas. Journal of Materials Science, 2021, 56, 18019-18030.	3.7	5
104	TEMPO-Ru-BEA Composite Material for the Selective Oxidation of Alcohols to Aldehydes. ACS Catalysis, 2022, 12, 8925-8935.	11.2	5
105	Specifics of the deactivation of acid and zinc-containing propane aromatization catalysts. Petroleum Chemistry, 2008, 48, 100-104.	1.4	4
106	Binuclear iron complexes with acyclic Schiff bases based on 4-tert-butyl-2,6-diformylphenol: synthesis, properties, and use in catalytic partial oxidation of isobutane. Russian Chemical Bulletin, 2013, 62, 1201-1209.	1.5	4
107	Mastering a biphasic single-reactor process for direct conversion of glycerol into liquid hydrocarbon fuels. Green Chemistry, 2014, 16, 2128-2131.	9.0	4
108	Assessment of metal sintering in the copper-zeolite hybrid catalyst for direct dimethyl ether synthesis using synchrotron-based X-ray absorption and diffraction. Catalysis Today, 2020, 343, 199-205.	4.4	4

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109	Number and intrinsic activity of cobalt surface sites in platinum promoted zeolite catalysts for carbon monoxide hydrogenation. Catalysis Science and Technology, 2020, 10, 2137-2144.	4.1	4
110	Design of Twoâ€Dimensional Heteropolyacidâ€Covalent Organic Frameworks Composite Materials for Acid Catalysis. ChemCatChem, 2022, 14, .	3.7	4
111	Heterogenization of Complexes by Encapsulation in Solid Micelles for Aqueous-Phase Catalysis. Chemistry of Materials, 0, , .	6.7	3
112	Pre-concentration of organophosphorous compounds on porous silica materials. Studies in Surface Science and Catalysis, 2008, 174, 623-626.	1.5	2
113	Heterogeneously catalyzed reactive extraction for biomass valorization into chemicals and fuels. Green Processing and Synthesis, 2015, 4, .	3.4	2
114	Zeolite incorporation in chip-based microreactors. Microporous and Mesoporous Materials, 2016, 226, 424-432.	4.4	2
115	Effect of a carrierâ€™s nature on the activation of supported iron catalysts. Russian Journal of Physical Chemistry A, 2015, 89, 2032-2035.	0.6	1
116	Light-switching chemistry for photocatalytic methane oxidation over quantum dots. CheM, 2021, 7, 1422-1424.	11.7	1
117	Frontispiece: Tuning Zeolite Properties for a Highly Efficient Synthesis of Propylene from Methanol. Chemistry - A European Journal, 2018, 24, .	3.3	0
118	Alkyl coupling in tertiary amines as analog of Guerbet condensation reaction. RSC Advances, 2019, 9, 9845-9849.	3.6	0
119	Quinone Shuttling Impels Selective Electrocatalytic Alcohol Oxidation: A Hydrogen Bonding-Directed Electrosynthesis. SSRN Electronic Journal, 0, , .	0.4	0
120	Quinone Shuttling Impels Selective Electrocatalytic Alcohol Oxidation: A Hydrogen Bonding-Directed Electrosynthesis. Journal of Electroanalytical Chemistry, 2021, 903, 115820.	3.8	0