Nikolay A Kosinov

List of Publications by Year
in descending order

60 papers	3,480 citations	172457 29 h-index	149698 56 g-index
65 all docs	65 docs citations	65 times ranked	3314 citing authors

#	Article	IF	Citations
1	Recent developments in zeolite membranes for gas separation. Journal of Membrane Science, 2016, 499, 65-79.	8.2	435
2	Boosting CO2 hydrogenation via size-dependent metalâ€“support interactions in cobalt/ceria-based catalysts. Nature Catalysis, 2020, 3, 526-533.	34.4	286
3	Interface dynamics of Pdâ€“CeO2 single-atom catalysts during CO oxidation. Nature Catalysis, 2021, 4, 469-478.	34.4	244
4	Engineering of Transition Metal Catalysts Confined in Zeolites. Chemistry of Materials, 2018, 30, 3177-3198.	6.7	232
5	Methane Dehydroaromatization by Mo/HZSM-5: Mono- or Bifunctional Catalysis?. ACS Catalysis, 2017, 7, 520-529.	11.2	155
6	Stable Mo/HZSM-5 methane dehydroaromatization catalysts optimized for high-temperature calcination-regeneration. Journal of Catalysis, 2017, 346, 125-133.	6.2	147
7	High flux high-silica SSZ-13 membrane for CO₂separation. Journal of Materials Chemistry A, 2014, 2, 13083-13092.	10.3	142
8	Confined Carbon Mediating Dehydroaromatization of Methane over Mo/ZSMâ€5. Angewandte Chemie - International Edition, 2018, 57, 1016-1020.	13.8	128
9	Trimodal Porous Hierarchical SSZ-13 Zeolite with Improved Catalytic Performance in the Methanol-to-Olefins Reaction. ACS Catalysis, 2016, 6, 2163-2177.	11.2	116
10	Influence of the Si/Al ratio on the separation properties of SSZ-13 zeolite membranes. Journal of Membrane Science, 2015, 484, 140-145.	8.2	98
11	Selective Coke Combustion by Oxygen Pulsing During Mo/ZSMâ€5â€Catalyzed Methane Dehydroaromatization. Angewandte Chemie - International Edition, 2016, 55, 15086-15090.	13.8	94
12	Mechanism and Nature of Active Sites for Methanol Synthesis from CO/CO₂ on Cu/CeO₂. ACS Catalysis, 2020, 10, 11532-11544.	11.2	92
13	Reactivity, Selectivity, and Stability of Zeoliteâ€Based Catalysts for Methane Dehydroaromatization. Advanced Materials, 2020, 32, e2002565.	21.0	86
14	Structure and Evolution of Confined Carbon Species during Methane Dehydroaromatization over Mo/ZSM-5. ACS Catalysis, 2018, 8, 8459-8467.	11.2	79
15	Niâ€“In Synergy in CO₂ Hydrogenation to Methanol. ACS Catalysis, 2021, 11, 11371-11384.	11.2	79
16	Flame Synthesis of Cu/ZnOâ€“CeO₂ Catalysts: Synergistic Metalâ€“Support Interactions Promote CH₃OH Selectivity in CO₂ Hydrogenation. ACS Catalysis, 2021, 11, 4880-4892.	11.2	73
17	Aromatization of ethylene over zeolite-based catalysts. Catalysis Science and Technology, 2020, 10, 2774-2785.	4.1	70
18	Gallium-promoted HZSM-5 zeolites as efficient catalysts for the aromatization of biomass-derived furans. Chemical Engineering Science, 2019, 198, 305-316.	3.8	68

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19	Reversible Nature of Coke Formation on Mo/ZSMâ€5 Methane Dehydroaromatization Catalysts. Angewandte Chemie - International Edition, 2019, 58, 7068-7072.	13.8	65
20	Temperature-programmed plasma surface reaction: An approach to determine plasma-catalytic performance. Applied Catalysis B: Environmental, 2018, 239, 168-177.	20.2	57
21	Hydrogenation of levulinic acid to Î^3-valerolactone over Fe-Re/TiO2 catalysts. Applied Catalysis B: Environmental, 2020, 278, 119314.	20.2	57
22	Relevance of the Mo-precursor state in H-ZSM-5 for methane dehydroaromatization. Catalysis Science and Technology, 2018, 8, 916-922.	4.1	47
23	Different mechanisms of ethane aromatization over Mo/ZSM-5 and Ga/ZSM-5 catalysts. Catalysis Today, 2021, 369, 184-192.	4.4	43
24	Catalytic conversion of furanic compounds over Ga-modified ZSM-5 zeolites as a route to biomass-derived aromatics. Green Chemistry, 2018, 20, 3818-3827.	9.0	42
25	Influence of support morphology on the detemplation and permeation of ZSM-5 and SSZ-13 zeolite membranes. Microporous and Mesoporous Materials, 2014, 197, 268-277.	4.4	41
26	A site-sensitive quasi-in situ strategy to characterize Mo/HZSM-5 during activation. Journal of Catalysis, 2019, 370, 321-331.	6.2	40
27	Competitive Adsorption of Substrate and Solvent in Snâ€Beta Zeolite During Sugar Isomerization. ChemSusChem, 2016, 9, 3145-3149.	6.8	36
28	Fluoride-assisted synthesis of bimodal microporous SSZ-13 zeolite. Chemical Communications, 2016, 52, 3227-3230.	4.1	36
29	Improving separation performance of high-silica zeolite membranes by surface modification with triethoxyfluorosilane. Microporous and Mesoporous Materials, 2014, 194, 24-30.	4.4	31
30	Co-Aromatization of Furan and Methanol over ZSM-5â€"A Pathway to Bio-Aromatics. ACS Catalysis, 2019, 9, 8547-8554.	11.2	29
31	Tuning the reactivity of molybdenum (oxy)carbide catalysts by the carburization degree: CO₂ reduction and anisole hydrodeoxygenation. Catalysis Science and Technology, 2020, 10, 3635-3645.	4.1	27
32	Investigation of the Active Phase in K-Promoted MoS₂ Catalysts for Methanethiol Synthesis. ACS Catalysis, 2020, 10, 1838-1846.	11.2	25
33	Synthesis and separation properties of an Î±-alumina-supported high-silica MEL membrane. Journal of Membrane Science, 2013, 447, 12-18.	8.2	24
34	Hierarchically porous FER zeolite obtained via FAU transformation for fatty acid isomerization. Applied Catalysis B: Environmental, 2020, 263, 118356.	20.2	22
35	Establishing hierarchy: the chain of events leading to the formation of silicalite-1 nanosheets. Chemical Science, 2016, 7, 6506-6513.	7.4	21
36	Probing the Influence of SSZâ€•13 Zeolite Pore Hierarchy in Methanolâ€•toâ€•Olefins Catalysis by Using Nanometer Accuracy by Stochastic Chemical Reactions Fluorescence Microscopy and Positron Emission Profiling. ChemCatChem, 2017, 9, 3470-3477.	3.7	19

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37	Selective Coke Combustion by Oxygen Pulsing During Mo/ZSMâ€5â€Catalyzed Methane Dehydroaromatization. Angewandte Chemie, 2016, 128, 15310-15314.	2.0	18
38	Confined Carbon Mediating Dehydroaromatization of Methane over Mo/ZSMâ€5. Angewandte Chemie, 2018, 130, 1028-1032.	2.0	18
39	Mild dealumination of template-stabilized zeolites by NH₄F. Catalysis Science and Technology, 2019, 9, 4239-4247.	4.1	16
40	Operando Spectroscopy Unveils the Catalytic Role of Different Palladium Oxidation States in CO Oxidation on Pd/CeO₂ Catalysts. Angewandte Chemie - International Edition, 2022, 61, .	13.8	16
41	Mordenite Nanorods Prepared by an Inexpensive Pyrrolidineâ€based Mesoporogen for Alkane Hydroisomerization. ChemCatChem, 2019, 11, 2803-2811.	3.7	14
42	Mechanistic study of catalytic CO₂ hydrogenation in a plasma by operando DRIFT spectroscopy. Journal Physics D: Applied Physics, 2021, 54, 264004.	2.8	13
43	Understanding the Preparation and Reactivity of Mo/ZSMâ€5 Methane Dehydroaromatization Catalysts. Chemistry - A European Journal, 2022, 28, .	3.3	13
44	Protection Strategies for the Conversion of Biobased Furanics to Chemical Building Blocks. ACS Sustainable Chemistry and Engineering, 2022, 10, 3116-3130.	6.7	13
45	Facile synthesis of nanosized mordenite and beta zeolites with improved catalytic performance: non-surfactant diquaternary ammonium compounds as structure-directing agents. Inorganic Chemistry Frontiers, 2022, 9, 3200-3216.	6.0	11
46	Hierarchically Porous (Alumino)Silicates Prepared by an Imidazole-Based Surfactant and Their Application in Acid-Catalyzed Reactions. ACS Applied Materials & Interfaces, 2019, 11, 40151-40162.	8.0	8
47	Selective methanethiol-to-olefins conversion over HSSZ-13 zeolite. Chemical Communications, 2021, 57, 3323-3326.	4.1	8
48	Alkali catalyzes methanethiol synthesis from CO and H2S. Journal of Catalysis, 2022, 405, 116-128.	6.2	8
49	Comment on â€œEfficient Conversion of Methane to Aromatics by Coupling Methylation Reactionâ€• ACS Catalysis, 2017, 7, 4485-4487.	11.2	6
50	Synthesis of Nanocrystalline Mordenite Zeolite with Improved Performance in Benzene Alkylation and nâ€Paraffins Hydroconversion. ChemCatChem, 2022, 14, .	3.7	6
51	Reversible Nature of Coke Formation on Mo/ZSMâ€5 Methane Dehydroaromatization Catalysts. Angewandte Chemie, 2019, 131, 7142-7146.	2.0	4
52	A versatile mono-quaternary ammonium salt as a mesoporogen for the synthesis of hierarchical zeolites. Catalysis Science and Technology, 2019, 9, 6737-6748.	4.1	4
53	Heterogeneous catalysts for the non-oxidative conversion of methane to aromatics and olefins. , 2021, , .		4
54	A scanning pulse reaction technique for transient analysis of the methanol-to-hydrocarbons reaction. Catalysis Today, 2023, 417, 113740.	4.4	4

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55	Amorphous Silicaâ€Alumina as Suitable Catalyst for the Dielsâ€Alder Cycloaddition of <i>2,5</i>â€Dimethylfuran and Ethylene to Biobased <i>p</i>â€Xylene. ChemCatChem, 2022, 14, .	3.7	3
56	Innentitelbild: Confined Carbon Mediating Dehydroaromatization of Methane over Mo/ZSMâ€5 (Angew.) Tj ETQq0 0 0 rgBT /Overlock 1	2.0	0
57	Mordenite Nanorods Prepared by an Inexpensive Pyrrolidineâ€based Mesoporogen for Alkane Hydroisomerization. ChemCatChem, 2019, 11, 2754-2754.	3.7	0
58	Metal-support interfaces in ceria-based catalysts. , 2021, , .		0
59	Operando Spectroscopy Unveils the Catalytic Role of Different Palladium Oxidation States in CO Oxidation on Pd/CeO ₂ Catalysts. Angewandte Chemie, 0, , .	2.0	0
60	Titelbild: Operando Spectroscopy Unveils the Catalytic Role of Different Palladium Oxidation States in CO Oxidation on Pd/CeO₂ Catalysts (Angew. Chem. 23/2022). Angewandte Chemie, 2022, 134, .	2.0	0