Nicholas R Jaegers

List of Publications by Year
in descending order

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52	1,550	257101	329751
papers	citations	24 h-index	37 g-index

58	58	58	1444
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Achieving Atomic Dispersion of Highly Loaded Transition Metals in Smallâ€Pore Zeolite SSZâ€13: Highâ€Capacity and Highâ€Efficiency Lowâ€Temperature CO and Passive NO_x Adsorbers. Angewandte Chemie - International Edition, 2018, 57, 16672-16677.	7.2	129
2	Genesis and Stability of Hydronium Ions in Zeolite Channels. Journal of the American Chemical Society, 2019, 141, 3444-3455.	6.6	119
3	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_X Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 12609-12616.	7.2	96
4	Palladium/Beta zeolite passive NOx adsorbers (PNA): Clarification of PNA chemistry and the effects of CO and zeolite crystallite size on PNA performance. Applied Catalysis A: General, 2019, 569, 141-148.	2.2	81
5	Boehmite and Gibbsite Nanoplates for the Synthesis of Advanced Alumina Products. ACS Applied Nano Materials, 2018, 1, 7115-7128.	2.4	79
6	Stabilization of Super Electrophilic Pd⁺² Cations in Small-Pore SSZ-13 Zeolite. Journal of Physical Chemistry C, 2020, 124, 309-321.	1.5	67
7	The superior hydrothermal stability of Pd/SSZ-39 in low temperature passive NOx adsorption (PNA) and methane combustion. Applied Catalysis B: Environmental, 2021, 280, 119449.	10.8	56
8	Economizing on Precious Metals in Threeâ€Way Catalysts: Thermally Stable and Highly Active Singleâ€Atom Rhodium on Ceria for NO Abatement under Dry and Industrially Relevant Conditions**. Angewandte Chemie - International Edition, 2021, 60, 391-398.	7.2	51
9	Variable Temperature and Pressure Operando MAS NMR for Catalysis Science and Related Materials. Accounts of Chemical Research, 2020, 53, 611-619.	7.6	48
10	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_X Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie, 2019, 131, 12739-12746.	1.6	45
11	Transitions in Al Coordination during Gibbsite Crystallization Using High-Field ²⁷Al and ²³Na MAS NMR Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 27555-27562.	1.5	41
12	Investigation of Silica-Supported Vanadium Oxide Catalysts by High-Field ⁵¹V Magic-Angle Spinning NMR. Journal of Physical Chemistry C, 2017, 121, 6246-6254.	1.5	39
13	Palladium/Zeolite Low Temperature Passive NOx Adsorbers (PNA): Structure-Adsorption Property Relationships for Hydrothermally Aged PNA Materials. Emission Control Science and Technology, 2020, 6, 126-138.	0.8	38
14	25Mg NMR and computational modeling studies of the solvation structures and molecular dynamics in magnesium based liquid electrolytes. Nano Energy, 2018, 46, 436-446.	8.2	37
15	In situ and ex situ NMR for battery research. Journal of Physics Condensed Matter, 2018, 30, 463001.	0.7	35
16	Achieving Atomic Dispersion of Highly Loaded Transition Metals in Smallâ€Pore Zeolite SSZâ€13: Highâ€Capacity and Highâ€Efficiency Lowâ€Temperature CO and Passive NO_x Adsorbers. Angewandte Chemie, 2018, 130, 16914-16919.	1.6	34
17	Single-Step Conversion of Ethanol to n-Butene over Ag-ZrO₂/SiO₂ Catalysts. ACS Catalysis, 2020, 10, 10602-10613.	5.5	34
18	In Situ ²⁷Al NMR Spectroscopy of Aluminate in Sodium Hydroxide Solutions above and below Saturation with Respect to Gibbsite. Inorganic Chemistry, 2018, 57, 11864-11873.	1.9	33

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19	Unraveling Gibbsite Transformation Pathways into LiAl-LDH in Concentrated Lithium Hydroxide. Inorganic Chemistry, 2019, 58, 12385-12394.	1.9	29
20	High-Field One-Dimensional and Two-Dimensional ²⁷Al Magic-Angle Spinning Nuclear Magnetic Resonance Study of Î¸-, Î´-, and Î³-Al₂O₃ Dominated Aluminum Oxides: Toward Understanding the Al Sites in Î³-Al₂O₃. ACS Omega, 2021, 6, 4090-4099.	1.6	29
21	Quantification of Highâ€Temperature Transition Al₂O₃ and Their Phase Transformations**. Angewandte Chemie - International Edition, 2020, 59, 21719-21727.	7.2	28
22	Role of Solvent Rearrangement on Mg²⁺ Solvation Structures in Dimethoxyethane Solutions using Multimodal NMR Analysis. Journal of Physical Chemistry Letters, 2020, 11, 6443-6449.	2.1	27
23	Investigating the Surface Structure of Î³-Al₂O₃ Supported WO_X Catalysts by High Field ²⁷Al MAS NMR and Electronic Structure Calculations. Journal of Physical Chemistry C, 2016, 120, 23093-23103.	1.5	26
24	Elucidation of Active Sites in Aldol Condensation of Acetone over Single-Facet Dominant Anatase TiO₂ (101) and (001) Catalysts. Jacs Au, 2021, 1, 41-52.	3.6	26
25	Precise Identification and Characterization of Catalytically Active Sites on the Surface of Î³â€Alumina**. Angewandte Chemie - International Edition, 2021, 60, 17522-17530.	7.2	26
26	Palladium/Ferrierite versus Palladium/SSZâ€13 Passive NOx Adsorbers: Adsorbateâ€Controlled Location of Atomically Dispersed Palladium(II) in Ferrierite Determines High Activity and Stability**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	24
27	Conversion of ethanol to 1,3â€“butadiene over Agâ€“ZrO2/SiO2 catalysts: The role of surface interfaces. Journal of Energy Chemistry, 2021, 54, 7-15.	7.1	21
28	Catalytic activation of ethylene Câ€“H bonds on uniform d⁸ Ir(<scp>i</scp>) and Ni(<scp>ii</scp>) cations in zeolites: toward molecular level understanding of ethylene polymerization on heterogeneous catalysts. Catalysis Science and Technology, 2019, 9, 6570-6576.	2.1	20
29	Structureâ€“Activity Relationships of Hydrothermally Aged Titania-Supported Vanadiumâ€“Tungsten Oxide Catalysts for SCR of NO_x Emissions with NH₃. ACS Catalysis, 2021, 11, 12096-12111.	5.5	20
30	Transformation of Gibbsite to Boehmite in Caustic Aqueous Solution at Hydrothermal Conditions. Crystal Growth and Design, 2019, 19, 5557-5567.	1.4	19
31	Adsorption and Thermal Decomposition of Electrolytes on Nanometer Magnesium Oxide: An in Situ 13C MAS NMR Study. ACS Applied Materials & Interfaces, 2019, 11, 38689-38696.	4.0	19
32	Directing the Rateâ€Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. Angewandte Chemie - International Edition, 2021, 60, 2304-2311.	7.2	19
33	Factors Influencing Preferential Anion Interactions during Solvation of Multivalent Cations in Ethereal Solvents. Journal of Physical Chemistry C, 2021, 125, 6005-6012.	1.5	17
34	Precise Identification and Characterization of Catalytically Active Sites on the Surface of Î³â€Alumina**. Angewandte Chemie, 2021, 133, 17663-17671.	1.6	15
35	Low-temperature (<â€‰200ÂÂ°C) degradation of electronic nicotine delivery system liquids generates toxic aldehydes. Scientific Reports, 2021, 11, 7800.	1.6	14
36	Probing Conformational Evolution and Associated Dynamics of Mg(N(SO₂CF₃)₂)₂·Dimethoxyethane Adduct Using Solid-State ¹⁹F and ¹H NMR. Journal of Physical Chemistry C, 2020, 124, 4999-5008.	1.5	13

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37	On the Nature of Extra-Framework Aluminum Species and Improved Catalytic Properties in Steamed Zeolites. Molecules, 2022, 27, 2352.	1.7	12
38	Intermediate Species in the Crystallization of Sodium Aluminate Hydroxy Hydrates. Journal of Physical Chemistry C, 2020, 124, 12337-12345.	1.5	10
39	Economizing on Precious Metals in Threeâ€Way Catalysts: Thermally Stable and Highly Active Singleâ€Atom Rhodium on Ceria for NO Abatement under Dry and Industrially Relevant Conditions**. Angewandte Chemie, 2021, 133, 395-402.	1.6	10
40	Thermal perturbation of NMR properties in small polar and non-polar molecules. Scientific Reports, 2020, 10, 6097.	1.6	9
41	Biomimetic CO oxidation below â˜100â€‰Â°C by a nitrate-containing metal-free microporous system. Nature Communications, 2021, 12, 6033.	5.8	8
42	Elucidating the Cooperative Roles of Water and Lewis Acidâ€“Base Pairs in Cascade Câ€“C Coupling and Self-Deoxygenation Reactions. Jacs Au, 2021, 1, 1471-1487.	3.6	5
43	Development and Application of In Situ High-Temperature, High-Pressure Magic Angle Spinning NMR. , 2017, , 1-19.		5
44	High-Temperature and High-Pressure In situ Magic Angle Spinning Nuclear Magnetic Resonance Spectroscopy. Journal of Visualized Experiments, 2020, , .	0.2	5
45	Understanding the Solvation-Dependent Properties of Cyclic Ether Multivalent Electrolytes Using High-Field NMR and Quantum Chemistry. Jacs Au, 2022, 2, 917-932.	3.6	5
46	Directing the Rateâ€Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. Angewandte Chemie, 2021, 133, 2334-2341.	1.6	4
47	Quantification of Highâ€Temperature Transition Al₂O₃ and Their Phase Transformations**. Angewandte Chemie, 2020, 132, 21903-21911.	1.6	3
48	Impact of Hydration on Supported V2O5/TiO2 Catalysts as Explored by Magnetic Resonance Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 16766-16775.	1.5	3
49	Pd/FER vs Pd/SSZâ€13 Passive NOx Adsorbers: Adsorbateâ€controlled Location of Atomically Dispersed Pd(II) in FER Determines High Activity and Stability. Angewandte Chemie, 0, , .	1.6	2
50	RÃ¼cktitelbild: Achieving Atomic Dispersion of Highly Loaded Transition Metals in Smallâ€Pore Zeolite SSZâ€13: Highâ€Capacity and Highâ€Efficiency Lowâ€Temperature CO and Passive NO_x Adsorbers (Angew. Chem. 51/2018). Angewandte Chemie, 2018, 130, 17152-17152.	1.6	1
51	InnenrÃ¼cktitelbild: Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_X Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy (Angew. Chem. 36/2019). Angewandte Chemie, 2019, 131, 12847-12847.	1.6	1
52	Modelling complex molecular interactions in catalytic materials for energy storage and conversion in nuclear magnetic resonance. Frontiers in Catalysis, 0, 2, .	1.8	1