

Stian Svelle

List of Publications by Year in descending order

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127
papers

14,805
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20817

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times ranked

8310
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Conversion of Methanol to Hydrocarbons: How Zeolite Cavity and Pore Size Controls Product Selectivity. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 5810-5831. | 13.8 | 1,476 |
| 2 | Defect Engineering: Tuning the Porosity and Composition of the Metal-Organic Framework UiO-66 via Modulated Synthesis. <i>Chemistry of Materials</i> , 2016, 28, 3749-3761. | 6.7 | 933 |
| 3 | Conversion of methanol to hydrocarbons over zeolite H-ZSM-5: On the origin of the olefinic species. <i>Journal of Catalysis</i> , 2007, 249, 195-207. | 6.2 | 893 |
| 4 | Tuned to Perfection: Ironing Out the Defects in Metal-Organic Framework UiO-66. <i>Chemistry of Materials</i> , 2014, 26, 4068-4071. | 6.7 | 634 |
| 5 | Conversion of Methanol into Hydrocarbons over Zeolite H-ZSM-5: Ethene Formation Is Mechanistically Separated from the Formation of Higher Alkenes. <i>Journal of the American Chemical Society</i> , 2006, 128, 14770-14771. | 13.7 | 603 |
| 6 | Methanol to gasoline over zeolite H-ZSM-5: Improved catalyst performance by treatment with NaOH. <i>Applied Catalysis A: General</i> , 2008, 345, 43-50. | 4.3 | 433 |
| 7 | Product shape selectivity dominates the Methanol-to-Olefins (MTO) reaction over H-SAPO-34 catalysts. <i>Journal of Catalysis</i> , 2009, 264, 77-87. | 6.2 | 344 |
| 8 | Post-synthetic modification of the metal-organic framework compound UiO-66. <i>Journal of Materials Chemistry</i> , 2010, 20, 9848. | 6.7 | 340 |
| 9 | The formation and degradation of active species during methanol conversion over protonated zeolite catalysts. <i>Chemical Society Reviews</i> , 2015, 44, 7155-7176. | 38.1 | 320 |
| 10 | Detailed Structure Analysis of Atomic Positions and Defects in Zirconium Metal-Organic Frameworks. <i>Crystal Growth and Design</i> , 2014, 14, 5370-5372. | 3.0 | 306 |
| 11 | Quantum Chemical Modeling of Zeolite-Catalyzed Methylation Reactions: Toward Chemical Accuracy for Barriers. <i>Journal of the American Chemical Society</i> , 2009, 131, 816-825. | 13.7 | 288 |
| 12 | Methane to Methanol: Structure-Activity Relationships for Cu-CHA. <i>Journal of the American Chemical Society</i> , 2017, 139, 14961-14975. | 13.7 | 277 |
| 13 | Assessing the acid properties of desilicated ZSM-5 by FTIR using CO and 2,4,6-trimethylpyridine (collidine) as molecular probes. <i>Applied Catalysis A: General</i> , 2009, 356, 23-30. | 4.3 | 249 |
| 14 | Mechanistic insight into the methanol-to-hydrocarbons reaction. <i>Catalysis Today</i> , 2005, 106, 108-111. | 4.4 | 237 |
| 15 | The mechanisms of ethene and propene formation from methanol over high silica H-ZSM-5 and H-beta. <i>Catalysis Today</i> , 2009, 142, 90-97. | 4.4 | 219 |
| 16 | The Effect of Acid Strength on the Conversion of Methanol to Olefins Over Acidic Microporous Catalysts with the CHA Topology. <i>Topics in Catalysis</i> , 2009, 52, 218-228. | 2.8 | 216 |
| 17 | Cu-CHA - a model system for applied selective redox catalysis. <i>Chemical Society Reviews</i> , 2018, 47, 8097-8133. | 38.1 | 215 |
| 18 | Shape Selectivity in the Conversion of Methanol to Hydrocarbons: The Catalytic Performance of One-Dimensional 10-Ring Zeolites: ZSM-22, ZSM-23, ZSM-48, and EU-1. <i>ACS Catalysis</i> , 2012, 2, 26-37. | 11.2 | 207 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Conversion of Methanol to Alkenes over Medium- and Large-Pore Acidic Zeolites: Steric Manipulation of the Reaction Intermediates Governs the Ethene/Propene Product Selectivity. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17981-17984. | 3.1 | 179 |
| 20 | The Nuclearity of the Active Site for Methane to Methanol Conversion in Cu-Mordenite: A Quantitative Assessment. <i>Journal of the American Chemical Society</i> , 2018, 140, 15270-15278. | 13.7 | 177 |
| 21 | Effect of Benzoic Acid as a Modulator in the Structure of UiO-66: An Experimental and Computational Study. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9312-9324. | 3.1 | 176 |
| 22 | Functionalizing the Defects: Postsynthetic Ligand Exchange in the Metal Organic Framework UiO-66. <i>Chemistry of Materials</i> , 2016, 28, 7190-7193. | 6.7 | 170 |
| 23 | Catalyst deactivation by coke formation in microporous and desilicated zeolite H-ZSM-5 during the conversion of methanol to hydrocarbons. <i>Journal of Catalysis</i> , 2013, 307, 62-73. | 6.2 | 169 |
| 24 | Kinetic studies of zeolite-catalyzed methylation reactions1. Coreaction of [12C]ethene and [13C]methanol. <i>Journal of Catalysis</i> , 2004, 224, 115-123. | 6.2 | 160 |
| 25 | Kinetic studies of zeolite-catalyzed methylation reactions. Part 2. Co-reaction of [12C]propene or [12C]n-butene and [13C]methanol. <i>Journal of Catalysis</i> , 2005, 234, 385-400. | 6.2 | 151 |
| 26 | Mesopore formation in zeolite H-SSZ-13 by desilication with NaOH. <i>Microporous and Mesoporous Materials</i> , 2010, 132, 384-394. | 4.4 | 150 |
| 27 | Synthesis and Characterization of Amine-Functionalized Mixed-Ligand Metal-Organic Frameworks of UiO-66 Topology. <i>Inorganic Chemistry</i> , 2014, 53, 9509-9515. | 4.0 | 148 |
| 28 | In Situ Infrared Spectroscopic and Gravimetric Characterisation of the Solvent Removal and Dehydroxylation of the Metal Organic Frameworks UiO-66 and UiO-67. <i>Topics in Catalysis</i> , 2013, 56, 770-782. | 2.8 | 145 |
| 29 | Selectivity control through fundamental mechanistic insight in the conversion of methanol to hydrocarbons over zeolites. <i>Microporous and Mesoporous Materials</i> , 2010, 136, 33-41. | 4.4 | 141 |
| 30 | Methanol to hydrocarbons over large cavity zeolites: Toward a unified description of catalyst deactivation and the reaction mechanism. <i>Journal of Catalysis</i> , 2010, 275, 170-180. | 6.2 | 141 |
| 31 | Hydrogenation of CO ₂ to Methanol by Pt Nanoparticles Encapsulated in UiO-67: Deciphering the Role of the Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 999-1009. | 13.7 | 141 |
| 32 | Conversion of methanol over 10-ring zeolites with differing volumes at channel intersections: comparison of TNU-9, IM-5, ZSM-11 and ZSM-5. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 2539-2549. | 2.8 | 137 |
| 33 | Methanol-to-hydrocarbons conversion: The alkene methylation pathway. <i>Journal of Catalysis</i> , 2014, 314, 159-169. | 6.2 | 136 |
| 34 | Methylation of benzene by methanol: Single-site kinetics over H-ZSM-5 and H-beta zeolite catalysts. <i>Journal of Catalysis</i> , 2012, 292, 201-212. | 6.2 | 126 |
| 35 | High Zn/Al ratios enhance dehydrogenation vs hydrogen transfer reactions of Zn-ZSM-5 catalytic systems in methanol conversion to aromatics. <i>Journal of Catalysis</i> , 2018, 362, 146-163. | 6.2 | 120 |
| 36 | Mechanistic Aspects of the Zeolite Catalyzed Methylation of Alkenes and Aromatics with Methanol: A Review. <i>Topics in Catalysis</i> , 2011, 54, 897-906. | 2.8 | 109 |

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|----|---|------|-----------|
| 37 | New insights into catalyst deactivation and product distribution of zeolites in the methanol-to-hydrocarbons (MTH) reaction with methanol and dimethyl ether feeds. <i>Catalysis Science and Technology</i> , 2017, 7, 2700-2716. | 4.1 | 106 |
| 38 | Probing Reactive Platinum Sites in UiO-67 Zirconium Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2015, 27, 1042-1056. | 6.7 | 105 |
| 39 | Shape-Selective Conversion of Methanol to Hydrocarbons Over 10-Ring Unidirectional-Channel Acidic H-ZSM-22. <i>ChemCatChem</i> , 2009, 1, 78-81. | 3.7 | 104 |
| 40 | H-SAPO-5 as methanol-to-olefins (MTO) model catalyst: Towards elucidating the effects of acid strength. <i>Journal of Catalysis</i> , 2013, 298, 94-101. | 6.2 | 104 |
| 41 | How defects and crystal morphology control the effects of desilication. <i>Catalysis Today</i> , 2011, 168, 38-47. | 4.4 | 103 |
| 42 | The influence of catalyst acid strength on the methanol to hydrocarbons (MTH) reaction. <i>Catalysis Today</i> , 2013, 215, 216-223. | 4.4 | 103 |
| 43 | Hydrogen Transfer versus Methylation: On the Genesis of Aromatics Formation in the Methanol-To-Hydrocarbons Reaction over H-ZSM-5. <i>ACS Catalysis</i> , 2017, 7, 5773-5780. | 11.2 | 102 |
| 44 | Detailed Reaction Paths for Zeolite Dealumination and Desilication From Density Functional Calculations. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 652-655. | 13.8 | 101 |
| 45 | Methylation of Alkenes and Methylbenzenes by Dimethyl Ether or Methanol on Acidic Zeolites. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12874-12878. | 2.6 | 98 |
| 46 | The methyl halide to hydrocarbon reaction over H-SAPO-34. <i>Journal of Catalysis</i> , 2006, 241, 243-254. | 6.2 | 91 |
| 47 | Computational exploration of newly synthesized zirconium metal-organic frameworks UiO-66, -67, -68 and analogues. <i>Journal of Materials Chemistry C</i> , 2014, 2, 7111-7125. | 5.5 | 89 |
| 48 | Conversion of Methanol to Hydrocarbons: The Reactions of the Heptamethylbenzenium Cation over Zeolite H-Beta. <i>Catalysis Letters</i> , 2004, 93, 37-40. | 2.6 | 86 |
| 49 | Single parameter synthesis of high silica CHA zeolites from fluoride media. <i>Microporous and Mesoporous Materials</i> , 2012, 153, 94-99. | 4.4 | 83 |
| 50 | Structure-deactivation relationships in zeolites during the methanol-to-hydrocarbons reaction: Complementary assessments of the coke content. <i>Journal of Catalysis</i> , 2017, 351, 33-48. | 6.2 | 82 |
| 51 | Theoretical Investigation of the Dimerization of Linear Alkenes Catalyzed by Acidic Zeolites. <i>Journal of Physical Chemistry B</i> , 2004, 108, 2953-2962. | 2.6 | 78 |
| 52 | A Straightforward Descriptor for the Deactivation of Zeolite Catalyst H-ZSM-5. <i>ACS Catalysis</i> , 2017, 7, 8235-8246. | 11.2 | 77 |
| 53 | Single-Event Microkinetics for Methanol to Olefins on H-ZSM-5. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1491-1507. | 3.7 | 73 |
| 54 | A Theoretical Investigation of the Methylation of Alkenes with Methanol over Acidic Zeolites. <i>Journal of Physical Chemistry B</i> , 2003, 107, 9281-9289. | 2.6 | 71 |

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| 55 | Kinetic modeling of deactivation profiles in the methanol-to-hydrocarbons (MTH) reaction: A combined autocatalytic-hydrocarbon pool approach. <i>Journal of Catalysis</i> , 2013, 308, 122-130. | 6.2 | 71 |
| 56 | Benzene co-reaction with methanol and dimethyl ether over zeolite and zeotype catalysts: Evidence of parallel reaction paths to toluene and diphenylmethane. <i>Journal of Catalysis</i> , 2017, 349, 136-148. | 6.2 | 70 |
| 57 | Kinetics of Zeolite Dealumination: Insights from H-SSZ-13. <i>ACS Catalysis</i> , 2015, 5, 7131-7139. | 11.2 | 69 |
| 58 | Influence of Defects and H ₂ O on the Hydrogenation of CO ₂ to Methanol over Pt Nanoparticles in UiO-67 Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 17105-17118. | 13.7 | 68 |
| 59 | Product yield in methanol conversion over ZSM-5 is predominantly independent of coke content. <i>Microporous and Mesoporous Materials</i> , 2012, 164, 190-198. | 4.4 | 66 |
| 60 | Morphology-induced shape selectivity in zeolite catalysis. <i>Journal of Catalysis</i> , 2015, 327, 22-32. | 6.2 | 64 |
| 61 | Mechanistic Comparison of the Dealumination in SSZ-13 and the Desilication in SAPO-34. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13442-13451. | 3.1 | 62 |
| 62 | A Theoretical Investigation of the Methylation of Methylbenzenes and Alkenes by Halomethanes over Acidic Zeolites. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5251-5260. | 2.6 | 61 |
| 63 | In Situ FT-IR Mechanistic Investigations of the Zeolite Catalyzed Methylation of Benzene with Methanol: H-ZSM-5 versus H-beta. <i>Topics in Catalysis</i> , 2011, 54, 1293-1301. | 2.8 | 60 |
| 64 | Methane conversion to light olefins-How does the methyl halide route differ from the methanol to olefins (MTO) route?. <i>Catalysis Today</i> , 2011, 171, 211-220. | 4.4 | 53 |
| 65 | Probing the surface of nanosheet H-ZSM-5 with FTIR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13363. | 2.8 | 53 |
| 66 | On How Copper Mordenite Properties Govern the Framework Stability and Activity in the Methane-to-Methanol Conversion. <i>ACS Catalysis</i> , 2019, 9, 365-375. | 11.2 | 53 |
| 67 | Interplay between nanoscale reactivity and bulk performance of H-ZSM-5 catalysts during the methanol-to-hydrocarbons reaction. <i>Journal of Catalysis</i> , 2013, 307, 185-193. | 6.2 | 51 |
| 68 | How zeolitic acid strength and composition alter the reactivity of alkenes and aromatics towards methanol. <i>Journal of Catalysis</i> , 2015, 328, 186-196. | 6.2 | 49 |
| 69 | CHA/AEI intergrowth materials as catalysts for the Methanol-to-Olefins process. <i>Applied Catalysis A: General</i> , 2015, 505, 1-7. | 4.3 | 46 |
| 70 | Zeolite Surface Methoxy Groups as Key Intermediates in the Stepwise Conversion of Methane to Methanol. <i>ChemCatChem</i> , 2019, 11, 5022-5026. | 3.7 | 45 |
| 71 | Synthesis of mesoporous ZSM-5 zeolite encapsulated in an ultrathin protective shell of silicalite-1 for MTH conversion. <i>Microporous and Mesoporous Materials</i> , 2020, 292, 109730. | 4.4 | 44 |
| 72 | Collective action of water molecules in zeolite dealumination. <i>Catalysis Science and Technology</i> , 2019, 9, 3721-3725. | 4.1 | 43 |

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|----|---|------|-----------|
| 73 | Time- and space-resolved study of the methanol to hydrocarbons (MTH) reaction – influence of zeolite topology on axial deactivation patterns. <i>Faraday Discussions</i> , 2017, 197, 421-446. | 3.2 | 39 |
| 74 | Intermediates in the Methanol-to-hydrocarbons (MTH) Reaction: A Gas Phase Study of the Unimolecular Reactivity of Multiply Methylated Benzenium Cations. <i>Catalysis Letters</i> , 2006, 109, 25-35. | 2.6 | 37 |
| 75 | EXAFS wavelet transform analysis of Cu-MOR zeolites for the direct methane to methanol conversion. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 18950-18963. | 2.8 | 35 |
| 76 | Synthesis of Titanium Chabazite: A New Shape Selective Oxidation Catalyst with Small Pore Openings and Application in the Production of Methyl Formate from Methanol. <i>ChemCatChem</i> , 2011, 3, 1869-1871. | 3.7 | 34 |
| 77 | A quantum mechanically guided view of Cd-MOF-5 from formation energy, chemical bonding, electronic structure, and optical properties. <i>Microporous and Mesoporous Materials</i> , 2013, 175, 50-58. | 4.4 | 34 |
| 78 | Diphenylmethane-Mediated Transmethylation of Methylbenzenes over H-Zeolites. <i>Journal of the American Chemical Society</i> , 2006, 128, 5618-5619. | 13.7 | 33 |
| 79 | Unit cell thick nanosheets of zeolite H-ZSM-5: Structure and activity. <i>Topics in Catalysis</i> , 2013, 56, 558-566. | 2.8 | 33 |
| 80 | Mechanism of Si Island Formation in SAPO-34. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2086-2095. | 3.1 | 33 |
| 81 | Deactivation of Zeolite Catalyst H-ZSM-5 during Conversion of Methanol to Gasoline: Operando Time- and Space-Resolved X-ray Diffraction. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1324-1328. | 4.6 | 33 |
| 82 | Chapter 6. Shape selectivity in zeolite catalysis. The Methanol to Hydrocarbons (MTH) reaction. <i>Catalysis</i> , 0, , 179-217. | 1.0 | 32 |
| 83 | Does an Ethene/Benzenium Ion Complex Exist? A Discrepancy between B3LYP and MP2 Predictions. <i>Journal of Physical Chemistry A</i> , 2008, 112, 6399-6400. | 2.5 | 31 |
| 84 | The conversion of chloromethane to light olefins over SAPO-34: The influence of dichloromethane addition. <i>Applied Catalysis A: General</i> , 2009, 367, 23-31. | 4.3 | 31 |
| 85 | Conversion of methanol to hydrocarbons over zeolite ZSM-23 (MTT): exceptional effects of particle size on catalyst lifetime. <i>Chemical Communications</i> , 2017, 53, 6816-6819. | 4.1 | 31 |
| 86 | Time- and space-resolved high energy operando X-ray diffraction for monitoring the methanol to hydrocarbons reaction over H-ZSM-22 zeolite catalyst in different conditions. <i>Surface Science</i> , 2016, 648, 141-149. | 1.9 | 30 |
| 87 | Understanding and Optimizing the Performance of Cu ⁺ for The Direct CH ₄ to CH ₃ OH Conversion. <i>ChemCatChem</i> , 2019, 11, 621-627. | 3.7 | 29 |
| 88 | Finding the active species: The conversion of methanol to aromatics over Zn-ZSM-5/alumina shaped catalysts. <i>Journal of Catalysis</i> , 2021, 394, 416-428. | 6.2 | 29 |
| 89 | Understanding zeolite-catalyzed benzene methylation reactions by methanol and dimethyl ether at operating conditions from first principle microkinetic modeling and experiments. <i>Catalysis Today</i> , 2018, 312, 35-43. | 4.4 | 28 |
| 90 | Theoretical Study of Ethylbenzenium Ions: The Mechanism for Splitting Off Ethene, and the Formation of a π Complex of Ethene and the Benzenium Ion. <i>Journal of Physical Chemistry A</i> , 2009, 113, 917-923. | 2.5 | 27 |

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|-----|---|-----|-----------|
| 91 | Enhanced Catalyst Performance of Zeolite SSZ-13 in the Methanol to Olefin Reaction after Neutron Irradiation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6521-6530. | 3.1 | 26 |
| 92 | The impact of reaction conditions and material composition on the stepwise methane to methanol conversion over Cu-MOR: An operando XAS study. <i>Catalysis Today</i> , 2019, 336, 99-108. | 4.4 | 26 |
| 93 | Conversion of methanol to hydrocarbons: Hints to rational catalyst design from fundamental mechanistic studies on H-ZSM-5. <i>Studies in Surface Science and Catalysis</i> , 2007, , 463-468. | 1.5 | 24 |
| 94 | Tuning the material and catalytic properties of SUZ-4 zeolites for the conversion of methanol or methane. <i>Microporous and Mesoporous Materials</i> , 2018, 265, 112-122. | 4.4 | 24 |
| 95 | Single-Event MicroKinetics (SEMK) for Methanol to Hydrocarbons (MTH) on H-ZSM-23. <i>Catalysis Today</i> , 2013, 215, 224-232. | 4.4 | 23 |
| 96 | Desilication of SAPO-34: Reaction Mechanisms from Periodic DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2073-2085. | 3.1 | 23 |
| 97 | Influence of post-synthetic modifications on the composition, acidity and textural properties of ZSM-22 zeolite. <i>Catalysis Today</i> , 2018, 299, 120-134. | 4.4 | 23 |
| 98 | Thermochemistry of Organic Reactions in Microporous Oxides by Atomistic Simulations: Benchmarking against Periodic B3LYP. <i>Journal of Physical Chemistry A</i> , 2010, 114, 7391-7397. | 2.5 | 21 |
| 99 | A Systematic Study of Isomorphically Substituted H α AlPO α 5 Materials for the Methanol α Hydrocarbons Reaction. <i>ChemPhysChem</i> , 2018, 19, 484-495. | 2.1 | 21 |
| 100 | Impact of post-synthetic treatments on unidirectional H-ZSM-22 zeolite catalyst: Towards improved clean MTC catalytic process. <i>Catalysis Today</i> , 2018, 299, 135-145. | 4.4 | 21 |
| 101 | Co-conversion of methanol and light alkenes over acidic zeolite catalyst H-ZSM-22: Simulated recycle of non-gasoline range products. <i>Applied Catalysis A: General</i> , 2015, 494, 68-76. | 4.3 | 19 |
| 102 | Identification of Distinct Framework Aluminum Sites in Zeolite ZSM-23: A Combined Computational and Experimental ²⁷ Al NMR Study. <i>Journal of Physical Chemistry C</i> , 2019, 123, 7831-7844. | 3.1 | 19 |
| 103 | Zeolite morphology and catalyst performance: conversion of methanol to hydrocarbons over offretite. <i>Catalysis Science and Technology</i> , 2017, 7, 5435-5447. | 4.1 | 18 |
| 104 | Topology-dependent hydrocarbon transformations in the methanol-to-hydrocarbons reaction studied by <i>operando</i> UV-Raman spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26580-26590. | 2.8 | 18 |
| 105 | Mechanistic Proposal for the Zeolite Catalyzed Methylation of Aromatic Compounds. <i>Journal of Physical Chemistry A</i> , 2010, 114, 12548-12554. | 2.5 | 16 |
| 106 | Methanol Conversion to Hydrocarbons (MTH) Over H-ITQ-13 (ITH) Zeolite. <i>Topics in Catalysis</i> , 2014, 57, 143-158. | 2.8 | 16 |
| 107 | Operando UV-Raman study of the methanol to olefins reaction over SAPO-34: Spatiotemporal evolution monitored by different reactor approaches. <i>Catalysis Today</i> , 2019, 336, 203-209. | 4.4 | 16 |
| 108 | Comparing the Nature of Active Sites in Cu-loaded SAPO-34 and SSZ-13 for the Direct Conversion of Methane to Methanol. <i>Catalysts</i> , 2020, 10, 191. | 3.5 | 16 |

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|-----|--|------|-----------|
| 109 | Copper Pairing in the Mordenite Framework as a Function of the Cu ^I /Cu ^{II} Speciation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25891-25896. | 13.8 | 16 |
| 110 | Optical Investigation of the Intergrowth Structure and Accessibility of Brønsted Acid Sites in Etched SSZ-13 Zeolite Crystals by Confocal Fluorescence Microscopy. <i>Langmuir</i> , 2010, 26, 16510-16516. | 3.5 | 14 |
| 111 | Influence of Cu-speciation in mordenite on direct methane to methanol conversion: Multi-Technique characterization and comparison with NH ₃ selective catalytic reduction of NO _x . <i>Catalysis Today</i> , 2021, 369, 105-111. | 4.4 | 14 |
| 112 | Mapping the coke formation within a zeolite catalyst extrudate in space and time by operando computed X-ray diffraction tomography. <i>Journal of Catalysis</i> , 2021, 401, 1-6. | 6.2 | 14 |
| 113 | Titration of Cu(I) Sites in Cu-ZSM-5 by Volumetric CO Adsorption. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21059-21068. | 8.0 | 12 |
| 114 | Conclusive Evidence for Two Unimolecular Pathways to Zeolite-Catalyzed Dealkylation of the Heptamethylbenzenium Cation. <i>ChemCatChem</i> , 2015, 7, 4143-4147. | 3.7 | 11 |
| 115 | Synthesis-Structure-Activity Relationship in Cu-MOR for Partial Methane Oxidation: Al Siting via Inorganic Structure-Directing Agents. <i>ACS Catalysis</i> , 2022, 12, 2166-2177. | 11.2 | 11 |
| 116 | A XAFS study of the local environment and reactivity of Pt-sites in functionalized UiO-67 MOFs. <i>Journal of Physics: Conference Series</i> , 2016, 712, 012125. | 0.4 | 10 |
| 117 | Acidity effect on benzene methylation kinetics over substituted H-MeAlPO-5 catalysts. <i>Journal of Catalysis</i> , 2021, 404, 594-606. | 6.2 | 10 |
| 118 | Cu-Exchanged Ferrierite Zeolite for the Direct CH ₄ to CH ₃ OH Conversion: Insights on Cu Speciation from X-Ray Absorption Spectroscopy. <i>Topics in Catalysis</i> , 2019, 62, 712-723. | 2.8 | 9 |
| 119 | Assessing the surface sites of the large pore 3-dimensional microporous material H-ITQ-7 using FT-IR spectroscopy and molecular probes. <i>Microporous and Mesoporous Materials</i> , 2011, 141, 146-156. | 4.4 | 8 |
| 120 | Synthesis of ZSM-23 (MTT) zeolites with different crystal morphology and intergrowths: effects on the catalytic performance in the conversion of methanol to hydrocarbons. <i>Catalysis Science and Technology</i> , 2019, 9, 6782-6792. | 4.1 | 7 |
| 121 | Spectroscopic and catalytic characterization of extra large pore zeotype H-ITQ-33. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 424-433. | 4.4 | 5 |
| 122 | From Catalytic Test Reaction to Modern Chemical Descriptors in Zeolite Catalysis Research. <i>Chemie-Ingenieur-Technik</i> , 2021, 93, 902-915. | 0.8 | 5 |
| 123 | Infrared Spectroscopic Investigation of the Acidity and Availability of the Surface Hydroxyls of Three-Dimensional 12-Ring Zeotype H-ITQ-7. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12090-12094. | 3.1 | 0 |
| 124 | Correction to "Mechanism of Si Island Formation in SAPO-34". <i>Journal of Physical Chemistry C</i> , 2015, 119, 20782-20782. | 3.1 | 0 |
| 125 | Understanding and Design Catalysts from Molecular to Material Scale: One of the Five Grand-Challenges for Catalysis at the 13th European Congress on Catalysis. <i>Topics in Catalysis</i> , 2018, 61, 1383-1384. | 2.8 | 0 |
| 126 | Copper pairing in the mordenite framework as a function of the Cu(I)/Cu(II) speciation. <i>Angewandte Chemie</i> , 0, . | 2.0 | 0 |

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|-----|---|-----|-----------|
| 127 | Morphology Controlled Lifetime and Selectivity in Zeolite Catalysis. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C737-C737. | 0.1 | 0 |