Alexis T Bell

List of Publications by Year in descending order

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ALEVIS T RELL

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Membraneâ€electrode assembly design parameters for optimal CO ₂ reduction. Electrochemical Science Advances, 2023, 3, . | 2.8 | 14 |
| 2 | Insights into the mechanism and kinetics of propene oxidation and ammoxidation over bismuth molybdate catalysts derived from experiments and theory. Journal of Catalysis, 2022, 408, 436-452. | 6.2 | 18 |
| 3 | Investigation of the modes of NO adsorption in Pd/H-CHA. Applied Catalysis B: Environmental, 2022, 304, 120992. | 20.2 | 18 |
| 4 | Mechanistic understanding of pH effects on the oxygen evolution reaction. Electrochimica Acta, 2022, 405, 139810. | 5.2 | 31 |
| 5 | Engineering Catalyst–Electrolyte Microenvironments to Optimize the Activity and Selectivity for the Electrochemical Reduction of CO ₂ on Cu and Ag. Accounts of Chemical Research, 2022, 55, 484-494. | 15.6 | 81 |
| 6 | Mechanism and Kinetics of <i>n</i> -Butane Dehydrogenation to 1,3-Butadiene Catalyzed by Isolated Pt Sites Grafted onto ≡SiOZn–OH Nests in Dealuminated Zeolite Beta. ACS Catalysis, 2022, 12, 3333-3345. | 11.2 | 18 |
| 7 | Highly selective and productive reduction of carbon dioxide to multicarbon products via in situ CO management using segmented tandem electrodes. Nature Catalysis, 2022, 5, 202-211. | 34.4 | 120 |
| 8 | Pathways for the Formation of C ₂₊ Products under Alkaline Conditions during the Electrochemical Reduction of CO ₂ . ACS Energy Letters, 2022, 7, 1679-1686. | 17.4 | 27 |
| 9 | Continuum Modeling of Porous Electrodes for Electrochemical Synthesis. Chemical Reviews, 2022, 122, 11022-11084. | 47.7 | 46 |
| 10 | Assessing the stability of Pd-exchanged sites in zeolites with the aid of a high throughput quantum chemistry workflow. Nature Communications, 2022, 13, . | 12.8 | 9 |
| 11 | Siloxyaluminate and Siloxygallate Complexes as Models for Framework and Partially Hydrolyzed Framework Sites in Zeolites and Zeotypes. Chemistry - A European Journal, 2021, 27, 307-315. | 3.3 | 2 |
| 12 | Challenges for density functional theory: calculation of CO adsorption on electrocatalytically relevant metals. Physical Chemistry Chemical Physics, 2021, 23, 9394-9406. | 2.8 | 15 |
| 13 | Mechanism and Kinetics of Light Alkane Dehydrogenation and Cracking over Isolated Ga Species in Ga/H-MFI. ACS Catalysis, 2021, 11, 2062-2075. | 11.2 | 31 |
| 14 | Mechanism and Kinetics of Acetone Conversion to Isobutene over Isolated Hf Sites Grafted to Silicalite-1 and SiO ₂ . Journal of the American Chemical Society, 2021, 143, 8352-8366. | 13.7 | 33 |
| 15 | Critical Role of Thermal Fluctuations for CO Binding on Electrocatalytic Metal Surfaces. Jacs Au, 2021, 1, 1708-1718. | 7.9 | 10 |
| 16 | Software for the frontiers of quantum chemistry: An overview of developments in the Q-Chem 5 package. Journal of Chemical Physics, 2021, 155, 084801. | 3.0 | 518 |
| 17 | Fewâ€Unitâ€Cell MFI Zeolite Synthesized using a Simple Diâ€quaternary Ammonium Structureâ€Directing Agent. Angewandte Chemie - International Edition, 2021, 60, 19214-19221. | 13.8 | 19 |
| 18 | The Role of Roughening to Enhance Selectivity to C ₂₊ Products during CO ₂ Electroreduction on Copper. ACS Energy Letters, 2021, 6, 3252-3260. | 17.4 | 38 |

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| 19 | Fewâ€Unitâ€Cell MFI Zeolite Synthesized using a Simple Diâ€quaternary Ammonium Structureâ€Directing Agent. Angewandte Chemie, 2021, 133, 19363-19370. | 2.0 | 8 |
| 20 | Challenges for the theoretical description of the mechanism and kinetics of reactions catalyzed by zeolites. Journal of Catalysis, 2021, 404, 832-849. | 6.2 | 6 |
| 21 | Computational modeling predicts the stability of both Pd ⁺ and Pd ²⁺ ion-exchanged into H-CHA. Journal of Materials Chemistry A, 2021, 9, 2161-2174. | 10.3 | 20 |
| 22 | Kinetic modeling of nitrous oxide decomposition on Fe-ZSM-5 in the presence of nitric oxide based on parameters obtained from first-principles calculations. Catalysis Science and Technology, 2021, 11, 3539-3555. | 4.1 | 3 |
| 23 | Tailored catalyst microenvironments for CO2 electroreduction to multicarbon products on copper using bilayer ionomer coatings. Nature Energy, 2021, 6, 1026-1034. | 39.5 | 194 |
| 24 | On the Nature of Field-Enhanced Water Dissociation in Bipolar Membranes. Journal of Physical Chemistry C, 2021, 125, 24974-24987. | 3.1 | 17 |
| 25 | Propane Dehydrogenation and Cracking over Zn/H-MFI Prepared by Solid-State Ion Exchange of ZnCl ₂ . ACS Catalysis, 2021, 11, 14489-14506. | 11.2 | 33 |
| 26 | Propane Dehydrogenation Catalyzed by Isolated Pt Atoms in ≡SiOZn–OH Nests in Dealuminated Zeolite Beta. Journal of the American Chemical Society, 2021, 143, 21364-21378. | 13.7 | 92 |
| 27 | Electronic structure calculations permit identification of the driving forces behind frequency shifts in transition metal monocarbonyls. Physical Chemistry Chemical Physics, 2020, 22, 781-798. | 2.8 | 21 |
| 28 | Facing the Challenges of Borderline Oxidation State Assignments Using State-of-the-Art Computational Methods. Inorganic Chemistry, 2020, 59, 15410-15420. | 4.0 | 27 |
| 29 | The Role of Water in Vapor-fed Proton-Exchange-Membrane Electrolysis. Journal of the Electrochemical Society, 2020, 167, 104508. | 2.9 | 34 |
| 30 | Electrocatalytic CO2 Reduction to Fuels: Progress and Opportunities. Trends in Chemistry, 2020, 2, 825-836. | 8.5 | 104 |
| 31 | Influence of surface Sn species and hydrogen interactions on the OH group formation over spherical silica-supported tin oxide catalysts. Reaction Chemistry and Engineering, 2020, 5, 1814-1823. | 3.7 | 4 |
| 32 | Ethanol Conversion to Butadiene over Isolated Zinc and Yttrium Sites Grafted onto Dealuminated Beta Zeolite. Journal of the American Chemical Society, 2020, 142, 14674-14687. | 13.7 | 90 |
| 33 | A Perspective on the Electrochemical Oxidation of Methane to Methanol in Membrane Electrode Assemblies. ACS Energy Letters, 2020, 5, 2954-2963. | 17.4 | 45 |
| 34 | A systematic analysis of Cu-based membrane-electrode assemblies for CO ₂ reduction through multiphysics simulation. Energy and Environmental Science, 2020, 13, 3592-3606. | 30.8 | 67 |
| 35 | Scanning Nanobeam Diffraction and Energy Dispersive Spectroscopy Characterization of a Model Mn-Promoted Co/Al ₂ O ₃ Nanosphere Catalyst for Fischer–Tropsch Synthesis. ACS Catalysis, 2020, 10, 12071-12079. | 11.2 | 7 |
| 36 | Understanding Multi-Ion Transport Mechanisms in Bipolar Membranes. ACS Applied Materials & Interfaces, 2020, 12, 52509-52526. | 8.0 | 54 |

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|----|--|------|-----------|
| 37 | Experimental and Computational Studies of Carbon–Carbon Bond Formation via Ketonization and Aldol Condensation over Site-Isolated Zirconium Catalysts. ACS Catalysis, 2020, 10, 4566-4579. | 11.2 | 33 |
| 38 | Effects of Surface Roughness on the Electrochemical Reduction of CO ₂ over Cu. ACS Energy Letters, 2020, 5, 1206-1214. | 17.4 | 172 |
| 39 | Production of C ₂ /C ₃ Oxygenates from Planar Copper Nitride-Derived Mesoporous Copper via Electrochemical Reduction of CO ₂ . Chemistry of Materials, 2020, 32, 3304-3311. | 6.7 | 64 |
| 40 | Heterogenized Pyridine-Substituted Cobalt(II) Phthalocyanine Yields Reduction of CO ₂ by Tuning the Electron Affinity of the Co Center. ACS Applied Materials & Interfaces, 2020, 12, 5251-5258. | 8.0 | 41 |
| 41 | Impact of Pulsed Electrochemical Reduction of CO ₂ on the Formation of C ₂₊ Products over Cu. ACS Catalysis, 2020, 10, 12403-12413. | 11.2 | 83 |
| 42 | Understanding cation effects in electrochemical CO ₂ reduction. Energy and Environmental Science, 2019, 12, 3001-3014. | 30.8 | 433 |
| 43 | Factors and Dynamics of Cu Nanocrystal Reconstruction under CO ₂ Reduction. ACS Applied Energy Materials, 2019, 2, 7744-7749. | 5.1 | 56 |
| 44 | Mechanism and Kinetics of Isobutene Formation from Ethanol and Acetone over Zn <i>_x</i> Zr <i>_y</i> O <i>_z</i> . ACS Catalysis, 2019, 9, 10588-10604. | 11.2 | 32 |
| 45 | Synthesis of Biomassâ€Derived Ethers for Use as Fuels and Lubricants. ChemSusChem, 2019, 12, 2835-2858. | 6.8 | 56 |
| 46 | Zeolite-Catalyzed Isobutene Amination: Mechanism and Kinetics. ACS Catalysis, 2019, 9, 7012-7022. | 11.2 | 19 |
| 47 | Towards membrane-electrode assembly systems for CO ₂ reduction: a modeling study. Energy and Environmental Science, 2019, 12, 1950-1968. | 30.8 | 273 |
| 48 | Response to "Impact of Zeolite Structure on Entropic–Enthalpic Contributions to Alkane Monomolecular Cracking: An IR Operando Study― Chemistry - A European Journal, 2019, 25, 7225-7226. | 3.3 | 1 |
| 49 | Influence of Atomic Surface Structure on the Activity of Ag for the Electrochemical Reduction of CO ₂ to CO. ACS Catalysis, 2019, 9, 4006-4014. | 11.2 | 119 |
| 50 | Explaining the Incorporation of Oxygen Derived from Solvent Water into the Oxygenated Products of CO Reduction over Cu. Journal of the American Chemical Society, 2019, 141, 4191-4193. | 13.7 | 29 |
| 51 | Propanol Amination over Supported Nickel Catalysts: Reaction Mechanism and Role of the Support. ACS Catalysis, 2019, 9, 2931-2939. | 11.2 | 54 |
| 52 | Mechanism and Kinetics of Propane Dehydrogenation and Cracking over Ga/H-MFI Prepared via Vapor-Phase Exchange of H-MFI with GaCl ₃ . Journal of the American Chemical Society, 2019, 141, 1614-1627. | 13.7 | 107 |
| 53 | Challenges in Modeling Electrochemical Reaction Energetics with Polarizable Continuum Models. ACS Catalysis, 2019, 9, 920-931. | 11.2 | 153 |
| 54 | Understanding BrÃ,nsted-Acid Catalyzed Monomolecular Reactions of Alkanes in Zeolite Pores by Combining Insights from Experiment and Theory. ChemPhysChem, 2018, 19, 338-338. | 2.1 | 0 |

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| 55 | Impact of long-range electrostatic and dispersive interactions on theoretical predictions of adsorption and catalysis in zeolites. Catalysis Today, 2018, 312, 51-65. | 4.4 | 35 |
| 56 | Effects of Anion Identity and Concentration on Electrochemical Reduction of CO ₂ . ChemElectroChem, 2018, 5, 1064-1072. | 3.4 | 165 |
| 57 | Is Subsurface Oxygen Necessary for the Electrochemical Reduction of CO ₂ on Copper?. Journal of Physical Chemistry Letters, 2018, 9, 601-606. | 4.6 | 118 |
| 58 | Mechanism of CO ₂ Reduction at Copper Surfaces: Pathways to C ₂ Products. ACS Catalysis, 2018, 8, 1490-1499. | 11.2 | 608 |
| 59 | Atomistic Investigations of the Effects of Si/Al Ratio and Al Distribution on the Adsorption Selectivity of <i>n</i> -Alkanes in BrÃ,nsted-Acid Zeolites. Journal of Physical Chemistry C, 2018, 122, 9397-9410. | 3.1 | 35 |
| 60 | Understanding BrÃ,nstedâ€Acid Catalyzed Monomolecular Reactions of Alkanes in Zeolite Pores by Combining Insights from Experiment and Theory. ChemPhysChem, 2018, 19, 341-358. | 2.1 | 21 |
| 61 | Chapter 3. Understanding the Effects of Composition and Structure on the Oxygen Evolution Reaction (OER) Occurring on NiFeOx Catalysts. RSC Energy and Environment Series, 2018, , 79-116. | 0.5 | 3 |
| 62 | Reaction mechanism of the selective reduction of CO ₂ to CO by a tetraaza [Co ^{II} N ₄ H] ²⁺ complex in the presence of protons. Physical Chemistry Chemical Physics, 2018, 20, 24058-24064. | 2.8 | 15 |
| 63 | Characterization of Isolated Ga ³⁺ Cations in Ga/H-MFI Prepared by Vapor-Phase Exchange of H-MFI Zeolite with GaCl ₃ . ACS Catalysis, 2018, 8, 6106-6126. | 11.2 | 85 |
| 64 | Continuous pervaporation-assisted furfural production catalyzed by CrCl ₃ . Green Chemistry, 2018, 20, 2903-2912. | 9.0 | 22 |
| 65 | Standards and Protocols for Data Acquisition and Reporting for Studies of the Electrochemical Reduction of Carbon Dioxide. ACS Catalysis, 2018, 8, 6560-6570. | 11.2 | 250 |
| 66 | Direct Observation of the Local Reaction Environment during the Electrochemical Reduction of CO ₂ . Journal of the American Chemical Society, 2018, 140, 7012-7020. | 13.7 | 176 |
| 67 | Computational Modeling of the Nature and Role of Ga Species for Light Alkane Dehydrogenation Catalyzed by Ga/H-MFI. ACS Catalysis, 2018, 8, 6146-6162. | 11.2 | 86 |
| 68 | Effect of Alcohol Structure on the Kinetics of Etherification and Dehydration over Tungstated Zirconia. ChemSusChem, 2018, 11, 3104-3111. | 6.8 | 25 |
| 69 | The mechanism and kinetics of methyl isobutyl ketone synthesis from acetone over ion-exchanged hydroxyapatite. Journal of Catalysis, 2018, 365, 174-183. | 6.2 | 25 |
| 70 | Nonempirical Meta-Generalized Gradient Approximations for Modeling Chemisorption at Metal Surfaces. Journal of Chemical Theory and Computation, 2018, 14, 3083-3090. | 5.3 | 20 |
| 71 | Modeling gas-diffusion electrodes for CO ₂ reduction. Physical Chemistry Chemical Physics, 2018, 20, 16973-16984. | 2.8 | 305 |
| 72 | Theoretical Analysis of the Influence of Pore Geometry on Monomolecular Cracking and Dehydrogenation ofn-Butane in BrÃ,nsted Acidic Zeolites. ACS Catalysis, 2017, 7, 2685-2697. | 11.2 | 42 |

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| 73 | Production of Biomassâ€Based Automotive Lubricants by Reductive Etherification. ChemSusChem, 2017, 10, 2527-2533. | 6.8 | 31 |
| 74 | Optimizing C–C Coupling on Oxide-Derived Copper Catalysts for Electrochemical CO ₂ Reduction. Journal of Physical Chemistry C, 2017, 121, 14191-14203. | 3.1 | 254 |
| 75 | Artificial neural network based predictions of cetane number for furanic biofuel additives. Fuel, 2017, 206, 171-179. | 6.4 | 60 |
| 76 | Effects of Pore and Cage Topology on the Thermodynamics of <i>n</i> -Alkane Adsorption at BrÃ,nsted Protons in Zeolites at High Temperature. Journal of Physical Chemistry C, 2017, 121, 1618-1638. | 3.1 | 17 |
| 77 | Mechanistic insights into electrochemical reduction of CO ₂ over Ag using density functional theory and transport models. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8812-E8821. | 7.1 | 219 |
| 78 | Mechanism and kinetics of 1-dodecanol etherification over tungstated zirconia. Journal of Catalysis, 2017, 354, 13-23. | 6.2 | 25 |
| 79 | Nanoporous gold assemblies of calixarene-phosphine-capped colloids. Chemical Communications, 2017, 53, 10870-10873. | 4.1 | 4 |
| 80 | Integrated catalytic sequences for catalytic upgrading of bio-derived carboxylic acids to fuels, lubricants and chemical feedstocks. Sustainable Energy and Fuels, 2017, 1, 1805-1809. | 4.9 | 20 |
| 81 | Novel Strategies for the Production of Fuels, Lubricants, and Chemicals from Biomass. Accounts of Chemical Research, 2017, 50, 2589-2597. | 15.6 | 159 |
| 82 | Promoter Effects of Alkali Metal Cations on the Electrochemical Reduction of Carbon Dioxide. Journal of the American Chemical Society, 2017, 139, 11277-11287. | 13.7 | 653 |
| 83 | Electrochemical CO ₂ Reduction over Compressively Strained CuAg Surface Alloys with Enhanced Multi-Carbon Oxygenate Selectivity. Journal of the American Chemical Society, 2017, 139, 15848-15857. | 13.7 | 470 |
| 84 | A DFT Investigation of the Mechanism of Propene Ammoxidation over $\hat{I}\pm$ -Bismuth Molybdate. ACS Catalysis, 2017, 7, 161-176. | 11.2 | 26 |
| 85 | Kinetics of hydrogenation and hydrogenolysis of 2,5-dimethylfuran over noble metals catalysts under mild conditions. Applied Catalysis B: Environmental, 2017, 202, 557-568. | 20.2 | 41 |
| 86 | Ga[OSi(O ^t Bu) ₃ 3·THF, a thermolytic molecular precursor for high surface area gallium-containing silica materials of controlled dispersion and stoichiometry. Dalton Transactions, 2016, 45, 11025-11034. | 3.3 | 18 |
| 87 | From Sugars to Wheels: The Conversion of Ethanol to 1,3â€Butadiene over Metalâ€Promoted Magnesia‧ilicate Catalysts. ChemSusChem, 2016, 9, 1462-1472. | 6.8 | 84 |
| 88 | CO ₂ Electroreduction with Enhanced Ethylene and Ethanol Selectivity by Nanostructuring Polycrystalline Copper. ChemElectroChem, 2016, 3, 1012-1019. | 3.4 | 142 |
| 89 | Theoretical Study of 4-(Hydroxymethyl)benzoic Acid Synthesis from Ethylene and 5-(Hydroxymethyl)furoic Acid Catalyzed by Sn-BEA. ACS Catalysis, 2016, 6, 5052-5061. | 11.2 | 18 |
| 90 | Identifying the Unique Properties of α-Bi ₂ Mo ₃ O ₁₂ for the Activation of Propene. Journal of Physical Chemistry C, 2016, 120, 29233-29247. | 3.1 | 9 |

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| 91 | Growth of encapsulating carbon on supported Pt nanoparticles studied by in situ TEM. Journal of Catalysis, 2016, 338, 295-304. | 6.2 | 39 |
| 92 | Effects of Lewis acidity of metal oxide promoters on the activity and selectivity of Co-based Fischer–Tropsch synthesis catalysts. Journal of Catalysis, 2016, 338, 250-264. | 6.2 | 71 |
| 93 | The mechanism and kinetics of propene ammoxidation over α-bismuth molybdate. Journal of Catalysis, 2016, 339, 228-241. | 6.2 | 22 |
| 94 | Thermodynamics of Anharmonic Systems: Uncoupled Mode Approximations for Molecules. Journal of Chemical Theory and Computation, 2016, 12, 2861-2870. | 5.3 | 38 |
| 95 | Identification of Possible Pathways for C–C Bond Formation during Electrochemical Reduction of CO ₂ : New Theoretical Insights from an Improved Electrochemical Model. Journal of Physical Chemistry Letters, 2016, 7, 1471-1477. | 4.6 | 479 |
| 96 | Experimental and Computational Evidence of Highly Active Fe Impurity Sites on the Surface of Oxidized Au for the Electrocatalytic Oxidation of Water in Basic Media. ChemElectroChem, 2016, 3, 66-73. | 3.4 | 44 |
| 97 | Pervaporation-assisted catalytic conversion of xylose to furfural. Green Chemistry, 2016, 18, 4073-4085. | 9.0 | 28 |
| 98 | Effects of temperature and gas–liquid mass transfer on the operation of small electrochemical cells for the quantitative evaluation of CO ₂ reduction electrocatalysts. Physical Chemistry Chemical Physics, 2016, 18, 26777-26785. | 2.8 | 138 |
| 99 | Production of Hydroxyl-rich Acids from Xylose and Glucose Using Sn-BEA Zeolite. ChemistrySelect, 2016, 1, 4167-4172. | 1.5 | 27 |
| 100 | Effects of Composition and Structure of Mg/Al Oxides on Their Activity and Selectivity for the Condensation of Methyl Ketones. Industrial & Engineering Chemistry Research, 2016, 55, 10635-10644. | 3.7 | 32 |
| 101 | Propene Metathesis over Supported Tungsten Oxide Catalysts: A Study of Active Site Formation. ACS Catalysis, 2016, 6, 7728-7738. | 11.2 | 60 |
| 102 | Quantum Mechanical Screening of Single-Atom Bimetallic Alloys for the Selective Reduction of CO ₂ to C ₁ Hydrocarbons. ACS Catalysis, 2016, 6, 7769-7777. | 11.2 | 190 |
| 103 | Hydrolysis of Electrolyte Cations Enhances the Electrochemical Reduction of CO ₂ over Ag and Cu. Journal of the American Chemical Society, 2016, 138, 13006-13012. | 13.7 | 640 |
| 104 | Operando Analyses of Solar Fuels Light Absorbers and Catalysts. Electrochimica Acta, 2016, 211, 711-719. | 5.2 | 23 |
| 105 | Delignification of miscanthus using ethylenediamine (EDA) with or without ammonia and subsequent enzymatic hydrolysis to sugars. 3 Biotech, 2016, 6, 23. | 2.2 | 11 |
| 106 | Effects of Zeolite Structural Confinement on Adsorption Thermodynamics and Reaction Kinetics for Monomolecular Cracking and Dehydrogenation of <i>n</i> Butane. Journal of the American Chemical Society, 2016, 138, 4739-4756. | 13.7 | 72 |
| 107 | A systematic study on Pt based, subnanometer-sized alloy cluster catalysts for alkane dehydrogenation: effects of intermetallic interaction. Physical Chemistry Chemical Physics, 2016, 18, 10906-10917. | 2.8 | 29 |
| 108 | Production of renewable lubricants via self-condensation of methyl ketones. Green Chemistry, 2016, 18, 3577-3581. | 9.0 | 29 |

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| 109 | The role of hydrogen during Pt–Ga nanocatalyst formation. Physical Chemistry Chemical Physics, 2016, 18, 3234-3243. | 2.8 | 27 |
| 110 | Ambient-Pressure XPS Study of a Ni–Fe Electrocatalyst for the Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2016, 120, 2247-2253. | 3.1 | 336 |
| 111 | Mechanism and Kinetics of Ethanol Coupling to Butanol over Hydroxyapatite. ACS Catalysis, 2016, 6, 939-948. | 11.2 | 139 |
| 112 | Trace Levels of Copper in Carbon Materials Show Significant Electrochemical CO ₂ Reduction Activity. ACS Catalysis, 2016, 6, 202-209. | 11.2 | 143 |
| 113 | Role of ZrO ₂ in Promoting the Activity and Selectivity of Co-Based Fischer–Tropsch Synthesis Catalysts. ACS Catalysis, 2016, 6, 100-114. | 11.2 | 56 |
| 114 | Design of an artificial photosynthetic system for production of alcohols in high concentration from CO ₂ . Energy and Environmental Science, 2016, 9, 193-199. | 30.8 | 47 |
| 115 | Effects of catalyst crystal structure on the oxidation of propene to acrolein. Catalysis Today, 2016, 261, 146-153. | 4.4 | 22 |
| 116 | Non-Oxidative Dehydrogenation Pathways for the Conversion of C2-C4Alcohols to Carbonyl Compounds. ChemSusChem, 2015, 8, 3917-3917. | 6.8 | 0 |
| 117 | Upgrading Lignocellulosic Products to Dropâ€In Biofuels via Dehydrogenative Cross oupling and Hydrodeoxygenation Sequence. ChemSusChem, 2015, 8, 2609-2614. | 6.8 | 31 |
| 118 | Nonâ€Oxidative Dehydrogenation Pathways for the Conversion of C ₂ –C ₄ Alcohols to Carbonyl Compounds. ChemSusChem, 2015, 8, 3959-3962. | 6.8 | 11 |
| 119 | Adsorption Thermodynamics and Intrinsic Activation Parameters for Monomolecular Cracking of <i>n</i> -Alkanes on BrĀ,nsted Acid Sites in Zeolites. Journal of Physical Chemistry C, 2015, 119, 10427-10438. | 3.1 | 48 |
| 120 | Novel pathways for fuels and lubricants from biomass optimized using life-cycle greenhouse gas assessment. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7645-7649. | 7.1 | 101 |
| 121 | Investigations of element spatial correlation in Mn-promoted Co-based Fischer–Tropsch synthesis catalysts. Journal of Catalysis, 2015, 328, 111-122. | 6.2 | 29 |
| 122 | Catalytic Upgrading of Biomassâ€Derived Methyl Ketones to Liquid Transportation Fuel Precursors by an Organocatalytic Approach. Angewandte Chemie - International Edition, 2015, 54, 4673-4677. | 13.8 | 63 |
| 123 | Selective oxidation and oxidative dehydrogenation of hydrocarbons on bismuth vanadium molybdenum oxide. Journal of Catalysis, 2015, 325, 87-100. | 6.2 | 47 |
| 124 | Pretreatment of Miscanthus giganteus with Lime and Oxidants for Biofuels. Energy & Fuels, 2015, 29, 1743-1750. | 5.1 | 8 |
| 125 | Improved Force-Field Parameters for QM/MM Simulations of the Energies of Adsorption for Molecules in Zeolites and a Free Rotor Correction to the Rigid Rotor Harmonic Oscillator Model for Adsorption Enthalpies. Journal of Physical Chemistry C, 2015, 119, 1840-1850. | 3.1 | 110 |
| 126 | Synthesis of biomass-derived methylcyclopentane as a gasoline additive via aldol condensation/hydrodeoxygenation of 2,5-hexanedione. Green Chemistry, 2015, 17, 2393-2397. | 9.0 | 64 |

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| 127 | The Role of Metal Halides in Enhancing the Dehydration of Xylose to Furfural. ChemCatChem, 2015, 7, 479-489. | 3.7 | 74 |
| 128 | Identification of Highly Active Fe Sites in (Ni,Fe)OOH for Electrocatalytic Water Splitting. Journal of the American Chemical Society, 2015, 137, 1305-1313. | 13.7 | 2,018 |
| 129 | p-Type Transparent Conducting Oxide/n-Type Semiconductor Heterojunctions for Efficient and Stable Solar Water Oxidation. Journal of the American Chemical Society, 2015, 137, 9595-9603. | 13.7 | 122 |
| 130 | Role of Catalyst Preparation on the Electrocatalytic Activity of Ni _{1–<i>x</i>} Fe _{<i>x</i>} OOH for the Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2015, 119, 18303-18316. | 3.1 | 114 |
| 131 | Effects of electrolyte, catalyst, and membrane composition and operating conditions on the performance of solar-driven electrochemical reduction of carbon dioxide. Physical Chemistry Chemical Physics, 2015, 17, 18924-18936. | 2.8 | 312 |
| 132 | SnCl ₄ -catalyzed isomerization/dehydration of xylose and glucose to furanics in water. Catalysis Science and Technology, 2015, 5, 2839-2847. | 4.1 | 89 |
| 133 | Highly Selective Condensation of Biomassâ€Derived Methyl Ketones as a Source of Aviation Fuel. ChemSusChem, 2015, 8, 1726-1736. | 6.8 | 105 |
| 134 | Nitric-acid hydrolysis of Miscanthus giganteus to sugars fermented to bioethanol. Biotechnology and Bioprocess Engineering, 2015, 20, 304-314. | 2.6 | 17 |
| 135 | An Atomic-Scale View of the Nucleation and Growth of Graphene Islands on Pt Surfaces. Journal of Physical Chemistry C, 2015, 119, 7124-7129. | 3.1 | 21 |
| 136 | Effects of Fe Electrolyte Impurities on Ni(OH) ₂ /NiOOH Structure and Oxygen Evolution Activity. Journal of Physical Chemistry C, 2015, 119, 7243-7254. | 3.1 | 806 |
| 137 | Tailoring Metal-Porphyrin-Like Active Sites on Graphene to Improve the Efficiency and Selectivity of Electrochemical CO ₂ Reduction. Journal of Physical Chemistry C, 2015, 119, 21345-21352. | 3.1 | 79 |
| 138 | Thermodynamic and achievable efficiencies for solar-driven electrochemical reduction of carbon dioxide to transportation fuels. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6111-8. | 7.1 | 103 |
| 139 | Differential Electrochemical Mass Spectrometer Cell Design for Online Quantification of Products Produced during Electrochemical Reduction of CO ₂ . Analytical Chemistry, 2015, 87, 8013-8020. | 6.5 | 83 |
| 140 | Wavefunction stability analysis without analytical electronic Hessians: application to orbital-optimised second-order MĄ̃ļler–Plesset theory and W10-containing density functionals. Molecular Physics, 2015, 113, 1802-1808. | 1.7 | 30 |
| 141 | Electrochemical Study of the Energetics of the Oxygen Evolution Reaction at Nickel Iron (Oxy)Hydroxide Catalysts. Journal of Physical Chemistry C, 2015, 119, 19022-19029. | 3.1 | 282 |
| 142 | Ethane and propane dehydrogenation over PtIr/Mg(Al)O. Applied Catalysis A: General, 2015, 506, 25-32. | 4.3 | 64 |
| 143 | An Investigation into the Effects of Mn Promotion on the Activity and Selectivity of Co/SiO ₂ for Fischer–Tropsch Synthesis: Evidence for Enhanced CO Adsorption and Dissociation. ACS Catalysis, 2015, 5, 5888-5903. | 11.2 | 138 |
| 144 | The Role of Hydroxyl Group Acidity on the Activity of Silicaâ€Supported Secondary Amines for the Selfâ€Condensation of <i>n</i> à€Butanal. ChemSusChem, 2015, 8, 466-472. | 6.8 | 30 |

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| 145 | Advances in molecular quantum chemistry contained in the Q-Chem 4 program package. Molecular Physics, 2015, 113, 184-215. | 1.7 | 2,561 |
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