# O V Safonova

## List of Publications by Year in descending order



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|---|---|---|---|
| 146 papers | 7,561 citations | 44069 48 h-index | 62596 80 g-index |
| 159 all docs | 159 docs citations | 159 times ranked | 8378 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Stability and Reactivity of Ïµâˆ'Ï‡â˜Î¸ Iron Carbide Catalyst Phases in Fischerâˆ'Tropsch Synthesis: Controlling Î¼<sub>C</sub>. Journal of the American Chemical Society, 2010, 132, 14928-14941. | 13.7 | 426 |
| 2 | Atomic-scale engineering of indium oxide promotion by palladium for methanol production via CO2 hydrogenation. Nature Communications, 2019, 10, 3377. | 12.8 | 261 |
| 3 | Single Site Cobalt Substitution in 2D Molybdenum Carbide (MXene) Enhances Catalytic Activity in the Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2019, 141, 17809-17816. | 13.7 | 259 |
| 4 | Structure and catalytic performance of Pt-promoted alumina-supported cobalt catalysts under realistic conditions of Fischerâ€"Tropsch synthesis. Journal of Catalysis, 2011, 277, 14-26. | 6.2 | 211 |
| 5 | Activation of Oxygen on Gold/Alumina Catalysts: In Situ High-Energy-Resolution Fluorescence and Time-Resolved X-ray Spectroscopy. Angewandte Chemie - International Edition, 2006, 45, 4651-4654. | 13.8 | 208 |
| 6 | Isolated Zr Surface Sites on Silica Promote Hydrogenation of CO<sub>2</sub> to CH<sub>3</sub>OH in Supported Cu Catalysts. Journal of the American Chemical Society, 2018, 140, 10530-10535. | 13.7 | 170 |
| 7 | Catalytically Active and Spectator Ce<sup>3+</sup> in Ceriaâ€Supported Metal Catalysts. Angewandte Chemie - International Edition, 2015, 54, 8728-8731. | 13.8 | 168 |
| 8 | Identification of CO Adsorption Sites in Supported Pt Catalysts Using High-Energy-Resolution Fluorescence Detection X-ray Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 16162-16164. | 2.6 | 163 |
| 9 | Highly Productive Propane Dehydrogenation Catalyst Using Silica-Supported Gaâ€"Pt Nanoparticles Generated from Single-Sites. Journal of the American Chemical Society, 2018, 140, 11674-11679. | 13.7 | 161 |
| 10 | A von Hamos x-ray spectrometer based on a segmented-type diffraction crystal for single-shot x-ray emission spectroscopy and time-resolved resonant inelastic x-ray scattering studies. Review of Scientific Instruments, 2012, 83, 103105. | 1.3 | 158 |
| 11 | Nanostructuring unlocks high performance of platinum single-atom catalysts for stable vinyl chloride production. Nature Catalysis, 2020, 3, 376-385. | 34.4 | 122 |
| 12 | Polymerization of Ethylene by Silicaâ€Supported Dinuclear Cr<sup>III</sup> Sites through an Initiation Step Involving Cï£¿H Bond Activation. Angewandte Chemie - International Edition, 2014, 53, 1872-1876. | 13.8 | 120 |
| 13 | Generating Highly Active Partially Oxidized Platinum during Oxidation of Carbon Monoxide over Pt/Al<sub>2</sub>O<sub>3</sub>: In Situ, Timeâ€Resolved, and Highâ€Energyâ€Resolution Xâ€Ray Absorption Spectroscopy. Angewandte Chemie - International Edition, 2008, 47, 9260-9264. | 13.8 | 119 |
| 14 | Silica-supported isolated gallium sites as highly active, selective and stable propane dehydrogenation catalysts. Chemical Science, 2017, 8, 2661-2666. | 7.4 | 119 |
| 15 | Proton transfers are key elementary steps in ethylene polymerization on isolated chromium(III) silicates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11624-11629. | 7.1 | 118 |
| 16 | Câ€"H Activation on Co,O Sites: Isolated Surface Sites versus Molecular Analogs. Journal of the American Chemical Society, 2016, 138, 14987-14997. | 13.7 | 117 |
| 17 | Design of Single Gold Atoms on Nitrogenâ€Doped Carbon for Molecular Recognition in Alkyne Semiâ€Hydrogenation. Angewandte Chemie - International Edition, 2019, 58, 504-509. | 13.8 | 111 |
| 18 | CO and NO2 gas sensitivity of nanocrystalline tin dioxide thin films doped with Pd, Ru and Rh. Materials Science and Engineering C, 2002, 21, 105-111. | 7.3 | 110 |

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|---|---|---|---|
| 19 | In situXRD investigation of the evolution of alumina-supported cobaltcatalysts under realistic conditions of Fischer-Tropsch synthesis. Chemical Communications, 2010, 46, 788-790. | 4.1 | 110 |
| 20 | Polyhedral CeO<sub>2</sub> Nanoparticles: Size-Dependent Geometrical and Electronic Structure. Journal of Physical Chemistry C, 2012, 116, 7312-7317. | 3.1 | 108 |
| 21 | Atomâ€byâ€Atom Resolution of Structureâ€“Function Relations over Lowâ€Nuclearity Metal Catalysts. Angewandte Chemie - International Edition, 2019, 58, 8724-8729. | 13.8 | 108 |
| 22 | SNBL, a dedicated beamline for combinedin situX-ray diffraction, X-ray absorption and Raman scattering experiments. Phase Transitions, 2011, 84, 726-732. | 1.3 | 107 |
| 23 | Valence-to-Core X-ray Emission Spectroscopy Identification of Carbide Compounds in Nanocrystalline Cr Coatings Deposited from Cr(III) Electrolytes Containing Organic Substances. Journal of Physical Chemistry B, 2006, 110, 23192-23196. | 2.6 | 104 |
| 24 | Following the structure of copper-zinc-alumina across the pressure gap in carbon dioxide hydrogenation. Nature Catalysis, 2021, 4, 488-497. | 34.4 | 100 |
| 25 | Nanostructure of nickel-promoted indium oxide catalysts drives selectivity in CO2 hydrogenation. Nature Communications, 2021, 12, 1960. | 12.8 | 90 |
| 26 | Identification of the active species in the working alumina-supported cobalt catalyst under various conditions of Fischerâ€“Tropsch synthesis. Catalysis Today, 2011, 164, 62-67. | 4.4 | 87 |
| 27 | Evolution of structural properties of iron oxide nano particles during temperature treatment from 250ÂÂ°Câ€“900ÂÂ°C: X-ray diffraction and Fe K-shell pre-edge X-ray absorption study. Current Applied Physics, 2012, 12, 817-825. | 2.4 | 80 |
| 28 | Introducing Time Resolution to Detect Ce<sup>3+</sup> Catalytically Active Sites at the Pt/CeO<sub>2</sub> Interface through Ambient Pressure X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 102-108. | 4.6 | 80 |
| 29 | Key activity descriptors of nickel-iron oxygen evolution electrocatalysts in the presence of alkali metal cations. Nature Communications, 2020, 11, 6181. | 12.8 | 80 |
| 30 | The Effect of the State of Pd on Methane Combustion in Pd-Doped LaFeO<sub>3</sub>. Journal of Physical Chemistry C, 2010, 114, 4584-4594. | 3.1 | 78 |
| 31 | Silica-supported, narrowly distributed, subnanometric Ptâ€“Zn particles from single sites with high propane dehydrogenation performance. Chemical Science, 2020, 11, 1549-1555. | 7.4 | 77 |
| 32 | Controlling the speciation and reactivity of carbon-supported gold nanostructures for catalysed acetylene hydrochlorination. Chemical Science, 2019, 10, 359-369. | 7.4 | 76 |
| 33 | Infrared Studies on Bimetallic Copper/Nickel Catalysts Supported on Zirconia and Ceria/Zirconia. Catalysis Letters, 2013, 143, 517-530. | 2.6 | 74 |
| 34 | Dopants in nanocrystalline tin dioxide. Russian Chemical Bulletin, 2003, 52, 1217-1238. | 1.5 | 68 |
| 35 | Low-Temperature CO Oxidation over Combustion Made Fe- and Cr-Doped Co<sub>3</sub>O<sub>4</sub> Catalysts: Role of Dopantâ€™s Nature toward Achieving Superior Catalytic Activity and Stability. Journal of Physical Chemistry C, 2017, 121, 15256-15265. | 3.1 | 67 |
| 36 | Low Temperature Activation of Supported Metathesis Catalysts by Organosilicon Reducing Agents. ACS Central Science, 2016, 2, 569-576. | 11.3 | 65 |

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|---|---|---|---|
| 37 | Chemical composition and structural transformations of amorphous chromium coatings electrodeposited from Cr(III) electrolytes. Electrochimica Acta, 2010, 56, 145-153. | 5.2 | 61 |
| 38 | Single-Atom-Substituted Mo<sub>2</sub>CT<sub>x</sub>:Fe-Layered Carbide for Selective Oxygen Reduction to Hydrogen Peroxide: Tracking the Evolution of the MXene Phase. Journal of the American Chemical Society, 2021, 143, 5771-5778. | 13.7 | 61 |
| 39 | Scientific Opportunities for Heterogeneous Catalysis Research at the SuperXAS and SNBL Beam Lines. Chimia, 2012, 66, 699. | 0.6 | 60 |
| 40 | On the State of Pd in Perovskite-Type Oxidation Catalysts of Composition A(B,Pd)O<sub>3Â±Î´</sub> (A =) Tj ETQq0 0 0 rgBT /Overlock | 6.7 | 59 |
| 41 | Structure of copper sites in zeolites examined by Fourier and wavelet transform analysis of EXAFS. Chemical Science, 2020, 11, 5299-5312. | 7.4 | 59 |
| 42 | Effect of combined Pd and Cu doping on microstructure, electrical and gas sensor properties of nanocrystalline tin dioxide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 85, 43-49. | 3.5 | 56 |
| 43 | Mechanism of the Oxidationâ^'Reduction of the MoVSbNbO Catalyst:Â In Operando X-ray Absorption Spectroscopy and Electrical Conductivity Measurements. Journal of Physical Chemistry B, 2006, 110, 23962-23967. | 2.6 | 55 |
| 44 | Identifying Dynamic Structural Changes of Active Sites in Ptâ€“Ni Bimetallic Catalysts Using Multimodal Approaches. ACS Catalysis, 2018, 8, 4120-4131. | 11.2 | 54 |
| 45 | Preserved in a Shell: Highâ€Performance Grapheneâ€Confined Ruthenium Nanoparticles in Acetylene Hydrochlorination. Angewandte Chemie - International Edition, 2019, 58, 12297-12304. | 13.8 | 53 |
| 46 | 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 |
| 47 | Cr local environment by valence-to-core X-ray emission spectroscopy. Journal of Analytical Atomic Spectrometry, 2009, 24, 215-223. | 3.0 | 52 |
| 48 | Surface molecular imprinting over supported metal catalysts for size-dependent selective hydrogenation reactions. Nature Catalysis, 2021, 4, 595-606. | 34.4 | 52 |
| 49 | High CO<sub>2</sub> Storage Capacity in Alkaliâ€Promoted Hydrotalciteâ€Based Material: In Situ Detection of Reversible Formation of Magnesium Carbonate. Chemistry - A European Journal, 2010, 16, 12694-12700. | 3.3 | 51 |
| 50 | Mechanism of sensing CO in nitrogen by nanocrystalline SnO2 and SnO2(Pd) studied by MÃ¶ssbauer spectroscopy and conductance measurements. Journal of Materials Chemistry, 2002, 12, 1174-1178. | 6.7 | 49 |
| 51 | The nature of the active site in the Fe-ZSM-5/N2O system studied by (resonant) inelastic X-ray scattering. Catalysis Today, 2007, 126, 127-134. | 4.4 | 49 |
| 52 | High energy resolution off-resonant spectroscopy at sub-second time resolution: (Pt(acac)2) decomposition. Chemical Communications, 2012, 48, 10898. | 4.1 | 48 |
| 53 | Effect of cobalt loading on structure and catalytic behavior of CoO x /SiO 2 in CO 2 -assisted dehydrogenation of ethane. Applied Catalysis A: General, 2018, 552, 77-85. | 4.3 | 48 |
| 54 | Redox State Dynamics at the Surface of MoVTe(Sb)NbO M1 Phase in Selective Oxidation of Light Alkanes. Topics in Catalysis, 2013, 56, 1952-1962. | 2.8 | 47 |

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| 55 | Bipyridine Periodic Mesoporous Organosilica: A Solid Ligand for the Iridiumâ€Catalyzed Borylation of Cï£¿H Bonds. Advanced Synthesis and Catalysis, 2014, 356, 673-679. | 4.3 | 47 |
| 56 | Pd<sub>2</sub>Au<sub>36</sub>(SR)<sub>24</sub>cluster: structure studies. Nanoscale, 2015, 7, 17012-17019. | 5.6 | 46 |
| 57 | Oxidation State of Ce in CeO<sub>2</sub>-Promoted Rh/Al<sub>2</sub>O<sub>3</sub> Catalysts during Methane Steam Reforming: H<sub>2</sub>O Activation and Alumina Stabilization. ACS Catalysis, 2013, 3, 1956-1964. | 11.2 | 44 |
| 58 | Subsecond and in Situ Chemical Speciation of Pt/Al<sub>2</sub>O<sub>3</sub> during Oxidationâ€“Reduction Cycles Monitored by High-Energy Resolution Off-Resonant X-ray Spectroscopy. Journal of the American Chemical Society, 2013, 135, 19071-19074. | 13.7 | 43 |
| 59 | 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 |
| 60 | Ultra-Low-Temperature CO Oxidation Activity of Octahedral Site Cobalt Species in Co<sub>3</sub>O<sub>4</sub> Based Catalysts: Unravelling the Origin of the Unique Catalytic Property. Journal of Physical Chemistry C, 2019, 123, 19557-19571. | 3.1 | 41 |
| 61 | On the Presence of Fe(IV) in Fe-ZSM-5 and FeSrO3-xUnequivocal Detection of the 3d4Spin System by Resonant Inelastic X-ray Scattering. Journal of Physical Chemistry B, 2006, 110, 18104-18107. | 2.6 | 36 |
| 62 | Reaction between Thiophene and Ni Nanoparticles Supported on SiO<sub>2</sub>or ZnO: In Situ Synchrotron X-ray Diffraction Study. Journal of Physical Chemistry C, 2009, 113, 17064-17069. | 3.1 | 36 |
| 63 | Carrierâ€Induced Modification of Palladium Nanoparticles on Porous Boron Nitride for Alkyne Semiâ€Hydrogenation. Angewandte Chemie - International Edition, 2020, 59, 19639-19644. | 13.8 | 36 |
| 64 | Potentialâ€Induced Spin Changes in Fe/N/C Electrocatalysts Assessed by In Situ Xâ€ray Emission Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 11707-11712. | 13.8 | 36 |
| 65 | CO2 hydrogenation on Cu-catalysts generated from ZnII single-sites: Enhanced CH3OH selectivity compared to Cu/ZnO/Al2O3. Journal of Catalysis, 2021, 394, 266-272. | 6.2 | 35 |
| 66 | Electronic and Geometric Structure of Ce<sup>3+</sup> Forming Under Reducing Conditions in Shaped Ceria Nanoparticles Promoted by Platinum. Journal of Physical Chemistry C, 2014, 118, 1974-1982. | 3.1 | 34 |
| 67 | Stable Palladium Oxide Clusters Encapsulated in Silicalite-1 for Complete Methane Oxidation. ACS Catalysis, 2021, 11, 7371-7382. | 11.2 | 34 |
| 68 | Flame Spray Pyrolysis as a Synthesis Platform to Assess Metal Promotion in In<sub>2</sub>O<sub>3</sub>â€Catalyzed CO<sub>2</sub> Hydrogenation. Advanced Energy Materials, 2022, 12, . | 19.5 | 34 |
| 69 | Structure of the methanol synthesis catalyst determined by in situHERFD XAS and EXAFS. Catalysis Science and Technology, 2012, 2, 373-378. | 4.1 | 33 |
| 70 | Site preference and local geometry of Sc in garnets: Part II. The crystal-chemistry of octahedral Sc in the andradite-Ca3Sc2Si3O12 join. American Mineralogist, 2006, 91, 1240-1248. | 1.9 | 32 |
| 71 | The oxidation state of copper in bimetallic (Ptâ€“Cu, Pdâ€“Cu) catalysts during water denitration. Catalysis Science and Technology, 2012, 2, 794. | 4.1 | 32 |
| 72 | Dynamics and Site Isolation: Keys to High Propane Dehydrogenation Performance of Silica-Supported PtGa Nanoparticles. Jacs Au, 2021, 1, 1445-1458. | 7.9 | 32 |

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|---|---|---|---|
| 73 | Silica-Supported PdGa Nanoparticles: Metal Synergy for Highly Active and Selective CO<sub>2</sub>-to-CH<sub>3</sub>OH Hydrogenation. Jacs Au, 2021, 1, 450-458. | 7.9 | 31 |
| 74 | Characterization of the H2 sensing mechanism of Pd-promoted SnO2 by XAS in operando conditions. Chemical Communications, 2005, , 5202. | 4.1 | 30 |
| 75 | Sulfidation Mechanism of Pure and Cu-Doped ZnO Nanoparticles at Moderate Temperature: TEM and In Situ XRD Studies. Journal of Physical Chemistry C, 2012, 116, 14423-14430. | 3.1 | 30 |
| 76 | Enhanced CH<sub>3</sub>OH selectivity in CO<sub>2</sub> hydrogenation using Cu-based catalysts generated via SOMC from Ga<sup>III</sup> single-sites. Chemical Science, 2020, 11, 7593-7598. | 7.4 | 30 |
| 77 | Local environment of vanadium in V/Al/O-mixed oxide catalyst for propane ammoxidation: Characterization by in situ valence-to-core X-ray emission spectroscopy and X-ray absorption spectroscopy. Journal of Catalysis, 2009, 268, 156-164. | 6.2 | 29 |
| 78 | In situ XAS with high-energy resolution: The changing structure of platinum during the oxidation of carbon monoxide. Catalysis Today, 2009, 145, 300-306. | 4.4 | 29 |
| 79 | Redispersion of Gold Multiple-Twinned Particles during Liquid-Phase Hydrogenation. ACS Catalysis, 2012, 2, 1394-1403. | 11.2 | 29 |
| 80 | In situ hard X-ray quick RIXS to probe dynamic changes in the electronic structure of functional materials. Journal of Electron Spectroscopy and Related Phenomena, 2013, 188, 161-165. | 1.7 | 29 |
| 81 | Silica-supported isolated molybdenum di-oxo species: formation and activation with organosilicon agent for olefin metathesis. Chemical Communications, 2018, 54, 3989-3992. | 4.1 | 28 |
| 82 | Pushing up the magnetisation values for iron oxide nanoparticles via zinc doping: X-ray studies on the particle's sub-nano structure of different synthesis routes. Physical Chemistry Chemical Physics, 2016, 18, 25221-25229. | 2.8 | 27 |
| 83 | On the mechanism of rapid metal exchange between thiolate-protected gold and gold/silver clusters: a time-resolved in situ XAFS study. Physical Chemistry Chemical Physics, 2018, 20, 5312-5318. | 2.8 | 27 |
| 84 | Magnetic manipulation of molecules on a non-magnetic catalytic surface. Nanoscale, 2013, 5, 8462. | 5.6 | 26 |
| 85 | Deciphering the Phillips Catalyst by Orbital Analysis and Supervised Machine Learning from Cr Pre-edge XANES of Molecular Libraries. Journal of the American Chemical Society, 2021, 143, 7326-7341. | 13.7 | 26 |
| 86 | Decomposition of Carbon Dioxide at 500 Â°C over Reduced Iron, Cobalt, Nickel, and Zinc Ferrites: A Combined XANESâ^'XRD Study. Journal of Physical Chemistry C, 2009, 113, 19568-19577. | 3.1 | 25 |
| 87 | Simultaneous generation of mild acidic functionalities and small supported Ir NPs from alumina-supported well-defined iridium siloxide. Journal of Catalysis, 2015, 321, 81-89. | 6.2 | 24 |
| 88 | Well-Defined Silica-Supported Tungsten(IV)â€“Oxo Complex: Olefin Metathesis Activity, Initiation, and Role of BrÃ¸nsted Acid Sites. Journal of the American Chemical Society, 2019, 141, 18286-18292. | 13.7 | 24 |
| 89 | In Situ XRD Detection of Reversible Dawsonite Formation on Alkali Promoted Alumina: A Cheap Sorbent for CO<sub>2</sub> Capture. European Journal of Inorganic Chemistry, 2010, 2010, 2461-2464. | 2.0 | 23 |
| 90 | Zr(IV) surface sites determine CH3OH formation rate on Cu/ZrO2/SiO2 - CO2 hydrogenation catalysts. Chinese Journal of Catalysis, 2019, 40, 1741-1748. | 14.0 | 22 |

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|---|---|---|---|
| 91 | Design of Single Gold Atoms on Nitrogenâ€Doped Carbon for Molecular Recognition in Alkyne Semiâ€Hydrogenation. Angewandte Chemie, 2019, 131, 514-519. | 2.0 | 22 |
| 92 | Reducibility and Dispersion Influence the Activity in Silica-Supported Vanadium-Based Catalysts for the Oxidative Dehydrogenation of Propane: The Case of Sodium Decavanadate. ACS Catalysis, 2020, 10, 2314-2321. | 11.2 | 22 |
| 93 | Two successive effects in the interaction of nanocrystalline SnO2 thin films with reducing gases. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 77, 159-166. | 3.5 | 21 |
| 94 | Understanding the anomalous behavior of Vegard's law in Ce<sub>1â^'x</sub>M<sub>x</sub>O<sub>2</sub> (M = Sn and Ti; 0 < x â‰¤ 0.5) solid solutions. Physical Chemistry Chemical Physics, 2016, 18, 13974-13983. | 2.8 | 21 |
| 95 | Size-Selective Reactivity of Subnanometer Ag<sub>4</sub> and Ag<sub>16</sub> Clusters on a TiO<sub>2</sub> Surface. Journal of Physical Chemistry C, 2017, 121, 6614-6625. | 3.1 | 21 |
| 96 | Understanding the mechanism of synthesis of Pt<sub>3</sub>Co intermetallic nanoparticlesviapreferential chemical vapor deposition. Journal of Materials Chemistry A, 2017, 5, 24396-24406. | 10.3 | 21 |
| 97 | Câ€“H Activation and Proton Transfer Initiate Alkene Metathesis Activity of the Tungsten(IV)â€“Oxo Complex. Journal of the American Chemical Society, 2018, 140, 11395-11401. | 13.7 | 21 |
| 98 | Atomâ€byâ€Atom Resolution of Structureâ€“Function Relations over Lowâ€Nuclearity Metal Catalysts. Angewandte Chemie, 2019, 131, 8816-8821. | 2.0 | 21 |
| 99 | Elucidating the Oxygen Activation Mechanism on Ceria-Supported Copper-Oxo Species Using Time-Resolved X-ray Absorption Spectroscopy. ACS Catalysis, 2020, 10, 4692-4701. | 11.2 | 21 |
| 100 | Low-Temperature Propylene Epoxidation Activity of CuOâ€“CeO<sub>2</sub> Catalyst with CO + O<sub>2</sub>: Role of Metalâ€“Support Interaction on the Reducibility and Catalytic Property of CuO<sub>x</sub> Species. Journal of Physical Chemistry C, 2020, 124, 14131-14146. | 3.1 | 20 |
| 101 | Enhanced Reducibility of the Ceriaâ€“Tin Oxide Solid Solution Modifies the CO Oxidation Mechanism at the Platinumâ€“Oxide Interface. ACS Catalysis, 2021, 11, 9435-9449. | 11.2 | 19 |
| 102 | Study of N-bridged diiron phthalocyanine relevant to methane oxidation: Insight into oxidation and spin states from high resolution 1s core hole X-ray spectroscopy. Applied Catalysis B: Environmental, 2012, 113-114, 43-51. | 20.2 | 18 |
| 103 | Unwanted effects of X-rays in surface grafted copper(<scp>ii</scp>) organometallics and copper exchanged zeolites, how they manifest, and what can be done about them. Physical Chemistry Chemical Physics, 2020, 22, 6826-6837. | 2.8 | 18 |
| 104 | Chemical state of phosphorus in amorphous Niâ€“Feâ€“P electroplates. Surface and Coatings Technology, 2015, 275, 239-244. | 4.8 | 17 |
| 105 | Reply to Peters et al.: Proton transfers are plausible initiation and termination steps on Cr(III) sites in ethylene polymerization. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4162-3. | 7.1 | 16 |
| 106 | Time-Resolved XAS Provides Direct Evidence for Oxygen Activation on Cationic Iron in a Bimetallic Pt-FeO<sub>x</sub>/Al<sub>2</sub>O<sub>3</sub> Catalyst. ACS Catalysis, 2021, 11, 11793-11805. | 11.2 | 16 |
| 107 | Kinetics of Lifetime Changes in Bimetallic Nanocatalysts Revealed by Quick Xâ€ray Absorption Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 12430-12434. | 13.8 | 15 |
| 108 | In situ study of low-temperature dry reforming of methane over La2Ce2O7 and LaNiO3 mixed oxides. Applied Catalysis B: Environmental, 2022, 315, 121528. | 20.2 | 15 |

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|---|---|---|---|
| 109 | Elucidation of Metal Local Environments in Singleâ€Atom Catalysts Based on Carbon Nitrides. Small, 2022, 18, . | 10.0 | 15 |
| 110 | Effect of heat treatment on the electrocatalytic properties of nano-structured Ru cores with Pt shells. Journal of Electroanalytical Chemistry, 2013, 704, 57-66. | 3.8 | 14 |
| 111 | Atomically dispersed rhodium on a support: the influence of a metal precursor and a support. Physical Chemistry Chemical Physics, 2014, 16, 26553-26560. | 2.8 | 14 |
| 112 | Synthesis and Properties of Monolayer-Protected Co<sub>x</sub>(SC<sub>2</sub>H<sub>4</sub>Ph)<sub>m</sub> Nanoclusters. Journal of Physical Chemistry C, 2017, 121, 10948-10956. | 3.1 | 14 |
| 113 | Fluorescence-detected XAS with sub-second time resolution reveals new details about the redox activity of Pt/CeO<sub>2</sub> catalyst. Journal of Synchrotron Radiation, 2018, 25, 989-997. | 2.4 | 14 |
| 114 | CO 2 â€Promoted Catalytic Process Forming Higher Alcohols with Tunable Nature at Record Productivity. ChemCatChem, 2020, 12, 2732-2744. | 3.7 | 14 |
| 115 | Redox Dynamics of Active VO<sub>x</sub> Sites Promoted by TiO<sub>x</sub> during Oxidative Dehydrogenation of Ethanol Detected by Operando Quick XAS. Jacs Au, 2022, 2, 762-776. | 7.9 | 14 |
| 116 | Temperature and Reaction Environment Influence the Nature of Platinum Species Supported on Ceria. ACS Catalysis, 2021, 11, 13041-13049. | 11.2 | 13 |
| 117 | Fine tuning of gold electronic structure by IRMOF post-synthetic modification. RSC Advances, 2013, 3, 12043. | 3.6 | 12 |
| 118 | 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 |
| 119 | Sensor Properties of Pd-Doped SnO2 Films Deposited by Laser Ablation. Inorganic Materials, 2002, 38, 374-379. | 0.8 | 11 |
| 120 | X-ray emission spectroscopy: highly sensitive techniques for time-resolved probing of cerium reactivity under catalytic conditions. Physical Chemistry Chemical Physics, 2016, 18, 32486-32493. | 2.8 | 11 |
| 121 | Carrierâ€Induced Modification of Palladium Nanoparticles on Porous Boron Nitride for Alkyne Semiâ€Hydrogenation. Angewandte Chemie, 2020, 132, 19807-19812. | 2.0 | 11 |
| 122 | Precursor Nuclearity and Ligand Effects in Atomicallyâ€Dispersed Heterogeneous Iron Catalysts for Alkyne Semiâ€Hydrogenation. ChemCatChem, 2021, 13, 3247-3256. | 3.7 | 11 |
| 123 | A high-temperature furnace forin situsynchrotron X-ray spectroscopy under controlled atmospheric conditions. Journal of Synchrotron Radiation, 2008, 15, 489-494. | 2.4 | 10 |
| 124 | Protagonists and spectators during photocatalytic solar water splitting with SrTaO<sub>x</sub>N<sub>y</sub> oxynitride. Journal of Materials Chemistry A, 2022, 10, 2374-2387. | 10.3 | 10 |
| 125 | Lignin Compounds to Monoaromatics: Selective Cleavage of Câ^'O Bonds over a Brominated Ruthenium Catalyst. Angewandte Chemie, 2021, 133, 12621-12631. | 2.0 | 10 |
| 126 | Assessing the environmental benefit of palladium-based single-atom heterogeneous catalysts for Sonogashira coupling. Green Chemistry, 2022, 24, 6879-6888. | 9.0 | 10 |

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|---|---|---|---|
| 127 | Intracluster Atomic and Electronic Structural Heterogeneities in Supported Nanoscale Metal Catalysts. Journal of Physical Chemistry C, 2015, 119, 25615-25627. | 3.1 | 9 |
| 128 | High Energy Resolution Fluorescence Detection X-Ray Absorption Spectroscopy: Detection of Adsorption Sites in Supported Metal Catalysts. AIP Conference Proceedings, 2007, , . | 0.4 | 8 |
| 129 | Elucidation of the chemical state of phosphorus and boron in crystallographically amorphous nickel electroplates. Russian Journal of Electrochemistry, 2010, 46, 1223-1229. | 0.9 | 8 |
| 130 | Buildup and structure of theInSeâˆ•Ptinterface studied by angle-resolved photoemission and x-ray absorption spectroscopy. Physical Review B, 2006, 73, . | 3.2 | 7 |
| 131 | Machine learning powered by principal component descriptors as the key for sorted structural fit of XANES. Physical Chemistry Chemical Physics, 2021, 23, 17873-17887. | 2.8 | 7 |
| 132 | Buildup of the InSe/M interface (MPd, Au) studied by X-ray photoemission and X-ray absorption spectroscopy. Surface Science, 2007, 601, 3778-3783. | 1.9 | 6 |
| 133 | 2.8NiOâ€“H1.8Ni0.6(OH)MoO4â€”Novel nanocomposite material for the reactive adsorption of sulfur-containing molecules at moderate temperature. Applied Catalysis B: Environmental, 2011, 106, 460-468. | 20.2 | 6 |
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