

Martin Muhler

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

556
papers

25,878
citations

77
h-index

136
g-index

592
ext. papers

28,574
ext. citations

6.2
avg, IF

7.08
L-index

#	Paper	IF	Citations
556	3D atomic-scale imaging of mixed Co-Fe spinel oxide nanoparticles during oxygen evolution reaction.. <i>Nature Communications</i> , 2022 , 13, 179	17.4	15
555	Oxygen vacancies-enriched Ta-doped Bi ₂ WO ₆ with Pt as cocatalyst for boosting the dehydrogenation of benzyl alcohol in water. <i>Applied Surface Science</i> , 2022 , 571, 151370	6.7	0
554	Optical absorption spectroscopy of reactive oxygen and nitrogen species in a surface dielectric barrier discharge. <i>Journal Physics D: Applied Physics</i> , 2022 , 55, 215205	3	0
553	Catalytic effects for cellulose-based model fuels under low and high heating rate in air and oxy-fuel atmosphere. <i>Fuel</i> , 2022 , 324, 124437	7.1	1
552	Highly dispersed Pd clusters/nanoparticles encapsulated in MOFs via in situ auto-reduction method for aqueous phenol hydrogenation. <i>Journal of Materials Science and Technology</i> , 2021 , 109, 167-167	9.1	0
551	Photocatalytic Deacon Reaction over SrTiO ₃ . <i>ChemPhotoChem</i> , 2021 , 5, 521-525	3.3	0
550	Highly Efficient and Selective Aerobic Oxidation of Cinnamyl Alcohol under Visible Light over Pt-Loaded NaNbO ₃ Enriched with Oxygen Vacancies by Ni Doping. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 5422-5429	8.3	6
549	One-Step Synthesis of Core-Shell-Structured Mixed-Metal CPO-27(Cu,Co) and Investigations on Its Controlled Thermal Transformation. <i>European Journal of Inorganic Chemistry</i> , 2021 , 2021, 2257-2261	2.3	1
548	A Career in Catalysis: Robert Schlögl. <i>ACS Catalysis</i> , 2021 , 11, 6243-6260	13.1	0
547	Trace Metal Loading of B-N-Co-doped Graphitic Carbon for Active and Stable Bifunctional Oxygen Reduction and Oxygen Evolution Electrocatalysts. <i>ChemElectroChem</i> , 2021 , 8, 1685-1693	4.3	0
546	Identification of Active Sites in the Catalytic Oxidation of 2-Propanol over Co _{1+x} Fe _{2-2x} O ₄ Spinel Oxides at Solid/Liquid and Solid/Gas Interfaces. <i>ChemCatChem</i> , 2021 , 13, 2942-2951	5.2	7
545	Electrocatalytic Oxidation of Glycerol Using Solid-State Synthesised Nickel Boride: Impact of Key Electrolysis Parameters on Product Selectivity. <i>ChemElectroChem</i> , 2021 , 8, 2336-2342	4.3	4
544	Synthesis of Cu Single Atoms Supported on Mesoporous Graphitic Carbon Nitride and Their Application in Liquid-Phase Aerobic Oxidation of Cyclohexene. <i>ACS Catalysis</i> , 2021 , 11, 7863-7875	13.1	12
543	Ceria-Based Materials for Thermocatalytic and Photocatalytic Organic Synthesis. <i>ACS Catalysis</i> , 2021 , 11, 9618-9678	13.1	30
542	Nickel nanoparticles supported on nitrogen-doped carbon nanotubes are a highly active, selective and stable CO ₂ methanation catalyst. <i>Journal of Energy Chemistry</i> , 2021 , 54, 323-331	12	18
541	Catalytic influence of mineral compounds on the reactivity of cellulose-derived char in O ₂ -, CO ₂ -, and H ₂ O-containing atmospheres. <i>Fuel</i> , 2021 , 287, 119584	7.1	4
540	Formic Acid-Assisted Selective Hydrogenolysis of 5-Hydroxymethylfurfural to 2,5-Dimethylfuran over Bifunctional Pd Nanoparticles Supported on N-Doped Mesoporous Carbon. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 6807-6815	16.4	16

539	Ameisensäure-unterstützte selektive Hydrogenolyse von 5-Hydroxymethylfurfural zu 2,5-Dimethylfuran über bifunktionale Pd-Nanopartikel auf N-dotiertem mesoporösem Kohlenstoff als Träger. <i>Angewandte Chemie</i> , 2021 , 133, 6882-6891	3.6	4
538	The steady-state kinetics of CO hydrogenation to higher alcohols over a bulk Co-Cu catalyst. <i>Journal of Catalysis</i> , 2021 , 394, 465-475	7.3	3
537	GdCu Nanoparticles Supported on Zr _{0.5} Ce _{0.5} O ₂ Nanorods for Dry Methane Reforming. <i>ACS Applied Nano Materials</i> , 2021 , 4, 2547-2557	5.6	4
536	Catalyst-enhanced plasma oxidation of n-butane over MnO ₂ in a temperature-controlled twin surface dielectric barrier discharge reactor. <i>Plasma Processes and Polymers</i> , 2021 , 18, 2000127	3.4	4
535	Solvent Effects on Photocatalytic Anaerobic Oxidation of Benzyl Alcohol over Pt-Loaded Defective SrTiO ₃ Nanoparticles. <i>ACS Applied Nano Materials</i> , 2021 , 4, 9254-9264	5.6	5
534	Surface reactions during temperature-programmed desorption and reduction experiments with oxygen-functionalized carbon blacks. <i>Applied Surface Science</i> , 2021 , 561, 150044	6.7	2
533	Liquid-Phase Cyclohexene Oxidation with O ₂ over Spray-Flame-Synthesized La Sr CoO Perovskite Nanoparticles. <i>Chemistry - A European Journal</i> , 2021 , 27, 16912-16923	4.8	2
532	The Roles of Composition and Mesostructure of Cobalt-Based Spinel Catalysts in Oxygen Evolution Reactions. <i>Chemistry - A European Journal</i> , 2021 , 27, 17038-17048	4.8	3
531	A Perspective on Heterogeneous Catalysts for the Selective Oxidation of Alcohols. <i>Chemistry - A European Journal</i> , 2021 , 27, 16809-16833	4.8	8
530	State-of-the-art progress in the selective photo-oxidation of alcohols. <i>Journal of Energy Chemistry</i> , 2021 , 62, 338-350	12	20
529	Steering accessible oxygen vacancies for alcohol oxidation over defective Nb ₂ O ₅ under visible light illumination. <i>Applied Catalysis B: Environmental</i> , 2021 , 298, 120584	21.8	8
528	Optimizing the nickel boride layer thickness in a spectroelectrochemical ATR-FTIR thin-film flow cell applied in glycerol oxidation. <i>Chinese Journal of Catalysis</i> , 2021 , 42, 2206-2215	11.3	1
527	In Situ X-ray Microscopy Reveals Particle Dynamics in a NiCo Dry Methane Reforming Catalyst under Operating Conditions. <i>ACS Catalysis</i> , 2020 , 10, 6223-6230	13.1	15
526	Influence of Mineral Composition of Chars Derived by Hydrothermal Carbonization on Sorption Behavior of CO, CH ₄ , and O ₂ . <i>ACS Omega</i> , 2020 , 5, 10704-10714	3.9	4
525	Facettierte verzweigte Nickel-Nanopartikel mit variierbarer Verzweigungsgröße für die hochaktive elektrokatalytische Oxidation von Biomasse. <i>Angewandte Chemie</i> , 2020 , 132, 15615-15620	3.6	13
524	CO ₂ Hydrogenation with Cu/ZnO/Al ₂ O ₃ : A Benchmark Study. <i>ChemCatChem</i> , 2020 , 12, 3216-3222	5.2	18
523	Selective cyclohexene oxidation with O ₂ , H ₂ O ₂ and tert-butyl hydroperoxide over spray-flame synthesized LaCo _{1-x} FexO ₃ nanoparticles. <i>Catalysis Science and Technology</i> , 2020 , 10, 5196-5206	5.5	17
522	Synergistic Effect of Molybdenum and Tungsten in Highly Mixed Carbide Nanoparticles as Effective Catalysts in the Hydrogen Evolution Reaction under Alkaline and Acidic Conditions. <i>ChemElectroChem</i> , 2020 , 7, 983-988	4.3	5

521	Model-Based Analysis of the Photocatalytic HCl Oxidation Kinetics over TiO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 4265-4272	3.9	4
520	Structural evolution of bimetallic Co-Cu catalysts in CO hydrogenation to higher alcohols at high pressure. <i>Journal of Catalysis</i> , 2020 , 383, 33-41	7.3	27
519	Eine universelle, auf Nanokapillaren basierende Methode zur Katalysatorimmobilisierung für die Flüssigzell-Transmissionselektronenmikroskopie. <i>Angewandte Chemie</i> , 2020 , 132, 5634-5638	3.6	1
518	A Universal Nano-capillary Based Method of Catalyst Immobilization for Liquid-Cell Transmission Electron Microscopy. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 5586-5590	16.4	14
517	Nanocrystalline Ga ₂ N Oxynitride Materials: Minimized Defect Density for Improved Photocatalytic Activity?. <i>Zeitschrift Fur Physikalische Chemie</i> , 2020 , 234, 1133-1153	3.1	4
516	Thermal treatment of lignin, cellulose and hemicellulose in nitrogen and carbon dioxide. <i>Fuel</i> , 2020 , 271, 117656	7.1	23
515	Simultaneous analysis of light gases and heavy pyrolyzates evolved from lignite and hard coal by pyrolysis- GC/MS-GC/TCD . <i>Journal of Analytical and Applied Pyrolysis</i> , 2020 , 149, 104833	6	2
514	Conversion of volatile organic compounds in a twin surface dielectric barrier discharge. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 114003	3.5	6
513	Morphology, microstructure, coordinative unsaturation, and hydrogenation activity of unsupported MoS ₂ : How idealized models fail to describe a real sulfide material. <i>Applied Catalysis B: Environmental</i> , 2020 , 266, 118623	21.8	5
512	On the reversible deactivation of cobalt ferrite spinel nanoparticles applied in selective 2-propanol oxidation. <i>Journal of Catalysis</i> , 2020 , 382, 57-68	7.3	17
511	Investigation of Synergistic Effects between Co and Fe in Co _{3-x} Fe _x O ₄ Spinel Catalysts for the Liquid-Phase Oxidation of Aromatic Alcohols and Styrene. <i>Molecular Catalysis</i> , 2020 , 498, 111251	3.3	4
510	In situ X-ray emission and high-resolution X-ray absorption spectroscopy applied to Ni-based bimetallic dry methane reforming catalysts. <i>Nanoscale</i> , 2020 , 12, 15185-15192	7.7	11
509	Identifying the nature of the active sites in methanol synthesis over Cu/ZnO/AlO catalysts. <i>Nature Communications</i> , 2020 , 11, 3898	17.4	44
508	Effect of Dipole Orientation in Mixed, Charge-Equilibrating Self-assembled Monolayers on Protein Adsorption and Marine Biofouling. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 50953-50961	9.5	8
507	Influence of Contaminants in Steel Mill Exhaust Gases on Cu/ZnO/Al ₂ O ₃ Catalysts Applied in Methanol Synthesis. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 1525-1532	0.8	4
506	Fundamental Properties and Applications of Dielectric Barrier Discharges in Plasma-Catalytic Processes at Atmospheric Pressure. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 1542-1558	0.8	9
505	Origin of Laser-Induced Colloidal Gold Surface Oxidation and Charge Density, and Its Role in Oxidation Catalysis. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20981-20990	3.8	10
504	Anchoring of palladium nanoparticles on N-doped mesoporous carbon. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 21317-21325	3.6	7

503	Faceted Branched Nickel Nanoparticles with Tunable Branch Length for High-Activity Electrocatalytic Oxidation of Biomass. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 15487-15491	16.4	41
502	Catalytic Carbon Monoxide Oxidation over Potassium-Doped Manganese Dioxide Nanoparticles Synthesized by Spray Drying. <i>Emission Control Science and Technology</i> , 2019 , 5, 378-391	2	3
501	Catalytic effect of iron phases on the oxidation of cellulose-derived synthetic char. <i>Energy Procedia</i> , 2019 , 158, 694-699	2.3	2
500	Enhancing the water splitting performance of cryptomelane-type δ (K)MnO ₂ . <i>Journal of Catalysis</i> , 2019 , 374, 335-344	7.3	17
499	Regulating the size and spatial distribution of Pd nanoparticles supported by the defect engineered metal-organic framework HKUST-1 and applied in the aerobic oxidation of cinnamyl alcohol. <i>Catalysis Science and Technology</i> , 2019 , 9, 3703-3710	5.5	13
498	Ni-Metalloid (B, Si, P, As, and Te) Alloys as Water Oxidation Electrocatalysts. <i>Advanced Energy Materials</i> , 2019 , 9, 1900796	21.8	46
497	Selective 2-Propanol Oxidation over Unsupported Co ₃ O ₄ Spinel Nanoparticles: Mechanistic Insights into Aerobic Oxidation of Alcohols. <i>ACS Catalysis</i> , 2019 , 9, 5974-5985	13.1	36
496	Seleno-analogues of pentlandites (FeNiSSe, Y = 1-6): tuning bulk Fe/Ni sulphoselenides for hydrogen evolution. <i>Chemical Communications</i> , 2019 , 55, 8792-8795	5.8	16
495	Sauerstoffevolutionselektrokatalyse eines einzelnen MOF-basierten Kompositnanopartikels an der Spitze einer Nanoelektrode. <i>Angewandte Chemie</i> , 2019 , 131, 9021-9026	3.6	12
494	Photocatalytic Oxidation of C-H Bonds in Unsaturated Hydrocarbons through a Radical Pathway Induced by a Molecular Cocatalyst. <i>ChemSusChem</i> , 2019 , 12, 2795-2801	8.3	20
493	Anaerobic Alcohol Conversion to Carbonyl Compounds over Nanoscaled Rh-Doped SrTiO under Visible Light. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2075-2080	6.4	20
492	Oxygen Evolution Electrocatalysis of a Single MOF-Derived Composite Nanoparticle on the Tip of a Nanoelectrode. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8927-8931	16.4	56
491	Cl ₂ Production by Photocatalytic Oxidation of HCl over TiO ₂ . <i>ChemSusChem</i> , 2019 , 12, 2725-2731	8.3	7
490	The kinetics of glycerol hydrodeoxygenation to 1,2-propanediol over Cu/ZrO ₂ in the aqueous phase. <i>Applied Catalysis A: General</i> , 2019 , 576, 47-53	5.1	15
489	Tuning the Properties of Iron-Doped Porous Graphitic Carbon Synthesized by Hydrothermal Carbonization of Cellulose and Subsequent Pyrolysis. <i>ACS Omega</i> , 2019 , 4, 4448-4460	3.9	21
488	Photocatalytic one-step synthesis of Ag nanoparticles without reducing agent and their catalytic redox performance supported on carbon. <i>Journal of Energy Chemistry</i> , 2019 , 36, 37-46	12	6
487	Role of Boron and Phosphorus in Enhanced Electrocatalytic Oxygen Evolution by Nickel Borides and Nickel Phosphides. <i>ChemElectroChem</i> , 2019 , 6, 235-240	4.3	38
486	Highly Selective Anaerobic Oxidation of Alcohols Over Fe-doped SrTiO ₃ Under Visible Light. <i>ChemCatChem</i> , 2019 , 11, 5139-5144	5.2	19

485	Towards Mechanistic Understanding of Liquid-Phase Cinnamyl Alcohol Oxidation with tert-Butyl Hydroperoxide over Noble-Metal-Free LaCo Fe O Perovskites. <i>ChemPlusChem</i> , 2019 , 84, 1155-1163	2.8	21
484	Perspective of Surfactant-Free Colloidal Nanoparticles in Heterogeneous Catalysis. <i>ChemCatChem</i> , 2019 , 11, 4489-4518	5.2	80
483	Operando Thin-Layer ATR-FTIR Spectroelectrochemical Radial Flow Cell with Tilt Correction and Borehole Electrode. <i>Analytical Chemistry</i> , 2019 , 91, 14323-14331	7.8	7
482	On the role of cobalt carbidization in higher alcohol synthesis over hydrotalcite-based Co-Cu catalysts. <i>Chinese Journal of Catalysis</i> , 2019 , 40, 1731-1740	11.3	7
481	Spray-Flame-Synthesized LaCo _{1-x} Fe _x O ₃ Perovskite Nanoparticles as Electrocatalysts for Water and Ethanol Oxidation. <i>ChemElectroChem</i> , 2019 , 6, 4266-4274	4.3	21
480	Preface to Special Issue. <i>Emission Control Science and Technology</i> , 2019 , 5, 289-289	2	
479	High temperature pyrolysis of lignite and synthetic carbons. <i>Fuel</i> , 2019 , 241, 264-272	7.1	5
478	Assessment of combustion rates of coal chars for oxy-combustion applications. <i>Fuel</i> , 2019 , 238, 173-185	7.1	18
477	Nitrogen-Doped Metal-Free Carbon Materials Derived from Cellulose as Electrocatalysts for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2019 , 6, 514-521	4.3	26
476	MOFs for Electrocatalysis: From Serendipity to Design Strategies. <i>Small Methods</i> , 2019 , 3, 1800415	12.8	65
475	Proof of Equivalent Catalytic Functionality upon Photon-Induced and Thermal Activation of Supported Isolated Vanadia Species in Methanol Oxidation. <i>ChemCatChem</i> , 2018 , 10, 2360-2364	5.2	9
474	Bifunctional Oxygen Reduction/Oxygen Evolution Activity of Mixed Fe/Co Oxide Nanoparticles with Variable Fe/Co Ratios Supported on Multiwalled Carbon Nanotubes. <i>ChemSusChem</i> , 2018 , 11, 1204-1214	8.3	36
473	Dry Reforming of Methane at High Pressure in a Fixed-Bed Reactor with Axial Temperature Profile Determination. <i>Catalysis Letters</i> , 2018 , 148, 2256-2262	2.8	10
472	On the nature of spillover hydrogen species on platinum/nitrogen-doped mesoporous carbon composites: A temperature-programmed nitrobenzene desorption study. <i>Journal of Catalysis</i> , 2018 , 365, 55-62	7.3	24
471	Spectroelectrochemical studies on the effect of cations in the alkaline glycerol oxidation reaction over carbon nanotube-supported Pd nanoparticles. <i>Beilstein Journal of Organic Chemistry</i> , 2018 , 14, 1428-1435	2.5	5
470	Experimental confirmation of a new invariant for a non-linear chemical reaction. <i>Chemical Engineering Science</i> , 2018 , 191, 262-267	4.4	15
469	Electrocatalytic Oxidation of 5-(Hydroxymethyl)furfural Using High-Surface-Area Nickel Boride. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 11460-11464	16.4	146
468	Photocatalytic Methanol Oxidation by Supported Vanadium Oxide Species: Influence of Support and Degree of Oligomerization. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 3725-3735	2.3	8

467	Elektrokatalytische Oxidation von 5-(Hydroxymethyl)furfural an Nickelborid mit großer Oberfläche. <i>Angewandte Chemie</i> , 2018 , 130, 11631-11636	3.6	30
466	Recent Developments in the Conversion of Synthesis Gas to Short-Chain Alcohols over Cu-Co-Based Catalysts. <i>Chemie-Ingenieur-Technik</i> , 2018 , 90, 1465-1475	0.8	8
465	CuPd Mixed-Metal HKUST-1 as a Catalyst for Aerobic Alcohol Oxidation. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 21433-21440	3.8	28
464	Highly Efficient Photocatalytic Degradation of Dyes by a Copper-Triazolate Metal-Organic Framework. <i>Chemistry - A European Journal</i> , 2018 , 24, 16804-16813	4.8	49
463	Proof of Equivalent Catalytic Functionality upon Photon-Induced and Thermal Activation of Supported Isolated Vanadia Species in Methanol Oxidation. <i>ChemCatChem</i> , 2018 , 10, 2325-2325	5.2	
462	Emissivity Comparison between Chars and Demineralized Coal Chars under Oxycombustion Conditions. <i>Chemical Engineering and Technology</i> , 2018 , 41, 1490-1496	2	3
461	Katalyse der Kohlenstoffdioxid-Photoreduktion an Nanoschichten: Grundlagen und Herausforderungen. <i>Angewandte Chemie</i> , 2018 , 130, 7734-7752	3.6	19
460	Influence of the Fe:Ni Ratio and Reaction Temperature on the Efficiency of (Fe _x Ni _{1-x}) ₉ S ₈ Electrocatalysts Applied in the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2018 , 8, 987-996	13.1	90
459	The Role of Metallic Copper in the Selective Hydrodeoxygenation of Glycerol to 1,2-Propanediol over Cu/ZrO ₂ . <i>ChemCatChem</i> , 2018 , 10, 1344-1350	5.2	11
458	Catalysis of Carbon Dioxide Photoreduction on Nanosheets: Fundamentals and Challenges. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 7610-7627	16.4	242
457	The effect of the thermal pretreatment on the performance of ZnO/Cr ₂ O ₃ catalysts applied in high-temperature methanol synthesis. <i>Molecular Catalysis</i> , 2018 , 451, 76-86	3.3	7
456	Atomic-Scale Explanation of O Activation at the Au-TiO Interface. <i>Journal of the American Chemical Society</i> , 2018 , 140, 18082-18092	16.4	43
455	Optimizing the Synthesis of Zinc-rich Gallium Zinc Oxynitrides by Combining Co-Precipitation and Moisture-Assisted Nitridation. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2018 , 644, 1686-1690 ¹⁻³		2
454	Investigation of Carbon Nanofiber-supported Electrocatalysts with Ultra-low Platinum Loading for the Use in PEM Fuel Cells. <i>Fuel Cells</i> , 2018 , 18, 586-593	2.9	4
453	Methanol Synthesis from Steel Mill Exhaust Gases: Challenges for the Industrial Cu/ZnO/Al ₂ O ₃ Catalyst. <i>Chemie-Ingenieur-Technik</i> , 2018 , 90, 1419-1429	0.8	34
452	Pyrolysis and Thermal Annealing of Coal and Biomass in CO ₂ -Rich Atmospheres. <i>Energy & Fuels</i> , 2018 , 32, 10701-10708	4.1	19
451	Oxidative Deposition of Manganese Oxide Nanosheets on Nitrogen-Functionalized Carbon Nanotubes Applied in the Alkaline Oxygen Evolution Reaction. <i>ACS Omega</i> , 2018 , 3, 11216-11226	3.9	19
450	Local dynamics of copper active sites in zeolite catalysts for selective catalytic reduction of NO _x with NH ₃ . <i>Applied Catalysis B: Environmental</i> , 2018 , 237, 263-272	21.8	21

449	Three-way catalysis with supported gold catalysts: Poisoning effects of hydrocarbons. <i>Applied Catalysis B: Environmental</i> , 2018 , 237, 1021-1032	21.8	7
448	On the alternating physicochemical characteristics of Colombian coal during pyrolysis. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017 , 123, 12-19	6	10
447	German Catalysis Society (GeCatS). <i>ChemCatChem</i> , 2017 , 9, 525-526	5.2	
446	NH ₃ Post-Treatment Induces High Activity of Co-Based Electrocatalysts Supported on Carbon Nanotubes for the Oxygen Evolution Reaction. <i>ChemElectroChem</i> , 2017 , 4, 2091-2098	4.3	6
445	Ultrathin High Surface Area Nickel Boride (Ni ₃ B) Nanosheets as Highly Efficient Electrocatalyst for Oxygen Evolution. <i>Advanced Energy Materials</i> , 2017 , 7, 1700381	21.8	245
444	Synergistic effect of potassium hydroxide and steam co-treatment on the functionalization of carbon nanotubes applied as basic support in the Pd-catalyzed liquid-phase oxidation of ethanol. <i>Carbon</i> , 2017 , 121, 452-462	10.4	5
443	On the bifunctional nature of Cu/ZrO ₂ catalysts applied in the hydrogenation of ethyl acetate. <i>Journal of Catalysis</i> , 2017 , 352, 120-129	7.3	21
442	MOF-Templated Assembly Approach for Fe C Nanoparticles Encapsulated in Bamboo-Like N-Doped CNTs: Highly Efficient Oxygen Reduction under Acidic and Basic Conditions. <i>Chemistry - A European Journal</i> , 2017 , 23, 12125-12130	4.8	56
441	Micrometer-Precise Determination of the Thin Electrolyte Layer of a Spectroelectrochemical Cell by Microelectrode Approach Curves. <i>Analytical Chemistry</i> , 2017 , 89, 4367-4372	7.8	7
440	Encapsulation of Bimetallic Metal Nanoparticles into Robust Zirconium-Based Metal-Organic Frameworks: Evaluation of the Catalytic Potential for Size-Selective Hydrogenation. <i>Chemistry - A European Journal</i> , 2017 , 23, 3583-3594	4.8	28
439	Impact of Synthesis Parameters on the Formation of Defects in HKUST-1. <i>European Journal of Inorganic Chemistry</i> , 2017 , 2017, 925-931	2.3	27
438	Solid Electrolyte Interphase (SEI) at TiO ₂ Electrodes in Li-Ion Batteries: Defining Apparent and Effective SEI Based on Evidence from X-ray Photoemission Spectroscopy and Scanning Electrochemical Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3123-3130	9.5	36
437	Experimental and Theoretical Understanding of Nitrogen-Doping-Induced Strong Metal-Support Interactions in Pd/TiO ₂ Catalysts for Nitrobenzene Hydrogenation. <i>ACS Catalysis</i> , 2017 , 7, 1197-1206	13.1	107
436	Spinel-Structured ZnCr ₂ O ₄ with Excess Zn Is the Active ZnO/Cr ₂ O ₃ Catalyst for High-Temperature Methanol Synthesis. <i>ACS Catalysis</i> , 2017 , 7, 7610-7622	13.1	61
435	Perovskites as Precursors for Ni/La ₂ O ₃ Catalysts in the Dry Reforming of Methane: Synthesis by Constant pH Co-Precipitation, Reduction Mechanism and Effect of Ru-Doping. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017 , 643, 1088-1095	1.3	16
434	Probing Oxide Reduction and Phase Transformations at the Au-TiO ₂ Interface by Vibrational Spectroscopy. <i>Topics in Catalysis</i> , 2017 , 60, 1744-1753	2.3	12
433	Cobalt boride modified with N-doped carbon nanotubes as a high-performance bifunctional oxygen electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 21122-21129	13	53
432	Decoupling the Effects of High Crystallinity and Surface Area on the Photocatalytic Overall Water Splitting over Bi ₂ WO ₆ Nanoparticles by Chemical Vapor Synthesis. <i>ChemSusChem</i> , 2017 , 10, 4190-4197	8.3	12

431	Oxidative photo-deposition of chromia: tuning the activity for overall water splitting of the Rh/CrOx co-catalyst system. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 17248-17252	13	11
430	Catalytic Oxidation of Soot Spray-Coated Lithium Zirconate in a Plate Reactor. <i>Chemie-Ingenieur-Technik</i> , 2017 , 89, 263-269	0.8	1
429	Effects of Potassium and Manganese Promoters on Nitrogen-Doped Carbon Nanotube-Supported Iron Catalysts for CO ₂ Hydrogenation. <i>Engineering</i> , 2017 , 3, 385-392	9.7	22
428	Effect of titania surface modification of mesoporous silica SBA-15 supported Au catalysts: Activity and stability in the CO oxidation reaction. <i>Journal of Catalysis</i> , 2017 , 356, 214-228	7.3	18
427	Topotactic Synthesis of Porous Cobalt Ferrite Platelets from a Layered Double Hydroxide Precursor and Their Application in Oxidation Catalysis. <i>Chemistry - A European Journal</i> , 2017 , 23, 12443-12449	4.8	19
426	Tuning the oxidation state of manganese oxide nanoparticles on oxygen- and nitrogen-functionalized carbon nanotubes for the electrocatalytic oxygen evolution reaction. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 18434-18442	3.6	25
425	Synergistic Effect of Cobalt and Iron in Layered Double Hydroxide Catalysts for the Oxygen Evolution Reaction. <i>ChemSusChem</i> , 2017 , 10, 156-165	8.3	91
424	Metallic NiPS ₃ @NiOOH Core-Shell Heterostructures as Highly Efficient and Stable Electrocatalyst for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017 , 7, 229-237	13.1	168
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