Oliver Gutiérrez Tinoco

List of Publications by Year in descending order

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120 papers 4,282 citations

108046 37 h-index 59 g-index

123 all docs

123 docs citations

times ranked

123

3984 citing authors

#	Article	IF	CITATIONS
1	Impact of functional groups on the electrocatalytic hydrogenation of aromatic carbonyls to alcohols. Catalysis Today, 2022, 397-399, 63-68.	2.2	5
2	Electrocatalytic decarboxylation of carboxylic acids over RuO2 and Pt nanoparticles. Applied Catalysis B: Environmental, 2022, 305, 121060.	10.8	18
3	Effect of reaction conditions on the hydrogenolysis of polypropylene and polyethylene into gas and liquid alkanes. Reaction Chemistry and Engineering, 2022, 7, 844-854.	1.9	43
4	Kinetics of nitrogen-, oxygen- and sulfur-containing compounds hydrotreating during co-processing of bio-crude with petroleum stream. Applied Catalysis B: Environmental, 2022, 307, 121197.	10.8	14
5	Explaining the structure sensitivity of Pt and Rh for aqueous-phase hydrogenation of phenol. Journal of Chemical Physics, 2022, 156, 104703.	1.2	7
6	Disordered, Sub-Nanometer Ru Structures on CeO ₂ are Highly Efficient and Selective Catalysts in Polymer Upcycling by Hydrogenolysis. ACS Catalysis, 2022, 12, 4618-4627.	5.5	54
7	Controlling Reaction Routes in Nobleâ€Metalâ€Catalyzed Conversion of Aryl Ethers. Angewandte Chemie - International Edition, 2022, 61, .	7.2	3
8	Inside Cover: Controlling Reaction Routes in Nobleâ€Metal atalyzed Conversion of Aryl Ethers (Angew.) Tj ETo	Qq <u>9,9</u> 0 r _E	gBT Overlock
9	Innentitelbild: Controlling Reaction Routes in Nobleâ∈Metalâ∈Catalyzed Conversion of Aryl Ethers (Angew. Chem. 30/2022). Angewandte Chemie, 2022, 134, .	1.6	O
10	Metal-organic framework supported single-site nickel catalysts for butene dimerization. Journal of Catalysis, 2022, 413, 176-183.	3.1	9
11	Directing the Rateâ€Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. Angewandte Chemie, 2021, 133, 2334-2341.	1.6	4
12	Hydrogen Bonding Enhances the Electrochemical Hydrogenation of Benzaldehyde in the Aqueous Phase. Angewandte Chemie, 2021, 133, 294-300.	1.6	12
13	Hydrogen Bonding Enhances the Electrochemical Hydrogenation of Benzaldehyde in the Aqueous Phase. Angewandte Chemie - International Edition, 2021, 60, 290-296.	7.2	40
14	Electrocatalytic valorization into H2 and hydrocarbons of an aqueous stream derived from hydrothermal liquefaction. Journal of Applied Electrochemistry, 2021, 51, 107-118.	1.5	11
15	Directing the Rateâ€Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. Angewandte Chemie - International Edition, 2021, 60, 2304-2311.	7.2	19
16	Simultaneous electrocatalytic hydrogenation of aldehydes and phenol over carbon-supported metals. Journal of Applied Electrochemistry, 2021, 51, 27-36.	1.5	21
17	Electrochemical routes for biomass conversion. Journal of Applied Electrochemistry, 2021, 51, 1-3.	1.5	11
18	Differences in Mechanism and Rate of Zeolite-Catalyzed Cyclohexanol Dehydration in Apolar and Aqueous Phase. ACS Catalysis, 2021, 11, 2879-2888.	5 . 5	26

#	Article	IF	CITATIONS
19	Environment of Metal–O–Fe Bonds Enabling High Activity in CO ₂ Reduction on Single Metal Atoms and on Supported Nanoparticles. Journal of the American Chemical Society, 2021, 143, 5540-5549.	6.6	54
20	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie, 2021, 133, 18185-18191.	1.6	0
21	Innentitelbild: Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling (Angew. Chem. 33/2021). Angewandte Chemie, 2021, 133, 17894-17894.	1.6	0
22	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie - International Edition, 2021, 60, 18037-18043.	7.2	16
23	Activity of Cu–Al–Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. Jacs Au, 2021, 1, 1412-1421.	3.6	21
24	Tuning proton transfer and catalytic properties in triple junction nanostructured catalyts. Nano Energy, 2021, 86, 106046.	8.2	5
25	Critical role of solvent-modulated hydrogen-binding strength in the catalytic hydrogenation of benzaldehyde on palladium. Nature Catalysis, 2021, 4, 976-985.	16.1	49
26	Copper-Based Catalysts Confined in Carbon Nanocage Reactors for Condensed Ester Hydrogenation: Tuning Copper Species by Confined SiO ₂ and Methanol Resistance. ACS Sustainable Chemistry and Engineering, 2021, 9, 16270-16280.	3.2	8
27	Site Densities, Rates, and Mechanism of Stable Ni/UiO-66 Ethylene Oligomerization Catalysts. Journal of the American Chemical Society, 2021, 143, 20274-20280.	6.6	21
28	Electrochemically Tunable Protonâ€Coupled Electron Transfer in Pdâ€Catalyzed Benzaldehyde Hydrogenation. Angewandte Chemie - International Edition, 2020, 59, 1501-1505.	7.2	53
29	Electrochemically Tunable Protonâ€Coupled Electron Transfer in Pdâ€Catalyzed Benzaldehyde Hydrogenation. Angewandte Chemie, 2020, 132, 1517-1521.	1.6	18
30	The Critical Role of Reductive Steps in the Nickelâ€Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether Câ~O Bonds. Angewandte Chemie - International Edition, 2020, 59, 1445-1449.	7.2	40
31	The Critical Role of Reductive Steps in the Nickelâ€Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether Câ°'O Bonds. Angewandte Chemie, 2020, 132, 1461-1465.	1.6	6
32	Copper-zirconia interfaces in UiO-66 enable selective catalytic hydrogenation of CO2 to methanol. Nature Communications, 2020, 11, 5849.	5.8	86
33	Electrocatalytic Hydrogenation of Biomass-Derived Organics: A Review. Chemical Reviews, 2020, 120, 11370-11419.	23.0	185
34	Understanding the Role of Surface Heterogeneities in Electrosynthesis Reactions. IScience, 2020, 23, 101814.	1.9	16
35	Enhancing hydrogenation activity of Ni-Mo sulfide hydrodesulfurization catalysts. Science Advances, 2020, 6, eaax5331.	4.7	39
36	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cuâ€exchanged Mordenite. Chemistry - A European Journal, 2020, 26, 7515-7515.	1.7	3

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37	Anodic electrocatalytic conversion of carboxylic acids on thin films of RuO2, IrO2, and Pt. Applied Catalysis B: Environmental, 2020, 277, 119277.	10.8	27
38	Inverse iron oxide/metal catalysts from galvanic replacement. Nature Communications, 2020, 11, 3269.	5.8	31
39	Performance of Base and Noble Metals for Electrocatalytic Hydrogenation of Bio-Oil-Derived Oxygenated Compounds. ACS Sustainable Chemistry and Engineering, 2020, 8, 4407-4418.	3.2	65
40	Magnesium–Aluminum Mixed Oxides as Basic Catalysts for the Synthesis of Methanethiol. Catalysis Letters, 2020, 150, 2304-2308.	1.4	2
41	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cuâ€Exchanged Mordenite. Chemistry - A European Journal, 2020, 26, 7563-7567.	1.7	31
42	Aqueous phase catalytic and electrocatalytic hydrogenation of phenol and benzaldehyde over platinum group metals. Journal of Catalysis, 2020, 382, 372-384.	3.1	68
43	Roles of Cu+ and Cu0 sites in liquid-phase hydrogenation of esters on core-shell CuZnx@C catalysts. Applied Catalysis B: Environmental, 2020, 267, 118698.	10.8	68
44	Anodic electrocatalytic conversion of carboxylic acids on thin films of RuO2, IrO2, and Pt., 2020,,.		1
45	On the enhanced catalytic activity of acid-treated, trimetallic Ni-Mo-W sulfides for quinoline hydrodenitrogenation. Journal of Catalysis, 2019, 380, 332-342.	3.1	25
46	Maximizing Active Site Concentrations at Ni-Substituted WS2 Edges for Hydrogenation of Aromatic Molecules. Journal of Physical Chemistry Letters, 2019, 10, 5617-5622.	2.1	4
47	Cesium Induced Changes in the Acid–Base Properties of Metal Oxides and the Consequences for Methanol Thiolation. ACS Catalysis, 2019, 9, 9245-9252.	5 . 5	15
48	Understanding the Role of Metal and Molecular Structure on the Electrocatalytic Hydrogenation of Oxygenated Organic Compounds. ACS Catalysis, 2019, 9, 9964-9972.	5 . 5	81
49	The role of weak Lewis acid sites for methanol thiolation. Catalysis Science and Technology, 2019, 9, 509-516.	2.1	14
50	Genesis and Stability of Hydronium Ions in Zeolite Channels. Journal of the American Chemical Society, 2019, 141, 3444-3455.	6.6	119
51	Quantifying Adsorption of Organic Molecules on Platinum in Aqueous Phase by Hydrogen Site Blocking and in Situ X-ray Absorption Spectroscopy. ACS Catalysis, 2019, 9, 6869-6881.	5.5	40
52	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metal–Organic Framework. Journal of the American Chemical Society, 2019, 141, 9292-9304.	6.6	131
53	The synergistic effect between Ni sites and Ni-Fe alloy sites on hydrodeoxygenation of lignin-derived phenols. Applied Catalysis B: Environmental, 2019, 253, 348-358.	10.8	155
54	Impact of pH on Aqueous-Phase Phenol Hydrogenation Catalyzed by Carbon-Supported Pt and Rh. ACS Catalysis, 2019, 9, 1120-1128.	5 . 5	55

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55	Structure Sensitivity in Hydrogenation Reactions on Pt/C in Aqueousâ€phase. ChemCatChem, 2019, 11, 575-582.	1.8	47
56	Electrocatalytic Hydrogenation of Benzaldehyde: Unexpected Enhancing Effect By Co-Adsorbed Proton Donor. ECS Meeting Abstracts, 2019, , .	0.0	0
57	Understanding Metal Structure Sensitivity during the Electrocatalytic Hydrogenation and Oxidation of Biomass-Derived Molecules at Normal Temperature and Pressure. ECS Meeting Abstracts, 2019, , .	0.0	0
58	Electrocatalytic Hydrogenation of Biogenic Molecules: Understanding Reactivity Trends. ECS Meeting Abstracts, 2019, , .	0.0	0
59	Hydrogenation of Carbonyl Compounds over Pd in Aqueous Phase Under Charged Conditions: Role of Organic Molecular Structure. ECS Meeting Abstracts, 2019, , .	0.0	0
60	Electrochemical Upgrading of Wastes to Products- Fundamental Studies Using a Combined Experimental and Computational Approach. ECS Meeting Abstracts, 2019, , .	0.0	0
61	Kinetic Coupling of Water Splitting and Photoreforming on SrTiO ₃ -Based Photocatalysts. ACS Catalysis, 2018, 8, 2902-2913.	5.5	36
62	Hydrogenation of benzaldehyde via electrocatalysis and thermal catalysis on carbon-supported metals. Journal of Catalysis, 2018, 359, 68-75.	3.1	116
63	Palladium atalyzed Reductive Insertion of Alcohols into Aryl Ether Bonds. Angewandte Chemie - International Edition, 2018, 57, 3747-3751.	7. 2	27
64	Palladium atalyzed Reductive Insertion of Alcohols into Aryl Ether Bonds. Angewandte Chemie, 2018, 130, 3809-3813.	1.6	11
65	Carbon-supported Pt during aqueous phenol hydrogenation with and without applied electrical potential: X-ray absorption and theoretical studies of structure and adsorbates. Journal of Catalysis, 2018, 368, 8-19.	3.1	49
66	Electrocatalytic Hydrogenation of Oxygenated Compounds in Aqueous Phase. Organic Process Research and Development, 2018, 22, 1590-1598.	1.3	76
67	Active Sites on Nickelâ€Promoted Transitionâ€Metal Sulfides That Catalyze Hydrogenation of Aromatic Compounds. Angewandte Chemie, 2018, 130, 14763-14767.	1.6	2
68	Exceptional Fluorocarbon Uptake with Mesoporous Metal–Organic Frameworks for Adsorption-Based Cooling Systems. ACS Applied Energy Materials, 2018, 1, 5853-5858.	2.5	35
69	Kinetic Investigation of the Sustainable Electrocatalytic Hydrogenation of Benzaldehyde on Pd/C: Effect of Electrolyte Composition and Half-Cell Potentials. ACS Sustainable Chemistry and Engineering, 2018, 6, 16073-16085.	3.2	65
70	Active Sites on Nickelâ€Promoted Transitionâ€Metal Sulfides That Catalyze Hydrogenation of Aromatic Compounds. Angewandte Chemie - International Edition, 2018, 57, 14555-14559.	7.2	32
71	A nitrogen-doped PtSn nanocatalyst supported on hollow silica spheres for acetic acid hydrogenation. Chemical Communications, 2018, 54, 8818-8821.	2.2	19
72	Understanding Electrocatalytic Hydrogenation of Phenol and Benzaldehyde on Platinum Group Metals for Fuel Production. ECS Meeting Abstracts, 2018, , .	0.0	0

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73	Progress Towards Electrochemical Methods for Pyrolysis-Oil Hydrogenation. ECS Meeting Abstracts, 2018, MA2018-01, 1822-1822.	0.0	O
74	Impact of Ni promotion on the hydrogenation pathways of phenanthrene on MoS2/ \hat{l}^3 -Al2O3. Journal of Catalysis, 2017, 352, 171-181.	3.1	38
75	Simultaneous hydrodenitrogenation and hydrodesulfurization on unsupported Ni-Mo-W sulfides. Catalysis Today, 2017, 297, 344-355.	2.2	35
76	Overcoming the Rate-Limiting Reaction during Photoreforming of Sugar Aldoses for H ₂ -Generation. ACS Catalysis, 2017, 7, 3236-3244.	5.5	34
77	Methanol thiolation over Al2O3 and WS2 catalysts modified with cesium. Journal of Catalysis, 2017, 345, 308-318.	3.1	23
78	Carbon–Carbon Bond Scission Pathways in the Deoxygenation of Fatty Acids on Transition-Metal Sulfides. ACS Catalysis, 2017, 7, 1068-1076.	5.5	44
79	On the role of the alkali cations on methanol thiolation. Catalysis Science and Technology, 2017, 7, 4437-4443.	2.1	14
80	Deoxygenation of Palmitic Acid on Unsupported Transition-Metal Phosphides. ACS Catalysis, 2017, 7, 6331-6341.	5.5	83
81	Aqueous phase hydrogenation of phenol catalyzed by Pd and PdAg on ZrO2. Applied Catalysis A: General, 2017, 548, 128-135.	2.2	24
82	Towards Understanding Structure–Activity Relationships of Ni–Mo–W Sulfide Hydrotreating Catalysts. ChemCatChem, 2017, 9, 629-641.	1.8	19
83	Towards Controlling the Electrocatalytic Hydrogenation of Oxygenated Hydrocarbons through Particle Size Effects. ECS Meeting Abstracts, 2017, , .	0.0	0
84	Electrocatalytic Reduction of Carbonyl Groups in Aromatic Molecules: A Step Towards Electrochemical Bio-Oil Conversion. ECS Meeting Abstracts, 2017, , .	0.0	1
85	Catalytic routes and oxidation mechanisms in photoreforming of polyols. Journal of Catalysis, 2016, 344, 806-816.	3.1	65
86	Electrocatalytic Hydrogenation of Phenol over Platinum and Rhodium: Unexpected Temperature Effects Resolved. ACS Catalysis, 2016, 6, 7466-7470.	5.5	86
87	Hydrodeoxygenation of fatty acid esters catalyzed by Ni on nano-sized MFI type zeolites. Catalysis Science and Technology, 2016, 6, 7976-7984.	2.1	49
88	Integrated catalytic and electrocatalytic conversion of substituted phenols and diaryl ethers. Journal of Catalysis, 2016, 344, 263-272.	3.1	73
89	Enabling Overall Water Splitting on Photocatalysts by CO-Covered Noble Metal Co-catalysts. Journal of Physical Chemistry Letters, 2016, 7, 4358-4362.	2.1	32
90	Photoreforming of ethylene glycol over Rh/TiO2 and Rh/GaN:ZnO. Journal of Catalysis, 2016, 338, 68-81.	3.1	27

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91	Aqueous phase electrocatalysis and thermal catalysis for the hydrogenation of phenol at mild conditions. Applied Catalysis B: Environmental, 2016, 182, 236-246.	10.8	103
92	Bulk and γâ€'Al2O3-supported Ni2P and MoP for hydrodeoxygenation of palmitic acid. Applied Catalysis B: Environmental, 2016, 180, 301-311.	10.8	76
93	Understanding Ni Promotion of MoS ₂ ∫ı̂³â€Al ₂ O ₃ and its Implications for the Hydrogenation of Phenanthrene. ChemCatChem, 2015, 7, 4118-4130.	1.8	36
94	Distribution of Metal Cations in Niâ∈Moâ∈W Sulfide Catalysts. ChemCatChem, 2015, 7, 3692-3704.	1.8	17
95	Tailoring p-xylene selectivity in toluene methylation on medium pore-size zeolites. Microporous and Mesoporous Materials, 2015, 210, 52-59.	2.2	33
96	Pathways for H ₂ Activation on (Ni)-MoS ₂ Catalysts. Journal of Physical Chemistry Letters, 2015, 6, 2929-2932.	2.1	36
97	Mechanistic Pathways for Methylcyclohexane Hydrogenolysis over Supported Ir Catalysts. Journal of Physical Chemistry C, 2014, 118, 20948-20958.	1.5	8
98	Effects of the Support on the Performance and Promotion of (Ni)MoS ₂ Catalysts for Simultaneous Hydrodenitrogenation and Hydrodesulfurization. ACS Catalysis, 2014, 4, 1487-1499.	5 . 5	157
99	γâ€Al ₂ O ₃ ‣upported and Unsupported (Ni)MoS ₂ for the Hydrodenitrogenation of Quinoline in the Presence of Dibenzothiophene. ChemCatChem, 2014, 6, 485-499.	1.8	26
100	Structure sensitivity of hydrogenolytic cleavage of endocyclic and exocyclic C–C bonds in methylcyclohexane over supported iridium particles. Journal of Catalysis, 2013, 297, 70-78.	3.1	28
101	Synthesis of Methanethiol from CS ₂ on Niâ€, Coâ€, and Kâ€Doped MoS ₂ /SiO ₂ Catalysts. ChemCatChem, 2013, 5, 3249-3259.	1.8	25
102	Hydrogenation of tetralin over Pt catalysts supported on sulfated zirconia and amorphous silica alumina. Catalysis Science and Technology, 2013, 3, 2365.	2.1	10
103	Catalytic Consequences of Particle Size and Chloride Promotion in the Ring-Opening of Cyclopentane on Pt/Al ₂ O ₃ . ACS Catalysis, 2013, 3, 328-338.	5 . 5	19
104	Tailoring silica–alumina-supported Pt–Pd as poison-tolerant catalyst for aromatics hydrogenation. Journal of Catalysis, 2013, 304, 135-148.	3.1	31
105	Ring opening of 1,2,3,4-tetrahydroquinoline and decahydroquinoline on MoS2/γ-Al2O3 and Ni–MoS2/I³-Al2O3. Journal of Catalysis, 2012, 295, 155-168.	3.1	46
106	Active sites and reactive intermediates in the hydrogenolytic cleavage of C–C bonds in cyclohexane over supported iridium. Journal of Catalysis, 2012, 295, 133-145.	3.1	26
107	Bimetallic Pt–Pd/silica–alumina hydrotreating catalysts – Part I: Physicochemical characterization. Journal of Catalysis, 2012, 292, 1-12.	3.1	25
108	Bimetallic Pt–Pd/silica–alumina hydrotreating catalysts. Part II: Structure–activity correlations in the hydrogenation of tetralin in the presence of dibenzothiophene and quinoline. Journal of Catalysis, 2012, 292, 13-25.	3.1	29

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109	Synthesis of Methanethiol from Carbonyl Sulfide and Carbon Disulfide on (Co)K-Promoted Sulfide Mo/SiO ₂ Catalysts. ACS Catalysis, 2011, 1, 1595-1603.	5. 5	43
110	Synthesis of methyl mercaptan from carbonyl sulfide over sulfide K2MoO4/SiO2. Journal of Catalysis, 2011, 280, 264-273.	3.1	40
111	Effect of the support on the high activity of the (Ni)Mo/ZrO2–SBA-15 catalyst in the simultaneous hydrodesulfurization of DBT and 4,6-DMDBT. Journal of Catalysis, 2011, 281, 50-62.	3.1	156
112	Selective poisoning of the direct denitrogenation route in o-propylaniline HDN by DBT on Mo and NiMo/ \hat{I}^3 -Al2O3 sulfide catalysts. Journal of Catalysis, 2011, 281, 325-338.	3.1	51
113	Influence of Potassium on the Synthesis of Methanethiol from Carbonyl Sulfide on Sulfided Mo/Al ₂ O ₃ Catalyst. ChemCatChem, 2011, 3, 1480-1490.	1.8	32
114	Effect of H2 in the synthesis of COS using liquid sulfur and CO or CO2 as reactants. Research on Chemical Intermediates, 2010, 36, 211-225.	1.3	11
115	APPLICATION OF NEW ZRO2-SBA-15 MATERIALS AS CATALYTIC SUPPORTS: STUDY OF INTRINSIC ACTIVITY OF MO CATALYSTS IN DEEP HDS. Chemical Engineering Communications, 2009, 196, 1163-1177.	1.5	8
116	Modification of Activity and Selectivity of NiMo/SBA-15 HDS Catalysts by Grafting of Different Metal Oxides on the Support Surface. Industrial & Engineering Chemistry Research, 2009, 48, 1126-1133.	1.8	60
117	SBA-15 mesoporous molecular sieves doped with ZrO2 or TiO2 as supports for Mo HDS catalysts. Studies in Surface Science and Catalysis, 2007, , 803-806.	1.5	4
118	SBA-15 supports modified by Ti and Zr grafting for NiMo hydrodesulfurization catalysts. Catalysis Today, 2006, 116, 485-497.	2.2	126
119	New NiMo catalysts supported on ZrO2-modified SBA-15 materials for 4,6-dimethyldibenzothiophene hydrodesulfurization. Studies in Surface Science and Catalysis, 2006, 162, 355-362.	1.5	7
120	Controlling Reaction Routes in Nobleâ€Metal atalyzed Conversion of Aryl Ethers. Angewandte Chemie, 0, , .	1.6	2