

Jordi Llorca

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435
papers

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h-index

99
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454
ext. papers

16,872
ext. citations

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avg, IF

6.85
L-index

#	Paper	IF	Citations
435	The effect of gold loading and particle size on photocatalytic hydrogen production from ethanol over Au/TiO ₂ nanoparticles. <i>Nature Chemistry</i> , 2011 , 3, 489-92	17.6	986
434	Efficient Production of Hydrogen over Supported Cobalt Catalysts from Ethanol Steam Reforming. <i>Journal of Catalysis</i> , 2002 , 209, 306-317	7.3	453
433	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?. <i>ACS Catalysis</i> , 2017 , 7, 4716-4735	13.1	372
432	Shape-Dependent Activity of Ceria in Soot Combustion. <i>ACS Catalysis</i> , 2014 , 4, 172-181	13.1	322
431	Nanophase Fluorite-Structured CeO ₂ /ZrO ₂ Catalysts Prepared by High-Energy Mechanical Milling. <i>Journal of Catalysis</i> , 1997 , 169, 490-502	7.3	315
430	Surface-structure sensitivity of CO oxidation over polycrystalline ceria powders. <i>Journal of Catalysis</i> , 2005 , 234, 88-95	7.3	221
429	Nanofaceted Pd-O sites in Pd-Ce surface superstructures: enhanced activity in catalytic combustion of methane. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 8481-4	16.4	213
428	CO-free hydrogen from steam-reforming of bioethanol over ZnO-supported cobalt catalysts. <i>Applied Catalysis B: Environmental</i> , 2003 , 43, 355-369	21.8	208
427	The Synthesis and Characterization of Mesoporous High-Surface Area Ceria Prepared Using a Hybrid Organic/Inorganic Route. <i>Journal of Catalysis</i> , 1998 , 178, 299-308	7.3	201
426	Effect of sodium addition on the performance of Co/ZnO-based catalysts for hydrogen production from bioethanol. <i>Journal of Catalysis</i> , 2004 , 222, 470-480	7.3	175
425	Nanomaterials. Influence of the support on surface rearrangements of bimetallic nanoparticles in real catalysts. <i>Science</i> , 2014 , 346, 620-3	33.3	159
424	In situ DRIFT-mass spectrometry study of the ethanol steam-reforming reaction over carbonyl-derived Co/ZnO catalysts. <i>Journal of Catalysis</i> , 2004 , 227, 556-560	7.3	151
423	Soot combustion over silver-supported catalysts. <i>Applied Catalysis B: Environmental</i> , 2009 , 91, 489-498	21.8	144
422	Direct production of hydrogen from ethanolic aqueous solutions over oxide catalysts. <i>Chemical Communications</i> , 2001 , 641-642	5.8	142
421	The effect of doping CeO ₂ with zirconium in the oxidation of isobutane. <i>Applied Catalysis A: General</i> , 1996 , 139, 161-173	5.1	138
420	Surface Faceting and Reconstruction of Ceria Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 375-379	16.4	136
419	Low-temperature steam-reforming of ethanol over ZnO-supported Ni and Cu catalysts. <i>Catalysis Today</i> , 2006 , 116, 361-366	5.3	120

418	Propene epoxidation over TiO ₂ -supported AuCu alloy catalysts prepared from thiol-capped nanoparticles. <i>Journal of Catalysis</i> , 2008 , 258, 187-198	7.3	116
417	In situ studies of CeO ₂ -supported Pt, Ru, and PtRu alloy catalysts for the water-gas shift reaction: Active phases and reaction intermediates. <i>Journal of Catalysis</i> , 2012 , 291, 117-126	7.3	114
416	In situ magnetic characterisation of supported cobalt catalysts under steam-reforming of ethanol. <i>Applied Catalysis A: General</i> , 2003 , 243, 261-269	5.1	113
415	Transformation of Co ₃ O ₄ during Ethanol Steam-Re-forming. Activation Process for Hydrogen Production. <i>Chemistry of Materials</i> , 2004 , 16, 3573-3578	9.6	110
414	Synthesis of Several Isomeric Tetrathiafulvalene .pi.-Electron Donors with Peripheral Sulfur Atoms. A Study of Their Radical Cations. <i>Journal of Organic Chemistry</i> , 1994 , 59, 3307-3313	4.2	107
413	Structure and morphology of Pd/Al ₂ O ₃ and Pd/CeO ₂ /Al ₂ O ₃ combustion catalysts in PdPdO transformation hysteresis. <i>Applied Catalysis A: General</i> , 2010 , 390, 1-10	5.1	98
412	CO and CO ₂ methanation over Ni catalysts supported on CeO ₂ , Al ₂ O ₃ and Y ₂ O ₃ oxides. <i>Applied Catalysis B: Environmental</i> , 2020 , 264, 118494	21.8	98
411	Ethanol steam reforming and water gas shift over Co/ZnO catalytic honeycombs doped with Fe, Ni, Cu, Cr and Na. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 7690-7698	6.7	96
410	Steam reforming of ethanol at moderate temperature: Multifactorial design analysis of Ni/La ₂ O ₃ -Al ₂ O ₃ , and Fe- and Mn-promoted Co/ZnO catalysts. <i>Journal of Power Sources</i> , 2007 , 169, 158-166	8.9	94
409	Supported PtSn catalysts highly selective for isobutane dehydrogenation: preparation, characterization and catalytic behavior. <i>Applied Catalysis A: General</i> , 1999 , 189, 77-86	5.1	94
408	Chemical abundances determined from meteor spectra: I. Ratios of the main chemical elements. <i>Meteoritics and Planetary Science</i> , 2003 , 38, 1283-1294	2.8	93
407	Fast and efficient hydrogen generation catalyzed by cobalt talc nanolayers dispersed in silica aerogel. <i>Journal of Materials Chemistry</i> , 2010 , 20, 4875		90
406	Microcalorimetric and infrared studies of ethanol and acetaldehyde adsorption to investigate the ethanol steam reforming on supported cobalt catalysts. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 10813-9	3.4	89
405	A novel and simple route to catalysts with a high oxygen storage capacity: the direct room-temperature synthesis of CeO ₂ ZrO ₂ solid solutions. <i>Journal of the Chemical Society Chemical Communications</i> , 1995 , 2181-2182		89
404	Unusual Oxygen Storage/Redox Behavior of High-Surface-Area Ceria Prepared by a Surfactant-Assisted Route. <i>Chemistry of Materials</i> , 1997 , 9, 2676-2678	9.6	88
403	Relationships between Structural/Morphological Modifications and Oxygen Storage/Redox Behavior of Silica-Doped Ceria. <i>Journal of Catalysis</i> , 2000 , 194, 461-478	7.3	88
402	Hydrogen production by tuning the photonic band gap with the electronic band gap of TiO ₂ . <i>Scientific Reports</i> , 2013 , 3, 2849	4.9	86
401	Propene epoxidation by nitrous oxide over AuCu/TiO ₂ alloy catalysts. <i>Journal of Molecular Catalysis A</i> , 2007 , 274, 159-168		83

- 400 The strength of cometary meteoroids: clues to the structure and evolution of comets. *Monthly Notices of the Royal Astronomical Society*, **2006**, 372, 655-660 4.3 83
- 399 NiSn bimetallic nanoparticles as stable electrocatalysts for methanol oxidation reaction. *Applied Catalysis B: Environmental*, **2018**, 234, 10-18 21.8 82
- 398 Conversion of glycerol over 10%Ni/Al₂O₃ catalyst. *Applied Catalysis B: Environmental*, **2014**, 147, 464-480 11.8 82
- 397 Photoreaction of ethanol on Au/TiO₂ anatase: Comparing the micro to nanoparticle size activities of the support for hydrogen production. *Journal of Photochemistry and Photobiology A: Chemistry*, **2010**, 216, 250-255 4.7 80
- 396 A phenomenological study of the metal-oxide interface: the role of catalysis in hydrogen production from renewable resources. *ChemSusChem*, **2008**, 1, 905-10 8.3 77
- 395 The effect of CeO₂ on the dynamics of PdPdO transformation over Pd/Al₂O₃ combustion catalysts. *Catalysis Communications*, **2007**, 8, 1263-1266 3.2 74
- 394 Higher activity of Diesel soot oxidation over polycrystalline ceria and ceria/zirconia solid solutions from more reactive surface planes. *Catalysis Today*, **2012**, 197, 119-126 5.3 71
- 393 Performance comparison of Ni/TiO₂ and Au/TiO₂ photocatalysts for H₂ production in different alcohol-water mixtures. *Journal of Catalysis*, **2018**, 367, 27-42 7.3 71
- 392 Outstanding Methane Oxidation Performance of Palladium-Embedded Ceria Catalysts Prepared by a One-Step Dry Ball-Milling Method. *Angewandte Chemie - International Edition*, **2018**, 57, 10212-10216 16.4 69
- 391 In Situ Electrochemical Oxidation of Cu₂S into CuO Nanowires as a Durable and Efficient Electrocatalyst for Oxygen Evolution Reaction. *Chemistry of Materials*, **2019**, 31, 7732-7743 9.6 69
- 390 First use of macroporous silicon loaded with catalyst film for a chemical reaction: A microreformer for producing hydrogen from ethanol steam reforming. *Journal of Catalysis*, **2008**, 255, 228-233 7.3 69
- 389 Autothermal generation of hydrogen from ethanol in a microreactor. *International Journal of Hydrogen Energy*, **2008**, 33, 1827-1833 6.7 69
- 388 Cobalt hydroxalicates as catalysts for bioethanol steam reforming. The promoting effect of potassium on catalyst activity and long-term stability. *Applied Catalysis B: Environmental*, **2012**, 127, 59-67 21.8 68
- 387 Bimetallic Silica-Supported Catalysts Based on Ni₂N, Pd₂N, and Pt₂N as Materials in the CO Oxidation Reaction. *Chemistry of Materials*, **1998**, 10, 1333-1342 9.6 67
- 386 A luminescent hydrogel based on a new Au(I) complex. *Chemical Communications*, **2013**, 49, 72-4 5.8 65
- 385 Bulbous tracks arising from hypervelocity capture in aerogel. *Meteoritics and Planetary Science*, **2008**, 43, 75-86 2.8 65
- 384 Defect-induced strategies for the creation of highly active hydroxalicates in base-catalyzed reactions. *Journal of Catalysis*, **2007**, 252, 249-257 7.3 65
- 383 Catalytic monoliths for ethanol steam reforming. *Catalysis Today*, **2008**, 138, 187-192 5.3 65

382	Dynamic photocatalytic hydrogen production from ethanol/water mixtures in an optical fiber honeycomb reactor loaded with Au/TiO ₂ . <i>Journal of Catalysis</i> , 2014 , 309, 460-467	7.3	64
381	Methanol steam reforming behavior of copper impregnated over CeO ₂ /ZrO ₂ derived from a surfactant assisted coprecipitation route. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 10463-10479	6.7	63
380	Visible Light-Driven H ₂ Production over Highly Dispersed Ruthenia on Rutile TiO ₂ Nanorods. <i>ACS Catalysis</i> , 2016 , 6, 407-417	13.1	63
379	CO oxidation and COPrOx over preformed Au nanoparticles supported over nanoshaped CeO ₂ . <i>Applied Catalysis B: Environmental</i> , 2016 , 197, 47-55	21.8	63
378	Mn ₃ O ₄ @CoMn ₂ O ₄ -CoxO _y Nanoparticles: Partial Cation Exchange Synthesis and Electrocatalytic Properties toward the Oxygen Reduction and Evolution Reactions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 17435-44	9.5	60
377	Detection of sporadic impact flashes on the Moon: Implications for the luminous efficiency of hypervelocity impacts and derived terrestrial impact rates. <i>Icarus</i> , 2006 , 184, 319-326	3.8	60
376	Catalytic ammonia decomposition for hydrogen production on Ni, Ru and Ni Ru supported on CeO ₂ . <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 12693-12707	6.7	57
375	Room temperature oxidation of formaldehyde on Pt-based catalysts: A comparison between ceria and other supports (TiO ₂ , Al ₂ O ₃ and ZrO ₂). <i>Catalysis Today</i> , 2015 , 253, 163-171	5.3	56
374	In Situ Elucidation of the Active State of Co/CeO _x Catalysts in the Dry Reforming of Methane: The Important Role of the Reducible Oxide Support and Interactions with Cobalt. <i>ACS Catalysis</i> , 2018 , 8, 3550-3560	13.1	56
373	Enhanced photocatalytic degradation of methylene blue: Preparation of TiO ₂ /reduced graphene oxide nanocomposites by direct sol-gel and hydrothermal methods. <i>Materials Research Bulletin</i> , 2017 , 95, 578-587	5.1	56
372	Hydrodechlorination of trichloroethylene on noble metal promoted Cu-hydroxalcalite-derived catalysts. <i>Journal of Catalysis</i> , 2009 , 263, 239-246	7.3	56
371	Bio-ethanol steam reforming and autothermal reforming in 3-in channels coated with RhPd/CeO ₂ for hydrogen generation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013 , 64, 31-37	3.7	55
370	Improved high temperature stability of NH ₃ -SCR catalysts based on rare earth vanadates supported on TiO ₂ WO ₃ SiO ₂ . <i>Catalysis Today</i> , 2012 , 184, 227-236	5.3	55
369	Origin of High Activity and Selectivity of CuO/CeO ₂ Catalysts Prepared by Solution Combustion Synthesis in CO-PROX Reaction. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 13039-13048	3.8	55
368	Boosted selectivity toward high glycerol tertiary butyl ethers by microwave-assisted sulfonic acid-functionalization of SBA-15 and beta zeolite. <i>Journal of Catalysis</i> , 2012 , 290, 202-209	7.3	54
367	An efficient and reusable catalyst based on Pd/CeO ₂ for the room temperature aerobic Suzuki-Miyaura reaction in water/ethanol. <i>Journal of Molecular Catalysis A</i> , 2010 , 315, 197-204		53
366	Structural and morphological investigation of ceria-promoted Al ₂ O ₃ under severe reducing/oxidizing conditions. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11110-8	3.4	53
365	Photocatalyzed Hydrogen Evolution from Water by a Composite Catalyst of NH ₂ -MIL-125(Ti) and Surface Nickel(II) Species. <i>Chemistry - A European Journal</i> , 2016 , 22, 13894-13899	4.8	52

364	Computational fluid dynamics simulation of ethanol steam reforming in catalytic wall microchannels. <i>Chemical Engineering Journal</i> , 2011 , 167, 603-609	14.7	52
363	Pd ₂ Sn [010] nanorods as a highly active and stable ethanol oxidation catalyst. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 16706-16713	13	52
362	Catalytic walls and micro-devices for generating hydrogen by low temperature steam reforming of ethanol. <i>Catalysis Today</i> , 2009 , 143, 32-37	5.3	51
361	Ethanol reforming processes over ZnO-supported palladium catalysts: Effect of alloy formation. <i>Journal of Molecular Catalysis A</i> , 2006 , 250, 44-49		51
360	Cobalt hydroxalate for the steam reforming of ethanol with scarce carbon production. <i>RSC Advances</i> , 2012 , 2, 2946	3.7	50
359	Ethanol steam reforming for hydrogen generation over structured catalysts. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 4418-4428	6.7	50
358	The Villalbeta de la Peñ meteorite fall: I. Fireball energy, meteorite recovery, strewn field, and petrography. <i>Meteoritics and Planetary Science</i> , 2005 , 40, 795-804	2.8	50
357	Crotonaldehyde hydrogenation over alumina- and silica-supported Pt ₂ Sn catalysts of different composition. In situ DRIFT study. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 3063-3069	3.6	50
356	Magnetite-supported palladium single-atoms do not catalyse the hydrogenation of alkenes but small clusters do. <i>Catalysis Science and Technology</i> , 2016 , 6, 4081-4085	5.5	50
355	A comparative study of water gas shift reaction over gold and platinum supported on ZrO ₂ and CeO ₂ /ZrO ₂ . <i>Applied Catalysis B: Environmental</i> , 2009 , 88, 272-282	21.8	49
354	Colloidal Ni ₂ CoSn nanoparticles as efficient electrocatalysts for the methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22915-22924	13	49
353	Graphene-supported palladium phosphide PdP ₂ nanocrystals for ethanol electrooxidation. <i>Applied Catalysis B: Environmental</i> , 2019 , 242, 258-266	21.8	48
352	Study of Pt/CeO ₂ interaction and the effect in the selective hydrodechlorination of trichloroethylene. <i>Applied Catalysis B: Environmental</i> , 2009 , 87, 84-91	21.8	46
351	Platinum ₂ Sn Catalysts Supported on Silica Highly Selective for Hexane Dehydrogenation. <i>Journal of Catalysis</i> , 1997 , 166, 44-52	7.3	46
350	Ambient Pressure Photoemission Spectroscopy Reveals the Mechanism of Carbon Soot Oxidation in Ceria-Based Catalysts. <i>ChemCatChem</i> , 2016 , 8, 2748-2751	5.2	45
349	Recent Advances in the Catalytic Production of Platform Chemicals from Holocellulosic Biomass. <i>ChemCatChem</i> , 2019 , 11, 2022-2042	5.2	44
348	Remarkable Carbon Dioxide Hydrogenation to Ethanol on a Palladium/Iron Oxide Single-Atom Catalyst. <i>ChemCatChem</i> , 2018 , 10, 2365-2369	5.2	43
347	Colloidal Ni ₂ CoxP nanocrystals for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11453-11462	13	43

346	The Villalbeto de la Peña meteorite fall: II. Determination of atmospheric trajectory and orbit. <i>Meteoritics and Planetary Science</i> , 2006 , 41, 505-517	2.8	43
345	ZnSe/N-Doped Carbon Nanoreactor with Multiple Adsorption Sites for Stable Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2020 , 14, 15492-15504	16.7	43
344	SnP nanocrystals as anode materials for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10958-10963	5.3	43
343	Sulfonic acid-functionalized aerogels as high resistant to deactivation catalysts for the etherification of glycerol with isobutene. <i>Applied Catalysis B: Environmental</i> , 2013 , 136-137, 287-293	21.8	42
342	Ethanol steam reforming and water gas shift reaction over CoMn/ZnO catalysts. <i>Chemical Engineering Journal</i> , 2009 , 154, 267-273	14.7	42
341	The formation of nanodomains of Ce6O11 in ceria catalyzed soot combustion. <i>Journal of Catalysis</i> , 2014 , 312, 191-194	7.3	41
340	Support effect on the formation of the well-defined PtSn alloy from a PtSn bimetallic complex. Catalytic properties in the activation of CO2. <i>Journal of Molecular Catalysis A</i> , 1997 , 118, 101-111		41
339	Ethanol steam reforming at very low temperature over cobalt talc in a membrane reactor. <i>Catalysis Today</i> , 2012 , 193, 101-106	5.3	40
338	Hydrogen production from ethanol over PdRh/CeO2 with a metallic membrane reactor. <i>Catalysis Today</i> , 2012 , 193, 145-150	5.3	40
337	Chemical abundances determined from meteor spectra - II. Evidence for enlarged sodium abundances in meteoroids. <i>Monthly Notices of the Royal Astronomical Society</i> , 2004 , 348, 802-810	4.3	40
336	Influence of Metallic Precursors on the Preparation of Silica-Supported PtSn Alloy: Characterization and Reactivity in the Catalytic Activation of CO2. <i>Journal of Catalysis</i> , 1995 , 156, 139-146	7.3	40
335	Tubular CoFeP@CN as a MottSchottky Catalyst with Multiple Adsorption Sites for Robust LithiumSulfur Batteries. <i>Advanced Energy Materials</i> , 2021 , 11, 2100432	21.8	40
334	Three-dimensional ruthenium-doped TiO2 sea urchins for enhanced visible-light-responsive H2 production. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 15972-9	3.6	40
333	Influence of copper on nickel-based catalysts in the conversion of glycerol. <i>Applied Catalysis B: Environmental</i> , 2015 , 166-167, 166-180	21.8	39
332	PdCu alloy nanoparticles on alumina as selective catalysts for trichloroethylene hydrodechlorination to ethylene. <i>Applied Catalysis A: General</i> , 2013 , 453, 130-141	5.1	39
331	Vapour phase hydrogenation of crotonaldehyde over magnesia-supported platinumSn catalysts. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 1782-1788	3.6	39
330	Mixed ironBismuth vanadate NH3-SCR catalysts. <i>Catalysis Today</i> , 2015 , 241, 159-168	5.3	38
329	Boosted CO2 reaction with methanol to yield dimethyl carbonate over Mg-Al hydrotalcite-silica lyogels. <i>Chemical Communications</i> , 2013 , 49, 5489-91	5.8	38

328	Nature and location of cerium in Ce-loaded Y zeolites as revealed by HRTEM and spectroscopic techniques. <i>Microporous and Mesoporous Materials</i> , 2007 , 100, 276-286	5.3	38
327	The influence of nano-architected CeO supports in RhPd/CeO ₂ for the catalytic ethanol steam reforming reaction. <i>Catalysis Today</i> , 2015 , 253, 99-105	5.3	37
326	Pd ₂ Au ₃₆ (SR) ₂₄ cluster: structure studies. <i>Nanoscale</i> , 2015 , 7, 17012-9	7.7	37
325	Influence of acid-base properties of calcined MgAl and CaAl layered double hydroxides on the catalytic glycerol etherification to short-chain polyglycerols. <i>Chemical Engineering Journal</i> , 2015 , 264, 547-556	14.7	37
324	Durable ethanol steam reforming in a catalytic membrane reactor at moderate temperature over cobalt hydrotalcite. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 10902-10910	6.7	37
323	A General Approach To Fabricate Fe ₃ O ₄ Nanoparticles Decorated with Pd, Au, and Rh: Magnetically Recoverable and Reusable Catalysts for Suzuki C-C Cross-Coupling Reactions, Hydrogenation, and Sequential Reactions. <i>Chemistry - A European Journal</i> , 2013 , 19, 11963-74	4.8	37
322	Enhanced Cu activity in catalytic ozonation of clofibric acid by incorporation into ammonium dawsonite. <i>Applied Catalysis B: Environmental</i> , 2011 , 107, 9-17	21.8	37
321	Solution-Processed Ultrathin SnS-Pt Nanoplates for Photoelectrochemical Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 6918-6926	9.5	36
320	Influence of Pt particle size and reaction phase on the photocatalytic performances of ultradispersed Pt/TiO ₂ catalysts for hydrogen evolution. <i>Journal of Catalysis</i> , 2019 , 375, 155-163	7.3	36
319	Asteroid 2002NY40 as a source of meteorite-dropping bolides. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007 , 382, 1933-1939	4.3	36
318	The solid-state rearrangement of the Wells-Dawson K ₆ P ₂ W ₁₈ O ₆₂ ·10H ₂ O to a stable Keggin-type heteropolyanion phase: a catalyst for the selective oxidation of isobutane to isobutene. <i>Catalysis Letters</i> , 1996 , 36, 75-79	2.8	36
317	Atomically dispersed Fe in a C ₂ N Based Catalyst as a Sulfur Host for Efficient Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2021 , 11, 2003507	21.8	36
316	Compositionally tuned Ni _x Sn alloys as anode materials for lithium-ion and sodium-ion batteries with a high pseudocapacitive contribution. <i>Electrochimica Acta</i> , 2019 , 304, 246-254	6.7	35
315	Combustion synthesized copper-ion substituted FeAl ₂ O ₄ (Cu _{0.1} Fe _{0.9} Al ₂ O ₄): A superior catalyst for methanol steam reforming compared to its impregnated analogue. <i>Journal of Power Sources</i> , 2016 , 304, 319-331	8.9	35
314	The effect of Fe-Rh alloying on CO hydrogenation to C ₂ + oxygenates. <i>Journal of Catalysis</i> , 2015 , 329, 87-94	7.3	35
313	CoBiO ₂ aerogel-coated catalytic walls for the generation of hydrogen. <i>Catalysis Today</i> , 2008 , 138, 193-197	5.3	35
312	Reaction between H ₂ , CO, and H ₂ S over Fe, Ni metal in the solar nebula: Experimental evidence for the formation of sulfur-bearing organic molecules and sulfides. <i>Meteoritics and Planetary Science</i> , 2000 , 35, 841-848	2.8	35
311	Microwave-assisted synthesis of sulfonic acid-functionalized microporous materials for the catalytic etherification of glycerol with isobutene. <i>Green Chemistry</i> , 2013 , 15, 2230	10	34

310	Kinetic analysis and CFD simulations of the photocatalytic production of hydrogen in silicone microreactors from water-ethanol mixtures. <i>Applied Catalysis B: Environmental</i> , 2017 , 203, 210-217	21.8	34
309	Ceria-Zirconia Particles Wrapped in a 2D Carbon Envelope: Improved Low-Temperature Oxygen Transfer and Oxidation Activity. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 14040-3	16.4	34
308	Activity, durability and microstructural characterization of ex-nitrate and ex-chloride Pt/Ce _{0.56} Zr _{0.44} O ₂ catalysts for low temperature water gas shift reaction. <i>Journal of Catalysis</i> , 2010 , 270, 285-298	7.3	34
307	A million-channel reformer on a fingertip: Moving down the scale in hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 3472-3479	6.7	34
306	Selective hydrodeoxygenation of biomass derived 5-hydroxymethylfurfural over silica supported iridium catalysts. <i>Applied Catalysis B: Environmental</i> , 2019 , 241, 270-283	21.8	34
305	Stability of Pd ₃ Pb Nanocubes during Electrocatalytic Ethanol Oxidation. <i>Chemistry of Materials</i> , 2020 , 32, 2044-2052	9.6	33
304	From Au(I) organometallic hydrogels to well-defined Au(0) nanoparticles. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 5538	7.1	33
303	Catalytic reduction of nitrates in water on Pt promoted Cu hydrotalcite-derived catalysts: Effect of the Pt ₁ Cu alloy formation. <i>Applied Catalysis B: Environmental</i> , 2011 , 110, 58-70	21.8	32
302	Pretreatment Effect on Pt/CeO ₂ Catalyst in the Selective Hydrodechlorination of Trichloroethylene. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17675-17682	3.8	32
301	Silicone microreactors for the photocatalytic generation of hydrogen. <i>Catalysis Today</i> , 2016 , 273, 106-114	4.3	32
300	Silica-supported PtSn alloy doped with Ga, In or, Tl: Characterization and catalytic behaviour in n-hexane dehydrogenation. <i>Journal of Molecular Catalysis A</i> , 2003 , 200, 251-259		31
299	Unraveling the Chemical State of Cobalt in Co-Based Catalysts during Ethanol Steam Reforming: an in Situ Study by Near Ambient Pressure XPS and XANES. <i>ACS Catalysis</i> , 2018 , 8, 9625-9636	13.1	31
298	PdO hydrate as an efficient and recyclable catalyst for the SuzukiMiyaura reaction in water/ethanol at room temperature. <i>Catalysis Communications</i> , 2011 , 12, 563-567	3.2	30
297	Hydrogen production by steam reforming of dimethyl ether over Pd-based catalytic monoliths. <i>Applied Catalysis B: Environmental</i> , 2011 , 101, 690-697	21.8	30
296	Plasma-activated core-shell gold nanoparticle films with enhanced catalytic properties. <i>Journal of Nanoparticle Research</i> , 2008 , 10, 537-542	2.3	30
295	Reduction and Oxygen Storage Behavior of Noble Metals Supported on Silica-Doped Ceria. <i>Journal of Catalysis</i> , 2002 , 211, 407-421	7.3	30
294	FeO@NiFeO Nanoparticles with Enhanced Electrocatalytic Properties for Oxygen Evolution in Carbonate Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 29461-29469	9.5	30
293	Selective Methanol-to-Formate Electrocatalytic Conversion on Branched Nickel Carbide. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 20826-20830	16.4	29

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