

Christopher Hardacre

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457
papers

21,380
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73
h-index

123
g-index

488
ext. papers

23,270
ext. citations

6.1
avg, IF

6.98
L-index

#	Paper	IF	Citations
457	Catalysis in ionic liquids. <i>Chemical Reviews</i> , 2007 , 107, 2615-65	68.1	1880
456	Structure of molten 1,3-dimethylimidazolium chloride using neutron diffraction. <i>Journal of Chemical Physics</i> , 2003 , 118, 273-278	3.9	431
455	Effect of Water on the Electrochemical Window and Potential Limits of Room-Temperature Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2008 , 53, 2884-2891	2.8	421
454	Small-Angle X-ray Scattering Studies of Liquid Crystalline 1-Alkyl-3-methylimidazolium Salts. <i>Chemistry of Materials</i> , 2002 , 14, 629-635	9.6	385
453	Liquid clathrate formation in ionic liquid-aromatic mixtures. <i>Chemical Communications</i> , 2003 , 476-7	5.8	343
452	Use of room temperature ionic liquids in gas sensor design. <i>Analytical Chemistry</i> , 2004 , 76, 4583-8	7.8	341
451	Structure and solvation in ionic liquids. <i>Accounts of Chemical Research</i> , 2007 , 40, 1146-55	24.3	290
450	Small angle neutron scattering from 1-alkyl-3-methylimidazolium hexafluorophosphate ionic liquids ([C(n)mim][PF(6)], n=4, 6, and 8). <i>Journal of Chemical Physics</i> , 2010 , 133, 074510	3.9	252
449	Quantification of halide in ionic liquids using ion chromatography. <i>Analytical Chemistry</i> , 2004 , 76, 2118-23	3.8	230
448	Voltammetry of Oxygen in the Room-Temperature Ionic Liquids 1-Ethyl-3-methylimidazolium Bis((trifluoromethyl)sulfonyl)imide and Hexyltriethylammonium Bis((trifluoromethyl)sulfonyl)imide: One-Electron Reduction To Form Superoxide. Steady-State and Transient Behavior in the Same Cyclic Voltammogram Resulting from Widely Different Diffusion	2.8	229
447	Prediction of Ionic Liquid Properties: The Volumetric Properties as a Function of Temperature at 0.1 MPa. <i>Journal of Chemical & Engineering Data</i> , 2008 , 53, 716-726	2.8	218
446	Voltammetric Characterization of the Ferrocene Ferrocenium and Cobaltocenium Cobaltocene Redox Couples in RTILs. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 2729-2735	3.8	210
445	Electroreduction of Oxygen in a Series of Room Temperature Ionic Liquids Composed of Group 15-Centered Cations and Anions. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 7878-7886	3.4	207
444	Liquid structure of the ionic liquid 1,3-dimethylimidazolium bis[(trifluoromethyl)sulfonyl]amide. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 12055-61	3.4	199
443	Glucose solvation by the ionic liquid 1,3-dimethylimidazolium chloride: a simulation study. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 13765-74	3.4	196
442	DFT and in situ EXAFS investigation of gold/ceria-zirconia low-temperature water gas shift catalysts: identification of the nature of the active form of gold. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 22553-9	3.4	181
441	Thermal Properties of Ionic Liquids and Ionanofluids of Imidazolium and Pyrrolidinium Liquids. <i>Journal of Chemical & Engineering Data</i> , 2010 , 55, 653-661	2.8	179

440	Thermodynamics, structure, and dynamics in room temperature ionic liquids: the case of 1-butyl-3-methyl imidazolium hexafluorophosphate ([bmim][PF6]). <i>Journal of Physical Chemistry B</i> , 2006 , 110, 21357-64	3.4	171
439	Influence of surface structures, subsurface carbon and hydrogen, and surface alloying on the activity and selectivity of acetylene hydrogenation on Pd surfaces: A density functional theory study. <i>Journal of Catalysis</i> , 2013 , 305, 264-276	7.3	169
438	Microwave irradiation for the facile synthesis of transition-metal nanoparticles (NPs) in ionic liquids (ILs) from metal-carbonyl precursors and Ru-, Rh-, and Ir-NP/IL dispersions as biphasic liquid-liquid hydrogenation nanocatalysts for cyclohexene. <i>Chemistry - A European Journal</i> , 2010 , 16, 3849-58	4.8	165
437	Application of static charge transfer within an ionic-liquid force field and its effect on structure and dynamics. <i>ChemPhysChem</i> , 2008 , 9, 1548-58	3.2	164
436	Structure of ionic liquid-benzene mixtures. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 1593-8	3.4	157
435	Quantitative analysis of the reactivity of formate species seen by DRIFTS over a Au/Ce(La)O ₂ water-gas shift catalyst: First unambiguous evidence of the minority role of formates as reaction intermediates. <i>Journal of Catalysis</i> , 2007 , 247, 277-287	7.3	154
434	Highly selective and efficient hydrogenation of carboxylic acids to alcohols using titania supported Pt catalysts. <i>Chemical Communications</i> , 2010 , 46, 6279-81	5.8	149
433	Thermal Conductivities of Ionic Liquids over the Temperature Range from 293 K to 353 K. <i>Journal of Chemical & Engineering Data</i> , 2007 , 52, 1819-1823	2.8	147
432	Heat Capacities of Ionic Liquids as a Function of Temperature at 0.1 MPa. Measurement and Prediction. <i>Journal of Chemical & Engineering Data</i> , 2008 , 53, 2148-2153	2.8	143
431	Application of heterogeneous catalysts prepared by mechanochemical synthesis. <i>Chemical Society Reviews</i> , 2013 , 42, 7701-18	58.5	140
430	A comparative electrochemical study of diffusion in room temperature ionic liquid solvents versus acetonitrile. <i>ChemPhysChem</i> , 2005 , 6, 526-33	3.2	135
429	Origin of the Increase of Activity and Selectivity of Nickel Doped by Au, Ag, and Cu for Acetylene Hydrogenation. <i>ACS Catalysis</i> , 2012 , 2, 1027-1032	13.1	134
428	Extended electrochemical windows made accessible by room temperature ionic liquid/organic solvent electrolyte systems. <i>ChemPhysChem</i> , 2006 , 7, 176-80	3.2	130
427	Prediction of Ionic Liquid Properties. II. Volumetric Properties as a Function of Temperature and Pressure. <i>Journal of Chemical & Engineering Data</i> , 2008 , 53, 2133-2143	2.8	124
426	Structural Studies of Crystalline 1-Alkyl-3-Methylimidazolium Chloride Salts. <i>Chemistry of Materials</i> , 2004 , 16, 43-48	9.6	123
425	Electrochemistry of sulfur and polysulfides in ionic liquids. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 13873-9	3.4	119
424	Ensemble Effects in the Coupling of Acetylene to Benzene on a Bimetallic Surface: A Study with Pd{111}/Au. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 2189-2194		118
423	The reduction of oxygen in various room temperature ionic liquids in the temperature range 293-318 K: exploring the applicability of the Stokes-Einstein relationship in room temperature ionic liquids. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 8953-9	3.4	115

422	Oxidation of N,N,N',N'-tetraalkyl-para-phenylenediamines in a series of room temperature ionic liquids incorporating the bis(trifluoromethylsulfonyl)imide anion. <i>Journal of Electroanalytical Chemistry</i> , 2003 , 556, 179-188	4.1	115
421	Structure and dynamics of 1-ethyl-3-methylimidazolium acetate via molecular dynamics and neutron diffraction. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 7760-8	3.4	111
420	Molecular layering and local order in thin films of 1-alkyl-3-methylimidazolium ionic liquids using X-ray reflectivity. <i>Molecular Physics</i> , 2001 , 99, 795-800	1.7	111
419	Reduction of Carbon Dioxide to Formate at Low Overpotential Using a Superbase Ionic Liquid. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 14164-8	16.4	110
418	Neutron diffraction, NMR and molecular dynamics study of glucose dissolved in the ionic liquid 1-ethyl-3-methylimidazolium acetate. <i>Chemical Science</i> , 2011 , 2, 1594	9.4	110
417	A molecular dynamics study of glucose solvation in the ionic liquid 1,3-dimethylimidazolium chloride. <i>ChemPhysChem</i> , 2006 , 7, 2279-81	3.2	109
416	Metal Redispersion Strategies for Recycling of Supported Metal Catalysts: A Perspective. <i>ACS Catalysis</i> , 2015 , 5, 3430-3445	13.1	108
415	Structural investigation of the promotional effect of hydrogen during the selective catalytic reduction of NO _x with hydrocarbons over Ag/Al ₂ O ₃ catalysts. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 4805-7	3.4	106
414	Electroanalytical determination of trace chloride in room-temperature ionic liquids. <i>Analytical Chemistry</i> , 2004 , 76, 1998-2003	7.8	106
413	Origin of low CO ₂ selectivity on platinum in the direct ethanol fuel cell. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 1572-5	16.4	105
412	Thermophysical Properties of Amino Acid-Based Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2010 , 55, 1505-1515	2.8	102
411	Transesterification of vegetable oils on basic large mesoporous alumina supported alkaline fluorides: Evidences of the nature of the active site and catalytic performances. <i>Journal of Catalysis</i> , 2009 , 263, 56-66	7.3	101
410	Liquid structure of 1, 3-dimethylimidazolium salts. <i>Journal of Physics Condensed Matter</i> , 2003 , 15, S159-S166	16.6	101
409	Electrochemical reduction of nitrobenzene and 4-nitrophenol in the room temperature ionic liquid [C ₄ dmim][N(Tf) ₂]. <i>Journal of Electroanalytical Chemistry</i> , 2006 , 596, 131-140	4.1	100
408	An electrochemical study of the oxidation of hydrogen at platinum electrodes in several room temperature ionic liquids. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 5000-7	3.4	95
407	Quantitative DRIFTS investigation of possible reaction mechanisms for the water-gas shift reaction on high-activity Pt- and Au-based catalysts. <i>Journal of Catalysis</i> , 2007 , 252, 18-22	7.3	94
406	Electrochemical studies of gold and chloride in ionic liquids. <i>New Journal of Chemistry</i> , 2006 , 30, 1576-1588	3.8	91
405	A mechanistic study of the electro-oxidation of bromide in acetonitrile and the room temperature ionic liquid, 1-butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide at platinum electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2005 , 575, 311-320	4.1	91

404	Evaluation of Gas Solubility Prediction in Ionic Liquids using COSMOthermX. <i>Journal of Chemical & Engineering Data</i> , 2009 , 54, 2005-2022	2.8	89
403	Catalytic hydrogenation of tertiary amides at low temperatures and pressures using bimetallic Pt/Re-based catalysts. <i>Journal of Catalysis</i> , 2011 , 283, 89-97	7.3	87
402	Industrial Applications of Ionic Liquids. <i>Molecules</i> , 2020 , 25,	4.8	87
401	Investigating the Mechanism and Electrode Kinetics of the Oxygen Superoxide (O ₂ O ₂ ⁻) Couple in Various Room-Temperature Ionic Liquids at Gold and Platinum Electrodes in the Temperature Range 298-318 K. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17811-17823	3.8	82
400	Relaxation processes in room temperature ionic liquids: the case of 1-butyl-3-methyl imidazolium hexafluorophosphate. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 22061-6	3.4	82
399	New insight into mechanisms in water-gas-shift reaction on Au/CeO ₂ (111): a density functional theory and kinetic study. <i>Faraday Discussions</i> , 2011 , 152, 121-33; discussion 203-25	3.6	79
398	Liquid densities, heat capacities, refractive index and excess quantities for {protic ionic liquids+water} binary system. <i>Journal of Chemical Thermodynamics</i> , 2009 , 41, 799-808	2.9	79
397	Deactivation Mechanism of a Au/CeZrO ₄ Catalyst During a Low-Temperature Water Gas Shift Reaction. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 16927-16933	3.8	79
396	Double potential step chronoamperometry at microdisk electrodes: simulating the case of unequal diffusion coefficients. <i>Journal of Electroanalytical Chemistry</i> , 2004 , 571, 211-221	4.1	79
395	The effect of various treatment conditions on natural zeolites: ion exchange, acidic, thermal and steam treatments. <i>Journal of Colloid and Interface Science</i> , 2012 , 372, 130-40	9.3	78
394	Electrochemistry in Room-Temperature Ionic Liquids: Potential Windows at Mercury Electrodes. <i>Journal of Chemical & Engineering Data</i> , 2009 , 54, 2049-2053	2.8	78
393	Unusual Voltammetry of the Reduction of O ₂ in [C ₄ dmim][N(Tf) ₂] Reveals a Strong Interaction of O ₂ ⁻ with the [C ₄ dmim] ⁺ Cation. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 13709-13715	3.8	77
392	Kinetic Analysis of the Reaction between Electrogenerated Superoxide and Carbon Dioxide in the Room Temperature Ionic Liquids 1-Ethyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide and Hexyltriethylammonium Bis(trifluoromethylsulfonyl)imide. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 3947-3954	3.4	77
391	In situ XAFS investigation of palladium species present during the Heck reaction in room temperature ionic liquids. <i>Green Chemistry</i> , 2002 , 4, 139-142	10	77
390	Electrochemical rate constants in room temperature ionic liquids: the oxidation of a series of ferrocene derivatives. <i>ChemPhysChem</i> , 2006 , 7, 1041-5	3.2	75
389	An electrochemical and ESR spectroscopic study on the molecular dynamics of TEMPO in room temperature ionic liquid solvents. <i>ChemPhysChem</i> , 2005 , 6, 1035-9	3.2	75
388	Crystal and liquid crystalline polymorphism in 1-alkyl-3-methylimidazolium tetrachloropalladate(II) salts. <i>Journal of Materials Chemistry</i> , 2001 , 11, 346-350		75
387	Temperature dependence of the primary relaxation in 1-hexyl-3-methylimidazolium bis((trifluoromethyl)sulfonyl)imide. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 8469-74	3.4	73

386	The electrochemical oxidation of hydrogen at activated platinum electrodes in room temperature ionic liquids as solvents. <i>Journal of Electroanalytical Chemistry</i> , 2008 , 618, 53-60	4.1	73
385	Preparation of nanoparticulate metal catalysts in porous supports using an ionic liquid route; hydrogenation and C–C coupling. <i>Inorganic Chemistry Communication</i> , 2004 , 7, 73-76	3.1	73
384	Heterogeneously catalysed selective hydrogenation reactions in ionic liquids. <i>Green Chemistry</i> , 2003 , 5, 448	10	73
383	Alternating copolymerisation of styrene and carbon monoxide in ionic liquids. <i>Green Chemistry</i> , 2002 , 4, 143-146	10	71
382	Facile in situ synthesis of nanofluids based on ionic liquids and copper oxide clusters and nanoparticles. <i>Dalton Transactions</i> , 2012 , 41, 219-27	4.3	70
381	APPLICATION OF EXAFS TO MOLTEN SALTS AND IONIC LIQUID TECHNOLOGY. <i>Annual Review of Materials Research</i> , 2005 , 35, 29-49	12.8	68
380	Marked enantioselectivity enhancements for Diels-Alder reactions in ionic liquids catalysed by platinum diphosphine complexes. <i>Green Chemistry</i> , 2004 , 6, 63-67	10	68
379	Understanding the Optimal Adsorption Energies for Catalyst Screening in Heterogeneous Catalysis. <i>ACS Catalysis</i> , 2014 , 4, 182-186	13.1	67
378	A structural and electrochemical investigation of 1-alkyl-3-methylimidazolium salts of the nitratodioxouranate(VI) anions $[[UO_2(NO_3)_2]_2(\mu\text{-}4\text{-}C_2O_4)]^{2-}$, $[UO_2(NO_3)_3]^-$, and $[UO_2(NO_3)_4]^{2-}$. <i>Inorganic Chemistry</i> , 2004 , 43, 2503-14	5.1	67
377	Solubility of carbon dioxide and ethane in three ionic liquids based on the bis{(trifluoromethyl)sulfonyl}imide anion. <i>Fluid Phase Equilibria</i> , 2007 , 257, 27-34	2.5	66
376	Ion association in [bmim][PF ₆]/naphthalene mixtures: an experimental and computational study. <i>Journal of the American Chemical Society</i> , 2008 , 130, 7032-41	16.4	66
375	Rheological and heat transfer behaviour of the ionic liquid, [C ₄ mim][NTf ₂]. <i>International Journal of Heat and Fluid Flow</i> , 2008 , 29, 149-155	2.4	65
374	Pinning down the solid-state polymorphism of the ionic liquid [bmim][PF ₆]. <i>Chemical Science</i> , 2013 , 4, 1270	9.4	64
373	On the complexity of the water-gas shift reaction mechanism over a Pt/CeO ₂ catalyst: Effect of the temperature on the reactivity of formate surface species studied by operando DRIFT during isotopic transient at chemical steady-state. <i>Catalysis Today</i> , 2007 , 126, 143-147	5.3	64
372	Tetrahexahedral Pt Nanocrystal Catalysts Decorated with Ru Adatoms and Their Enhanced Activity in Methanol Electrooxidation. <i>ACS Catalysis</i> , 2012 , 2, 708-715	13.1	63
371	Electrochemical oxidation of nitrite and the oxidation and reduction of NO ₂ in the room temperature ionic liquid [C ₂ mim][NTf ₂]. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 7778-85	3.4	63
370	Plasma-assisted catalytic dry reforming of methane (DRM) over metal-organic frameworks (MOFs)-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2020 , 260, 118195	21.8	63
369	Role of Water and Adsorbed Hydroxyls on Ethanol Electrochemistry on Pd: New Mechanism, Active Centers, and Energetics for Direct Ethanol Fuel Cell Running in Alkaline Medium. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5762-5772	3.8	62

368	Redispersion of Gold Supported on Oxides. <i>ACS Catalysis</i> , 2012 , 2, 552-560	13.1	62
367	Supported and liquid phase task specific ionic liquids for base catalysed Knoevenagel reactions. <i>Journal of Molecular Catalysis A</i> , 2007 , 269, 64-71		62
366	Ionic liquids--media for unique phosphorus chemistry. <i>Chemical Communications</i> , 2006 , 72-4	5.8	62
365	Interaction of water, hydrogen and their mixtures with SnO ₂ based materials: the role of surface hydroxyl groups in detection mechanisms. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 2639-47	3.6	61
364	Increased dispersion of supported gold during methanol carbonylation conditions. <i>Journal of the American Chemical Society</i> , 2009 , 131, 6973-5	16.4	61
363	Sustaining metal-organic frameworks for water-gas shift catalysis by non-thermal plasma. <i>Nature Catalysis</i> , 2019 , 2, 142-148	36.5	60
362	Functionalised ionic liquids: synthesis of ionic liquids with tethered basic groups and their use in Heck and Knoevenagel reactions. <i>New Journal of Chemistry</i> , 2010 , 34, 723	3.6	59
361	Voltammetric Studies of Gold, Protons, and [HCl ₂] ⁻ in Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8496-8503	3.8	59
360	Electrochemical Kinetics of Ag Ag ⁺ and TMPD TMPD ⁺ in the Room-Temperature Ionic Liquid [C4mpyr][NTf ₂]; toward Optimizing Reference Electrodes for Voltammetry in RTILs. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 13957-13966	3.8	59
359	H ₂ production by the photocatalytic reforming of cellulose and raw biomass using Ni, Pd, Pt and Au on titania. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016 , 472, 20160054	2.4	58
358	Probing a Non-Thermal Plasma Activated Heterogeneously Catalyzed Reaction Using in Situ DRIFTS-MS. <i>ACS Catalysis</i> , 2015 , 5, 956-964	13.1	58
357	A fast transient kinetic study of the effect of H ₂ on the selective catalytic reduction of NO _x with octane using isotopically labelled ¹⁵ N ₂ O. <i>Journal of Catalysis</i> , 2007 , 246, 1-9	7.3	58
356	Efficient Heterogeneous Asymmetric Catalysis of the Mukaiyama Aldol Reaction by Silica- and Ionic Liquid-Supported Lewis Acid Copper(II) Complexes of Bis(oxazolines). <i>Advanced Synthesis and Catalysis</i> , 2008 , 350, 295-302	5.6	58
355	Chloroindate(III) ionic liquids: recyclable media for Friedel-Crafts acylation reactions. <i>Chemical Communications</i> , 2005 , 903-5	5.8	58
354	A highly efficient synthetic procedure for deuterating imidazoles and imidazolium salts. <i>Chemical Communications</i> , 2001 , 367-368	5.8	58
353	Non-Thermal Plasma Activation of Gold-Based Catalysts for Low-Temperature Water-Gas Shift Catalysis. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 5579-5583	16.4	57
352	Liquid-Liquid miscibility and volumetric properties of aqueous solutions of ionic liquids as a function of temperature. <i>Journal of Chemical Thermodynamics</i> , 2009 , 41, 1206-1214	2.9	57
351	Effect of Acetonitrile on the Solubility of Carbon Dioxide in 1-Ethyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)amide. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 8180-8188 ³⁻⁹		57

350	Determination of ammonia based on the electro-oxidation of hydroquinone in dimethylformamide or in the room temperature ionic liquid, 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. <i>Talanta</i> , 2004 , 62, 904-11	6.2	56
349	The use of short time-on-stream in situ spectroscopic transient kinetic isotope techniques to investigate the mechanism of hydrocarbon selective catalytic reduction (HC-SCR) of NO _x at low temperatures. <i>Journal of Catalysis</i> , 2011 , 281, 98-105	7.3	55
348	An investigation of the thermal stability and sulphur tolerance of Ag/Al ₂ O ₃ catalysts for the SCR of NO _x with hydrocarbons and hydrogen. <i>Applied Catalysis B: Environmental</i> , 2007 , 70, 36-44	21.8	55
347	Mechanistic Study of 1,3-Butadiene Formation in Acetylene Hydrogenation over the Pd-Based Catalysts Using Density Functional Calculations. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1560-1567	3.8	54
346	Insight into the key aspects of the regeneration process in the NO _x storage reduction (NSR) reaction probed using fast transient kinetics coupled with isotopically labelled ¹⁵ N ₂ O over Pt and Rh-containing Ba/Al ₂ O ₃ catalysts. <i>Applied Catalysis B: Environmental</i> , 2008 , 81, 150-159	21.8	53
345	A catalytic and mechanistic study of the Friedel-Crafts benzoylation of anisole using zeolites in ionic liquids. <i>Journal of Catalysis</i> , 2004 , 227, 44-52	7.3	53
344	Ambient Temperature Hydrocarbon Selective Catalytic Reduction of NO _x Using Atmospheric Pressure Nonthermal Plasma Activation of a Ag/Al ₂ O ₃ Catalyst. <i>ACS Catalysis</i> , 2014 , 4, 666-673	13.1	52
343	SpaciMS: spatial and temporal operando resolution of reactions within catalytic monoliths. <i>Analyst, The</i> , 2010 , 135, 2260-72	5	52
342	Utilisation of ionic liquid solvents for the synthesis of Lily-of-the-Valley fragrance (Lilial ; 3-(4- <i>t</i> -butylphenyl)-2-methylpropanal}. <i>Journal of Molecular Catalysis A</i> , 2005 , 231, 61-66		52
341	An efficient recyclable peroxometalate-based polymer-immobilised ionic liquid phase (PIILP) catalyst for hydrogen peroxide-mediated oxidation. <i>Green Chemistry</i> , 2012 , 14, 925	10	51
340	In situ study of ozone and hybrid plasma Ag/Al catalysts for the oxidation of toluene: Evidence of the nature of the active sites. <i>Applied Catalysis B: Environmental</i> , 2011 , 104, 84-90	21.8	51
339	Interfacial tensions of imidazolium-based ionic liquids with water and n-alkanes. <i>Fluid Phase Equilibria</i> , 2010 , 294, 139-147	2.5	51
338	Efficient and selective hydrogen peroxide-mediated oxidation of sulfides in batch and segmented and continuous flow using a peroxometalate-based polymer immobilised ionic liquid phase catalyst. <i>Green Chemistry</i> , 2015 , 17, 1559-1571	10	50
337	The origin of high activity but low CO ₂ selectivity on binary PtSn in the direct ethanol fuel cell. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 9432-40	3.6	50
336	Influence of methyl halide treatment on gold nanoparticles supported on activated carbon. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 8912-6	16.4	50
335	Dissolved Argon Changes the Rate of Diffusion in Room Temperature Ionic Liquids: Effect of the Presence and Absence of Argon and Nitrogen on the Voltammetry of Ferrocene. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 7750-7754	3.8	50
334	CO ₂ Capture in Wet and Dry Superbase Ionic Liquids. <i>Journal of Solution Chemistry</i> , 2015 , 44, 511-527	1.8	49
333	Selective Hydrogenation of α -Unsaturated Aldehydes and Ketones using Novel Manganese Oxide and Platinum Supported on Manganese Oxide Octahedral Molecular Sieves as Catalysts. <i>ChemCatChem</i> , 2013 , 5, 506-512	5.2	49

332	Evolution and Enabling Capabilities of Spatially Resolved Techniques for the Characterization of Heterogeneously Catalyzed Reactions. <i>ACS Catalysis</i> , 2016 , 6, 1356-1381	13.1	48
331	Selective hydrogenation of fatty acids to alcohols over highly dispersed ReO/TiO ₂ catalyst. <i>Journal of Catalysis</i> , 2015 , 328, 197-207	7.3	48
330	Recyclable Copper Catalysts Based on Imidazolium-Tagged Bis(oxazolines): A Marked Enhancement in Rate and Enantioselectivity for Diels-Alder Reactions in Ionic Liquid. <i>Advanced Synthesis and Catalysis</i> , 2007 , 349, 951-963	5.6	47
329	Techno-Economic Feasibility of Selective CO ₂ Capture Processes from Biogas Streams Using Ionic Liquids as Physical Absorbents. <i>Energy & Fuels</i> , 2016 , 30, 5052-5064	4.1	47
328	Mechanistic study of non-thermal plasma assisted CO ₂ hydrogenation over Ru supported on MgAl layered double hydroxide. <i>Applied Catalysis B: Environmental</i> , 2020 , 268, 118752	21.8	46
327	The First Continuous Flow Hydrogenation of Amides to Amines. <i>ChemCatChem</i> , 2013 , 5, 2843-2847	5.2	46
326	The effect of reaction conditions on the stability of Au/CeZrO ₄ catalysts in the low-temperature water-gas shift reaction. <i>Journal of Catalysis</i> , 2010 , 273, 257-265	7.3	46
325	Extraction of electrode kinetic parameters from microdisc voltammetric data measured under transport conditions intermediate between steady-state convergent and transient linear diffusion as typically applies to room temperature ionic liquids. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 7560-5	3.4	46
324	Effect of solvent on the hydrogenation of 4-phenyl-2-butanone over Pt based catalysts. <i>Journal of Catalysis</i> , 2015 , 330, 344-353	7.3	45
323	Characterization of silica-supported dodecatungstic heteropolyacids as a function of their dehydroxylation temperature. <i>Dalton Transactions</i> , 2009 , 2235-40	4.3	45
322	Electrooxidation of the Iodides [C ₄ mim]I, LiI, NaI, KI, RbI, and CsI in the Room Temperature Ionic Liquid [C ₄ mim][NTf ₂]. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 6551-6557	3.8	45
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