

Peter Wasserscheid

List of Publications by Year in Descending Order

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Version: 2024-04-28

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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.

457
papers

27,047
citations

79
h-index

152
g-index

505
ext. papers

29,662
ext. citations

6.6
avg, IF

7.32
L-index

#	Paper	IF	Citations
457	Determination of hydrogen loading in the carrier system diphenylmethane/dicyclohexylmethane by depolarized Raman spectroscopy. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 9331-9345	6.7	2
456	Effect of the degree of hydrogenation on the viscosity, surface tension, and density of the liquid organic hydrogen carrier system based on diphenylmethane. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 6111-6130	6.7	3
455	Development of an efficient Pt/SiO ₂ catalyst for the transfer hydrogenation from perhydro-dibenzyltoluene to acetone. <i>Applied Catalysis A: General</i> , 2022 , 639, 118644	5.1	0
454	Thermochemical properties of 6,7-benzindole and its perhydrogenated derivative: A model component for liquid organic hydrogen carriers. <i>Fuel</i> , 2022 , 324, 124410	7.1	1
453	Continuous Gas-Phase Synthesis of Oxymethylene Dimethyl Ethers Using Supported Ionic Liquid Phase Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2022 , 10, 6973-6980	8.3	0
452	Ga-Ni supported catalytically active liquid metal solutions (SCALMS) for selective ethylene oligomerization.. <i>Catalysis Science and Technology</i> , 2021 , 11, 7535-7539	5.5	0
451	GaPt Supported Catalytically Active Liquid Metal Solution Catalysis for Propane Dehydrogenation-Support Influence and Coking Studies. <i>ACS Catalysis</i> , 2021 , 11, 13423-13433	13.1	6
450	Adsorption Motifs and Molecular Orientation at the Ionic Liquid/Noble Metal Interface: [CCIm][NTf ₂] on Pt(111). <i>Langmuir</i> , 2021 , 37, 12596-12607	4	2
449	Interaction between Ionic Liquids and a Pt(111) Surface Probed by Coadsorbed CO as a Test Molecule. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 10079-10085	6.4	0
448	Volatility of molten salts [Ph ₄ P][NTf ₂] and Cs[NTf ₂]. <i>ChemistryOpen</i> , 2021 , 10, 199-204	2.3	0
447	Pressurized hydrogen from charged liquid organic hydrogen carrier systems by electrochemical hydrogen compression. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 15624-15634	6.7	4
446	Dehydrogenation of perhydro-N-ethylcarbazole under reduced total pressure. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 15660-15670	6.7	5
445	Hydrogen solubility, interfacial tension, and density of the liquid organic hydrogen carrier system diphenylmethane/dicyclohexylmethane. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 19446-19466	6.7	10
444	Strategies for Low-Temperature Liquid Organic Hydrogen Carrier Dehydrogenation. <i>Energy & Fuels</i> , 2021 , 35, 10929-10936	4.1	1
443	CO Permeability and Wetting Behavior of Ionic Liquids on Pt(111): An IRAS and PM-IRAS Study from Ultrahigh Vacuum to Ambient Pressure. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 15301-15315	3.8	3
442	Capturing spatially resolved kinetic data and coking of Ga-Pt supported catalytically active liquid metal solutions during propane dehydrogenation in situ. <i>Faraday Discussions</i> , 2021 , 229, 359-377	3.6	5
441	Model Studies on the Ozone-Mediated Synthesis of Cobalt Oxide Nanoparticles from Dicobalt Octacarbonyl in Ionic Liquids. <i>ChemistryOpen</i> , 2021 , 10, 141-152	2.3	1

440	Enduring liquid repellency through slippery ionic liquid-infused organogels. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 2357-2366	13	3
439	Enhancing the feasibility of Pd/C-catalyzed formic acid decomposition for hydrogen generation □ catalyst pretreatment, deactivation, and regeneration. <i>Catalysis Science and Technology</i> , 2021 , 11, 4259-4271	5.5	1
438	Hydrogenation of aromatic and heteroaromatic compounds □ a key process for future logistics of green hydrogen using liquid organic hydrogen carrier systems. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 1311-1346	5.8	11
437	Unraveling Structural Details in Ga-Pd SCALMS Systems Using Correlative Nano-CT, 360□Electron Tomography and Analytical TEM. <i>Catalysts</i> , 2021 , 11, 810	4	0
436	The 2-Propanol Fuel Cell: A Review from the Perspective of a Hydrogen Energy Economy. <i>Energy Technology</i> , 2021 , 9, 2100164	3.5	2
435	Impact of catalyst loading, ionomer content, and carbon support on the performance of direct isopropanol fuel cells. <i>Journal of Power Sources Advances</i> , 2021 , 10, 100064	3.3	0
434	Combined dynamic operation of PEM fuel cell and continuous dehydrogenation of perhydro-dibenzyltoluene. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 35662-35662	6.7	3
433	Experimental determination of the hydrogenation/dehydrogenation - Equilibrium of the LOHC system H0/H18-dibenzyltoluene. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 32583-32594	6.7	5
432	LOHC-bound hydrogen for catalytic NOx reduction from O2-rich exhaust gas. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 34498-34508	6.7	0
431	Catalytically activated stainless steel plates for the dehydrogenation of perhydro dibenzyltoluene. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 34797-34806	6.7	1
430	Glucose oxidation to formic acid and methyl formate in perfect selectivity. <i>Green Chemistry</i> , 2020 , 22, 4311-4320	10	10
429	Extractive Catalytic Oxidative Denitrogenation of Fuels and Their Promoting Effect for Desulfurization Catalyzed by Vanadium Substituted Heteropolyacids and Molecular Oxygen. <i>Energy & Fuels</i> , 2020 , 34, 8099-8109	4.1	10
428	Periodic Open Cellular Raney-Copper Catalysts Fabricated via Selective Electron Beam Melting. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901524	3.5	3
427	Influence of Carboxylate Anions on Phase Behavior of Choline Ionic Liquid Mixtures. <i>Molecules</i> , 2020 , 25,	4.8	3
426	Benzyltoluene/dibenzyltoluene-based mixtures as suitable liquid organic hydrogen carrier systems for low temperature applications. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 14897-14906	6.7	29
425	Additively manufactured RANEY□ -type copper catalyst for methanol synthesis. <i>Catalysis Science and Technology</i> , 2020 , 10, 164-168	5.5	6
424	Cu carbonyls enhance the performance of Ru-based SILP water□gas shift catalysts: a combined in situ DRIFTS and DFT study. <i>Catalysis Science and Technology</i> , 2020 , 10, 252-262	5.5	4
423	Kinetics of Triphase Extractive Oxidative Desulfurization of Benzothiophene with Molecular Oxygen Catalyzed by HPA-5. <i>Chemical Engineering and Technology</i> , 2020 , 43, 465-475	2	7

4 ²²	Purity of hydrogen released from the Liquid Organic Hydrogen Carrier compound perhydrodibenzyltoluene by catalytic dehydrogenation. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 712-720	6.7	34
4 ²¹	Coke Formation during Propane Dehydrogenation over Ga-Rh Supported Catalytically Active Liquid Metal Solutions. <i>ChemCatChem</i> , 2020 , 12, 1085-1094	5.2	15
4 ²⁰	Thermophysical properties of diphenylmethane and dicyclohexylmethane as a reference liquid organic hydrogen carrier system from experiments and molecular simulations. <i>International Journal of Hydrogen Energy</i> , 2020 , 45, 28903-28919	6.7	15
4 ¹⁹	Stable and Selective Dehydrogenation of Methylcyclohexane using Supported Catalytically Active Liquid Metal Solutions [Ga ₅₂ Pt/SiO ₂ SCALMS. <i>ChemCatChem</i> , 2020 , 12, 4533-4537	5.2	5
4 ¹⁸	High performance direct organic fuel cell using the acetone/isopropanol liquid organic hydrogen carrier system. <i>Electrochemistry Communications</i> , 2020 , 118, 106786	5.1	12
4 ¹⁷	Thermochemical Properties and Dehydrogenation Thermodynamics of Indole Derivates. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 20539-20550	3.9	6
4 ¹⁶	Influence of gas impurities on the hydrogenation of CO ₂ to methanol using indium-based catalysts. <i>Catalysis Science and Technology</i> , 2020 , 10, 7309-7322	5.5	4
4 ¹⁵	Surface Tension and Viscosity of Binary Mixtures of the Fluorinated and Non-fluorinated Ionic Liquids [PFBMIm][PF ₆] and [C ₄ C ₁ Im][PF ₆] by the Pendant Drop Method and Surface Light Scattering. <i>International Journal of Thermophysics</i> , 2020 , 41, 1	2.1	6
4 ¹⁴	Influence of the nanoparticle size on hydrogen release and side product formation in liquid organic hydrogen carrier systems with supported platinum catalysts. <i>Catalysis Science and Technology</i> , 2020 , 10, 6669-6678	5.5	10
4 ¹³	Thermal Conductivity of Hydrocarbon Liquid Organic Hydrogen Carrier Systems: Measurement and Prediction. <i>Journal of Chemical & Engineering Data</i> , 2020 , 65, 5003-5017	2.8	5
4 ¹²	Highly efficient, low-temperature hydrogen release from perhydro-benzyltoluene using reactive distillation. <i>Energy and Environmental Science</i> , 2020 , 13, 3119-3128	35.4	14
4 ¹¹	Structural Analysis of Liquid Metal Catalysts in Porous Silica Utilizing Nano-CT and Analytical Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2019 , 25, 422-423	0.5	3
4 ¹⁰	Evaluations of Concepts for the Integration of Fuel Cells in Liquid Organic Hydrogen Carrier Systems. <i>Energy & Fuels</i> , 2019 , 33, 10324-10330	4.1	21
4 ⁰⁹	Highly Effective Propane Dehydrogenation Using Ga-Rh Supported Catalytically Active Liquid Metal Solutions. <i>ACS Catalysis</i> , 2019 , 9, 9499-9507	13.1	36
4 ⁰⁸	Shifting the equilibrium of methanol synthesis from CO ₂ by in situ absorption using ionic liquid media. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 3399-3405	5.8	11
4 ⁰⁷	Trimerization and tetramerization of ethylene in continuous gas-phase reaction using a Cr-based supported liquid phase catalyst. <i>Reaction Chemistry and Engineering</i> , 2019 , 4, 131-140	4.9	4
4 ⁰⁶	Homogeneously-catalysed hydrogen release/storage using the 2-methylindole/2-methylindoline LOHC system in molten salt-organic biphasic reaction systems. <i>Chemical Communications</i> , 2019 , 55, 2046-2049	5.8	10
4 ⁰⁵	Towards an efficient liquid organic hydrogen carrier fuel cell concept. <i>Energy and Environmental Science</i> , 2019 , 12, 2305-2314	35.4	35

404	Boosting the activity of hydrogen release from liquid organic hydrogen carrier systems by sulfur-additives to Pt on alumina catalysts. <i>Catalysis Science and Technology</i> , 2019 , 9, 3537-3547	5.5	41
403	A solid oxide fuel cell operating on liquid organic hydrogen carrier-based hydrogen: A kinetic model of the hydrogen release unit and system performance. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 13794-13806	6.7	17
402	Development of a Structured Reactor System for CO ₂ Methanation under Dynamic Operating Conditions. <i>Energy Technology</i> , 2019 , 7, 1900047	3.5	16
401	Synthesis and characterization of chiral ionic liquids based on quinine, l-proline and l-valine for enantiomeric recognition. <i>Journal of Molecular Liquids</i> , 2019 , 283, 410-416	6	17
400	The Prospect of Hydrogen Storage Using Liquid Organic Hydrogen Carriers. <i>Energy & Fuels</i> , 2019 , 33, 2778-2796	4.1	149
399	Acrylic Acid Synthesis from Lactide in a Continuous Liquid-Phase Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 7140-7147	8.3	6
398	Operando DRIFTS and DFT Study of Propane Dehydrogenation over Solid- and Liquid-Supported Ga/Pt Catalysts. <i>ACS Catalysis</i> , 2019 , 9, 2842-2853	13.1	50
397	Operational Stability of a LOHC-Based Hot Pressure Swing Reactor for Hydrogen Storage. <i>Energy Technology</i> , 2019 , 7, 146-152	3.5	26
396	Advanced and In-Situ Electron Microscopy Investigation of Phase Composition and Phase Transformation in Ga-Rh Liquid Metal Catalysts. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1878-1879	0.5	1
395	Improving the performance of supported ionic liquid phase (SILP) catalysts for the ultra-low-temperature water-gas shift reaction using metal salt additives. <i>Green Chemistry</i> , 2019 , 21, 5008-5018	10	13
394	Dehydrogenation of the liquid organic hydrogen carrier system 2-methylindole/2-methylindoline/2-methyloctahydroindole on Pt(111). <i>Journal of Chemical Physics</i> , 2019 , 151, 144711	3.9	10
393	Hydrogenation of liquid organic hydrogen carrier systems using multicomponent gas mixtures. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 31172-31182	6.7	18
392	Low-Temperature Synthesis of Oxides in Ionic Liquids: Ozone-Mediated Formation of Co ₃ O ₄ Nanoparticles Monitored by In Situ Infrared Spectroscopy. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900890	4.6	3
391	Fifteen Years of Supported Ionic Liquid Phase-Catalyzed Hydroformylation: Material and Process Developments. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 2409-2420	3.9	37
390	Wilhelm Keim (1934-2018). <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 31-32	16.4	
389	Economic comparison of different electric fuels for energy scenarios in 2035. <i>Applied Energy</i> , 2019 , 233-234, 1078-1093	10.7	30
388	Mechanism of the Water-Gas Shift Reaction Catalyzed by Efficient Ruthenium-Based Catalysts: A Computational and Experimental Study. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 741-745	16.4	21
387	Surface behavior of low-temperature molten salt mixtures during the transition from liquid to solid. <i>Journal of Molecular Liquids</i> , 2019 , 275, 290-296	6	2

- 386 Charging a Liquid Organic Hydrogen Carrier with Wet Hydrogen from Electrolysis. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 4186-4194 8.3 14
- 385 Analysis of reaction mixtures of perhydro-dibenzyltoluene using two-dimensional gas chromatography and single quadrupole gas chromatography. *International Journal of Hydrogen Energy*, **2018**, 43, 5620-5636 6.7 41
- 384 Dehydrogenation of the Liquid Organic Hydrogen Carrier System Indole/Indoline/Octahydroindole on Pt(111). *Journal of Physical Chemistry C*, **2018**, 122, 4470-4479 3.8 27
- 383 Zwitterionic Hydrobromic Acid Carriers for the Synthesis of 2-Bromopropionic Acid from Lactide. *ChemSusChem*, **2018**, 11, 1063-1072 8.3 3
- 382 Ionic-Liquid-Infused Nanostructures as Repellent Surfaces. *Langmuir*, **2018**, 34, 6894-6902 4 22
- 381 Solid oxide fuel cell operating on liquid organic hydrogen carrier-based hydrogen [making full use of heat integration potentials]. *International Journal of Hydrogen Energy*, **2018**, 43, 1758-1768 6.7 40
- 380 Resilience of Liquid Organic Hydrogen Carrier Based Energy-Storage Systems. *Energy Technology*, **2018**, 6, 529-539 3.5 19
- 379 Catalyst Activation and Influence of the Oil Matrix on Extractive Oxidative Desulfurization Using Aqueous Polyoxometalate Solutions and Molecular Oxygen. *Energy & Fuels*, **2018**, 32, 8683-8688 4.1 19
- 378 Correlative 3D-Characterization of Liquid Metal Catalysts (LMC) utilizing X-ray and Analytical Electron Microscopy. *Microscopy and Microanalysis*, **2018**, 24, 556-557 0.5 2
- 377 Charging a Liquid Organic Hydrogen Carrier System with H₂/CO₂ Gas Mixtures. *ChemCatChem*, **2018**, 10, 4329-4337 5.2 12
- 376 Investigations on Catalyst Stability and Product Isolation in the Extractive Oxidative Desulfurization of Fuels Using Polyoxometalates and Molecular Oxygen. *ChemCatChem*, **2018**, 10, 4602-4609 5.2 16
- 375 Highly Selective Synthesis of Acrylic Acid from Lactide in the Liquid Phase. *ChemSusChem*, **2018**, 11, 2936-2943 8.3 11
- 374 Dynamic equilibria in supported ionic liquid phase (SILP) catalysis: in situ IR spectroscopy identifies [Ru(CO)_xCl_y]_n species in water gas shift catalysis. *Catalysis Science and Technology*, **2018**, 8, 344-357 5.5 21
- 373 Mechanism of the Water-Gas Shift Reaction Catalyzed by Efficient Ruthenium-Based Catalysts: A Computational and Experimental Study. *Angewandte Chemie*, **2018**, 131, 751 3.6 0
- 372 Rational design of SILP catalysts with fully digital data handling. *Chemie-Ingenieur-Technik*, **2018**, 90, 1299-1300 0.8
- 371 Stable Immobilization of Size-Controlled Bimetallic Nanoparticles in Photonic Crystal Fiber Microreactor. *Chemie-Ingenieur-Technik*, **2018**, 90, 653-659 0.8 7
- 370 Carbon Dioxide-Free Hydrogen Production with Integrated Hydrogen Separation and Storage. *ChemSusChem*, **2017**, 10, 42-47 8.3 24
- 369 Quantitative measurement of complex substances dissolved in an ionic liquid using IR spectroscopy and chemometrics. *TM Technisches Messen*, **2017**, 84, 32-37 0.7 2

368	Photochemistry in a soft-glass single-ring hollow-core photonic crystal fibre. <i>Analyst, The</i> , 2017 , 142, 925-929	5	21
367	Dynamic power supply by hydrogen bound to a liquid organic hydrogen carrier. <i>Applied Energy</i> , 2017 , 194, 1-8	10.7	63
366	ZnO Nanoparticle Formation from the Molecular Precursor [MeZnOtBu] ₄ by Ozone Treatment in Ionic Liquids: in-situ Vibrational Spectroscopy in an Ultrahigh Vacuum Environment. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017 , 643, 31-40	1.3	5
365	pH effects in the acetaldehydeammonia reaction. <i>Reaction Chemistry and Engineering</i> , 2017 , 2, 382-389	4.9	3
364	An operando DRIFTS-MS study of NH ₃ removal by supported ionic liquid phase (SILP) materials. <i>Separation and Purification Technology</i> , 2017 , 174, 245-250	8.3	5
363	Seasonal storage and alternative carriers: A flexible hydrogen supply chain model. <i>Applied Energy</i> , 2017 , 200, 290-302	10.7	231
362	Hydrogen Storage Technologies for Future Energy Systems. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017 , 8, 445-471	8.9	141
361	Gluing Ionic Liquids to Oxide Surfaces: Chemical Anchoring of Functionalized Ionic Liquids by Vapor Deposition onto Cobalt(II) Oxide. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 9072-9076	16.4	11
360	Hydrogen storage using a hot pressure swing reactor. <i>Energy and Environmental Science</i> , 2017 , 10, 1652-1659	16.9	79
359	Coating of Pd/C catalysts with Lewis-acidic ionic liquids and liquid coordination complexes [SCILL induced activity enhancement in arene hydrogenation. <i>RSC Advances</i> , 2017 , 7, 27558-27563	3.7	12
358	Gluing Ionic Liquids to Oxide Surfaces: Chemical Anchoring of Functionalized Ionic Liquids by Vapor Deposition onto Cobalt(II) Oxide. <i>Angewandte Chemie</i> , 2017 , 129, 9200-9204	3.6	8
357	Extraction Coupled Oxidative Desulfurization of Fuels to Sulfate and Water-Soluble Sulfur Compounds Using Polyoxometalate Catalysts and Molecular Oxygen. <i>ACS Sustainable Chemistry and Engineering</i> , 2017 , 5, 4110-4118	8.3	65
356	Detailed Investigation of the Mechanism of Rh-Diphosphite Supported Ionic Liquid Phase (SILP)-Catalyzed 1-Butene Hydroformylation in the Gas Phase via Combined Kinetic and Density Functional Theory (DFT) Modeling Studies. <i>ACS Catalysis</i> , 2017 , 7, 1035-1044	13.1	15
355	Liquid Organic Hydrogen Carriers (LOHCs): Toward a Hydrogen-free Hydrogen Economy. <i>Accounts of Chemical Research</i> , 2017 , 50, 74-85	24.3	383
354	Thermodynamics of imidazolium based ionic liquids with cyano containing anions. <i>Journal of Molecular Liquids</i> , 2017 , 248, 86-90	6	9
353	A new reaction route for the synthesis of 2-methyl-5-ethylpyridine. <i>Reaction Chemistry and Engineering</i> , 2017 , 2, 754-762	4.9	1
352	Modification of nitrogen doped carbon for SILP catalyzed hydroformylation of ethylene. <i>Catalysis Science and Technology</i> , 2017 , 7, 5562-5571	5.5	14
351	Interaction of Ester-Functionalized Ionic Liquids with Atomically-Defined Cobalt Oxides Surfaces: Adsorption, Reaction and Thermal Stability. <i>ChemPhysChem</i> , 2017 , 18, 3443-3453	3.2	9

350	Spectroscopic Observation and Molecular Dynamics Simulation of Ga Surface Segregation in Liquid Pd-Ga Alloys. <i>Chemistry - A European Journal</i> , 2017 , 23, 17701-17706	4.8	14
349	Electrophoretic Deposition of Boehmite on Additively Manufactured, Interpenetrating Periodic Open Cellular Structures for Catalytic Applications. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 13402-13410	3.9	12
348	Gallium-rich Pd-Ga phases as supported liquid metal catalysts. <i>Nature Chemistry</i> , 2017 , 9, 862-867	17.6	140
347	Model Catalytic Studies of Novel Liquid Organic Hydrogen Carriers: Indole, Indoline and Octahydroindole on Pt(111). <i>Chemistry - A European Journal</i> , 2017 , 23, 14806-14818	4.8	18
346	Supported Liquid Phase Catalysis 2017 , 999-1068		1
345	KOH-promoted Pt/Al ₂ O ₃ catalysts for water gas shift and methanol steam reforming: An operando DRIFTS-MS study. <i>Applied Catalysis B: Environmental</i> , 2017 , 201, 169-181	21.8	50
344	Palladium-Mediated Ethylation of the Imidazolium Cation Monitored In Operando on a Solid Catalyst with Ionic Liquid Layer. <i>ChemCatChem</i> , 2017 , 9, 109-113	5.2	9
343	Ionic-Liquid-Modified Hybrid Materials Prepared by Physical Vapor Codeposition: Cobalt and Cobalt Oxide Nanoparticles in [C1C2Im][OTf] Monitored by In Situ IR Spectroscopy. <i>Langmuir</i> , 2016 , 32, 8613-22 ⁴		8
342	Experimental assessment of the degree of hydrogen loading for the dibenzyl toluene based LOHC system. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 22097-22103	6.7	43
341	Dynamische Energiefreisetzung aus Wasserstoffträgermaterialien. <i>Chemie-Ingenieur-Technik</i> , 2016 , 88, 1270-1271	0.8	
340	Transport and Storage of Hydrogen via Liquid Organic Hydrogen Carrier (LOHC) Systems 2016 , 811-830		4
339	Chitosan Containing Supported Ionic Liquid Phase Materials for CO ₂ Absorption. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 7052-7059	3.9	22
338	Hydrogenation of the liquid organic hydrogen carrier compound dibenzyltoluene [reaction pathway determination by ¹ H NMR spectroscopy. <i>Reaction Chemistry and Engineering</i> , 2016 , 1, 313-320	4.9	53
337	Surface enrichment of Pt in Ga ₂ O ₃ films grown on liquid Pt/Ga alloys. <i>Surface Science</i> , 2016 , 651, 16-21	1.8	12
336	Ligand Effects at Ionic Liquid-Modified Interfaces: Coadsorption of [C2C1Im][OTf] and CO on Pd(111). <i>Journal of Physical Chemistry C</i> , 2016 , 120, 4453-4465	3.8	31
335	Thermally stable bis(trifluoromethylsulfonyl)imide salts and their mixtures. <i>New Journal of Chemistry</i> , 2016 , 40, 7157-7161	3.6	23
334	Industrial Hydrogen Production from Hydrocarbon Fuels and Biomass 2016 , 237-252		2
333	Alkali hydroxide-modified Ru/Al ₂ O ₃ catalysts for ammonia decomposition. <i>Applied Catalysis A: General</i> , 2016 , 510, 189-195	5.1	29

332	Measurement of Hydrogen Solubility in Potential Liquid Organic Hydrogen Carriers. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 643-649	2.8	32
331	Pd-catalyzed telomerization of butadiene and methanol with direct catalyst recycling using a liquid-ionic liquid biphasic, continuous process. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016 , 99, 107-114	3.7	7
330	Binary Diffusion Coefficients of the Liquid Organic Hydrogen Carrier System Dibenzyltoluene/Perhydrodibenzyltoluene. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 504-511	2.8	29
329	Dicyclohexylmethane as a Liquid Organic Hydrogen Carrier: A Model Study on the Dehydrogenation Mechanism over Pd(111). <i>Catalysis Letters</i> , 2016 , 146, 851-860	2.8	12
328	Regeneration of LOHC dehydrogenation catalysts: In-situ IR spectroscopy on single crystals, model catalysts, and real catalysts from UHV to near ambient pressure. <i>Applied Surface Science</i> , 2016 , 360, 671-683	6.7	21
327	Ionic Liquid-Modified Electrocatalysts: The Interaction of [C ₁ C ₂ Im][OTf] with Pt(1 1 1) and its Influence on Methanol Oxidation Studied by Electrochemical IR Spectroscopy. <i>Electrochimica Acta</i> , 2016 , 188, 825-836	6.7	28
326	Chemical utilization of hydrogen from fluctuating energy sources [Catalytic transfer hydrogenation from charged Liquid Organic Hydrogen Carrier systems. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 1010-1017	6.7	70
325	Synthesis and Properties of Organic Hexahalocerate(III) Salts. <i>European Journal of Inorganic Chemistry</i> , 2016 , 2016, 1333-1339	2.3	8
324	Polymer-Based Spherical Activated Carbon as Easy-to-Handle Catalyst Support for Hydrogenation Reactions. <i>Chemical Engineering and Technology</i> , 2016 , 39, 276-284	2	17
323	Liquid silver tris(perfluoroethyl)trifluorophosphate salts as new media for propene/propane separation. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 28242-28253	3.6	6
322	Thermodynamic Analysis of Isomerization Equilibria of Chlorotoluenes and Dichlorobenzenes in a Biphasic Reaction Systems Containing Highly Acidic Chloroaluminate Melts. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 13152-13160	3.4	
321	Boosting the Activity in Supported Ionic Liquid-Phase-Catalyzed Hydroformylation via Surface Functionalization of the Carbon Support. <i>ACS Catalysis</i> , 2016 , 6, 2280-2286	13.1	21
320	Melting Points of Potential Liquid Organic Hydrogen Carrier Systems Consisting of N-Alkylcarbazoles. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 1441-1448	2.8	36
319	Novel Inverse Supported Ionic Liquid Absorbents for Acidic Gas Removal from Flue Gas. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 5748-5762	3.9	13
318	Formic Acid-Based Fischer-Tropsch Synthesis for Green Fuel Production from Wet Waste Biomass and Renewable Excess Energy. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 5078-5086	8.3	35
317	Highly Effective Pt-Based Water-Gas Shift Catalysts by Surface Modification with Alkali Hydroxide Salts. <i>ChemCatChem</i> , 2015 , 7, 766-775	5.2	17
316	Expanding the scope of biogenic substrates for the selective production of formic acid from water-insoluble and wet waste biomass. <i>Green Chemistry</i> , 2015 , 17, 5164-5171	10	54
315	Comparison between phosphine and NHC-modified Pd catalysts in the telomerization of butadiene with methanol [A kinetic study combined with model-based experimental analysis. <i>Journal of Catalysis</i> , 2015 , 329, 547-559	7.3	13

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20	Selective Trimerization of Olefins with Triazacyclohexane Complexes of Chromium as Catalysts. <i>Angewandte Chemie - International Edition</i> , 2000 , 39, 4337-4339	16.4	140
19	Ionic liquids in regioselective platinum-catalysed hydroformylation. <i>Journal of Molecular Catalysis A</i> , 2000 , 164, 61-67		84
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17	Perfluorinated polyethers for the immobilisation of homogeneous nickel catalysts. <i>Journal of Molecular Catalysis A</i> , 1999 , 139, 171-175		26
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