

David Farrusseng

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6746847/david-farrusseng-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

197
papers

10,211
citations

50
h-index

97
g-index

210
ext. papers

11,190
ext. citations

6.9
avg, IF

6.47
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 197 | Rhodium-Based Metal-Organic Polyhedra Assemblies for Selective CO Photoreduction.. <i>Journal of the American Chemical Society</i> , 2022 , 144, 3626-3636 | 16.4 | 5 |
| 196 | The Pivotal Role of Critical Hydroxyl Concentration in Si-Rich Zeolites for Switching Vapor Adsorption. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 22890-22897 | 3.8 | 2 |
| 195 | Kinetics of n-Hexane Cracking over Mesoporous HY Zeolites Based on Catalyst Descriptors. <i>Catalysts</i> , 2021 , 11, 652 | 4 | 2 |
| 194 | Adsorber heat exchanger using Al-fumarate beads for heat-pump applications - a transport study. <i>Faraday Discussions</i> , 2021 , 225, 384-402 | 3.6 | 5 |
| 193 | Surface effect of nano-sized cerium-zirconium oxides for the catalytic conversion of methanol and CO ₂ into dimethyl carbonate. <i>Journal of Catalysis</i> , 2021 , 394, 486-494 | 7.3 | 5 |
| 192 | Kinetic modelling of Pt/Al ₂ O ₃ catalysts formulation changes in n-heptane reforming. <i>Reaction Chemistry and Engineering</i> , 2021 , 6, 1079-1091 | 4.9 | 0 |
| 191 | Discovery of very active catalysts for methanol carboxylation into DMC by screening of a large and diverse catalyst library. <i>New Journal of Chemistry</i> , 2020 , 44, 6312-6320 | 3.6 | 3 |
| 190 | Molecular Porous Photosystems Tailored for Long-Term Photocatalytic CO Reduction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 5116-5122 | 16.4 | 35 |
| 189 | Molecular Porous Photosystems Tailored for Long-Term Photocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020 , 132, 5154-5160 | 3.6 | 8 |
| 188 | Non Monotonous Product Distribution Dependence on Pt/Al ₂ O ₃ Catalysts Formulation in n-Heptane Reforming.. <i>ChemCatChem</i> , 2020 , 12, 2262-2270 | 5.2 | 4 |
| 187 | A naphtha reforming process development methodology based on the identification of catalytic reactivity descriptors. <i>New Journal of Chemistry</i> , 2020 , 44, 7243-7260 | 3.6 | 3 |
| 186 | Hollow structures by controlled desilication of beta zeolite nanocrystals. <i>Journal of Solid State Chemistry</i> , 2020 , 281, 121033 | 3.3 | 4 |
| 185 | Faster transport in hollow zeolites. <i>Microporous and Mesoporous Materials</i> , 2020 , 308, 110499 | 5.3 | 3 |
| 184 | Effect of Chlorine-Containing VOCs on Silver Migration and Sintering in ZSM-5 Used in a TSA Process. <i>Catalysts</i> , 2019 , 9, 686 | 4 | 3 |
| 183 | Migration and Growth of Silver Nanoparticles in Zeolite Socony Mobil 5 (ZSM-5) Observed by Environmental Electron Microscopy: Implications for Heterogeneous Catalysis. <i>ACS Applied Nano Materials</i> , 2019 , 2, 6452-6461 | 5.6 | 7 |
| 182 | Gas oversolubility in nanoconfined liquids: Review and perspectives for adsorbent design. <i>Microporous and Mesoporous Materials</i> , 2019 , 288, 109561 | 5.3 | 10 |
| 181 | Controlled grafting of dialkylphosphonate-based ionic liquids on Alumina: design of hybrid materials with high potential for CO separation applications.. <i>RSC Advances</i> , 2019 , 9, 19882-19894 | 3.7 | 8 |

| | | | |
|-----|--|------|----|
| 180 | Hollow Y zeolite single crystals: synthesis, characterization and activity in the hydroisomerization of n-hexadecane. <i>Oil and Gas Science and Technology</i> , 2019 , 74, 38 | 1.9 | 3 |
| 179 | Impregnation Protocols on Alumina Beads for Controlling the Preparation of Supported Metal Catalysts. <i>Catalysts</i> , 2019 , 9, 577 | 4 | 2 |
| 178 | Evaluation Methods of Adsorbents for Air Purification and Gas Separation at Low Concentration: Case Studies on Xenon and Krypton. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 4560-4571 | 2.9 | 16 |
| 177 | Hydrogenation Size-Selective Pt/Hollow Beta Catalysts. <i>Chemistry - A European Journal</i> , 2019 , 25, 2972-2987 | 2.87 | 6 |
| 176 | Modeling of all-porous solid oxide fuel cells with a focus on the electrolyte porosity design. <i>Applied Energy</i> , 2019 , 235, 602-611 | 10.7 | 16 |
| 175 | A water-based room temperature synthesis of ZIF-93 for CO2 adsorption. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 5598-5602 | 13 | 25 |
| 174 | High-silica hollow Y zeolite by selective desilication of dealuminated NaY crystals in the presence of protective Al species. <i>CrystEngComm</i> , 2018 , 20, 1564-1572 | 3.3 | 19 |
| 173 | Microporous Polymers as Macroligands for Pentamethylcyclopentadienylrhodium Transfer-Hydrogenation Catalysts. <i>ChemCatChem</i> , 2018 , 10, 1778-1782 | 5.2 | 9 |
| 172 | Hollow Beta Zeolite Single Crystals for the Design of Selective Catalysts. <i>Crystal Growth and Design</i> , 2018 , 18, 592-596 | 3.5 | 19 |
| 171 | Unravelling ammonia adsorption mechanisms of adsorbents in humid conditions. <i>Microporous and Mesoporous Materials</i> , 2018 , 265, 143-148 | 5.3 | 29 |
| 170 | Hollow polycrystalline Y zeolite shells obtained from selective desilication of Beta-Y core-shell composites. <i>Microporous and Mesoporous Materials</i> , 2018 , 265, 123-131 | 5.3 | 3 |
| 169 | Hammett Parameter in Microporous Solids as Macroligands for Heterogenized Photocatalysts. <i>ACS Catalysis</i> , 2018 , 8, 1653-1661 | 13.1 | 34 |
| 168 | Aqueous production of spherical Zr-MOF beads via continuous-flow spray-drying. <i>Green Chemistry</i> , 2018 , 20, 873-878 | 10 | 37 |
| 167 | Modeling of all porous solid oxide fuel cells. <i>Applied Energy</i> , 2018 , 219, 105-113 | 10.7 | 62 |
| 166 | Fast 'Operando' electron nanotomography. <i>Journal of Microscopy</i> , 2018 , 269, 117-126 | 1.9 | 24 |
| 165 | Effects of H2S and phenanthrene on the activity of Ni and Rh-based catalysts for the reforming of a simulated biomass-derived producer gas. <i>Applied Catalysis B: Environmental</i> , 2018 , 221, 206-214 | 21.8 | 22 |
| 164 | Hollow Zeolite Single Crystals: Synthesis Routes and Functionalization Methods. <i>Small Methods</i> , 2018 , 2, 1800197 | 12.8 | 15 |
| 163 | Demonstration of Improved Effectiveness Factor of Catalysts Based on Hollow Single Crystal Zeolites. <i>ChemCatChem</i> , 2018 , 10, 4525-4529 | 5.2 | 9 |

| | | | |
|-----|--|------|-----|
| 162 | Quantitative structure-property relationship approach to predicting xylene separation with diverse exchanged faujasites. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 23773-23782 | 3.6 | 3 |
| 161 | Synthesis and Shaping Scale-up Study of Functionalized UiO-66 MOF for Ammonia Air Purification Filters. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 8200-8208 | 3.9 | 52 |
| 160 | Highly Dispersed Nickel Particles Encapsulated in Multi-hollow Silicalite-1 Single Crystal Nanoboxes: Effects of Siliceous Deposits and Phosphorous Species on the Catalytic Performances. <i>ChemCatChem</i> , 2017 , 9, 2297-2307 | 5.2 | 17 |
| 159 | Selective removal of external Ni nanoparticles on Ni@silicalite-1 single crystal nanoboxes: Application to size-selective arene hydrogenation. <i>Applied Catalysis A: General</i> , 2017 , 535, 69-76 | 5.1 | 12 |
| 158 | Systematic study of the impact of MOF densification into tablets on textural and mechanical properties. <i>CrystEngComm</i> , 2017 , 19, 4211-4218 | 3.3 | 40 |
| 157 | Xylene separation on a diverse library of exchanged faujasite zeolites. <i>Microporous and Mesoporous Materials</i> , 2017 , 247, 52-59 | 5.3 | 11 |
| 156 | Effect of polyaromatic tars on the activity for methane steam reforming of nickel particles embedded in silicalite-1. <i>Applied Catalysis B: Environmental</i> , 2017 , 204, 515-524 | 21.8 | 25 |
| 155 | Sensitive Photoacoustic IR Spectroscopy for the Characterization of Amino/Azido Mixed-Linker Metal-Organic Frameworks. <i>ChemPhysChem</i> , 2017 , 18, 2855-2858 | 3.2 | 2 |
| 154 | Monovalent and bivalent cations exchange isotherms for faujasites X and Y. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 17242-17249 | 3.6 | 2 |
| 153 | Zeolite-Encapsulated Catalysts 2017 , 335-386 | | 7 |
| 152 | Real-time observation of the transformation of silver nanoparticles during carbon gasification 2016 , 298-299 | | |
| 151 | Electron Tomography of entrapped iron nanoparticles in silicalite-1 (Fischer-Tropsch catalyst) 2016 , 133-134 | | |
| 150 | Perspectives on zeolite-encapsulated metal nanoparticles and their applications in catalysis. <i>New Journal of Chemistry</i> , 2016 , 40, 3933-3949 | 3.6 | 160 |
| 149 | Origin of highly active metal-organic framework catalysts: defects? Defects!. <i>Dalton Transactions</i> , 2016 , 45, 4090-9 | 4.3 | 148 |
| 148 | Hollow Zeolite Single-Crystals Encapsulated Alloy Nanoparticles with Controlled Size and Composition. <i>ChemNanoMat</i> , 2016 , 2, 534-539 | 3.5 | 37 |
| 147 | Hollow Zeolite Structures: An Overview of Synthesis Methods. <i>Chemistry of Materials</i> , 2016 , 28, 5205-5223 | 3.6 | 122 |
| 146 | Functional Linkers for Catalysis 2016 , 345-386 | | 1 |
| 145 | Breakthrough in Xenon Capture and Purification Using Adsorbent-Supported Silver Nanoparticles. <i>Chemistry - A European Journal</i> , 2016 , 22, 9660-6 | 4.8 | 17 |

| | | | |
|-----|---|------|-----|
| 144 | Enhanced Ligand-Based Luminescence in Metal-Organic Framework Sensor. <i>ChemNanoMat</i> , 2016 , 2, 866-872 | 3.5 | 23 |
| 143 | Adsorption in heterogeneous porous media: Hierarchical and composite solids. <i>Microporous and Mesoporous Materials</i> , 2016 , 229, 145-154 | 5.3 | 10 |
| 142 | A Pt/Al ₂ O ₃ -supported metal-organic framework film as the size-selective core-shell hydrogenation catalyst. <i>Chemical Communications</i> , 2016 , 52, 7161-3 | 5.8 | 15 |
| 141 | Influence of crystal size on the uptake rate of isooctane in plain and hollow silicalite-1 crystals. <i>Microporous and Mesoporous Materials</i> , 2016 , 228, 147-152 | 5.3 | 7 |
| 140 | Molecular Level Characterization of the Structure and Interactions in Peptide-Functionalized Metal-Organic Frameworks. <i>Chemistry - A European Journal</i> , 2016 , 22, 16531-16538 | 4.8 | 20 |
| 139 | Enantiopure Peptide-Functionalized Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9409-16 | 16.4 | 130 |
| 138 | Superstructure of a substituted zeolitic imidazolate metal-organic framework determined by combining proton solid-state NMR spectroscopy and DFT calculations. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 5971-6 | 16.4 | 31 |
| 137 | Platinum nanoparticles entrapped in zeolite nanoshells as active and sintering-resistant arene hydrogenation catalysts. <i>Journal of Catalysis</i> , 2015 , 332, 25-30 | 7.3 | 50 |
| 136 | Solubility of Gases in Water Confined in Nanoporous Materials: ZSM-5, MCM-41, and MIL-100. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21547-21554 | 3.8 | 41 |
| 135 | Determination of oxygen adsorption-desorption rates and diffusion rate coefficients in perovskites at different oxygen partial pressures by a microkinetic approach. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 1469-81 | 3.6 | 6 |
| 134 | Transition-Metal Nanoparticles in Hollow Zeolite Single Crystals as Bifunctional and Size-Selective Hydrogenation Catalysts. <i>Chemistry of Materials</i> , 2015 , 27, 276-282 | 9.6 | 95 |
| 133 | Coke-free operation of an all porous solid oxide fuel cell (AP-SOFC) used as an O ₂ supply device. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 2684-2689 | 13 | 8 |
| 132 | Tools for the Kinetics of Fast Reactions 2015 , 817-838 | | 1 |
| 131 | Superstructure of a Substituted Zeolitic Imidazolate Metal-Organic Framework Determined by Combining Proton Solid-State NMR Spectroscopy and DFT Calculations. <i>Angewandte Chemie</i> , 2015 , 127, 6069-6074 | 3.6 | 4 |
| 130 | Photocatalytic carbon dioxide reduction with rhodium-based catalysts in solution and heterogenized within metal-organic frameworks. <i>ChemSusChem</i> , 2015 , 8, 603-8 | 8.3 | 149 |
| 129 | Proline-functionalized metal-organic frameworks and their use in asymmetric catalysis: pitfalls in the MOFs rush. <i>RSC Advances</i> , 2015 , 5, 11254-11256 | 3.7 | 7 |
| 128 | Assessing chemical heterogeneity at the nanoscale in mixed-ligand metal-organic frameworks with the PTIR technique. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 2852-6 | 16.4 | 74 |
| 127 | Size-selective hydrogenation at the subnanometer scale over platinum nanoparticles encapsulated in silicalite-1 single crystal hollow shells. <i>Chemical Communications</i> , 2014 , 50, 1824-6 | 5.8 | 81 |

| | | | |
|-----|---|------|-----|
| 126 | Structure-property relationships of water adsorption in metal-organic frameworks. <i>New Journal of Chemistry</i> , 2014 , 38, 3102-3111 | 3.6 | 163 |
| 125 | A water-based and high space-time yield synthetic route to MOF Ni ₂ (dhtp) and its linker 2,5-dihydroxyterephthalic acid. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 17757-17763 | 13 | 39 |
| 124 | Role of Silver Nanoparticles in Enhanced Xenon Adsorption Using Silver-Loaded Zeolites. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 25032-25040 | 3.8 | 19 |
| 123 | Enhanced H ₂ Uptake of n-Alkanes Confined in Mesoporous Materials. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 10720-10727 | 3.8 | 6 |
| 122 | Water adsorption in MOFs: fundamentals and applications. <i>Chemical Society Reviews</i> , 2014 , 43, 5594-6175 | 8.5 | 837 |
| 121 | Antimicrobial activity of cobalt imidazolate metal-organic frameworks. <i>Chemosphere</i> , 2014 , 113, 188-92 | 8.4 | 87 |
| 120 | Assessing Chemical Heterogeneity at the Nanoscale in Mixed-Ligand Metal-Organic Frameworks with the FTIR Technique. <i>Angewandte Chemie</i> , 2014 , 126, 2896-2900 | 3.6 | 9 |
| 119 | Diffusion-Driven Selectivity in Oxidation of CO in the Presence of Propylene Using Zeolite Nano Shell as Membrane. <i>ACS Catalysis</i> , 2014 , 4, 4299-4303 | 13.1 | 49 |
| 118 | Ultimate size control of encapsulated gold nanoparticles. <i>Chemical Communications</i> , 2013 , 49, 8507-9 | 5.8 | 66 |
| 117 | Design of microporous mixed zinc-nickel triazolate metal-organic frameworks with functional ligands. <i>CrystEngComm</i> , 2013 , 15, 9336 | 3.3 | 10 |
| 116 | Xenon Capture on Silver-Loaded Zeolites: Characterization of Very Strong Adsorption Sites. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 15122-15129 | 3.8 | 31 |
| 115 | Hierarchical Zeolitic Imidazolate Framework-8 Catalyst for Monoglyceride Synthesis. <i>ChemCatChem</i> , 2013 , 5, 3562-3566 | 5.2 | 69 |
| 114 | Application of Metal-Organic Frameworks in Fine Chemical Synthesis 2013 , 293-331 | | 2 |
| 113 | Periodic trends in the selective hydrogenation of styrene over silica supported metal catalysts. <i>Journal of Catalysis</i> , 2013 , 307, 352-361 | 7.3 | 47 |
| 112 | An alternative pathway for the synthesis of isocyanato- and urea-functionalised metal-organic frameworks. <i>Dalton Transactions</i> , 2013 , 42, 8249-58 | 4.3 | 12 |
| 111 | Ammonia-mediated suppression of coke formation in direct-methane solid oxide fuel cells with nickel-based anodes. <i>Journal of Power Sources</i> , 2013 , 240, 232-240 | 8.9 | 12 |
| 110 | MOF-supported selective ethylene dimerization single-site catalysts through one-pot postsynthetic modification. <i>Journal of the American Chemical Society</i> , 2013 , 135, 4195-8 | 16.4 | 213 |
| 109 | Synthesis of Monoglycerides by Esterification of Oleic Acid with Glycerol in Heterogeneous Catalytic Process Using Tin-Organic Framework Catalyst. <i>Catalysis Letters</i> , 2013 , 143, 356-363 | 2.8 | 41 |

| | | | |
|-----|--|------|-----|
| 108 | Gas Uptake in Solvents Confined in Mesopores: Adsorption versus Enhanced Solubility. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 2274-2278 | 6.4 | 38 |
| 107 | An all porous solid oxide fuel cell (SOFC): a bridging technology between dual and single chamber SOFCs. <i>Energy and Environmental Science</i> , 2013 , 6, 2119 | 35.4 | 36 |
| 106 | Knowledge Based Catalyst Design by High Throughput Screening of Model Reactions and Statistical Modelling. <i>Oil and Gas Science and Technology</i> , 2013 , 68, 487-504 | 1.9 | 6 |
| 105 | Dynamic Nuclear Polarization Enhanced Solid-State NMR Spectroscopy of Functionalized Metal-Organic Frameworks. <i>Angewandte Chemie</i> , 2012 , 124, 127-131 | 3.6 | 37 |
| 104 | Dynamic nuclear polarization enhanced solid-state NMR spectroscopy of functionalized metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 123-7 | 16.4 | 145 |
| 103 | Absolute molecular sieve separation of ethylene/ethane mixtures with silver zeolite A. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14635-7 | 16.4 | 151 |
| 102 | Enhanced H ₂ uptake in solvents confined in mesoporous metal-organic framework. <i>Journal of the American Chemical Society</i> , 2012 , 134, 17369-71 | 16.4 | 35 |
| 101 | Soft synthesis of isocyanate-functionalised metal-organic frameworks. <i>Dalton Transactions</i> , 2012 , 41, 14236-8 | 4.3 | 12 |
| 100 | The Origin of the Activity of Amine-Functionalized Metal-Organic Frameworks in the Catalytic Synthesis of Cyclic Carbonates from Epoxide and CO ₂ . <i>ChemCatChem</i> , 2012 , 4, 1725-1728 | 5.2 | 79 |
| 99 | Homogeneity of flexible metal-organic frameworks containing mixed linkers. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10287 | | 64 |
| 98 | Quantitative Characterization of Breathing upon Adsorption for a Series of Amino-Functionalized MIL-53. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 9507-9516 | 3.8 | 32 |
| 97 | Guest-Induced Gate Opening and Breathing Phenomena in Soft Porous Crystals: Building Thermodynamically Consistent Isotherms. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 1638-1649 | 3.8 | 35 |
| 96 | Cu-mediated solid-state reaction in a post-functionalized metal-organic framework. <i>CrystEngComm</i> , 2012 , 14, 4105 | 3.3 | 15 |
| 95 | Technico-economical assessment of MFI-type zeolite membranes for CO ₂ capture from postcombustion flue gases. <i>AIChE Journal</i> , 2012 , 58, 3183-3194 | 3.6 | 25 |
| 94 | Tailoring metal-organic framework catalysts by click chemistry. <i>Dalton Transactions</i> , 2012 , 41, 3945-8 | 4.3 | 38 |
| 93 | Transition metal loaded silicon carbide-derived carbons with enhanced catalytic properties. <i>Carbon</i> , 2012 , 50, 1861-1870 | 10.4 | 49 |
| 92 | Combinatorial synthesis and characterization of metal-organic frameworks in mild and friendly conditions: application to CO ₂ adsorption. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2012 , 15, 152-60 | 1.3 | 2 |
| 91 | Amino acid functionalized metal-organic frameworks by a soft coupling-deprotection sequence. <i>Chemical Communications</i> , 2011 , 47, 11650-2 | 5.8 | 57 |

| | | | |
|----|---|-----|-----|
| 90 | Separation and Purification of Gases by MOFs 2011 , 69-97 | | 4 |
| 89 | Manufacture of MOF Thin Films on Structured Supports for Separation and Catalysis 2011 , 121-149 | | 2 |
| 88 | Metal-Organic Frameworks as Catalysts for Organic Reactions 2011 , 191-212 | | 13 |
| 87 | Design of Functional Metal-Organic Frameworks by Post-Synthetic Modification 2011 , 23-48 | | 7 |
| 86 | Design of Porous Coordination Polymers/Metal-Organic Frameworks: Past, Present and Future 2011 , 1-21 | | 6 |
| 85 | Thermodynamic Methods for Prediction of Gas Separation in Flexible Frameworks 2011 , 49-68 | | 2 |
| 84 | Synergistic effects of encapsulated phthalocyanine complexes in MIL-101 for the selective aerobic oxidation of tetralin. <i>Chemical Communications</i> , 2011 , 47, 1562-4 | 5.8 | 74 |
| 83 | Engineering structured MOF at nano and macroscales for catalysis and separation. <i>Journal of Materials Chemistry</i> , 2011 , 21, 7582 | | 123 |
| 82 | Deposition of Thin Films for Sensor Applications 2011 , 309-335 | | 3 |
| 81 | Simple modification of macroporous alumina supports for the fabrication of dense NaA zeolite coatings: Interplay of electrostatic and chemical interactions. <i>Microporous and Mesoporous Materials</i> , 2011 , 146, 69-75 | 5.3 | 17 |
| 80 | Tuning the activity by controlling the wettability of MOF eggshell catalysts: A quantitative structure-activity study. <i>Journal of Catalysis</i> , 2011 , 284, 207-214 | 7.3 | 56 |
| 79 | Engineering the Environment of a Catalytic Metal-Organic Framework by Postsynthetic Hydrophobization. <i>ChemCatChem</i> , 2011 , 3, 675-678 | 5.2 | 64 |
| 78 | Protection-Deprotection Methods Applied to Metal-Organic Frameworks for the Design of Original Single-Site Catalysts. <i>ChemCatChem</i> , 2011 , 3, 823-826 | 5.2 | 19 |
| 77 | Combinatorial synthesis of metal-organic frameworks libraries by click-chemistry. <i>New Journal of Chemistry</i> , 2011 , 35, 1892 | 3.6 | 46 |
| 76 | Guest-induced gate-opening of a zeolite imidazolate framework. <i>New Journal of Chemistry</i> , 2011 , 35, 546-550 | 3.6 | 153 |
| 75 | Facile synthesis of an ultramicroporous MOF tubular membrane with selectivity towards CO ₂ . <i>New Journal of Chemistry</i> , 2011 , 35, 41-44 | 3.6 | 118 |
| 74 | High-throughput approach to the catalytic combustion of diesel soot II: Screening of oxide-based catalysts. <i>Catalysis Today</i> , 2011 , 159, 138-143 | 5.3 | 26 |
| 73 | Engineering MIL-53(Al) flexibility by controlling amino tags. <i>Dalton Transactions</i> , 2011 , 40, 11359-61 | 4.3 | 41 |

| | | | |
|----|--|------|------|
| 72 | Experimental and Computational Study of Functionality Impact on Sodalite Zeolitic Imidazolate Frameworks for CO ₂ Separation. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 16425-16432 | 3.8 | 115 |
| 71 | CeO ₂ /Pt Catalyst Nanoparticle Containing Carbide-Derived Carbon Composites by a New In situ Functionalization Strategy. <i>Chemistry of Materials</i> , 2011 , 23, 57-66 | 9.6 | 13 |
| 70 | Evaluation of Energy Heterogeneity in Metal-Organic Frameworks: Absence of Henry Region in MIL-53 and MIL-68 Materials?. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 17665-17674 | 3.8 | 16 |
| 69 | Generic postfunctionalization route from amino-derived metal-organic frameworks. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4518-9 | 16.4 | 167 |
| 68 | Facile shaping of an imidazolate-based MOF on ceramic beads for adsorption and catalytic applications. <i>Chemical Communications</i> , 2010 , 46, 7999-8001 | 5.8 | 103 |
| 67 | Investigation of Acid Centers in MIL-53(Al, Ga) for Brønsted-Type Catalysis: In Situ FTIR and Ab Initio Molecular Modeling. <i>ChemCatChem</i> , 2010 , 2, 1235-1238 | 5.2 | 62 |
| 66 | A Microkinetic Vision on High-Throughput Catalyst Formulation and Optimization: Development of an Appropriate Software Tool. <i>Topics in Catalysis</i> , 2010 , 53, 64-76 | 2.3 | 14 |
| 65 | Acidity Characterization of Catalyst Libraries by High-Throughput Testing. <i>Topics in Catalysis</i> , 2010 , 53, 49-56 | 2.3 | 5 |
| 64 | Application of Evolutionary Strategies in the Experimental Optimization of Catalytic Materials. <i>Topics in Catalysis</i> , 2010 , 53, 2-12 | 2.3 | 2 |
| 63 | Tests for the Use of La ₂ Mo ₂ O ₉ -based Oxides as Multipurpose SOFC Core Materials. <i>Fuel Cells</i> , 2010 , 10, 433-439 | 2.9 | 24 |
| 62 | Alternative perovskite materials as a cathode component for intermediate temperature single-chamber solid oxide fuel cell. <i>Journal of Power Sources</i> , 2010 , 195, 4758-4764 | 8.9 | 8 |
| 61 | Engineering of coordination polymers for shape selective alkylation of large aromatics and the role of defects. <i>Microporous and Mesoporous Materials</i> , 2010 , 129, 319-329 | 5.3 | 166 |
| 60 | Impact of reforming catalyst on the anodic polarisation resistance in single-chamber SOFC fed by methane. <i>Electrochemistry Communications</i> , 2010 , 12, 1322-1325 | 5.1 | 1 |
| 59 | Screening of ceria-based catalysts for internal methane reforming in low temperature SOFC. <i>Catalysis Today</i> , 2010 , 157, 263-269 | 5.3 | 29 |
| 58 | Metall-organische Gerate fur die Katalyse. <i>Angewandte Chemie</i> , 2009 , 121, 7638-7649 | 3.6 | 213 |
| 57 | Metal-organic frameworks: opportunities for catalysis. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 7502-13 | 16.4 | 1612 |
| 56 | Natural gas treating by selective adsorption: Material science and chemical engineering interplay. <i>Chemical Engineering Journal</i> , 2009 , 155, 553-566 | 14.7 | 320 |
| 55 | A comparative study of La _{0.8} Sr _{0.2} MnO ₃ and La _{0.8} Sr _{0.2} Sc _{0.1} Mn _{0.9} O ₃ as cathode materials of single-chamber SOFCs operating on a methane/air mixture. <i>Journal of Power Sources</i> , 2009 , 191, 225-232 | 8.9 | 24 |

| | | | |
|----|--|------|-----|
| 54 | A new symmetric solid-oxide fuel cell with La _{0.8} Sr _{0.2} Sc _{0.2} Mn _{0.8} O _{3-δ} perovskite oxide as both the anode and cathode. <i>Acta Materialia</i> , 2009 , 57, 1165-1175 | 8.4 | 140 |
| 53 | Virtual screening of materials using neuro-genetic approach: Concepts and implementation. <i>Computational Materials Science</i> , 2009 , 45, 52-59 | 3.2 | 15 |
| 52 | Solvent free base catalysis and transesterification over basic functionalised Metal-Organic Frameworks. <i>Green Chemistry</i> , 2009 , 11, 1729 | 10 | 125 |
| 51 | Heats of adsorption for seven gases in three metal-organic frameworks: systematic comparison of experiment and simulation. <i>Langmuir</i> , 2009 , 25, 7383-8 | 4 | 183 |
| 50 | Marrying gas power and hydrogen energy: A catalytic system for combining methane conversion and hydrogen generation. <i>Green Chemistry</i> , 2009 , 11, 921 | 10 | 17 |
| 49 | MOF-5 as acid catalyst with shape selectivity properties. <i>Studies in Surface Science and Catalysis</i> , 2008 , 467-470 | 1.8 | 6 |
| 48 | High-throughput approach to the catalytic combustion of diesel soot. <i>Catalysis Today</i> , 2008 , 137, 103-109 | 9.3 | 36 |
| 47 | Deactivation handling in a high-throughput kinetic study of o-xylene hydrogenation. <i>Catalysis Today</i> , 2008 , 137, 71-79 | 5.3 | 10 |
| 46 | High-throughput gas phase transient reactor for catalytic material characterization and kinetic studies. <i>Chemical Engineering Journal</i> , 2008 , 138, 379-388 | 14.7 | 19 |
| 45 | OptiCat: A versatile open-source optimization platform for experimental design. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2008 , 93, 167-171 | 3.8 | 6 |
| 44 | High-throughput heterogeneous catalysis. <i>Surface Science Reports</i> , 2008 , 63, 487-513 | 12.9 | 70 |
| 43 | MOFs as acid catalysts with shape selectivity properties. <i>New Journal of Chemistry</i> , 2008 , 32, 937 | 3.6 | 121 |
| 42 | Diversity management for efficient combinatorial optimization of materials. <i>Applied Surface Science</i> , 2007 , 254, 772-776 | 6.7 | 10 |
| 41 | Oxidation in catalytic membrane reactors. <i>Applied Catalysis A: General</i> , 2007 , 325, 198-204 | 5.1 | 24 |
| 40 | Investigation by high throughput experimentation of ceria based catalysts for H ₂ purification and CO ₂ reforming of CH ₄ . <i>Studies in Surface Science and Catalysis</i> , 2007 , 167, 293-298 | 1.8 | 2 |
| 39 | Computational methods in the development of a knowledge-based system for the prediction of solid catalyst performance. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2007 , 10, 37-50 | 1.3 | 7 |
| 38 | Optimisation methodologies and algorithms for research on catalysis employing high-throughput methods: comparison using the Selox benchmark. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2007 , 10, 149-59 | 1.3 | 8 |
| 37 | Development of an integrated informatics toolbox: HT kinetic and virtual screening. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2007 , 10, 85-97 | 1.3 | 9 |

| | | | |
|----|---|------|----|
| 36 | Discovery of new catalytic materials for the water-gas shift reaction by high-throughput experimentation. <i>Applied Catalysis A: General</i> , 2006 , 306, 17-21 | 5.1 | 18 |
| 35 | High throughput experimentation in oxidation catalysis: Higher integration and [Intelligent] software. <i>Catalysis Today</i> , 2006 , 117, 284-290 | 5.3 | 31 |
| 34 | Combinatorial Strategies for Speeding up Discovery and Optimization of Heterogeneous Catalysts on the Academic Laboratory Scale: A Case Study of Hydrogen Purification for Feeding PEM Fuel Cells 2005 , 239-270 | | |
| 33 | Oxidative activation of ethane on catalytic modified dense ionic oxygen conducting membranes. <i>Catalysis Today</i> , 2005 , 104, 131-137 | 5.3 | 82 |
| 32 | Limitations and potentials of oxygen transport dense and porous ceramic membranes for oxidation reactions. <i>Catalysis Today</i> , 2005 , 104, 102-113 | 5.3 | 47 |
| 31 | Effect of the Genetic Algorithm Parameters on the Optimisation of Heterogeneous Catalysts. <i>QSAR and Combinatorial Science</i> , 2005 , 24, 45-57 | | 36 |
| 30 | Design of Discovery Libraries for Solids Based on QSAR Models. <i>QSAR and Combinatorial Science</i> , 2005 , 24, 78-93 | | 44 |
| 29 | Library design using genetic algorithms for catalyst discovery and optimization. <i>Review of Scientific Instruments</i> , 2005 , 76, 062208 | 1.7 | 18 |
| 28 | Oxidative activation of light alkanes on dense ionic oxygen conducting membranes. <i>Studies in Surface Science and Catalysis</i> , 2004 , 147, 655-660 | 1.8 | 9 |
| 27 | Using Artificial Neural Networks to Boost High-throughput Discovery in Heterogeneous Catalysis. <i>QSAR and Combinatorial Science</i> , 2004 , 23, 767-778 | | 53 |
| 26 | The development of descriptors for solids: teaching "catalytic intuition" to a computer. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 5347-9 | 16.4 | 80 |
| 25 | Combinatorial Explosion in Homogeneous Catalysis: Screening 60,000 Cross-Coupling Reactions. <i>Advanced Synthesis and Catalysis</i> , 2004 , 346, 1844-1853 | 5.6 | 53 |
| 24 | Data Management for Combinatorial Heterogeneous Catalysis: Methodology and Development of Advanced Tools. <i>ChemInform</i> , 2004 , 35, no | | 1 |
| 23 | Selective CO oxidation in the presence of hydrogen: fast parallel screening and mechanistic studies on ceria-based catalysts. <i>Journal of Catalysis</i> , 2004 , 225, 489-497 | 7.3 | 59 |
| 22 | Characterization of MFI/Al ₂ O ₃ and V-MFI/Al ₂ O ₃ composite membranes by ¹²⁹ Xe NMR. <i>Separation and Purification Technology</i> , 2003 , 32, 165-173 | 8.3 | 5 |
| 21 | Studies of interactions oxygen-BIMEVOX membrane materials by transient techniques. <i>Separation and Purification Technology</i> , 2003 , 32, 341-348 | 8.3 | 4 |
| 20 | Acceleration in catalyst development by fast transient kinetic investigation. <i>Journal of Catalysis</i> , 2003 , 216, 135-143 | 7.3 | 28 |
| 19 | Styrene from toluene by combinatorial catalysis. <i>Catalysis Today</i> , 2003 , 81, 425-436 | 5.3 | 70 |

| | | | |
|----|---|------|-----|
| 18 | How to Design Diverse Libraries of Solid Catalysts?. <i>QSAR and Combinatorial Science</i> , 2003 , 22, 729-736 | | 50 |
| 17 | Studies on the performance stability of mixed conducting BSCFO membranes in medium temperature oxygen permeation. <i>Chemical Communications</i> , 2003 , 32-3 | 5.8 | 51 |
| 16 | Dynamic Control of the Browsing-Exploitation Ratio for Iterative Optimisations. <i>Lecture Notes in Computer Science</i> , 2003 , 265-270 | 0.9 | 2 |
| 15 | Data Management for Combinatorial Heterogeneous Catalysis: Methodology and Development of Advanced Tools 2003 , 551-579 | | 17 |
| 14 | Novel preparation of BIMEVOX materials assisting in elementary step resolved investigations of the oxygen transfer at the surface. <i>Desalination</i> , 2002 , 146, 41-47 | 10.3 | 4 |
| 13 | The Combinatorial Approach for Heterogeneous Catalysis: A Challenge for Academic Research 2002 , 101-124 | | 8 |
| 12 | Porous ceramic membranes for catalytic reactors [b]overview and new ideas. <i>Journal of Membrane Science</i> , 2001 , 181, 3-20 | 9.6 | 261 |
| 11 | Mikroporöses Siliciumnitridimid: Steuerung der PorengröÙ und katalytische Eigenschaften. <i>Angewandte Chemie</i> , 2001 , 113, 4336-4339 | 3.6 | 5 |
| 10 | Pore-Size Engineering of Silicon Imido Nitride for Catalytic Applications. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 4204-4207 | 16.4 | 56 |
| 9 | The chemical valve membrane: a new concept for an auto-regulation of O ₂ distribution in membrane reactors. <i>Catalysis Today</i> , 2001 , 67, 139-149 | 5.3 | 17 |
| 8 | Synthesis and characterisation of a vanadium-based [b]chemical valve[m]membrane. <i>Separation and Purification Technology</i> , 2001 , 25, 11-24 | 8.3 | 8 |
| 7 | Evaluation of porous ceramic membranes as O ₂ distributors for the partial oxidation of alkanes in inert membrane reactors. <i>Separation and Purification Technology</i> , 2001 , 25, 137-149 | 8.3 | 25 |
| 6 | Characteristics and performance in the oxidative dehydrogenation of propane of MFI and V-MFI zeolite membranes. <i>Catalysis Today</i> , 2000 , 56, 199-209 | 5.3 | 68 |
| 5 | Investigation of sol-gel methods for the synthesis of VPO membrane materials adapted to the partial oxidation of n-butane. <i>Catalysis Today</i> , 2000 , 56, 211-220 | 5.3 | 7 |
| 4 | Synthesis of mesoporous silicon imido nitride with high surface area and narrow pore size distribution. <i>Chemical Communications</i> , 2000 , 2481-2482 | 5.8 | 35 |
| 3 | The First Redox Switchable Ceramic Membrane. <i>Journal of the American Chemical Society</i> , 2000 , 122, 12592-12593 | 16.4 | 12 |
| 2 | Oxidative dehydrogenation of propane on V/Al ₂ O ₃ catalytic membranes. Effect of the type of membrane and reactant feed configuration. <i>Chemical Engineering Science</i> , 1999 , 54, 1265-1272 | 4.4 | 31 |
| 1 | Rational Design and High-Throughput Screening of Metal Open Frameworks for Gas Separation and Catalysis161-194 | | |

