David Farrusseng

List of Publications by Year
in descending order

186 papers	12,294 citations	28190 55 h-index	27345 106 g-index
210 all docs	210 docs citations	210 times ranked	12700 citing authors

#	Article	IF	Citations
1	Metalâ€“Organic Frameworks: Opportunities for Catalysis. Angewandte Chemie - International Edition, 2009, 48, 7502-7513.	7.2	1,732
2	Water adsorption in MOFs: fundamentals and applications. Chemical Society Reviews, 2014, 43, 5594-5617.	18.7	1,094
3	Natural gas treating by selective adsorption: Material science and chemical engineering interplay. Chemical Engineering Journal, 2009, 155, 553-566.	6.6	386
4	Porous ceramic membranes for catalytic reactors â€” overview and new ideas. Journal of Membrane Science, 2001, 181, 3-20.	4.1	314
5	Structureâ€“property relationships of water adsorption in metalâ€“organic frameworks. New Journal of Chemistry, 2014, 38, 3102-3111.	1.4	252
6	MOF-Supported Selective Ethylene Dimerization Single-Site Catalysts through One-Pot Postsynthetic Modification. Journal of the American Chemical Society, 2013, 135, 4195-4198.	6.6	231
7	Perspectives on zeolite-encapsulated metal nanoparticles and their applications in catalysis. New Journal of Chemistry, 2016, 40, 3933-3949.	1.4	222
8	Heats of Adsorption for Seven Gases in Three Metalâ€'Organic Frameworks: Systematic Comparison of Experiment and Simulation. Langmuir, 2009, 25, 7383-7388.	1.6	212
9	Absolute Molecular Sieve Separation of Ethylene/Ethane Mixtures with Silver Zeolite A. Journal of the American Chemical Society, 2012, 134, 14635-14637.	6.6	196
10	Engineering of coordination polymers for shape selective alkylation of large aromatics and the role of defects. Microporous and Mesoporous Materials, 2010, 129, 319-329.	2.2	194
11	Origin of highly active metalâ€“organic framework catalysts: defects? Defects!. Dalton Transactions, 2016, 45, 4090-4099.	1.6	183
12	Generic Postfunctionalization Route from Amino-Derived Metalâ€'Organic Frameworks. Journal of the American Chemical Society, 2010, 132, 4518-4519.	6.6	181
13	Photocatalytic Carbon Dioxide Reduction with Rhodiumâ€based Catalysts in Solution and Heterogenized within Metalâ€“Organic Frameworks. ChemSusChem, 2015, 8, 603-608.	3.6	177
14	Guest-induced gate-opening of a zeolite imidazolate framework. New Journal of Chemistry, 2011, 35, 546-550.	1.4	172
15	Hollow Zeolite Structures: An Overview of Synthesis Methods. Chemistry of Materials, 2016, 28, 5205-5223.	3.2	167
16	Enantiopure Peptide-Functionalized Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2015, 137, 9409-9416.	6.6	166
17	Dynamic Nuclear Polarization Enhanced Solidâ€State NMR Spectroscopy of Functionalized Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2012, 51, 123-127.	7.2	161
18	A new symmetric solid-oxide fuel cell with La0.8Sr0.2Sc0.2Mn0.8O3-Î´ perovskite oxide as both the anode and cathode. Acta Materialia, 2009, 57, 1165-1175.	3.8	158

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19	Engineering structured MOF at nano and macroscales for catalysis and separation. Journal of Materials Chemistry, 2011, 21, 7582.	6.7	140
20	MOFs as acid catalysts with shape selectivity properties. New Journal of Chemistry, 2008, 32, 937.	1.4	137
21	Solvent free base catalysis and transesterification over basic functionalised Metal-Organic Frameworks. Green Chemistry, 2009, 11, 1729.	4.6	135
22	Experimental and Computational Study of Functionality Impact on Sodaliteâ€“Zeolitic Imidazolate Frameworks for CO₂Separation. Journal of Physical Chemistry C, 2011, 115, 16425-16432.	1.5	128
23	Antimicrobial activity of cobalt imidazolate metalâ€“organic frameworks. Chemosphere, 2014, 113, 188-192.	4.2	126
24	Facile synthesis of an ultramicroporous MOF tubular membrane with selectivity towards CO₂. New Journal of Chemistry, 2011, 35, 41-44.	1.4	125
25	Transition-Metal Nanoparticles in Hollow Zeolite Single Crystals as Bifunctional and Size-Selective Hydrogenation Catalysts. Chemistry of Materials, 2015, 27, 276-282.	3.2	118
26	Facile shaping of an imidazolate-based MOF on ceramic beads for adsorption and catalytic applications. Chemical Communications, 2010, 46, 7999.	2.2	115
27	The Development of Descriptors for Solids: Teachingâ€œCatalytic Intuitionâ€•to a Computer. Angewandte Chemie - International Edition, 2004, 43, 5347-5349.	7.2	97
28	Oxidative activation of ethane on catalytic modified dense ionic oxygen conducting membranes. Catalysis Today, 2005, 104, 131-137.	2.2	91
29	The Origin of the Activity of Amineâ€Functionalized Metalâ€“Organic Frameworks in the Catalytic Synthesis of Cyclic Carbonates from Epoxide and CO₂. ChemCatChem, 2012, 4, 1725-1728.	1.8	91
30	Size-selective hydrogenation at the subnanometer scale over platinum nanoparticles encapsulated in silicalite-1 single crystal hollow shells. Chemical Communications, 2014, 50, 1824.	2.2	89
31	Synthesis and Shaping Scale-up Study of Functionalized UiO-66 MOF for Ammonia Air Purification Filters. Industrial & Engineering Chemistry Research, 2018, 57, 8200-8208.	1.8	86
32	High-throughput heterogeneous catalysis. Surface Science Reports, 2008, 63, 487-513.	3.8	85
33	Modeling of all porous solid oxide fuel cells. Applied Energy, 2018, 219, 105-113.	5.1	84
34	Assessing Chemical Heterogeneity at the Nanoscale in Mixedâ€Ligand Metalâ€“Organic Frameworks with the PTIR Technique. Angewandte Chemie - International Edition, 2014, 53, 2852-2856.	7.2	82
35	Hierarchical Zeolitic Imidazolate Frameworkâ€8 Catalyst for Monoglyceride Synthesis. ChemCatChem, 2013, 5, 3562-3566.	1.8	81
36	Synergistic effects of encapsulated phthalocyanine complexes in MIL-101 for the selective aerobic oxidation of tetralin. Chemical Communications, 2011, 47, 1562-1564.	2.2	79

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37	Ultimate size control of encapsulated gold nanoparticles. Chemical Communications, 2013, 49, 8507.	2.2	77
38	Styrene from toluene by combinatorial catalysis. Catalysis Today, 2003, 81, 425-436.	2.2	75
39	Characteristics and performance in the oxidative dehydrogenation of propane of MFI and V-MFI zeolite membranes. Catalysis Today, 2000, 56, 199-209.	2.2	74
40	Using Artificial Neural Networks to Boost High-throughput Discovery in Heterogeneous Catalysis. QSAR and Combinatorial Science, 2004, 23, 767-778.	1.5	72
41	Investigation of Acid Centers in MILâ€53(Al, Ga) for BrÃ¸nstedâ€Type Catalysis: Inâ€…Situ FTIR and Abâ€…Initio Molecular Modeling. ChemCatChem, 2010, 2, 1235-1238.	1.8	72
42	Homogeneity of flexible metalâ€“organic frameworks containing mixed linkers. Journal of Materials Chemistry, 2012, 22, 10287.	6.7	71
43	Selective CO oxidation in the presence of hydrogen: fast parallel screening and mechanistic studies on ceria-based catalysts. Journal of Catalysis, 2004, 225, 489-497.	3.1	69
44	Combinatorial Explosion in Homogeneous Catalysis: Screening 60,000 Cross-Coupling Reactions. Advanced Synthesis and Catalysis, 2004, 346, 1844-1853.	2.1	68
45	Amino acid functionalized metalâ€“organic frameworks by a soft couplingâ€“deprotection sequence. Chemical Communications, 2011, 47, 11650.	2.2	68
46	Engineering the Environment of a Catalytic Metalâ€“Organic Framework by Postsynthetic Hydrophobization. ChemCatChem, 2011, 3, 675-678.	1.8	67
47	Pore-Size Engineering of Silicon Imido Nitride for Catalytic Applications. Angewandte Chemie - International Edition, 2001, 40, 4204-4207.	7.2	65
48	A water-based and high space-time yield synthetic route to MOF Ni₂(dhtp) and its linker 2,5-dihydroxyterephthalic acid. Journal of Materials Chemistry A, 2014, 2, 17757-17763.	5.2	60
49	Molecular Porous Photosystems Tailored for Longâ€Term Photocatalytic CO₂ Reduction. Angewandte Chemie - International Edition, 2020, 59, 5116-5122.	7.2	60
50	Tuning the activity by controlling the wettability of MOF eggshell catalysts: A quantitative structureâ€“activity study. Journal of Catalysis, 2011, 284, 207-214.	3.1	59
51	Platinum nanoparticles entrapped in zeolite nanoshells as active and sintering-resistant arene hydrogenation catalysts. Journal of Catalysis, 2015, 332, 25-30.	3.1	59
52	Aqueous production of spherical Zr-MOF beads via continuous-flow spray-drying. Green Chemistry, 2018, 20, 873-878.	4.6	59
53	How to Design Diverse Libraries of Solid Catalysts?. QSAR and Combinatorial Science, 2003, 22, 729-736.	1.5	58
54	Systematic study of the impact of MOF densification into tablets on textural and mechanical properties. CrystEngComm, 2017, 19, 4211-4218.	1.3	58

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55	Studies on the performance stability of mixed conducting BSCFO membranes in medium temperature oxygen permeation. Chemical Communications, 2003, , 32-33.	2.2	57
56	Limitations and potentials of oxygen transport dense and porous ceramic membranes for oxidation reactions. Catalysis Today, 2005, 104, 102-113.	2.2	57
57	Diffusion-Driven Selectivity in Oxidation of CO in the Presence of Propylene Using Zeolite Nano Shell as Membrane. ACS Catalysis, 2014, 4, 4299-4303.	5.5	57
58	Rhodium-Based Metalâ€“Organic Polyhedra Assemblies for Selective CO₂ Photoreduction. Journal of the American Chemical Society, 2022, 144, 3626-3636.	6.6	57
59	Design of Discovery Libraries for Solids Based on QSAR Models. QSAR and Combinatorial Science, 2005, 24, 78-93.	1.5	56
60	Transition metal loaded silicon carbide-derived carbons with enhanced catalytic properties. Carbon, 2012, 50, 1861-1870.	5.4	53
61	Solubility of Gases in Water Confined in Nanoporous Materials: ZSM-5, MCM-41, and MIL-100. Journal of Physical Chemistry C, 2015, 119, 21547-21554.	1.5	53
62	Combinatorial synthesis of metalâ€“organic frameworks libraries by click-chemistry. New Journal of Chemistry, 2011, 35, 1892.	1.4	51
63	Periodic trends in the selective hydrogenation of styrene over silica supported metal catalysts. Journal of Catalysis, 2013, 307, 352-361.	3.1	51
64	Synthesis of Monoglycerides by Esterification of Oleic Acid with Glycerol in Heterogeneous Catalytic Process Using Tinâ€“Organic Framework Catalyst. Catalysis Letters, 2013, 143, 356-363.	1.4	50
65	Hammett Parameter in Microporous Solids as Macroligands for Heterogenized Photocatalysts. ACS Catalysis, 2018, 8, 1653-1661.	5.5	50
66	Gas Uptake in Solvents Confined in Mesopores: Adsorption versus Enhanced Solubility. Journal of Physical Chemistry Letters, 2013, 4, 2274-2278.	2.1	48
67	Effect of the Genetic Algorithm Parameters on the Optimisation of Heterogeneous Catalysts. QSAR and Combinatorial Science, 2005, 24, 45-57.	1.5	46
68	A water-based room temperature synthesis of ZIF-93 for CO₂ adsorption. Journal of Materials Chemistry A, 2018, 6, 5598-5602.	5.2	46
69	Unravelling ammonia adsorption mechanisms of adsorbents in humid conditions. Microporous and Mesoporous Materials, 2018, 265, 143-148.	2.2	46
70	Engineering MIL-53(Al) flexibility by controlling amino tags. Dalton Transactions, 2011, 40, 11359.	1.6	44
71	Xenon Capture on Silver-Loaded Zeolites: Characterization of Very Strong Adsorption Sites. Journal of Physical Chemistry C, 2013, 117, 15122-15129.	1.5	44
72	An all porous solid oxide fuel cell (SOFC): a bridging technology between dual and single chamber SOFCs. Energy and Environmental Science, 2013, 6, 2119.	15.6	43

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73	Enhanced H₂ Uptake in Solvents Confined in Mesoporous Metalâ€“Organic Framework. Journal of the American Chemical Society, 2012, 134, 17369-17371.	6.6	41
74	Tailoring metalâ€“organic framework catalysts by click chemistry. Dalton Transactions, 2012, 41, 3945.	1.6	40
75	Hollow Zeolite Singleâ€Crystals Encapsulated Alloy Nanoparticles with Controlled Size and Composition. ChemNanoMat, 2016, 2, 534-539.	1.5	40
76	Synthesis of mesoporous silicon imido nitride with high surface area and narrow pore size distribution. Chemical Communications, 2000, , 2481-2482.	2.2	39
77	High-throughput approach to the catalytic combustion of diesel soot. Catalysis Today, 2008, 137, 103-109.	2.2	39
78	Superstructure of a Substituted Zeolitic Imidazolate Metalâ€“Organic Framework Determined by Combining Proton Solidâ€State NMR Spectroscopy and DFT Calculations. Angewandte Chemie - International Edition, 2015, 54, 5971-5976.	7.2	38
79	Oxidative dehydrogenation of propane on V/Al2O3 catalytic membranes. Effect of the type of membrane and reactant feed configuration. Chemical Engineering Science, 1999, 54, 1265-1272.	1.9	37
80	Guest-Induced Gate Opening and Breathing Phenomena in Soft Porous Crystals: Building Thermodynamically Consistent Isotherms. Journal of Physical Chemistry C, 2012, 116, 1638-1649.	1.5	37
81	Acceleration in catalyst development by fast transient kinetic investigation. Journal of Catalysis, 2003, 216, 135-143.	3.1	36
82	High throughput experimentation in oxidation catalysis: Higher integration and â€œintelligentâ€• software. Catalysis Today, 2006, 117, 284-290.	2.2	35
83	Quantitative Characterization of Breathing upon Adsorption for a Series of Amino-Functionalized MIL-53. Journal of Physical Chemistry C, 2012, 116, 9507-9516.	1.5	34
84	Screening of ceria-based catalysts for internal methane reforming in low temperature SOFC. Catalysis Today, 2010, 157, 263-269.	2.2	32
85	Evaluation of porous ceramic membranes as O2 distributors for the partial oxidation of alkanes in inert membrane reactors. Separation and Purification Technology, 2001, 25, 137-149.	3.9	31
86	Technicoâ€•economical assessment of MFIâ€•type zeolite membranes for CO₂ capture from postcombustion flue gases. AICHE Journal, 2012, 58, 3183-3194.	1.8	30
87	Role of Silver Nanoparticles in Enhanced Xenon Adsorption Using Silver-Loaded Zeolites. Journal of Physical Chemistry C, 2014, 118, 25032-25040.	1.5	30
88	Effect of polyaromatic tars on the activity for methane steam reforming of nickel particles embedded in silicalite-1. Applied Catalysis B: Environmental, 2017, 204, 515-524.	10.8	30
89	Fast â€˜Operandoâ€™ electron nanotomography. Journal of Microscopy, 2018, 269, 117-126.	0.8	29
90	Breakthrough in Xenon Capture and Purification Using Adsorbentâ€Supported Silver Nanoparticles. Chemistry - A European Journal, 2016, 22, 9660-9666.	1.7	28

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91	Hollow Zeolite Single Crystals: Synthesis Routes and Functionalization Methods. Small Methods, 2018, 2, 1800197.	4.6	28
92	Modeling of all-porous solid oxide fuel cells with a focus on the electrolyte porosity design. Applied Energy, 2019, 235, 602-611.	5.1	28
93	Oxidation in catalytic membrane reactors. Applied Catalysis A: General, 2007, 325, 198-204.	2.2	27
94	Tests for the Use of La2Mo2O9-based Oxides as Multipurpose SOFC Core Materials. Fuel Cells, 2010, 10, 433-439.	1.5	27
95	High-throughput approach to the catalytic combustion of diesel soot II: Screening of oxide-based catalysts. Catalysis Today, 2011, 159, 138-143.	2.2	27
96	Molecular Level Characterization of the Structure and Interactions in Peptideâ€Functionalized Metalâ€“Organic Frameworks. Chemistry - A European Journal, 2016, 22, 16531-16538.	1.7	27
97	Hollow Beta Zeolite Single Crystals for the Design of Selective Catalysts. Crystal Growth and Design, 2018, 18, 592-596.	1.4	27
98	Effects of H2S and phenanthrene on the activity of Ni and Rh-based catalysts for the reforming of a simulated biomass-derived producer gas. Applied Catalysis B: Environmental, 2018, 221, 206-214.	10.8	27
99	Discovery of new catalytic materials for the waterâ€“gas shift reaction by high-throughput experimentation. Applied Catalysis A: General, 2006, 306, 17-21.	2.2	26
100	A comparative study of La0.8Sr0.2MnO3 and La0.8Sr0.2Sc0.1Mn0.9O3 as cathode materials of single-chamber SOFCs operating on a methaneâ€“air mixture. Journal of Power Sources, 2009, 191, 225-232.	4.0	26
101	Enhanced Ligandâ€Based Luminescence in Metalâ€“Organic Framework Sensor. ChemNanoMat, 2016, 2, 866-872.	1.5	26
102	High-throughput gas phase transient reactor for catalytic material characterization and kinetic studies. Chemical Engineering Journal, 2008, 138, 379-388.	6.6	25
103	Highly Dispersed Nickel Particles Encapsulated in Multiâ€hollow Silicaliteâ€1 Single Crystal Nanoboxes: Effects of Siliceous Deposits and Phosphorous Species on the Catalytic Performances. ChemCatChem, 2017, 9, 2297-2307.	1.8	24
104	High-silica hollow Y zeolite by selective desilication of dealuminated NaY crystals in the presence of protective Al species. CrystEngComm, 2018, 20, 1564-1572.	1.3	24
105	Library design using genetic algorithms for catalyst discovery and optimization. Review of Scientific Instruments, 2005, 76, 062208.	0.6	23
106	Gas oversolubility in nanoconfined liquids: Review and perspectives for adsorbent design. Microporous and Mesoporous Materials, 2019, 288, 109561.	2.2	23
107	Evaluation Methods of Adsorbents for Air Purification and Gas Separation at Low Concentration: Case Studies on Xenon and Krypton. Industrial & Engineering Chemistry Research, 2019, 58, 4560-4571.	1.8	23
108	The chemical valve membrane: a new concept for an auto-regulation of O2 distribution in membrane reactors. Catalysis Today, 2001, 67, 139-149.	2.2	19

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109	Protectionâ€“deprotection Methods Applied to Metalâ€“Organic Frameworks for the Design of Original Singleâ€Site Catalysts. ChemCatChem, 2011, 3, 823-826.	1.8	19
110	Marrying gas power and hydrogen energy: A catalytic system for combining methane conversion and hydrogen generation. Green Chemistry, 2009, 11, 921.	4.6	18
111	A Microkinetic Vision on High-Throughput Catalyst Formulation and Optimization: Development of an Appropriate Software Tool. Topics in Catalysis, 2010, 53, 64-76.	1.3	18
112	Xylene separation on a diverse library of exchanged faujasite zeolites. Microporous and Mesoporous Materials, 2017, 247, 52-59.	2.2	18
113	Surface effect of nano-sized cerium-zirconium oxides for the catalytic conversion of methanol and CO2 into dimethyl carbonate. Journal of Catalysis, 2021, 394, 486-494.	3.1	18
114	Data Management for Combinatorial Heterogeneous Catalysis: Methodology and Development of Advanced Tools. , 2003, , 551-579.		18
115	Virtual screening of materials using neuro-genetic approach: Concepts and implementation. Computational Materials Science, 2009, 45, 52-59.	1.4	17
116	Evaluation of Energy Heterogeneity in Metalâ^'Organic Frameworks: Absence of Henryâ€™s Region in MIL-53 and MIL-68 Materials?. Journal of Physical Chemistry C, 2010, 114, 17665-17674.	1.5	17
117	Metal-Organic Frameworks as Catalysts for Organic Reactions. , 2011, , 191-212.		17
118	Simple modification of macroporous alumina supports for the fabrication of dense NaA zeolite coatings: Interplay of electrostatic and chemical interactions. Microporous and Mesoporous Materials, 2011, 146, 69-75.	2.2	17
119	A Pt/Al₂O₃-supported metalâ€“organic framework film as the size-selective coreâ€“shell hydrogenation catalyst. Chemical Communications, 2016, 52, 7161-7163.	2.2	17
120	CeO₂/Pt Catalyst Nanoparticle Containing Carbide-Derived Carbon Composites by a New In situ Functionalization Strategy. Chemistry of Materials, 2011, 23, 57-66.	3.2	16
121	Cu-mediated solid-state reaction in a post-functionalized metalâ€“organic framework. CrystEngComm, 2012, 14, 4105.	1.3	16
122	Selective removal of external Ni nanoparticles on Ni@silicalite-1 single crystal nanoboxes: Application to size-selective arene hydrogenation. Applied Catalysis A: General, 2017, 535, 69-76.	2.2	16
123	Migration and Growth of Silver Nanoparticles in Zeolite Socony Mobil 5 (ZSM-5) Observed by Environmental Electron Microscopy: Implications for Heterogeneous Catalysis. ACS Applied Nano Materials, 2019, 2, 6452-6461.	2.4	16
124	Adsorption in heterogeneous porous media: Hierarchical and composite solids. Microporous and Mesoporous Materials, 2016, 229, 145-154.	2.2	15
125	Molecular Porous Photosystems Tailored for Longâ€Term Photocatalytic CO 2 Reduction. Angewandte Chemie, 2020, 132, 5154-5160.	1.6	15
126	Microporous Polymers as Macroligands for Pentamethylcyclopentadienylrhodium Transferâ€Hydrogenation Catalysts. ChemCatChem, 2018, 10, 1778-1782.	1.8	14

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127	Demonstration of Improved Effectiveness Factor of Catalysts Based on Hollow Single Crystal Zeolites. ChemCatChem, 2018, 10, 4525-4529.	1.8	14
128	An alternative pathway for the synthesis of isocyanato- and urea-functionalised metalâ€“organic frameworks. Dalton Transactions, 2013, 42, 8249.	1.6	13
129	Determination of oxygen adsorptionâ€“desorption rates and diffusion rate coefficients in perovskites at different oxygen partial pressures by a microkinetic approach. Physical Chemistry Chemical Physics, 2015, 17, 1469-1481.	1.3	13
130	Coke-free operation of an all porous solid oxide fuel cell (AP-SOFC) used as an O₂ supply device. Journal of Materials Chemistry A, 2015, 3, 2684-2689.	5.2	13
131	The First Redox Switchable Ceramic Membrane. Journal of the American Chemical Society, 2000, 122, 12592-12593.	6.6	12
132	Soft synthesis of isocyanate-functionalised metalâ€“organic frameworks. Dalton Transactions, 2012, 41, 14236.	1.6	12
133	Ammonia-mediated suppression of coke formation in direct-methane solid oxide fuel cells with nickel-based anodes. Journal of Power Sources, 2013, 240, 232-240.	4.0	12
134	Influence of crystal size on the uptake rate of isooctane in plain and hollow silicalite-1 crystals. Microporous and Mesoporous Materials, 2016, 228, 147-152.	2.2	12
135	Controlled grafting of dialkylphosphonate-based ionic liquids on Î³-alumina: design of hybrid materials with high potential for CO₂ separation applications. RSC Advances, 2019, 9, 19882-19894.	1.7	12
136	Development of an Integrated Informatics Toolbox: HT Kinetic and Virtual Screening. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 85-97.	0.6	11
137	Diversity management for efficient combinatorial optimization of materials. Applied Surface Science, 2007, 254, 772-776.	3.1	11
138	Oxidative activation of light alkanes on dense ionic oxygen conducting membranes. Studies in Surface Science and Catalysis, 2004, 147, 655-660.	1.5	10
139	Computational Methods in the Development of a Knowledge-Based System for the Prediction of Solid Catalyst Performance. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 37-50.	0.6	10
140	Deactivation handling in a high-throughput kinetic study of o-xylene hydrogenation. Catalysis Today, 2008, 137, 71-79.	2.2	10
141	Design of microporous mixed zincâ€“nickel triazolate metalâ€“organic frameworks with functional ligands. CrystEngComm, 2013, 15, 9336.	1.3	10
142	Faster transport in hollow zeolites. Microporous and Mesoporous Materials, 2020, 308, 110499.	2.2	10
143	Adsorber heat exchanger using Al-fumarate beads for heat-pump applications â€“ a transport study. Faraday Discussions, 2021, 225, 384-402.	1.6	10
144	Kinetics of n-Hexane Cracking over Mesoporous HY Zeolites Based on Catalyst Descriptors. Catalysts, 2021, 11, 652.	1.6	10

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145	Investigation of solâ€“gel methods for the synthesis of VPO membrane materials adapted to the partial oxidation of n-butane. Catalysis Today, 2000, 56, 211-220.	2.2	9
146	Synthesis and characterisation of a vanadium-based â€˜chemical valveâ€™ membrane. Separation and Purification Technology, 2001, 25, 11-24.	3.9	9
147	Zeolite-Encapsulated Catalysts. , 2017, , 335-386.		9
148	Optimisation Methodologies and Algorithms for Research on Catalysis Employing High-Throughput Methods: Comparison Using the Selox Benchmark. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 149-159.	0.6	8
149	Alternative perovskite materials as a cathode component for intermediate temperature single-chamber solid oxide fuel cell. Journal of Power Sources, 2010, 195, 4758-4764.	4.0	8
150	Enhanced H₂ Uptake of n-Alkanes Confined in Mesoporous Materials. Journal of Physical Chemistry C, 2014, 118, 10720-10727.	1.5	8
151	Proline-functionalized metalâ€“organic frameworks and their use in asymmetric catalysis: pitfalls in the MOFs rush. RSC Advances, 2015, 5, 11254-11256.	1.7	8
152	Hydrogenation Sizeâ€Selective Pt/Hollow Beta Catalysts. Chemistry - A European Journal, 2019, 25, 2972-2977.	1.7	8
153	Non Monotonous Product Distribution Dependence on Pt/Î³â€Al₂O₃â^'Cl Catalysts Formulation in nâ€Heptane Reforming.. ChemCatChem, 2020, 12, 2262-2270.	1.8	8
154	The Combinatorial Approach for Heterogeneous Catalysis: A Challenge for Academic Research. , 2002, , 101-124.		8
155	The Pivotal Role of Critical Hydroxyl Concentration in Si-Rich Zeolites for Switching Vapor Adsorption. Journal of Physical Chemistry C, 2021, 125, 22890-22897.	1.5	8
156	OptiCat: A versatile open-source optimization platform for experimental design. Chemometrics and Intelligent Laboratory Systems, 2008, 93, 167-171.	1.8	7
157	Hollow polycrystalline Y zeolite shells obtained from selective desilication of Beta-Y core-shell composites. Microporous and Mesoporous Materials, 2018, 265, 123-131.	2.2	7
158	Hollow structures by controlled desilication of beta zeolite nanocrystals. Journal of Solid State Chemistry, 2020, 281, 121033.	1.4	7
159	MOF-5 as acid catalyst with shape selectivity properties. Studies in Surface Science and Catalysis, 2008, , 467-470.	1.5	6
160	Acidity Characterization of Catalyst Libraries by High-Throughput Testing. Topics in Catalysis, 2010, 53, 49-56.	1.3	6
161	Design of Porous Coordination Polymers/Metal-Organic Frameworks: Past, Present and Future. , 2011, , 1-21.		6
162	Knowledge Based Catalyst Design by High Throughput Screening of Model Reactions and Statistical Modelling. Oil and Gas Science and Technology, 2013, 68, 487-504.	1.4	6

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163	Impregnation Protocols on Alumina Beads for Controlling the Preparation of Supported Metal Catalysts. Catalysts, 2019, 9, 577.	1.6	6
164	Effect of Chlorine-Containing VOCs on Silver Migration and Sintering in ZSM-5 Used in a TSA Process. Catalysts, 2019, 9, 686.	1.6	6
165	Hollow Y zeolite single crystals: synthesis, characterization and activity in the hydroisomerization of n-hexadecane. Oil and Gas Science and Technology, 2019, 74, 38.	1.4	6
166	Discovery of very active catalysts for methanol carboxylation into DMC by screening of a large and diverse catalyst library. New Journal of Chemistry, 2020, 44, 6312-6320.	1.4	6
167	Novel preparation of BIMEVOX materials assisting in elementary step resolved investigations of the oxygen transfer at the surface. Desalination, 2002, 146, 41-47.	4.0	5
168	Characterization of MFI/Î±Al2O3 and V-MFI/Î±Al2O3 composite membranes by 129Xe NMR. Separation and Purification Technology, 2003, 32, 165-173.	3.9	5
169	Characterization of the BrÃ¸nsted acidity of PtSn/Al₂O₃ surfaces by adsorption of 2,6-di-tert-butylpyridine. New Journal of Chemistry, 2022, 46, 7557-7562.	1.4	5
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