Dirk E De Vos

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7415731/publications.pdf Version: 2024-02-01



DIDK F DE VOS

#	Article	IF	CITATIONS
1	Ordered Mesoporous and Microporous Molecular Sieves Functionalized with Transition Metal Complexes as Catalysts for Selective Organic Transformations. Chemical Reviews, 2002, 102, 3615-3640.	47.7	1,015
2	Defectâ€Engineered Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2015, 54, 7234-7254.	13.8	923
3	Synthesis Modulation as a Tool To Increase the Catalytic Activity of Metal–Organic Frameworks: The Unique Case of UiO-66(Zr). Journal of the American Chemical Society, 2013, 135, 11465-11468.	13.7	871
4	Adsorptive separation on metal–organic frameworks in the liquid phase. Chemical Society Reviews, 2014, 43, 5766-5788.	38.1	772
5	Probing the Lewis Acidity and Catalytic Activity of the Metal–Organic Framework [Cu3(btc)2] (BTC=Benzene-1,3,5-tricarboxylate). Chemistry - A European Journal, 2006, 12, 7353-7363.	3.3	651
6	Chemical vapour deposition of zeolitic imidazolate framework thinÂfilms. Nature Materials, 2016, 15, 304-310.	27.5	528
7	Layered double hydroxides exchanged with tungstate as biomimetic catalysts for mild oxidative bromination. Nature, 1999, 400, 855-857.	27.8	496
8	Selective Adsorption and Separation of Xylene Isomers and Ethylbenzene with the Microporous Vanadium(IV) Terephthalate MIL-47. Angewandte Chemie - International Edition, 2007, 46, 4293-4297.	13.8	496
9	Hydrotalcite-like anionic clays in catalytic organic reactions. Catalysis Reviews - Science and Engineering, 2001, 43, 443-488.	12.9	449
10	An amino-modified Zr-terephthalate metal–organic framework as an acid–base catalyst for cross-aldol condensation. Chemical Communications, 2011, 47, 1521-1523.	4.1	392
11	Electronic Effects of Linker Substitution on Lewis Acid Catalysis with Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2012, 51, 4887-4890.	13.8	384
12	Cerium-based metal organic frameworks with UiO-66 architecture: synthesis, properties and redox catalytic activity. Chemical Communications, 2015, 51, 12578-12581.	4.1	377
13	Selective Adsorption and Separation of <i>ortho</i> -Substituted Alkylaromatics with the Microporous Aluminum Terephthalate MIL-53. Journal of the American Chemical Society, 2008, 130, 14170-14178.	13.7	376
14	Metal–organic frameworks as catalysts: the role of metal active sites. Catalysis Science and Technology, 2013, 3, 1435.	4.1	275
15	Modulated UiO-66-Based Mixed-Matrix Membranes for CO ₂ Separation. ACS Applied Materials & amp; Interfaces, 2015, 7, 25193-25201.	8.0	221
16	The Structure of the Aluminum Fumarate Metal–Organic Framework A520. Angewandte Chemie - International Edition, 2015, 54, 3664-3668.	13.8	206
17	Biobased Ionic Liquids: Solvents for a Green Processing Industry?. ACS Sustainable Chemistry and Engineering, 2016, 4, 2917-2931.	6.7	195
18	Sequential Pore Wall Modification in a Covalent Organic Framework for Application in Lactic Acid Adsorption. Chemistry of Materials, 2016, 28, 626-631.	6.7	189

#	Article	IF	CITATIONS
19	Gel-based morphological design of zirconium metal–organic frameworks. Chemical Science, 2017, 8, 3939-3948.	7.4	177
20	Tuning the catalytic performance of metal–organic frameworks in fine chemistry by active site engineering. Journal of Materials Chemistry, 2012, 22, 10313.	6.7	176
21	High pressure, high temperature electrochemical synthesis of metal–organic frameworks: films of MIL-100 (Fe) and HKUST-1 in different morphologies. Journal of Materials Chemistry A, 2013, 1, 5827.	10.3	167
22	Water adsorption behaviour of CAU-10-H: a thorough investigation of its structure–property relationships. Journal of Materials Chemistry A, 2016, 4, 11859-11869.	10.3	166
23	Cu-exchanged Al-rich SSZ-13 zeolite from organotemplate-free synthesis as NH3-SCR catalyst: Effects of Na+ ions on the activity and hydrothermal stability. Applied Catalysis B: Environmental, 2017, 217, 421-428.	20.2	161
24	Liquid-Phase Adsorption and Separation of Xylene Isomers by the Flexible Porous Metal–Organic Framework MIL-53(Fe). Chemistry of Materials, 2012, 24, 2781-2791.	6.7	160
25	Phosphate-Exchanged Mg–Al Layered Double Hydroxides: A New Slow Release Phosphate Fertilizer. ACS Sustainable Chemistry and Engineering, 2016, 4, 4280-4287.	6.7	160
26	Selective Removal of Nâ€Heterocyclic Aromatic Contaminants from Fuels by Lewis Acidic Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2011, 50, 4210-4214.	13.8	159
27	Engineering a Highly Defective Stable UiO-66 with Tunable Lewis- BrÃnsted Acidity: The Role of the Hemilabile Linker. Journal of the American Chemical Society, 2020, 142, 3174-3183.	13.7	156
28	Tuning the energetics and tailoring the optical properties of silver clusters confined in zeolites. Nature Materials, 2016, 15, 1017-1022.	27.5	153
29	Electrocarboxylation: towards sustainable and efficient synthesis of valuable carboxylic acids. Beilstein Journal of Organic Chemistry, 2014, 10, 2484-2500.	2.2	150
30	Selective Alkene Oxidation with H2O2 and a Heterogenized Mn Catalyst: Epoxidation and a New Entry to Vicinalcis-Diols. Angewandte Chemie - International Edition, 1999, 38, 980-983.	13.8	139
31	N/S-Heterocyclic Contaminant Removal from Fuels by the Mesoporous Metal–Organic Framework MIL-100: The Role of the Metal Ion. Journal of the American Chemical Society, 2013, 135, 9849-9856.	13.7	138
32	On the electrochemical deposition of metal–organic frameworks. Journal of Materials Chemistry A, 2016, 4, 3914-3925.	10.3	138
33	1,2,4-Triazolium perfluorobutanesulfonate as an archetypal pure protic organic ionic plastic crystal electrolyte for all-solid-state fuel cells. Energy and Environmental Science, 2015, 8, 1276-1291.	30.8	134
34	Solvent-free synthesis of supported ZIF-8 films and patterns through transformation of deposited zinc oxide precursors. CrystEngComm, 2013, 15, 9308.	2.6	124
35	Palladium Catalysts on Alkaline-Earth Supports for Racemization and Dynamic Kinetic Resolution of Benzylic Amines. Chemistry - A European Journal, 2007, 13, 2034-2043.	3.3	123
36	Threeâ€Dimensional Visualization of Defects Formed during the Synthesis of Metal–Organic Frameworks: A Fluorescence Microscopy Study. Angewandte Chemie - International Edition, 2013, 52, 401-405.	13.8	121

#	Article	IF	CITATIONS
37	Silica–MOF Composites as a Stationary Phase in Liquid Chromatography. European Journal of Inorganic Chemistry, 2010, 2010, 3735-3738.	2.0	120
38	Superactivity of MOF-808 toward Peptide Bond Hydrolysis. Journal of the American Chemical Society, 2018, 140, 6325-6335.	13.7	120
39	Activation of the metal–organic framework MIL-47 for selective adsorption of xylenes and other difunctionalized aromatics. Physical Chemistry Chemical Physics, 2008, 10, 2979.	2.8	119
40	Improving the mechanical stability of zirconium-based metal–organic frameworks by incorporation of acidic modulators. Journal of Materials Chemistry A, 2015, 3, 1737-1742.	10.3	116
41	Towards metal–organic framework based field effect chemical sensors: UiO-66-NH ₂ for nerve agent detection. Chemical Science, 2016, 7, 5827-5832.	7.4	108
42	Efficient dynamic kinetic resolution of secondary amines with Pd on alkaline earth salts and a lipase. Chemical Communications, 2005, , 5307.	4.1	105
43	A Flexible Photoactive Titanium Metal–Organic Framework Based on a [Ti ^{IV} ₃ (î¼ ₃ â€O)(O) ₂ (COO) ₆] Cluster. Angewandte Chemie - International Edition, 2015, 54, 13912-13917.	13.8	103
44	Tackling the Defect Conundrum in UiO-66: A Mixed-Linker Approach to Engineering Missing Linker Defects. Chemistry of Materials, 2017, 29, 10478-10486.	6.7	102
45	Waste PET (bottles) as a resource or substrate for MOF synthesis. Journal of Materials Chemistry A, 2016, 4, 9519-9525.	10.3	100
46	A Heterogeneous Tungsten Catalyst for Epoxidation of Terpenes and Tungsten-Catalyzed Synthesis of Acid-Sensitive Terpene Epoxides. Journal of Organic Chemistry, 1999, 64, 7267-7270.	3.2	99
47	A Titanium(IV)â€Based Metal–Organic Framework Featuring Defectâ€Rich Tiâ€O Sheets as an Oxidative Desulfurization Catalyst. Angewandte Chemie - International Edition, 2019, 58, 9160-9165.	13.8	99
48	Unravelling the Redoxâ€catalytic Behavior of Ce ⁴⁺ Metal–Organic Frameworks by Xâ€ray Absorption Spectroscopy. ChemPhysChem, 2018, 19, 373-378.	2.1	89
49	Mechanistic studies of aldol condensations in UiO-66 and UiO-66-NH 2 metal organic frameworks. Journal of Catalysis, 2015, 331, 1-12.	6.2	88
50	Green synthesis of zirconium-MOFs. CrystEngComm, 2015, 17, 4070-4074.	2.6	85
51	Vaporâ€Phase Deposition and Modification of Metal–Organic Frameworks: Stateâ€ofâ€theâ€Art and Future Directions. Chemistry - A European Journal, 2016, 22, 14452-14460.	3.3	81
52	Single-site metal–organic framework catalysts for the oxidative coupling of arenes <i>via</i> C–H/C–H activation. Chemical Science, 2019, 10, 3616-3622.	7.4	77
53	Fuel purification, Lewis acid and aerobic oxidation catalysis performed by a microporous Co-BTT (BTT3â^ = 1,3,5-benzenetristetrazolate) framework having coordinatively unsaturated sites. Journal of Materials Chemistry, 2012, 22, 10200.	6.7	75
54	Bipyridine-based UiO-67 as novel filler in mixed-matrix membranes for CO2-selective gas separation. Journal of Membrane Science, 2019, 576, 78-87.	8.2	75

#	Article	lF	CITATIONS
55	Strategies for Enhancing the Catalytic Performance of Metal–Organic Frameworks in the Fixation of CO ₂ into Cyclic Carbonates. ChemSusChem, 2017, 10, 1283-1291.	6.8	72
56	AN EVALUATION OF ANALYTICAL AND INTERPRETATIVE METHODOLOGIES FOR THE EXTRACTION AND IDENTIFICATION OF LIPIDS ASSOCIATED WITH POTTERY SHERDS FROM THE SITE OF SAGALASSOS, TURKEY*. Archaeometry, 2007, 49, 729-747.	1.3	71
57	Bimetallic Zn and Hf on Silica Catalysts for the Conversion of Ethanol to 1,3-Butadiene. ACS Catalysis, 2015, 5, 3393-3397.	11.2	71
58	Efficient and rapid transformation of high silica CHA zeolite from FAU zeolite in the absence of water. Journal of Materials Chemistry A, 2017, 5, 9076-9080.	10.3	71
59	Highly stable and porous porphyrin-based zirconium and hafnium phosphonates – electron crystallography as an important tool for structure elucidation. Chemical Science, 2018, 9, 5467-5478.	7.4	70
60	Schiff Base Complexes with Five-Coordinate Cobalt as Dioxygen Activating Sites in Zeolites. Angewandte Chemie International Edition in English, 1994, 33, 431-433.	4.4	69
61	Zn–Co Double Metal Cyanides as Heterogeneous Catalysts for Hydroamination: A Structure–Activity Relationship. ACS Catalysis, 2013, 3, 597-607.	11.2	67
62	Chemoselective reduction of α,β-unsaturated carbonyl compounds with UiO-66 materials. Journal of Catalysis, 2016, 340, 136-143.	6.2	66
63	Vapour-phase deposition of oriented copper dicarboxylate metal–organic framework thin films. Chemical Communications, 2019, 55, 10056-10059.	4.1	64
64	Rare-earth ion exchanged Cu-SSZ-13 zeolite from organotemplate-free synthesis with enhanced hydrothermal stability in NH ₃ -SCR of NO _x . Catalysis Science and Technology, 2019, 9, 241-251.	4.1	64
65	Boosting the Catalytic Performance of Metal–Organic Frameworks for Steroid Transformations by Confinement within a Mesoporous Scaffold. Angewandte Chemie - International Edition, 2017, 56, 13302-13306.	13.8	63
66	Lignin solubility in nonâ€imidazolium ionic liquids. Journal of Chemical Technology and Biotechnology, 2015, 90, 1821-1826.	3.2	62
67	Solvent-Free Powder Synthesis and MOF-CVD Thin Films of the Large-Pore Metal–Organic Framework MAF-6. Chemistry of Materials, 2020, 32, 1784-1793.	6.7	62
68	Gold Redox Catalysis for Selective Oxidation of Methane to Methanol. Angewandte Chemie - International Edition, 2005, 44, 30-32.	13.8	60
69	Detecting Molecular Rotational Dynamics Complementing the Low-Frequency Terahertz Vibrations in a Zirconium-Based Metal-Organic Framework. Physical Review Letters, 2017, 118, 255502.	7.8	60
70	A precursor method for the synthesis of new Ce(<scp>iv</scp>) MOFs with reactive tetracarboxylate linkers. Chemical Communications, 2018, 54, 876-879.	4.1	60
71	Proteinâ€Rich Biomass Waste as a Resource for Future Biorefineries: State of the Art, Challenges, and Opportunities. ChemSusChem, 2019, 12, 1272-1303.	6.8	60
72	Highly Selective Removal of Perfluorinated Contaminants by Adsorption on All‧ilica Zeolite Beta. Angewandte Chemie - International Edition, 2020, 59, 14086-14090.	13.8	60

#	Article	IF	CITATIONS
73	Agronomic Effectiveness of Granulated and Powdered P-Exchanged Mg–Al LDH Relative to Struvite and MAP. Journal of Agricultural and Food Chemistry, 2017, 65, 6736-6744.	5.2	59
74	A new catalyst platform: zeolite Beta from template-free synthesis. Catalysis Science and Technology, 2013, 3, 2580.	4.1	58
75	Base catalytic activity of alkaline earth MOFs: a (micro)spectroscopic study of active site formation by the controlled transformation of structural anions. Chemical Science, 2014, 5, 4517-4524.	7.4	58
76	Support influences in the Pd-catalyzed racemization and dynamic kinetic resolution of chiral benzylic amines. Applied Catalysis A: General, 2009, 368, 9-16.	4.3	55
77	Mechanical properties of electrochemically synthesised metal–organic framework thin films. Journal of Materials Chemistry C, 2013, 1, 7716.	5.5	53
78	Species identification of archaeological dung remains: A critical review of potential methods. Environmental Archaeology, 2013, 18, 5-17.	1.2	53
79	Endâ€ofâ€Life Treatment of Poly(Vinyl Chloride) and Chlorinated Polyethylene by Dehydrochlorination in Ionic Liquids. ChemSusChem, 2014, 7, 610-617.	6.8	52
80	Zr-Based MOF-808 as Meerwein–Ponndorf–Verley Reduction Catalyst for Challenging Carbonyl Compounds. Catalysts, 2016, 6, 104.	3.5	52
81	Transformation synthesis of aluminosilicate SSZ-39 zeolite from ZSM-5 and beta zeolite. Journal of Materials Chemistry A, 2019, 7, 4420-4425.	10.3	52
82	Improved ruthenium catalysts for the modified Friedlaender quinoline synthesis. New Journal of Chemistry, 2007, 31, 1572.	2.8	51
83	Pd-catalyzed decarboxylation of glutamic acid and pyroglutamic acid to bio-based 2-pyrrolidone. Green Chemistry, 2015, 17, 2263-2270.	9.0	50
84	Three Series of Sulfoâ€Functionalized Mixedâ€Linker CAUâ€10 Analogues: Sorption Properties, Proton Conductivity, and Catalytic Activity. Chemistry - A European Journal, 2015, 21, 12517-12524.	3.3	49
85	Adsorptive desulfurization with CPO-27/MOF-74: an experimental and computational investigation. Physical Chemistry Chemical Physics, 2015, 17, 10759-10766.	2.8	47
86	Heterogeneous Catalysts for Racemization and Dynamic Kinetic Resolution of Amines and Secondary Alcohols. Topics in Catalysis, 2010, 53, 931-941.	2.8	46
87	Carbon dioxide as a reversible amine-protecting agent in selective Michael additions and acylations. Green Chemistry, 2013, 15, 1550.	9.0	46
88	Delayed electron–hole pair recombination in iron(<scp>iii</scp>)-oxo metal–organic frameworks. Physical Chemistry Chemical Physics, 2014, 16, 5044-5047.	2.8	46
89	The Remarkable Amphoteric Nature of Defective UiOâ€66 in Catalytic Reactions. ChemCatChem, 2017, 9, 2203-2210.	3.7	46
90	Alcohol amination with heterogeneous ruthenium hydroxyapatite catalysts. Applied Catalysis A: General, 2014, 469, 191-197.	4.3	45

#	Article	IF	CITATIONS
91	S,O-Functionalized Metal–Organic Frameworks as Heterogeneous Single-Site Catalysts for the Oxidative Alkenylation of Arenes via C–H activation. ACS Catalysis, 2020, 10, 5077-5085.	11.2	45
92	Cellulose conversion into alkylglycosides in the ionic liquid 1-butyl-3-methylimidazolium chloride. Green Chemistry, 2010, 12, 1790.	9.0	44
93	First examples of aliphatic zirconium MOFs and the influence of inorganic anions on their crystal structures. CrystEngComm, 2015, 17, 331-337.	2.6	44
94	Guanidinium nonaflate as a solid-state proton conductor. Journal of Materials Chemistry A, 2016, 4, 12241-12252.	10.3	43
95	Smart Metal–Organic Framework Coatings: Triggered Antibiofilm Compound Release. ACS Applied Materials & Interfaces, 2017, 9, 4440-4449.	8.0	43
96	Active Role of Methanol in Post-Synthetic Linker Exchange in the Metal–Organic Framework UiO-66. Chemistry of Materials, 2019, 31, 1359-1369.	6.7	43
97	Nanozymatic Activity of UiO-66 Metal–Organic Frameworks: Tuning the Nanopore Environment Enhances Hydrolytic Activity toward Peptide Bonds. ACS Applied Nano Materials, 2020, 3, 8931-8938.	5.0	42
98	Enhancement of low-temperature activity over Cu-exchanged zeolite beta from organotemplate-free synthesis for the selective catalytic reduction of NOx with NH3 in exhaust gas streams. Microporous and Mesoporous Materials, 2014, 200, 304-310.	4.4	41
99	A Breathing Zirconium Metal–Organic Framework with Reversible Loss of Crystallinity by Correlated Nanodomain Formation. Chemistry - A European Journal, 2016, 22, 3264-3267.	3.3	41
100	Ru-Catalyzed Hydrogenation–Decarbonylation of Amino Acids to Bio-based Primary Amines. ACS Sustainable Chemistry and Engineering, 2017, 5, 3290-3295.	6.7	41
101	Bulk-to-Surface Proton-Coupled Electron Transfer Reactivity of the Metal–Organic Framework MIL-125. Journal of the American Chemical Society, 2018, 140, 16184-16189.	13.7	41
102	Shape-selective C–H activation of aromatics to biarylic compounds using molecular palladium in zeolites. Nature Catalysis, 2020, 3, 1002-1009.	34.4	41
103	Parts per Million Detection of Alcohol Vapors via Metal Organic Framework Functionalized Surface Plasmon Resonance Sensors. Analytical Chemistry, 2017, 89, 4480-4487.	6.5	40
104	Direct liquid-phase phenol-to-aniline amination using Pd/C. Catalysis Science and Technology, 2018, 8, 2519-2523.	4.1	40
105	Sacrificial Anode-Free Electrosynthesis of α-Hydroxy Acids via Electrocatalytic Coupling of Carbon Dioxide to Aromatic Alcohols. ACS Sustainable Chemistry and Engineering, 2019, 7, 15860-15864.	6.7	40
106	Recycling of Flexible Polyurethane Foam by Splitâ€Phase Alcoholysis: Identification of Additives and Alcoholyzing Agents to Reach Higher Efficiencies. ChemSusChem, 2020, 13, 3835-3843.	6.8	40
107	Porosimetry for Thin Films of Metal–Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorptionâ€Based Methods. Advanced Materials, 2021, 33, e2006993. 	21.0	40
108	The use of ultrastable Y zeolites in the Ferrier rearrangement of acetylated and benzylated glycals. Green Chemistry, 2010, 12, 828.	9.0	39

#	Article	IF	CITATIONS
109	Ni-Catalyzed reductive amination of phenols with ammonia or amines into cyclohexylamines. Green Chemistry, 2020, 22, 1884-1893.	9.0	38
110	Interplay between structural parameters and reactivity of Zr ₆ -based MOFs as artificial proteases. Chemical Science, 2020, 11, 6662-6669.	7.4	38
111	Zrâ€Metalâ€Organic Framework Catalysts for Oxidative Desulfurization and Their Improvement by Postsynthetic Ligand Exchange. Small Methods, 2018, 2, 1800203.	8.6	37
112	A Titanium(IV)â€Based Metal–Organic Framework Featuring Defectâ€Rich Tiâ€O Sheets as an Oxidative Desulfurization Catalyst. Angewandte Chemie, 2019, 131, 9258-9263.	2.0	37
113	Heterogeneous Enzyme Mimics Based on Zeolites and Layered Hydroxides. Cattech, 2002, 6, 14-29.	2.2	36
114	Lewis acid double metal cyanide catalysts for hydroamination of phenylacetylene. Chemical Communications, 2011, 47, 4114.	4.1	36
115	Isolation of Renewable Phenolics by Adsorption on Ultrastable Hydrophobic MILâ€140 Metal–Organic Frameworks. ChemSusChem, 2015, 8, 3159-3166.	6.8	36
116	Shape selective properties of the Al-fumarate metal–organic framework in the adsorption and separation of n-alkanes, iso-alkanes, cyclo-alkanes and aromatic hydrocarbons. Physical Chemistry Chemical Physics, 2016, 18, 3294-3301.	2.8	36
117	Increasing the availability of active sites in Zn-Co double metal cyanides by dispersion onto a SiO2 support. Journal of Catalysis, 2017, 354, 92-99.	6.2	36
118	Development of a post-synthetic method for tuning the Al content of OSDA-free Beta as a catalyst for conversion of methanol to olefins. Catalysis Science and Technology, 2016, 6, 713-721.	4.1	35
119	Adsorption and Separation of Aromatic Amino Acids from Aqueous Solutions Using Metal–Organic Frameworks. ACS Applied Materials & Interfaces, 2017, 9, 30064-30073.	8.0	35
120	Stabilizing Effect of Bulky β-Diketones on Homogeneous Mo Catalysts for Deoxydehydration. ACS Sustainable Chemistry and Engineering, 2018, 6, 12197-12204.	6.7	35
121	Modulator-Mediated Functionalization of MOF-808 as a Platform Tool to Create High-Performance Mixed-Matrix Membranes. ACS Applied Materials & Interfaces, 2019, 11, 44792-44801.	8.0	35
122	Recent advances in the preparation of zeolites for the selective catalytic reduction of NOx in diesel engines. Reaction Chemistry and Engineering, 2019, 4, 975-985.	3.7	35
123	Molecular evidence for the mixing of <scp>M</scp> eat, <scp>F</scp> ish and <scp>V</scp> egetables in <scp>A</scp> ngloâ€ <scp>S</scp> axon coarseware from <scp>H</scp> amwic, <scp>UK</scp> . Archaeometry, 2013, 55, 1150-1174.	1.3	34
124	Unravelling Why and to What Extent the Topology of Similar Ceâ€Based MOFs Conditions their Photodynamic: Relevance to Photocatalysis and Photonics. Advanced Science, 2019, 6, 1901020.	11.2	34
125	Metal-Organic Framework Derived Metal Oxide Clusters in Porous Aluminosilicates: A Catalyst Design for the Synthesis of Bioactive aza-Heterocycles. ACS Catalysis, 2019, 9, 44-48.	11.2	34
126	Bioâ€Based Nitriles from the Heterogeneously Catalyzed Oxidative Decarboxylation of Amino Acids. ChemSusChem, 2015, 8, 345-352.	6.8	32

#	Article	IF	CITATIONS
127	Electrochemical dicarboxylation of conjugated fatty acids as an efficient valorization of carbon dioxide. RSC Advances, 2013, 3, 4634.	3.6	31
128	Ruthenium-catalyzed aerobic oxidative decarboxylation of amino acids: a green, zero-waste route to biobased nitriles. Chemical Communications, 2015, 51, 6528-6531.	4.1	31
129	Expanding the Variety of Zirconiumâ€based Inorganic Building Units for Metal–Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 10995-11000.	13.8	31
130	Pathway to Vinyl Chloride Production via Dehydrochlorination of 1,2-Dichloroethane in Ionic Liquid Media. ACS Catalysis, 2015, 5, 4043-4047.	11.2	30
131	Selective Oneâ€Pot Twoâ€Step Câ^'C Bond Formation using Metal–Organic Frameworks with Mild Basicity as Heterogeneous Catalysts. ChemCatChem, 2017, 9, 4019-4023.	3.7	30
132	Direct Synthesis of Aluminosilicate IWR Zeolite from a Strong Interaction between Zeolite Framework and Organic Template. Journal of the American Chemical Society, 2019, 141, 18318-18324.	13.7	30
133	Fe-doped Beta zeolite from organotemplate-free synthesis for NH ₃ -SCR of NO _x . Catalysis Science and Technology, 2016, 6, 6581-6592.	4.1	29
134	Geminal Coordinatively Unsaturated Sites on MOFâ€808 for the Selective Uptake of Phenolics from a Real Bioâ€Oil Mixture. ChemSusChem, 2019, 12, 1256-1266.	6.8	29
135	Selective catalytic reduction of NO by cerium-based metal–organic frameworks. Catalysis Science and Technology, 2020, 10, 337-341.	4.1	29
136	C2–H Arylation of Indoles Catalyzed by Palladium ontaining Metalâ€Organicâ€Framework in γâ€Valerolactone. ChemSusChem, 2020, 13, 2786-2791.	6.8	29
137	Miniaturized Layer-by-Layer Deposition of Metal–Organic Framework Coatings through Digital Microfluidics. Chemistry of Materials, 2013, 25, 1021-1023.	6.7	28
138	Highly selective one-step dehydration, decarboxylation and hydrogenation of citric acid to methylsuccinic acid. Chemical Science, 2017, 8, 2616-2620.	7.4	28
139	Ag nanoparticles on mixed Al2O3–Ga2O3 supports as catalysts for the N-alkylation of amines with alcohols. Applied Catalysis A: General, 2014, 469, 373-379.	4.3	27
140	A new class of solid Lewis acid catalysts based on interlayer expansion of layered silicates of the RUB-36 type with heteroatoms. Journal of Materials Chemistry A, 2014, 2, 9709-9717.	10.3	27
141	Counteranion effects on the catalytic activity of copper salts immobilized on the 2,2′-bipyridine-functionalized metal–organic framework MOF-253. Catalysis Today, 2015, 246, 55-59.	4.4	27
142	PdPb-Catalyzed Decarboxylation of Proline to Pyrrolidine: Highly Selective Formation of a Biobased Amine in Water. ACS Catalysis, 2016, 6, 7303-7310.	11.2	27
143	Tetrabutylphosphonium Bromide Catalyzed Dehydration of Diols to Dienes and Its Application in the Biobased Production of Butadiene. ACS Catalysis, 2017, 7, 5802-5809.	11.2	27
144	Decarboxylation of a Wide Range of Amino Acids with Electrogenerated Hypobromite. European Journal of Organic Chemistry, 2014, 2014, 6649-6652.	2.4	26

#	Article	IF	CITATIONS
145	The Rhodium Catalysed Direct Conversion of Phenols to Primary Cyclohexylamines. ChemCatChem, 2018, 10, 3689-3693.	3.7	26
146	Correlating MOF-808 parameters with mixed-matrix membrane (MMM) CO ₂ permeation for a more rational MMM development. Journal of Materials Chemistry A, 2021, 9, 12782-12796.	10.3	26
147	Holy Smoke in Medieval Funerary Rites: Chemical Fingerprints of Frankincense in Southern Belgian Incense Burners. PLoS ONE, 2014, 9, e113142.	2.5	26
148	Bimetallic Ce/Zr UiO-66 Metal–Organic Framework Nanostructures as Peptidase and Oxidase Nanozymes. ACS Applied Nano Materials, 2021, 4, 5748-5757.	5.0	25
149	Unexpected linker-dependent BrÃ,nsted acidity in the (Zr)UiO-66 metal organic framework and application to biomass valorization. Catalysis Science and Technology, 2020, 10, 4002-4009.	4.1	25
150	lonic liquids vs. microporous solids as reusable reaction media for the catalytic C–H functionalization of indoles with alcohols. Green Chemistry, 2018, 20, 2481-2485.	9.0	24
151	Rh-Catalyzed Hydrogenation of Amino Acids to Biobased Amino Alcohols: Tackling Challenging Substrates and Application to Protein Hydrolysates. ACS Sustainable Chemistry and Engineering, 2018, 6, 9218-9228.	6.7	24
152	The first water-based synthesis of Ce(iv)-MOFs with saturated chiral and achiral C4-dicarboxylate linkers. Dalton Transactions, 2019, 48, 8433-8441.	3.3	24
153	Layered Zn ₂ [Co(CN) ₆](CH ₃ COO) double metal cyanide: a two-dimensional DMC phase with excellent catalytic performance. Chemical Science, 2019, 10, 4868-4875.	7.4	24
154	Host–guest and guest–guest interactions between xylene isomers confined in the MIL-47(V) pore system. Theoretical Chemistry Accounts, 2012, 131, 1.	1.4	23
155	Tunable Prussian blue analogues for the selective synthesis of propargylamines through A ³ coupling. Catalysis Science and Technology, 2018, 8, 2061-2065.	4.1	23
156	One-pot reductive amination of carboxylic acids: a sustainable method for primary amine synthesis. Green Chemistry, 2020, 22, 5105-5114.	9.0	23
157	Changes in the hop-derived volatile profile upon lab scale boiling. Food Research International, 2015, 75, 1-10.	6.2	22
158	Resolving Interparticle Heterogeneities in Composition and Hydrogenation Performance between Individual Supported Silver on Silica Catalysts. ACS Catalysis, 2015, 5, 6690-6695.	11.2	22
159	Silver-induced reconstruction of an adeninate-based metal–organic framework for encapsulation of luminescent adenine-stabilized silver clusters. Journal of Materials Chemistry C, 2016, 4, 4259-4268.	5.5	22
160	Separation properties of the MIL-125(Ti) Metal-Organic Framework in high-performance liquid chromatography revealing cis/trans selectivity. Journal of Chromatography A, 2016, 1469, 68-76.	3.7	22
161	Network topology and cavity confinement-controlled diastereoselectivity in cyclopropanation reactions catalyzed by porphyrin-based MOFs. Catalysis Science and Technology, 2019, 9, 6452-6459.	4.1	22
162	A Cationic Oligomer as an Organic Template for Direct Synthesis of Aluminosilicate ITH Zeolite. Angewandte Chemie - International Edition, 2020, 59, 15649-15655.	13.8	22

#	Article	IF	CITATIONS
163	Cu-Exchanged CHA-Type Zeolite from Organic Template-Free Synthesis: An Effective Catalyst for NH ₃ -SCR. Industrial & Engineering Chemistry Research, 2020, 59, 7375-7382.	3.7	22
164	The isotopic exchangeability of phosphate in Mg-Al layered double hydroxides. Journal of Colloid and Interface Science, 2018, 520, 25-32.	9.4	21
165	Sustainable hydrogenation of aliphatic acyclic primary amides to primary amines with recyclable heterogeneous ruthenium–tungsten catalysts. Green Chemistry, 2019, 21, 5326-5335.	9.0	21
166	Organocatalytic Decarboxylation of Amino Acids as a Route to Bioâ€based Amines and Amides. ChemCatChem, 2019, 11, 4297-4306.	3.7	21
167	Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€5ilica Zeolite Beta. Angewandte Chemie, 2020, 132, 14190-14194.	2.0	21
168	Chemoselective C=O Hydrogenation of α,β-unsaturated Carbonyl Compounds over Quasihomogeneous and Heterogeneous Nano-Au0 Catalysts Promoted by Lewis Acidity. Catalysis Letters, 2007, 118, 15-21.	2.6	20
169	Selective continuous flow extractive denitrogenation of oil containing S- and N-heteroaromatics using metal-containing ionic liquids supported on monolithic silica with hierarchical porosity. RSC Advances, 2014, 4, 1045-1054.	3.6	20
170	10-Vertex closo-carborane: a unique ligand platform for porous coordination polymers. CrystEngComm, 2016, 18, 2036-2040.	2.6	20
171	An in situ investigation of the water-induced phase transformation of UTSA-74 to MOF-74(Zn). CrystEngComm, 2017, 19, 4152-4156.	2.6	20
172	Emergence of Nonlinear Optical Activity by Incorporation of a Linker Carrying the <i>p</i> -Nitroaniline Motif in MIL-53 Frameworks. Journal of Physical Chemistry C, 2017, 121, 25509-25519.	3.1	20
173	Pd(II)–Ni(II) Pyrazolate Framework as Active and Recyclable Catalyst for the Hydroamination of Terminal Alkynes. Topics in Catalysis, 2018, 61, 1414-1423.	2.8	20
174	Sodium-coupled electron transfer reactivity of metal–organic frameworks containing titanium clusters: the importance of cations in redox chemistry. Chemical Science, 2019, 10, 1322-1331.	7.4	20
175	Towards Heterogeneous and Green Versions of Os Dihydroxylation Catalysis. Topics in Catalysis, 2002, 19, 125-131.	2.8	19
176	Second harmonic generation microscopy reveals hidden polar organization in fluoride doped MIL-53(Fe). Dalton Transactions, 2016, 45, 4401-4406.	3.3	19
177	Metal-catalyzed reductive deamination of glutamic acid to bio-based dimethyl glutarate and methylamines. Green Chemistry, 2017, 19, 1866-1876.	9.0	19
178	Ligand-Controlled Selectivity in the Pd-Catalyzed C–H/C–H Cross-Coupling of Indoles with Molecular Oxygen. ACS Catalysis, 2021, 11, 2435-2444.	11.2	19
179	Improved resolution and simplification of the spin-diffusion-based NMR method for the structural analysis of mixed-linker MOFs. Journal of Magnetic Resonance, 2017, 279, 22-28.	2.1	18
180	The impact of the nature of amine reactants in the palladium catalyzed conversion of phenol to N-substituted anilines. Journal of Catalysis, 2019, 371, 207-213.	6.2	18

#	Article	IF	CITATIONS
181	Gold and Silver-Catalyzed Reductive Amination of Aromatic Carboxylic Acids to Benzylic Amines. ACS Catalysis, 2021, 11, 7672-7684.	11.2	18
182	Metal-Organic Frameworks as Catalysts for Organic Reactions. , 2011, , 191-212.		17
183	Structure and Properties of [Al ₄ (OH) ₈ (<i>o</i> ₆ H ₄ (CO ₂) _{2a Layered Aluminum Phthalate. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2785-2789.}	⊃>) _{2 1.2}	2]·H<
184	Adsorption and Reactive Desorption on Metal–Organic Frameworks: A Direct Strategy for Lactic Acid Recovery. ChemSusChem, 2017, 10, 643-650.	6.8	17
185	Bio-based N-alkyl-2-pyrrolidones by Pd-catalyzed reductive N-alkylation and decarboxylation of glutamic acid. Green Chemistry, 2017, 19, 4919-4929.	9.0	17
186	Conversion of lactide to acrylic acid by a phosphonium ionic liquid and acid cocatalyst. Catalysis Science and Technology, 2018, 8, 1468-1474.	4.1	17
187	Metal ion exchange in Prussian blue analogues: Cu(<scp>ii</scp>)-exchanged Zn–Co PBAs as highly selective catalysts for A ³ coupling. Dalton Transactions, 2019, 48, 3946-3954.	3.3	17
188	Solid-state speciation of interlayer anions in layered double hydroxides. Journal of Colloid and Interface Science, 2019, 537, 151-162.	9.4	17
189	Olefins from Biobased Sugar Alcohols via Selective, Ru-Mediated Reaction in Catalytic Phosphonium Ionic Liquids. ACS Catalysis, 2020, 10, 9401-9409.	11.2	17
190	Tandem Epoxidationâ€Alcoholysis or Epoxidationâ€Hydrolysis of Glycals Catalyzed by Titanium(IV) Isopropoxide or Venturello's Phosphotungstate Complex. Advanced Synthesis and Catalysis, 2008, 350, 1557-1568.	4.3	16
191	Nickel Nanoparticles as Racemization Catalysts for Primary Amines. European Journal of Inorganic Chemistry, 2013, 2013, 2623-2628.	2.0	16
192	From Layered Zeolite Precursors to Zeolites with a Three-Dimensional Porosity: Textural and Structural Modifications through Alkaline Treatment. Chemistry of Materials, 2015, 27, 316-326.	6.7	16
193	Solventâ€Free Powder Synthesis and Thin Film Chemical Vapor Deposition of a Zinc Bipyridylâ€Triazolate Framework. European Journal of Inorganic Chemistry, 2020, 2020, 71-74.	2.0	15
194	Revisiting the Extended X-ray Absorption Fine Structure Fitting Procedure through a Machine Learning-Based Approach. Journal of Physical Chemistry A, 2021, 125, 7080-7091.	2.5	15
195	Flavor Activity of Sesquiterpene Oxidation Products, Formed upon Lab-Scale Boiling of a Hop Essential Oil–Derived Sesquiterpene Hydrocarbon Fraction (cv. Saaz). Journal of the American Society of Brewing Chemists, 2016, 74, 65-76.	1.1	14
196	Controlled defunctionalisation of biobased organic acids. Chemical Communications, 2017, 53, 5682-5693.	4.1	14
197	Pt ^{II} â€Catalyzed Hydroxylation of Terminal Aliphatic C(sp ³)â^'H Bonds with Molecular Oxygen. Chemistry - A European Journal, 2019, 25, 10724-10734.	3.3	14
198	Surfactant-templated zeolites for the production of active pharmaceutical intermediates. Chemical Communications, 2019, 55, 12869-12872.	4.1	14

#	Article	IF	CITATIONS
199	Xâ€Rayâ€Induced Growth Dynamics of Luminescent Silver Clusters in Zeolites. Small, 2020, 16, e2002063.	10.0	14
200	Catalytic upcycling of PVC waste-derived phthalate esters into safe, hydrogenated plasticizers. Green Chemistry, 2022, 24, 754-766.	9.0	14
201	Metal–organic framework deposition on dealloyed substrates. Journal of Materials Chemistry A, 2015, 3, 19747-19753.	10.3	13
202	Cellulose Amorphization by Swelling in Ionic Liquid/Water Mixtures: A Combined Macroscopic and Secondâ€Harmonic Microscopy Study. ChemSusChem, 2015, 8, 82-86.	6.8	13
203	Stepped water isotherm and breakthrough curves on aluminium fumarate metal–organic framework: experimental and modelling study. Adsorption, 2017, 23, 185-192.	3.0	13
204	Expanding the Variety of Zirconiumâ€based Inorganic Building Units for Metal–Organic Frameworks. Angewandte Chemie, 2019, 131, 11111-11116.	2.0	13
205	Aqueous Flow Reactor and Vapourâ€Assisted Synthesis of Aluminium Dicarboxylate Metal–Organic Frameworks with Tuneable Water Sorption Properties. Chemistry - A European Journal, 2020, 26, 10841-10848.	3.3	13
206	Heterogeneous alkenylation of aromatics under oxygen. Catalysis Communications, 2007, 8, 1047-1051.	3.3	12
207	Heterogeneous Single-Site Catalysts for C–H Activation Reactions: Pd(II)-Loaded S,O-Functionalized Metal Oxide-Bisphosphonates. ACS Applied Materials & Interfaces, 2020, 12, 47457-47466.	8.0	12
208	Direct Electrocatalytic N–H Aziridination of Aromatic Alkenes Using Ammonia. ACS Sustainable Chemistry and Engineering, 2021, 9, 11596-11603.	6.7	12
209	C–N coupling reactions with arenes through C–H activation: the state-of-the-art versus the principles of green chemistry. Catalysis Science and Technology, 0, , .	4.1	12
210	Ammonolytic Hydrogenation of Secondary Amides: An Efficient Method for the Recycling of Long-Chain Polyamides. ACS Sustainable Chemistry and Engineering, 2022, 10, 3048-3056.	6.7	12
211	Synthesis of glucose esters from cellulose in ionic liquids. Holzforschung, 2012, 66, .	1.9	11
212	Synthesis and characterisation of alkyd resins with glutamic acid-based monomers. RSC Advances, 2018, 8, 8220-8227.	3.6	11
213	MOFs Extend the Lifetime of Pd(II) Catalyst for Room Temperature Alkenylation of Enamineâ€Like Arenes. Advanced Synthesis and Catalysis, 2018, 360, 3872-3876.	4.3	11
214	Cooperative acid–base bifunctional ordered porous solids in sequential multi-step reactions: MOF <i>vs.</i> mesoporous silica. Catalysis Science and Technology, 2020, 10, 1796-1802.	4.1	11
215	Selective defunctionalization of citric acid to tricarballylic acid as a precursor for the production of high-value plasticizers. Green Chemistry, 2020, 22, 7812-7822.	9.0	10
216	Catalytic self-cleaning coatings for thermal oxidation of organic deposits on glass. Catalysis Science and Technology, 2013, 3, 1579.	4.1	9

#	Article	IF	CITATIONS
217	Shape-selective organic–inorganic zeolitic catalysts prepared via interlayer expansion. Catalysis Today, 2014, 235, 169-175.	4.4	9
218	Adsorption and Selective Recovery of Citric Acid with Poly(4â€vinylpyridine). ChemSusChem, 2017, 10, 4864-4871.	6.8	9
219	Stabilising Ni catalysts for the dehydration–decarboxylation–hydrogenation of citric acid to methylsuccinic acid. Green Chemistry, 2017, 19, 4642-4650.	9.0	9
220	Boosting the Catalytic Performance of Metal–Organic Frameworks for Steroid Transformations by Confinement within a Mesoporous Scaffold. Angewandte Chemie, 2017, 129, 13487-13491.	2.0	9
221	Novel heterogeneous ruthenium racemization catalyst for dynamic kinetic resolution of chiral aliphatic amines. Green Chemistry, 2020, 22, 85-93.	9.0	9
222	Coplanar <i>versus</i> Noncoplanar Carboxyl Groups: The Influence of Sterically Enforced Noncoplanarity on the 2D Mixing Behavior of Benzene Tricarboxylic Acids. Journal of Physical Chemistry C, 2020, 124, 24874-24882.	3.1	9
223	Speciation of Ru Molecular Complexes in a Homogeneous Catalytic System: Fingerprint XANES Analysis Guided by Machine Learning. Journal of Physical Chemistry C, 2021, 125, 27844-27852.	3.1	9
224	Microscale Synthesis of Chiral Alcohols via Asymmetric Catalytic Transfer Hydrogenation. Journal of Chemical Education, 2009, 86, 87.	2.3	8
225	Tuning luminescent properties of a metal organic framework by insertion of metal complexes. Supramolecular Chemistry, 2017, 29, 758-767.	1.2	8
226	Double metal cyanides as heterogeneous Lewis acid catalysts for nitrile synthesis <i>via</i> acid-nitrile exchange reactions. Chemical Communications, 2019, 55, 12984-12987.	4.1	8
227	Regioselective C–H hydroxylation of <i>n</i> -alkanes using Shilov-type Pt catalysis in perfluorinated micro-emulsions. Catalysis Science and Technology, 2020, 10, 1264-1272.	4.1	8
228	Phenolics isolation from bio-oil using the metal–organic framework MIL-53(Al) as a highly selective adsorbent. Chemical Communications, 2019, 55, 6245-6248.	4.1	7
229	Metal–biomolecule frameworks (BioMOFs): a novel approach for "green―optoelectronic applications. Chemical Communications, 2022, 58, 677-680.	4.1	7
230	Tracer Chromatographic Adsorption Studies in Relation to Liquid-Phase Catalysis. Topics in Catalysis, 2003, 23, 191-198.	2.8	6
231	Metal-Catecholate Frameworks as Solid Basic Catalysts. Topics in Catalysis, 2016, 59, 1757-1764.	2.8	6
232	Cu ^{II} /H-USY as a regenerable bifunctional catalyst for the additive-free C–H amination of azoles. Catalysis Science and Technology, 2020, 10, 940-943.	4.1	6
233	Understanding the Effects of Binders in Gas Sorption and Acidity of Aluminium Fumarate Extrudates. Chemistry - A European Journal, 2022, 28, .	3.3	6
234	Alkylation of isobutane with butenes using OSDA-free zeolite beta. Journal of Catalysis, 2022, 406, 206-212.	6.2	6

#	Article	IF	CITATIONS
235	Sustainable formation of tricarballylic acid from citric acid over highly stable Pd/Nb2O5·nH2O catalysts. Journal of Catalysis, 2022, 408, 88-97.	6.2	6
236	Catalytically active gauze-supported skeletal nickel prepared from Ni–Zn alloys electrodeposited from an acetamide–dimethyl sulfone eutectic mixture. Catalysis Today, 2015, 246, 191-197.	4.4	5
237	The Dual Effect of the Acetate Ligand on the Mechanism of the Pd atalyzed Câ^'H/Câ^'H Coupling of Benzene. ChemCatChem, 2020, 12, 90-94.	3.7	5
238	From crude industrial waste glycerol to biopropene <i>via</i> Ru-mediated hydrodeoxygenation in ionic liquids. Chemical Communications, 2021, 57, 6324-6327.	4.1	5
239	Thermal defect engineering of precious group metal–organic frameworks: impact on the catalytic cyclopropanation reaction. Catalysis Science and Technology, 2020, 10, 8077-8085.	4.1	4
240	Ru-Bipyridine Entrapped in the Supercages of EMC-1 Faujasite as Catalyst for the Trifluoromethylation of Arenes. ACS Applied Materials & amp; Interfaces, 2022, 14, 971-977.	8.0	4
241	Porosimetry: Porosimetry for Thin Films of Metal–Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorptionâ€Based Methods (Adv. Mater. 17/2021). Advanced Materials, 2021, 33, 2170133.	21.0	3
242	Electro-oxidative C(sp2)–H/O–H cross-dehydrogenative coupling of phenols and tertiary anilines for diaryl ether formation. Catalysis Science and Technology, 2021, 11, 3925-3930.	4.1	3
243	Electron Transferâ€Initiated Epoxidation and Isomerization Chain Reactions of β aryophyllene. Chemistry - A European Journal, 2015, 21, 2146-2156.	3.3	2
244	In depth analysis of heterogeneous catalysts for the chemoenzymatic dynamic kinetic resolution of β-amino esters. Catalysis Science and Technology, 0, , .	4.1	2
245	Evidence for regioselective Pt(II)-mediated hydroxylation of long linear alkanes in acetic acid. Journal of Catalysis, 2018, 368, 345-353.	6.2	1
246	Innentitelbild: Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€Silica Zeolite Beta (Angew. Chem. 33/2020). Angewandte Chemie, 2020, 132, 13770-13770.	2.0	1
247	A Cationic Oligomer as an Organic Template for Direct Synthesis of Aluminosilicate ITH Zeolite. Angewandte Chemie, 2020, 132, 15779-15785.	2.0	1
248	Adsorptive separation using self-assembly on graphite: from nanoscale to bulk processes. Chemical Science, 2022, 13, 9035-9046.	7.4	1
249	Reply to Comment on "Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€Silica Zeolite Beta― Angewandte Chemie - International Edition, 2021, 60, 13710-13711. 	13.8	0
250	Reply to Comment on "Highly Selective Removal of Perfluorinated Contaminants by Adsorption on All‧ilica Zeolite Beta― Angewandte Chemie, 2021, 133, 13826-13827.	2.0	0