

Jorge Gascon

List of Publications by Year in Descending Order

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

325 papers	26,752 citations	82 h-index	154 g-index
364 ext. papers	31,305 ext. citations	10.2 avg, IF	7.51 L-index

#	Paper	IF	Citations
325	High purity, self-sustained, pressurized hydrogen production from ammonia in a catalytic membrane reactor. <i>Chemical Engineering Journal</i> , 2022 , 431, 134310	14.7	4
324	Molecular engineering of intrinsically microporous polybenzimidazole for energy-efficient gas separation. <i>Applied Materials Today</i> , 2022 , 26, 101271	6.6	1
323	Upcycling waste PET and CO ₂ to useful chemicals: Multi-functional catalysis at its best. <i>Chem</i> , 2022 , 8, 615-616	16.2	
322	Fe-MOF Materials as Precursors for the Catalytic Dehydrogenation of Isobutane. <i>ACS Catalysis</i> , 2022 , 12, 3832-3844	13.1	4
321	Effect of the particle blending-shaping method and silicon carbide crystal phase for Mn-Na-W/SiO ₂ -SiC catalyst in oxidative coupling of methane. <i>Molecular Catalysis</i> , 2022 , 527, 112399	3.3	
320	Noncatalytic Oxidative Coupling of Methane (OCM): Gas-Phase Reactions in a Jet Stirred Reactor (JSR).. <i>ACS Omega</i> , 2021 , 6, 33757-33768	3.9	2
319	An Efficient Metal-Organic Framework-Derived Nickel Catalyst for the Light Driven Methanation of CO. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 26476-26482	16.4	14
318	Designing a Multifunctional Catalyst for the Direct Production of Gasoline-Range Isoparaffins from CO. <i>Jacs Au</i> , 2021 , 1, 1961-1974		1
317	Selectivity descriptors for the direct hydrogenation of CO to hydrocarbons during zeolite-mediated bifunctional catalysis. <i>Nature Communications</i> , 2021 , 12, 5914	17.4	7
316	Tunable Selectivity in CO Photo-Thermal Reduction by Perovskite-Supported Pd Nanoparticles. <i>ChemSusChem</i> , 2021 ,	8.3	4
315	A techno-economic and life cycle assessment for the production of green methanol from CO ₂ : catalyst and process bottlenecks. <i>Journal of Energy Chemistry</i> , 2021 , 68, 255-255	12	5
314	Stable Cr-MFI Catalysts for the Nonoxidative Dehydrogenation of Ethane: Catalytic Performance and Nature of the Active Sites. <i>ACS Catalysis</i> , 2021 , 11, 3988-3995	13.1	9
313	Highly Selective and Stable Production of Aromatics via High-Pressure Methanol Conversion. <i>ACS Catalysis</i> , 2021 , 11, 3602-3613	13.1	9
312	Rhodium Nanoparticle Size Effects on the CO ₂ Reforming of Methane and Propane. <i>ChemCatChem</i> , 2021 , 13, 2879-2886	5.2	4
311	A Multi-Parametric Catalyst Screening for CO ₂ Hydrogenation to Ethanol. <i>ChemCatChem</i> , 2021 , 13, 3324-3332	5.2	4
310	Aromatics Production via Methanol-Mediated Transformation Routes. <i>ACS Catalysis</i> , 2021 , 11, 7780-7819	13.1	10
309	Der derzeitige Stand von MOF- und COF-Anwendungen. <i>Angewandte Chemie</i> , 2021 , 133, 24174	3.6	4

308	Efficient Visible-Light Driven Photothermal Conversion of CO ₂ to Methane by Nickel Nanoparticles Supported on Barium Titanate. <i>Advanced Functional Materials</i> , 2021 , 31, 2008244	15.6	22
307	Fundamentals and applications of photo-thermal catalysis. <i>Chemical Society Reviews</i> , 2021 , 50, 2173-2219	18.5	91
306	A technological roadmap to the ammonia energy economy: Current state and missing technologies. <i>Chemical Engineering Journal</i> , 2021 , 408, 127310	14.7	28
305	Elucidating the Promotional Effect of Cerium in the Dry Reforming of Methane. <i>ChemCatChem</i> , 2021 , 13, 553-563	5.2	7
304	Development of a Ba _{0.5} CoCe catalyst for the efficient and stable decomposition of ammonia. <i>Catalysis Science and Technology</i> , 2021 , 11, 3014-3024	5.5	5
303	Rapid fabrication of MOF-based mixed matrix membranes through digital light processing. <i>Materials Advances</i> , 2021 , 2, 2739-2749	3.3	4
302	Probing the Catalytic Active Sites of Mo/HZSM-5 and Their Deactivation during Methane Dehydroaromatization. <i>Cell Reports Physical Science</i> , 2021 , 2, 100309	6.1	6
301	CO ₂ hydrogenation to methanol and hydrocarbons over bifunctional Zn-doped ZrO ₂ /zeolite catalysts. <i>Catalysis Science and Technology</i> , 2021 , 11, 1249-1268	5.5	8
300	One-step conversion of crude oil to light olefins using a multi-zone reactor. <i>Nature Catalysis</i> , 2021 , 4, 233-241	36.5	21
299	Composition-performance Relationships in Catalysts Formulation for the Direct Conversion of Crude Oil to Chemicals. <i>ChemCatChem</i> , 2021 , 13, 1806-1813	5.2	8
298	The Importance of Thermal Treatment on Wet-Kneaded Silica-Magnesia Catalyst and Lebedev Ethanol-to-Butadiene Process. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
297	Unlocking mixed oxides with unprecedented stoichiometries from heterometallic metal-organic frameworks for the catalytic hydrogenation of CO ₂ . <i>Chem Catalysis</i> , 2021 , 1, 364-382		7
296	The Current Status of MOF and COF Applications. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 23975-24001	16.4	75
295	Is Hydroxide Just Hydroxide? Unidentical CO ₂ Hydration Conditions during Hydrogen Evolution and Carbon Dioxide Reduction in Zero-Gap Gas Diffusion Electrode Reactors. <i>ACS Applied Energy Materials</i> , 2021 , 4, 8506-8516	6.1	2
294	Electrochemical synthesis of continuous metal-organic framework membranes for separation of hydrocarbons. <i>Nature Energy</i> , 2021 , 6, 882-891	62.3	20
293	Metal-Organic Frameworks: Molecules or Semiconductors in Photocatalysis?. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 26038-26052	16.4	16
292	Metal-Organic Frameworks: Molecules or Semiconductors in Photocatalysis?. <i>Angewandte Chemie</i> , 2021 , 133, 26242	3.6	4
291	Multifunctional Catalyst Combination for the Direct Conversion of CO to Propane. <i>Jacs Au</i> , 2021 , 1, 1719-1732	5	

290	Illuminating the Intrinsic Effect of Water Co-feeding on Methane Dehydroaromatization: A Comprehensive Study. <i>ACS Catalysis</i> , 2021 , 11, 11671-11684	13.1	4
289	Calcium Looping: On the Positive Influence of SO and the Negative Influence of HO on CO Capture by Metamorphosed Limestone-Derived Sorbents. <i>ACS Omega</i> , 2020 , 5, 32318-32333	3.9	3
288	Bimetallic Metal-Organic Framework Mediated Synthesis of Ni-Co Catalysts for the Dry Reforming of Methane. <i>Catalysts</i> , 2020 , 10, 592	4	6
287	Triphenylphosphine-Based Covalent Organic Frameworks and Heterogeneous Rh-P-COFs Catalysts. <i>Chemistry - A European Journal</i> , 2020 , 26, 12134-12139	4.8	15
286	Impact of small promoter amounts on coke structure in dry reforming of methane over Ni/ZrO ₂ . <i>Catalysis Science and Technology</i> , 2020 , 10, 3965-3974	5.5	11
285	Initial Carbon-Carbon Bond Formation during the Early Stages of Methane Dehydroaromatization. <i>Angewandte Chemie</i> , 2020 , 132, 16884	3.6	
284	Initial Carbon-Carbon Bond Formation during the Early Stages of Methane Dehydroaromatization. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 16741-16746	16.4	15
283	Metal-Organic Frameworks in Heterogeneous Catalysis: Recent Progress, New Trends, and Future Perspectives. <i>Chemical Reviews</i> , 2020 , 120, 8468-8535	68.1	448
282	Turning Waste into Value: Potassium-Promoted Red Mud as an Effective Catalyst for the Hydrogenation of CO. <i>ChemSusChem</i> , 2020 , 13, 2981-2987	8.3	8
281	Metal-Organic Framework-Derived Synthesis of Cobalt Indium Catalysts for the Hydrogenation of CO ₂ to Methanol. <i>ACS Catalysis</i> , 2020 , 10, 5064-5076	13.1	40
280	Cu-BTC Functional Microdevices as Smart Tools for Capture and Preconcentration of Nerve Agents. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 42622-42633	9.5	5
279	Support Was the Key to Success. <i>Joule</i> , 2020 , 4, 714-716	27.8	5
278	A Viewpoint on the Refinery of the Future: Catalyst and Process Challenges. <i>ACS Catalysis</i> , 2020 , 10, 8131-8140	13.8	26
277	CO ₂ Derived E-Fuels: Research Trends, Misconceptions, and Future Directions. <i>Trends in Chemistry</i> , 2020 , 2, 785-795	14.8	15
276	Coated sulfated zirconia/SAPO-34 for the direct conversion of CO ₂ to light olefins. <i>Catalysis Science and Technology</i> , 2020 , 10, 1507-1517	5.5	18
275	Aromatization of Ethylene [Main Intermediate for MDA?]. <i>ChemCatChem</i> , 2020 , 12, 544-549	5.2	18
274	Toward New 2D Zirconium-Based Metal-Organic Frameworks: Synthesis, Structures, and Electronic Properties. <i>Chemistry of Materials</i> , 2020 , 32, 97-104	9.6	25
273	PBI mixed matrix hollow fiber membrane: Influence of ZIF-8 filler over H ₂ /CO ₂ separation performance at high temperature and pressure. <i>Separation and Purification Technology</i> , 2020 , 237, 116347	8.3	35

272	Acidity modification of ZSM-5 for enhanced production of light olefins from CO ₂ . <i>Journal of Catalysis</i> , 2020 , 381, 347-354	7.3	30
271	Advances in the Design of Heterogeneous Catalysts and Thermocatalytic Processes for CO ₂ Utilization. <i>ACS Catalysis</i> , 2020 , 10, 14147-14185	13.1	64
270	Solution processable metal-organic frameworks for mixed matrix membranes using porous liquids. <i>Nature Materials</i> , 2020 , 19, 1346-1353	27	78
269	High pressure ammonia decomposition on Ru/CaO catalysts. <i>Catalysis Science and Technology</i> , 2020 , 10, 5027-5035	5.5	12
268	Non-oxidative dehydrogenation of isobutane over supported vanadium oxide: nature of the active sites and coke formation. <i>Catalysis Science and Technology</i> , 2020 , 10, 6139-6151	5.5	6
267	Stable High-Pressure Methane Dry Reforming Under Excess of CO ₂ . <i>ChemCatChem</i> , 2020 , 12, 5919-5925	5.2	4
266	Highly Sensitive Non-Enzymatic Detection of Glucose at MWCNT-CuBTC Composite Electrode. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 8419	2.6	3
265	A Titanium Metal-Organic Framework with Visible-Light-Responsive Photocatalytic Activity. <i>Angewandte Chemie</i> , 2020 , 132, 13570-13574	3.6	12
264	A Titanium Metal-Organic Framework with Visible-Light-Responsive Photocatalytic Activity. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 13468-13472	16.4	33
263	A Supramolecular View on the Cooperative Role of Brønsted and Lewis Acid Sites in Zeolites for Methanol Conversion. <i>Journal of the American Chemical Society</i> , 2019 , 141, 14823-14842	16.4	41
262	Breaking Linear Scaling Relationships with Secondary Interactions in Confined Space: A Case Study of Methane Oxidation by Fe/ZSM-5 Zeolite. <i>ACS Catalysis</i> , 2019 , 9, 9276-9284	13.1	25
261	Structure-activity relationships in metal organic framework derived mesoporous nitrogen-doped carbon containing atomically dispersed iron sites for CO ₂ electrochemical reduction. <i>Journal of Catalysis</i> , 2019 , 378, 320-330	7.3	20
260	A site-sensitive quasi-in situ strategy to characterize Mo/HZSM-5 during activation. <i>Journal of Catalysis</i> , 2019 , 370, 321-331	7.3	27
259	Quantifying the impact of dispersion, acidity and porosity of Mo/HZSM-5 on the performance in methane dehydroaromatization. <i>Applied Catalysis A: General</i> , 2019 , 574, 144-150	5.1	13
258	Turning a Methanation Co Catalyst into an In Situ Methanol Producer. <i>ACS Catalysis</i> , 2019 , 9, 6910-6918	13.1	54
257	Engineering Metal-Organic Frameworks for the Electrochemical Reduction of CO : A Minireview. <i>Chemistry - an Asian Journal</i> , 2019 , 14, 3452-3461	4.5	33
256	Effect of Zeolite Topology and Reactor Configuration on the Direct Conversion of CO ₂ to Light Olefins and Aromatics. <i>ACS Catalysis</i> , 2019 , 9, 6320-6334	13.1	77
255	Cation influence in adsorptive propane/propylene separation in ZIF-8 (SOD) topology. <i>Chemical Engineering Journal</i> , 2019 , 371, 848-856	14.7	24

254	Tandem Conversion of CO ₂ to Valuable Hydrocarbons in Highly Concentrated Potassium Iron Catalysts. <i>ChemCatChem</i> , 2019 , 11, 2879-2886	5.2	37
253	Novel high performance poly(p-phenylene benzobisimidazole) (PBDI) membranes fabricated by interfacial polymerization for H ₂ separation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8929-8937	13	14
252	Progress in Developing a Structure-Activity Relationship for the Direct Aromatization of Methane. <i>ChemCatChem</i> , 2019 , 11, 39-52	5.2	49
251	Structure and Reactivity of the Mo/ZSM-5 Dehydroaromatization Catalyst: An Operando Computational Study. <i>ACS Catalysis</i> , 2019 , 9, 8731-8737	13.1	33
250	Optimizing Pd:Zn molar ratio in PdZn/CeO ₂ for CO ₂ hydrogenation to methanol. <i>Applied Catalysis A: General</i> , 2019 , 584, 117185	5.1	34
249	Surface enhanced dynamic nuclear polarization solid-state NMR spectroscopy sheds light on Brønsted-Lewis acid synergy during the zeolite catalyzed methanol-to-hydrocarbon process. <i>Chemical Science</i> , 2019 , 10, 8946-8954	9.4	17
248	Maximizing Ag Utilization in High-Rate CO ₂ Electrochemical Reduction with a Coordination Polymer-Mediated Gas Diffusion Electrode. <i>ACS Energy Letters</i> , 2019 , 4, 2024-2031	20.1	54
247	Shaping of ZSM-5-Based Catalysts via Spray Drying: Effect on Methanol-to-Olefins Performance. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 44133-44143	9.5	19
246	Activity Descriptors Derived from Comparison of Mo and Fe as Active Metal for Methane Conversion to Aromatics. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18814-18824	16.4	32
245	Fabrication of Defect-Free P84 Polyimide Hollow Fiber for Gas Separation: Pathway to Formation of Optimized Structure. <i>Membranes</i> , 2019 , 10,	3.8	4
244	Porous liquids based on porous cages, metal organic frameworks and metal organic polyhedra. <i>Coordination Chemistry Reviews</i> , 2019 , 386, 85-95	23.2	42
243	2020 roadmap on pore materials for energy and environmental applications. <i>Chinese Chemical Letters</i> , 2019 , 30, 2110-2122	8.1	69
242	Co-catalyst and Metal-free CO ₂ Fixation into Cyclic Carbonates: COPs to the Rescue. <i>CheM</i> , 2019 , 5, 3015-3016	16.1	1
241	Heterogeneous Catalysis for the Valorization of CO ₂ : Role of Bifunctional Processes in the Production of Chemicals. <i>ACS Energy Letters</i> , 2019 , 4, 167-176	20.1	71
240	Methane hydrates: Nucleation in microporous materials. <i>Chemical Engineering Journal</i> , 2019 , 360, 569-576	14.7	44
239	ZIF-67 as silver-bullet in adsorptive propane/propylene separation. <i>Chemical Engineering Journal</i> , 2019 , 360, 10-14	14.7	32
238	Photocatalytic properties of TiO ₂ and Fe-doped TiO ₂ prepared by metal organic framework-mediated synthesis. <i>Chemical Engineering Journal</i> , 2019 , 360, 75-88	14.7	65
237	Conversion of Formic Acid into Methanol Using a Bipyridine-Functionalized Molecular Heterogeneous Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 3933-3939	8.3	14

236	Thin mixed matrix and dual layer membranes containing metal-organic framework nanosheets and Polyactive[For CO2 capture. <i>Journal of Membrane Science</i> , 2019 , 570-571, 226-235	9.6	37
235	Prediction of adsorption isotherms from breakthrough curves. <i>Microporous and Mesoporous Materials</i> , 2019 , 277, 237-244	5.3	19
234	Revealing the Transient Concentration of CO in a Mixed-Matrix Membrane by IR Microimaging and Molecular Modeling. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5156-5160	16.4	29
233	Enhanced vapour sensing using silicon nanowire devices coated with Pt nanoparticle functionalized porous organic frameworks. <i>Nanoscale</i> , 2018 , 10, 6884-6891	7.7	10
232	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2018 , 362, 106-117	7.3	78
231	Influence of Filler Pore Structure and Polymer on the Performance of MOF-Based Mixed-Matrix Membranes for CO Capture. <i>Chemistry - A European Journal</i> , 2018 , 24, 7949-7956	4.8	33
230	Einblicke in die Verteilung von CO2-Molekülen und deren zeitliche Entwicklung durch Mikro-Bildgebung mittels IR-Spektroskopie und molekulardynamische Modellierung. <i>Angewandte Chemie</i> , 2018 , 130, 5250-5255	3.6	
229	Metal-Organic-Framework-Mediated Nitrogen-Doped Carbon for CO Electrochemical Reduction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 14751-14758	9.5	79
228	Revealing Lattice Expansion of Small-Pore Zeolite Catalysts during the Methanol-to-Olefins Process Using Combined Operando X-ray Diffraction and UV-vis Spectroscopy. <i>ACS Catalysis</i> , 2018 , 8, 2060-2070	13.1	31
227	Relevance of the Mo-precursor state in H-ZSM-5 for methane dehydroaromatization. <i>Catalysis Science and Technology</i> , 2018 , 8, 916-922	5.5	30
226	On the dynamic nature of Mo sites for methane dehydroaromatization. <i>Chemical Science</i> , 2018 , 9, 4801-4807	9.4	49
225	Synthesis, characterization and properties of a glycol-coordinated Keggin-type Al chloride. <i>Chemical Communications</i> , 2018 , 54, 4148-4151	5.8	3
224	Synthesis, characterization, and application of ruthenium-doped SrTiO3 perovskite catalysts for microwave-assisted methane dry reforming. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018 , 127, 178-190	3.7	40
223	Mechanistic Complexity of Methane Oxidation with HO by Single-Site Fe/ZSM-5 Catalyst. <i>ACS Catalysis</i> , 2018 , 8, 7961-7972	13.1	58
222	Unraveling reaction networks behind the catalytic oxidation of methane with HO over a mixed-metal MIL-53(Al,Fe) MOF catalyst. <i>Chemical Science</i> , 2018 , 9, 6765-6773	9.4	50
221	Isolated Fe Sites in Metal Organic Frameworks Catalyze the Direct Conversion of Methane to Methanol. <i>ACS Catalysis</i> , 2018 , 8, 5542-5548	13.1	138
220	Benzimidazole linked polymers (BILPs) in mixed-matrix membranes: Influence of filler porosity on the CO2/N2 separation performance. <i>Journal of Membrane Science</i> , 2018 , 566, 213-222	9.6	13
219	Metal Organic Framework-Derived Iron Catalysts for the Direct Hydrogenation of CO2 to Short Chain Olefins. <i>ACS Catalysis</i> , 2018 , 8, 9174-9182	13.1	94

218	Illuminating the nature and behavior of the active center: the key for photocatalytic H ₂ production in Co@NH ₂ -MIL-125(Ti). <i>Journal of Materials Chemistry A</i> , 2018 , 6, 17318-17322	13	21
217	Molecular-Scale Hybrid Membranes Derived from Metal-Organic Polyhedra for Gas Separation. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21381-21389	9.5	30
216	Recent trends and fundamental insights in the methanol-to-hydrocarbons process. <i>Nature Catalysis</i> , 2018 , 1, 398-411	36.5	315
215	High performance mixed matrix membranes (MMMs) composed of ZIF-94 filler and 6FDA-DAM polymer. <i>Journal of Membrane Science</i> , 2018 , 550, 198-207	9.6	71
214	Mixed-matrix membranes containing an azine-linked covalent organic framework: Influence of the polymeric matrix on post-combustion CO ₂ -capture. <i>Journal of Membrane Science</i> , 2018 , 549, 377-384	9.6	43
213	Single cobalt sites in mesoporous N-doped carbon matrix for selective catalytic hydrogenation of nitroarenes. <i>Journal of Catalysis</i> , 2018 , 357, 20-28	7.3	156
212	Formulation and catalytic performance of MOF-derived Fe@C/Al composites for high temperature Fischer-Tropsch synthesis. <i>Catalysis Science and Technology</i> , 2018 , 8, 210-220	5.5	23
211	Das Rätsel um Ketene in der Zeolithchemie und -katalyse. <i>Angewandte Chemie</i> , 2018 , 130, 15198-15201	3.6	0
210	Facile manufacture of porous organic framework membranes for precombustion CO capture. <i>Science Advances</i> , 2018 , 4, eaau1698	14.3	59
209	An efficient nanosieve. <i>Nature Materials</i> , 2018 , 17, 1057-1058	27	8
208	The Curious Case of Ketene in Zeolite Chemistry and Catalysis. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14982-14985	16.4	29
207	One-Pot Synthesis of High-Flux b-Oriented MFI Zeolite Membranes for Xe Recovery. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33574-33580	9.5	18
206	Nanosheets of Nonlayered Aluminum Metal-Organic Frameworks through a Surfactant-Assisted Method. <i>Advanced Materials</i> , 2018 , 30, e1707234	24	80
205	Towards High Performance Metal-Organic Framework-Microporous Polymer Mixed Matrix Membranes: Addressing Compatibility and Limiting Aging by Polymer Doping. <i>Chemistry - A European Journal</i> , 2018 , 24, 12796-12800	4.8	15
204	Structure-performance descriptors and the role of Lewis acidity in the methanol-to-propylene process. <i>Nature Chemistry</i> , 2018 , 10, 804-812	17.6	145
203	Determination of early warning signs for photocatalytic degradation of titanium white oil paints by means of surface analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017 , 172, 100-108	4.4	27
202	Understanding metal-organic frameworks for photocatalytic solar fuel production. <i>CrystEngComm</i> , 2017 , 19, 4118-4125	3.3	62
201	High-temperature Fischer-Tropsch synthesis over FeTi mixed oxide model catalysts: Tailoring activity and stability by varying the Ti/Fe ratio. <i>Applied Catalysis A: General</i> , 2017 , 533, 38-48	5.1	14

200	Metal organic frameworks as precursors for the manufacture of advanced catalytic materials. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1709-1745	7.8	174
199	Ruthenium particle size and cesium promotion effects in Fischer-Tropsch synthesis over high-surface-area graphite supported catalysts. <i>Catalysis Science and Technology</i> , 2017 , 7, 1235-1244	5.5	26
198	Metal-Organic Framework Mediated Cobalt/Nitrogen-Doped Carbon Hybrids as Efficient and Chemoselective Catalysts for the Hydrogenation of Nitroarenes. <i>ChemCatChem</i> , 2017 , 9, 1854-1862	5.2	63
197	Insights into the Activity and Deactivation of the Methanol-to-Olefins Process over Different Small-Pore Zeolites As Studied with Operando UV-vis Spectroscopy. <i>ACS Catalysis</i> , 2017 , 7, 4033-4046	13.1	87
196	Tuning the selectivity of light hydrocarbons in natural gas in a family of isorecticular MOFs. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11032-11039	13	28
195	Gas Phase Sensing of Alcohols by Metal Organic Framework-Polymer Composite Materials. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24926-24935	9.5	39
194	Mixed-Matrix-Membranen. <i>Angewandte Chemie</i> , 2017 , 129, 9420-9439	3.6	49
193	Sensitive and Reversible Detection of Methanol and Water Vapor by In Situ Electrochemically Grown CuBTC MOFs on Interdigitated Electrodes. <i>Small</i> , 2017 , 13, 1604150	11	20
192	Comment on Efficient Conversion of Methane to Aromatics by Coupling Methylation Reaction. <i>ACS Catalysis</i> , 2017 , 7, 4485-4487	13.1	3
191	Base free transfer hydrogenation using a covalent triazine framework based catalyst. <i>CrystEngComm</i> , 2017 , 19, 4166-4170	3.3	12
190	The MOF-driven synthesis of supported palladium clusters with catalytic activity for carbene-mediated chemistry. <i>Nature Materials</i> , 2017 , 16, 760-766	27	180
189	Mixed-Matrix Membranes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 9292-9310	16.4	347
188	Metal-organic and covalent organic frameworks as single-site catalysts. <i>Chemical Society Reviews</i> , 2017 , 46, 3134-3184	58.5	696
187	Separation of nuclear isomers for cancer therapeutic radionuclides based on nuclear decay after-effects. <i>Scientific Reports</i> , 2017 , 7, 44242	4.9	12
186	Harvesting the photoexcited holes on a photocatalytic proton reduction metal-organic framework. <i>Faraday Discussions</i> , 2017 , 201, 71-86	3.6	10
185	Consequences of secondary zeolite growth on catalytic performance in DMTO studied over DDR and CHA. <i>Catalysis Science and Technology</i> , 2017 , 7, 300-309	5.5	9
184	Covalent organic frameworks as supports for a molecular Ni based ethylene oligomerization catalyst for the synthesis of long chain olefins. <i>Journal of Catalysis</i> , 2017 , 345, 270-280	7.3	40
183	Revisiting the Incorporation of Ti(IV) in UiO-type Metal-Organic Frameworks: Metal Exchange versus Grafting and Their Implications on Photocatalysis. <i>Chemistry of Materials</i> , 2017 , 29, 8963-8967	9.6	52

182	Flicking the switch on a molecular gate. <i>Science</i> , 2017 , 358, 303	33.3	7
181	Facile Method for the Preparation of Covalent Triazine Framework coated Monoliths as Catalyst Support: Applications in C1 Catalysis. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 26060-26065	9.5	31
180	Revisiting Nitrogen Species in Covalent Triazine Frameworks. <i>Langmuir</i> , 2017 , 33, 14278-14285	4	75
179	Manufacture of highly loaded silica-supported cobalt Fischer-Tropsch catalysts from a metal organic framework. <i>Nature Communications</i> , 2017 , 8, 1680	17.4	87
178	Metal-organic frameworks based membranes for liquid separation. <i>Chemical Society Reviews</i> , 2017 , 46, 7124-7144	58.5	372
177	Revisiting the Aluminum Trimesate-Based MOF (MIL-96): From Structure Determination to the Processing of Mixed Matrix Membranes for CO ₂ Capture. <i>Chemistry of Materials</i> , 2017 , 29, 10326-10338	9.6	53
176	Metal-Organic Framework-Mediated Synthesis in Catalysis 2017 , 225-250		4
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5	CHAPTER 1:Introduction. <i>RSC Catalysis Series</i> ,1-5	0.3	1
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2 Hole utilization in solar hydrogen production. *Nature Reviews Chemistry*, 34.6 1

1 Hydrogen Selective Catalytic Reduction of Nitrogen Oxide on Pt- and Pd-Based Catalysts for Lean-Burn Automobile Applications 1