Silvia Bordiga

List of Publications by Year in Descending Order

484 papers	42,279 citations	108 h-index	190 g-index
513 ext. papers	46,156 ext. citations	7 avg, IF	7.17 L-index

#	Paper	IF	Citations
484	MAPO-18 Catalysts for the Methanol to Olefins Process: Influence of Catalyst Acidity in a High-Pressure Syngas (CO and H) Environment.. *ACS Catalysis*, **2022**, 12, 1520-1531	13.1	2
483	Thermochromic photoluminescent 3D printed polymeric devices based on copper-iodide clusters. *Additive Manufacturing*, **2022**, 49, 102504	6.1	0
482	Supported PdZn nanoparticles for selective CO2 conversion, through the grafting of a heterobimetallic complex on CeZrOx. *Applied Catalysis A: General*, **2022**, 635, 118568	5.1	1
481	Characterization of the NiSO4 site on a NiSO4-ReOx/γAl2O3 catalyst for tandem conversion of ethylene to propylene. *Applied Catalysis A: General*, **2022**, 637, 118598	5.1	0
480	SO Poisoning of Cu-CHA deNO Catalyst: The Most Vulnerable Cu Species Identified by X-ray Absorption Spectroscopy.. *Jacs Au*, **2022**, 2, 787-792		0
479	Efficient and reversible CO2 capture in bio-based ionic liquids solutions. *Journal of CO2 Utilization*, **2021**, 55, 101815	7.6	2
478	Titelbild: Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites (Angew. Chem. 18/2021). *Angewandte Chemie*, **2021**, 133, 9813-9813	3.6	
477	Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites. *Angewandte Chemie*, **2021**, 133, 10104-10110	3.6	3
476	Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites. *Angewandte Chemie - International Edition*, **2021**, 60, 10016-10022	16.4	10
475	Metal□rganic Frameworks in Italy: From synthesis and advanced characterization to theoretical modeling and applications. *Coordination Chemistry Reviews*, **2021**, 437, 213861	23.2	5
474	Co-catalyst free ethene dimerization over Zr-based metal-organic framework (UiO-67) functionalized with Ni and bipyridine. *Catalysis Today*, **2021**, 369, 193-202	5.3	9
473	Influence of Cu-speciation in mordenite on direct methane to methanol conversion: Multi-Technique characterization and comparison with NH3 selective catalytic reduction of NOx. *Catalysis Today*, **2021**, 369, 105-111	5.3	3
472	Functional Dyes in Polymeric 3D Printing: Applications and Perspectives **2021**, 3, 1-17		18
471	Cu- and Fe-speciation in a composite zeolite catalyst for selective catalytic reduction of NOx: insights from operando XAS. *Catalysis Science and Technology*, **2021**, 11, 846-860	5.5	4
470	Finding the active species: The conversion of methanol to aromatics over Zn-ZSM-5/alumina shaped catalysts. *Journal of Catalysis*, **2021**, 394, 416-428	7.3	13
469	CO2 hydrogenation to methanol and hydrocarbons over bifunctional Zn-doped ZrO2/zeolite catalysts. *Catalysis Science and Technology*, **2021**, 11, 1249-1268	5.5	8
468	Multifunctional Catalyst Combination for the Direct Conversion of CO to Propane. *Jacs Au*, **2021**, 1, 1719-1732		5

467	Insights on a Hierarchical MFI Zeolite: A Combined Spectroscopic and Catalytic Approach for Exploring the Multilevel Porous System Down to the Active Sites. *ACS Applied Materials & Interfaces*, **2021**, 13, 49114-49127	9.5	1
466	Copper Pairing in the Mordenite Framework as a Function of the Cu /Cu Speciation. *Angewandte Chemie - International Edition*, **2021**, 60, 25891-25896	16.4	2
465	Investigating the role of Cu-oxo species in Cu-nitrate formation over Cu-CHA catalysts. *Physical Chemistry Chemical Physics*, **2021**, 23, 18322-18337	3.6	3
464	In situ X-ray absorption study of Cu species in Cu-CHA catalysts for NH3-SCR during temperature-programmed reduction in NO/NH3. *Research on Chemical Intermediates*, **2021**, 47, 357-375	2.8	3
463	EXAFS wavelet transform analysis of Cu-MOR zeolites for the direct methane to methanol conversion. *Physical Chemistry Chemical Physics*, **2020**, 22, 18950-18963	3.6	23
462	On the conversion of CO2 to value added products over composite PdZn and H-ZSM-5 catalysts: excess Zn over Pd, a compromise or a penalty?. *Catalysis Science and Technology*, **2020**, 10, 4373-4385	5.5	9
461	Titanium Defective Sites in TS-1: Structural Insights by Combining Spectroscopy and Simulation. *Angewandte Chemie*, **2020**, 132, 18302-18307	3.6	
460	Titanium Defective Sites in TS-1: Structural Insights by Combining Spectroscopy and Simulation. *Angewandte Chemie - International Edition*, **2020**, 59, 18145-18150	16.4	6
459	Comparing the Nature of Active Sites in Cu-loaded SAPO-34 and SSZ-13 for the Direct Conversion of Methane to Methanol. *Catalysts*, **2020**, 10, 191	4	9
458	Revisiting the identity of MgCl2: Part II. Morphology and exposed surfaces studied by vibrational spectroscopies and DFT calculation. *Journal of Catalysis*, **2020**, 387, 1-11	7.3	15
457	A temporal analysis of products (TAP) study of C2-C4 alkene reactions with a well-defined pool of methylating species on ZSM-22 zeolite. *Journal of Catalysis*, **2020**, 385, 300-312	7.3	11
456	Bimetallic hexanuclear clusters in Ce/Zr-UiO-66 MOFs: in situ FTIR spectroscopy and modelling insights. *Dalton Transactions*, **2020**, 49, 5794-5797	4.3	7
455	Adsorption Properties of Ce5(BDC)7.5(DMF)4 MOF. *Inorganics*, **2020**, 8, 9	2.9	9
454	UiO-66 type MOFs with mixed-linkers - 1,4-Benzenedicarboxylate and 1,4-naphthalenedicarboxylate: Effect of the modulator and post-synthetic exchange. *Microporous and Mesoporous Materials*, **2020**, 305, 110324	5.3	14
453	A spectroscopic and computational study of a tough MOF with a fragile linker: Ce-UiO-66-ADC. *Dalton Transactions*, **2020**, 49, 12-16	4.3	9
452	Hydrogenation of CO to Methanol by Pt Nanoparticles Encapsulated in UiO-67: Deciphering the Role of the Metal-Organic Framework. *Journal of the American Chemical Society*, **2020**, 142, 999-1009	16.4	72
451	Location and activity of VOx species on TiO2 particles for NH3-SCR catalysis. *Applied Catalysis B: Environmental*, **2020**, 278, 119337	21.8	18
450	Visible-Light-Driven Photocatalytic Coupling of Benzylamine over Titanium-Based MIL-125-NH2 Metal Organic Framework: A Mechanistic Study. *Journal of Physical Chemistry C*, **2020**, 124, 23707-23715	3.8	8

449	Structure and Reactivity of Oxygen-Bridged Diamino Dicopper(II) Complexes in Cu-Ion-Exchanged Chabazite Catalyst for NH-Mediated Selective Catalytic Reduction. *Journal of the American Chemical Society*, **2020**, 142, 15884-15896	16.4	51
448	Identifying Cu-oxo species in Cu-zeolites by XAS: A theoretical survey by DFT-assisted XANES simulation and EXAFS wavelet transform. *Catalysis Today*, **2020**, 345, 125-135	5.3	33
447	Characterization and Modeling of Reversible CO2 Capture from Wet Streams by a MgO/Zeolite Y Nanocomposite. *Journal of Physical Chemistry C*, **2019**, 123, 17214-17224	3.8	15
446	Evidence of Mixed-Ligand Complexes in Cu□CHA by Reaction of Cu Nitrates with NO/NH3 at Low Temperature. *ChemCatChem*, **2019**, 11, 3828-3838	5.2	22
445	Temperature-programmed reduction with NO as a characterization of active Cu in Cu-CHA catalysts for NH3-SCR. *Catalysis Science and Technology*, **2019**, 9, 2608-2619	5.5	14
444	Functionalized nanoporous gold as a new biosensor platform for ultra-low quantitative detection of human serum albumin. *Sensors and Actuators B: Chemical*, **2019**, 288, 460-468	8.5	17
443	Dynamic CuII/CuI speciation in Cu-CHA catalysts by in situ Diffuse Reflectance UV□is-NIR spectroscopy. *Applied Catalysis A: General*, **2019**, 578, 1-9	5.1	33
442	Cu-Exchanged Ferrierite Zeolite for the Direct CH4 to CH3OH Conversion: Insights on Cu Speciation from X-Ray Absorption Spectroscopy. *Topics in Catalysis*, **2019**, 62, 712-723	2.3	5
441	Evolution of Pt and Pd species in functionalized UiO-67 metal-organic frameworks. *Catalysis Today*, **2019**, 336, 33-39	5.3	13
440	Metal-organic Framework Sponges **2019**, 59-121		
439	Zeolite Surface Methoxy Groups as Key Intermediates in the Stepwise Conversion of Methane to Methanol. *ChemCatChem*, **2019**, 11, 5022-5026	5.2	28
438	Nature and Topology of Metal□Oxygen Binding Sites in Zeolite Materials: 17O High-Resolution EPR Spectroscopy of Metal-Loaded ZSM-5. *Angewandte Chemie*, **2019**, 131, 12528-12533	3.6	3
437	Nature and Topology of Metal-Oxygen Binding Sites in Zeolite Materials: O High-Resolution EPR Spectroscopy of Metal-Loaded ZSM-5. *Angewandte Chemie - International Edition*, **2019**, 58, 12398-12403	16.4	10
436	Controlling the Synthesis of Metal□rganic Framework UiO-67 by Tuning Its Kinetic Driving Force. *Crystal Growth and Design*, **2019**, 19, 4246-4251	3.5	16
435	R□ktitelbild: Nature and Topology of Metal□Oxygen Binding Sites in Zeolite Materials: 17O High-Resolution EPR Spectroscopy of Metal-Loaded ZSM-5 (Angew. Chem. 36/2019). *Angewandte Chemie*, **2019**, 131, 12848-12848	3.6	
434	Synthesis of ZSM-23 (MTT) zeolites with different crystal morphology and intergrowths: effects on the catalytic performance in the conversion of methanol to hydrocarbons. *Catalysis Science and Technology*, **2019**, 9, 6782-6792	5.5	4
433	Understanding and Optimizing the Performance of Cu-FER for The Direct CH4 to CH3OH Conversion. *ChemCatChem*, **2019**, 11, 621-627	5.2	13
432	Unraveling the CO2 reaction mechanism in bio-based amino-acid ionic liquids by operando ATR-IR spectroscopy. *Catalysis Today*, **2019**, 336, 148-160	5.3	15

431	The impact of reaction conditions and material composition on the stepwise methane to methanol conversion over Cu-MOR: An operando XAS study. *Catalysis Today*, **2019**, 336, 99-108	5.3	19
430	Operando UV-Raman study of the methanol to olefins reaction over SAPO-34: Spatiotemporal evolution monitored by different reactor approaches. *Catalysis Today*, **2019**, 336, 203-209	5.3	9
429	Active sites speciation of supported CoMoS phase probed by NO molecule: A combined IR and DFT study. *Journal of Catalysis*, **2018**, 361, 62-72	7.3	16
428	Effect of Ti Speciation on Catalytic Performance of TS-1 in the Hydrogen Peroxide to Propylene Oxide Reaction. *Journal of Physical Chemistry C*, **2018**, 122, 9021-9034	3.8	48
427	Operando study of palladium nanoparticles inside UiO-67 MOF for catalytic hydrogenation of hydrocarbons. *Faraday Discussions*, **2018**, 208, 287-306	3.6	37
426	A Systematic Study of Isomorphically Substituted H-MAlPO-5 Materials for the Methanol-to-Hydrocarbons Reaction. *ChemPhysChem*, **2018**, 19, 484-495	3.2	11
425	Computational Assessment of Relative Sites Stabilities and Site-Specific Adsorptive Properties of Titanium Silicalite-1. *Journal of Physical Chemistry C*, **2018**, 122, 1612-1621	3.8	15
424	High Zn/Al ratios enhance dehydrogenation vs hydrogen transfer reactions of Zn-ZSM-5 catalytic systems in methanol conversion to aromatics. *Journal of Catalysis*, **2018**, 362, 146-163	7.3	78
423	Characterization of Metal Centers in Zeolites for Partial Oxidation Reactions. *Structure and Bonding* , **2018**, 91-154	0.9	4
422	Cu-CHA - a model system for applied selective redox catalysis. *Chemical Society Reviews*, **2018**, 47, 8097-8133	38.3	138
421	Investigating the Low Temperature Formation of Cu -(N,O) Species on Cu-CHA Zeolites for the Selective Catalytic Reduction of NO. *Chemistry - A European Journal*, **2018**, 24, 12044-12053	4.8	31
420	A Novel Raman Setup Based on Magnetic-Driven Rotation of Sample. *Topics in Catalysis*, **2018**, 61, 1491-1498	2.3	11
419	On the structure of superbasic (MgO) sites solvated in a faujasite zeolite. *Physical Chemistry Chemical Physics*, **2018**, 20, 18503-18514	3.6	6
418	Exact Stoichiometry of Ce Zr Cornerstones in Mixed-Metal UiO-66 Metal-Organic Frameworks Revealed by Extended X-ray Absorption Fine Structure Spectroscopy. *Journal of the American Chemical Society*, **2018**, 140, 17379-17383	16.4	44
417	The Nuclearity of the Active Site for Methane to Methanol Conversion in Cu-Mordenite: A Quantitative Assessment. *Journal of the American Chemical Society*, **2018**, 140, 15270-15278	16.4	123
416	The Effect of Al-Alkyls on the Phillips Catalyst for Ethylene Polymerization: The Case of Diethylaluminum Ethoxide (DEALE). *Topics in Catalysis*, **2018**, 61, 1465-1473	2.3	6
415	Topology-dependent hydrocarbon transformations in the methanol-to-hydrocarbons reaction studied by operando UV-Raman spectroscopy. *Physical Chemistry Chemical Physics*, **2018**, 20, 26580-26590	3.6	12
414	Exploring structure and reactivity of Cu sites in functionalized UiO-67 MOFs. *Catalysis Today*, **2017**, 283, 89-103	5.3	42

413	The Influence of Alcohols in Driving the Morphology of Magnesium Chloride Nanocrystals. *ChemCatChem*, **2017**, 9, 1782-1787	5.2	18
412	Fossil Fuels: The Effect of Zeolite Catalyst Particle Morphology on Catalyst Performance in the Conversion of Methanol to Hydrocarbons **2017**, 1-40		1
411	Tuning Pt and Cu sites population inside functionalized UiO-67 MOF by controlling activation conditions. *Faraday Discussions*, **2017**, 201, 265-286	3.6	27
410	CO adsorption on different organo-modified SBA-15 silicas: a multidisciplinary study on the effects of basic surface groups. *Physical Chemistry Chemical Physics*, **2017**, 19, 14114-14128	3.6	17
409	Structure–deactivation relationships in zeolites during the methanol-to-hydrocarbons reaction: Complementary assessments of the coke content. *Journal of Catalysis*, **2017**, 351, 33-48	7.3	65
408	Highly effective ammonia removal in a series of Brønsted acidic porous polymers: investigation of chemical and structural variations. *Chemical Science*, **2017**, 8, 4399-4409	9.4	62
407	CO Capture in Dry and Wet Conditions in UTSA-16 Metal-Organic Framework. *ACS Applied Materials & Interfaces*, **2017**, 9, 455-463	9.5	46
406	Electronic and Geometrical Structure of Zn+ Ions Stabilized in the Porous Structure of Zn-Loaded Zeolite H-ZSM-5: A Multifrequency CW and Pulse EPR Study. *Journal of Physical Chemistry C*, **2017**, 121, 14238-14245	3.8	20
405	Conversion of methanol to hydrocarbons over zeolite ZSM-23 (MTT): exceptional effects of particle size on catalyst lifetime. *Chemical Communications*, **2017**, 53, 6816-6819	5.8	20
404	Spectroscopic Methods in Catalysis and Their Application in Well-Defined Nanocatalysts. *Studies in Surface Science and Catalysis*, **2017**, 221-284	1.8	2
403	Effect of Benzoic Acid as a Modulator in the Structure of UiO-66: An Experimental and Computational Study. *Journal of Physical Chemistry C*, **2017**, 121, 9312-9324	3.8	125
402	A multi-technique approach to disclose the reaction mechanism of dimethyl carbonate synthesis over amino-modified SBA-15 catalysts. *Applied Catalysis B: Environmental*, **2017**, 211, 323-336	21.8	19
401	1D-2D-3D Transformation Synthesis of Hierarchical Metal-Organic Framework Adsorbent for Multicomponent Alkane Separation. *Journal of the American Chemical Society*, **2017**, 139, 819-828	16.4	54
400	Methane to Methanol: Structure-Activity Relationships for Cu-CHA. *Journal of the American Chemical Society*, **2017**, 139, 14961-14975	16.4	202
399	In Situ Investigation of the Deactivation Mechanism in Ni-ZSM5 During Ethylene Oligomerization. *Topics in Catalysis*, **2017**, 60, 1664-1672	2.3	6
398	Ligands Make the Difference! Molecular Insights into Cr/SiO Phillips Catalyst during Ethylene Polymerization. *Journal of the American Chemical Society*, **2017**, 139, 17064-17073	16.4	37
397	Zeolite morphology and catalyst performance: conversion of methanol to hydrocarbons over offretite. *Catalysis Science and Technology*, **2017**, 7, 5435-5447	5.5	10
396	A spin transition mechanism for cooperative adsorption in metal-organic frameworks. *Nature*, **2017**, 550, 96-100	50.4	142

395	CO2 Hydrogenation over Pt-Containing UiO-67 Zr-MOFs The Base Case. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13206-13218	3.9	52
394	Composition-driven Cu-speciation and reducibility in Cu-CHA zeolite catalysts: a multivariate XAS/FTIR approach to complexity. *Chemical Science*, **2017**, 8, 6836-6851	9.4	129
393	The Importance of Interactions at the Molecular Level: A Spectroscopic Study of a New Composite Sorber Material. *Applied Spectroscopy*, **2017**, 71, 2278-2285	3.1	1
392	Modulator Effect in UiO-66-NDC (1,4-Naphthalenedicarboxylic Acid) Synthesis and Comparison with UiO-67-NDC Isoreticular Metal Organic Frameworks. *Crystal Growth and Design*, **2017**, 17, 5422-5431	3.5	42
391	Conductive ZSM-5-Based Adsorbent for CO2 Capture: Active Phase vs Monolith. *Industrial & Engineering Chemistry Research*, **2017**, 56, 8485-8498	3.9	27
390	Click-based porous cationic polymers for enhanced carbon dioxide capture. *Journal of Materials Chemistry A*, **2017**, 5, 372-383	13	49
389	Increasing the stability of Mg2(dobpdc) metal organic framework in air through solvent removal. *Materials Chemistry Frontiers*, **2017**, 1, 444-448	7.8	20
388	Probing Structure and Reactivity of Metal Centers in Metal Organic Frameworks by XAS Techniques **2017**, 397-430		4
387	The Cu-CHA deNOx Catalyst in Action: Temperature-Dependent NH3-Assisted Selective Catalytic Reduction Monitored by Operando XAS and XES. *Journal of the American Chemical Society*, **2016**, 138, 12025-8	16.4	197
386	Surface Investigation and Morphological Analysis of Structurally Disordered MgCl2 and MgCl2/TiCl4 Ziegler Natta Catalysts. *ACS Catalysis*, **2016**, 6, 5786-5796	13.1	62
385	UV-Raman Fingerprint of Br sted Sites in MFI Zeolites: A Useful Marker in Dealumination Detection. *Journal of Physical Chemistry C*, **2016**, 120, 18088-18092	3.8	9
384	CO2 Adsorption Sites in UTSA-16: Multitechnique Approach. *Journal of Physical Chemistry C*, **2016**, 120, 12068-12074	3.8	18
383	Pre-reduction of the Phillips CrVI/SiO2 catalyst by cyclohexene: A model for the induction period of ethylene polymerization. *Journal of Catalysis*, **2016**, 337, 45-51	7.3	18
382	Spectroscopic Study on the Surface Properties and Catalytic Performances of Palladium Nanoparticles in Poly(ionic liquid)s. *Journal of Physical Chemistry C*, **2016**, 120, 1683-1692	3.8	21
381	New insights into UTSA-16. *Physical Chemistry Chemical Physics*, **2016**, 18, 220-7	3.6	40
380	IR and Raman Spectroscopies Probing MOFs Structure, Defectivity, and Reactivity **2016**, 657-690		4
379	Solvent-Driven Gate Opening in MOF-76-Ce: Effect on CO2 Adsorption. *ChemSusChem*, **2016**, 9, 713-9	8.3	42
378	A XAFS study of the local environment and reactivity of Pt- sites in functionalized UiO-67 MOFs. *Journal of Physics: Conference Series*, **2016**, 712, 012125	0.3	6

377	Active sites in Cu-SSZ-13 deNOx catalyst under reaction conditions: a XAS/XES perspective. *Journal of Physics: Conference Series*, **2016**, 712, 012041	0.3	11
376	Reactivity of Hydrosilanes with the CrII/SiO2 Phillips Catalyst: Observation of Intermediates and Properties of the Modified CrII Sites. *Topics in Catalysis*, **2016**, 59, 1732-1739	2.3	2
375	Incorporation of Ni into HZSM-5 zeolites: Effects of zeolite morphology and incorporation procedure. *Microporous and Mesoporous Materials*, **2016**, 229, 76-82	5.3	18
374	Toward the Understanding of the Comonomer Effect on CrII/SiO2 Phillips Catalyst. *ACS Catalysis*, **2016**, 6, 2918-2922	13.1	9
373	Defect Engineering: Tuning the Porosity and Composition of the Metal–Organic Framework UiO-66 via Modulated Synthesis. *Chemistry of Materials*, **2016**, 28, 3749-3761	9.6	596
372	Functionalizing the Defects: Postsynthetic Ligand Exchange in the Metal Organic Framework UiO-66. *Chemistry of Materials*, **2016**, 28, 7190-7193	9.6	125
371	Nitrate–nitrite equilibrium in the reaction of NO with a Cu-CHA catalyst for NH3-SCR. *Catalysis Science and Technology*, **2016**, 6, 8314-8324	5.5	39
370	The role of dispersive forces determining the energetics of adsorption in Ti zeolites. *Journal of Computational Chemistry*, **2016**, 37, 2659-2666	3.5	7
369	Gradual release of strongly bound nitric oxide from Fe(NO)(dobdc). *Journal of the American Chemical Society*, **2015**, 137, 3466-9	16.4	65
368	XAS and XES Techniques Shed Light on the Dark Side of Ziegler–Natta Catalysts: Active-Site Generation. *ChemCatChem*, **2015**, 7, 1432-1437	5.2	23
367	Design of high surface area poly(ionic liquid)s to convert carbon dioxide into ethylene carbonate. *Journal of Materials Chemistry A*, **2015**, 3, 8508-8518	13	45
366	Cooperative insertion of CO2 in diamine-appended metal-organic frameworks. *Nature*, **2015**, 519, 303-8	50.4	807
365	In Situ Resonant UV-Raman Spectroscopy of Polycyclic Aromatic Hydrocarbons. *Journal of Physical Chemistry C*, **2015**, 119, 11694-11698	3.8	21
364	A Consistent Reaction Scheme for the Selective Catalytic Reduction of Nitrogen Oxides with Ammonia. *ACS Catalysis*, **2015**, 5, 2832-2845	13.1	319
363	Probing zeolites by vibrational spectroscopies. *Chemical Society Reviews*, **2015**, 44, 7262-341	58.5	241
362	Activation and In Situ Ethylene Polymerization on Silica-Supported Ziegler–Natta Catalysts. *ACS Catalysis*, **2015**, 5, 5586-5595	13.1	24
361	Nanoporous gold obtained from a metallic glass precursor used as substrate for surface-enhanced Raman scattering. *Philosophical Magazine Letters*, **2015**, 95, 474-482	1	18
360	Porous Materials: Submicrometer-Sized ZIF-71 Filled Organophilic Membranes for Improved Bioethanol Recovery: Mechanistic Insights by Monte Carlo Simulation and FTIR Spectroscopy (Adv. Funct. Mater. 4/2015). *Advanced Functional Materials*, **2015**, 25, 498-498	15.6	1

359	Spectroscopic and Structural Characterization of Thermal Decomposition of Mg(BH4)2: Dynamic Vacuum versus H2 Atmosphere. *Journal of Physical Chemistry C*, **2015**, 119, 25340-25351	3.8	25
358	MoS2 supported on P25 titania: A model system for the activation of a HDS catalyst. *Journal of Catalysis*, **2015**, 328, 225-235	7.3	32
357	Probing Reactive Platinum Sites in UiO-67 Zirconium Metal Organic Frameworks. *Chemistry of Materials*, **2015**, 27, 1042-1056	9.6	95
356	Effect of surface hydroxylation on the catalytic activity of a Cr(II)/SiO2 model system of Phillips catalyst. *Journal of Catalysis*, **2015**, 324, 79-87	7.3	16
355	Submicrometer-Sized ZIF-71 Filled Organophilic Membranes for Improved Bioethanol Recovery: Mechanistic Insights by Monte Carlo Simulation and FTIR Spectroscopy. *Advanced Functional Materials*, **2015**, 25, 516-525	15.6	78
354	H2S interaction with HKUST-1 and ZIF-8 MOFs: A multitechnique study. *Microporous and Mesoporous Materials*, **2015**, 207, 90-94	5.3	68
353	Revisiting the nature of Cu sites in the activated Cu-SSZ-13 catalyst for SCR reaction. *Chemical Science*, **2015**, 6, 548-563	9.4	265
352	Hydrogen storage of MgZn mixed metal borohydrides. *Journal of Alloys and Compounds*, **2014**, 615, S702-S705	5.7	16
351	Monolithic cells for solar fuels. *Chemical Society Reviews*, **2014**, 43, 7963-81	58.5	165
350	Methanol Conversion to Hydrocarbons (MTH) Over H-ITQ-13 (ITH) Zeolite. *Topics in Catalysis*, **2014**, 57, 143-158	2.3	14
349	Oxidation of ethane to ethanol by N2O in a metal-organic framework with coordinatively unsaturated iron(II) sites. *Nature Chemistry*, **2014**, 6, 590-5	17.6	332
348	Detailed Structure Analysis of Atomic Positions and Defects in Zirconium Metal Organic Frameworks. *Crystal Growth and Design*, **2014**, 14, 5370-5372	3.5	219
347	Cr-MIL-101 encapsulated Keggin phosphotungstic acid as active nanomaterial for catalysing the alcoholysis of styrene oxide. *Green Chemistry*, **2014**, 16, 1351-1357	10	98
346	Synthesis and characterization of amine-functionalized mixed-ligand metal-organic frameworks of UiO-66 topology. *Inorganic Chemistry*, **2014**, 53, 9509-15	5.1	108
345	Tuned to Perfection: Ironing Out the Defects in Metal Organic Framework UiO-66. *Chemistry of Materials*, **2014**, 26, 4068-4071	9.6	472
344	Defect Sites in H2-Reduced TiO2Convert Ethylene to High Density Polyethylene without Activator. *ACS Catalysis*, **2014**, 4, 986-989	13.1	33
343	Carbon dioxide adsorption in amine-functionalized mixed-ligand metal-organic frameworks of UiO-66 topology. *ChemSusChem*, **2014**, 7, 3382-8	8.3	56
342	Fast carbon dioxide recycling by reaction with Mg(BH4)2. *Physical Chemistry Chemical Physics*, **2014**, 16, 22482-6	3.6	20

341	Interaction of NH3 with Cu-SSZ-13 Catalyst: A Complementary FTIR, XANES, and XES Study. *Journal of Physical Chemistry Letters*, **2014**, 5, 1552-9	6.4	209
340	Reversible CO binding enables tunable CO/H□ and CO/N□ separations in metal-organic frameworks with exposed divalent metal cations. *Journal of the American Chemical Society*, **2014**, 136, 10752-61	16.4	160
339	Fundamental Aspects of H2S Adsorption on CPO-27-Ni. *Journal of Physical Chemistry C*, **2013**, 117, 15615-15622	4.8	71
338	Catalyst deactivation by coke formation in microporous and desilicated zeolite H-ZSM-5 during the conversion of methanol to hydrocarbons. *Journal of Catalysis*, **2013**, 307, 62-73	7.3	146
337	Coke location in microporous and hierarchical ZSM-5 and the impact on the MTH reaction. *Journal of Catalysis*, **2013**, 307, 238-245	7.3	124
336	Probing the surface of nanosheet H-ZSM-5 with FTIR spectroscopy. *Physical Chemistry Chemical Physics*, **2013**, 15, 13363-70	3.6	42
335	Hierarchical Zeolitic Imidazolate Framework-8 Catalyst for Monoglyceride Synthesis. *ChemCatChem* , **2013**, 5, 3562-3566	5.2	69
334	In Situ Infrared Spectroscopic and Gravimetric Characterisation of the Solvent Removal and Dehydroxylation of the Metal Organic Frameworks UiO-66 and UiO-67. *Topics in Catalysis*, **2013**, 56, 770-782	2.3	110
333	Theoretical and experimental study on Mg(BH4)2–Zn(BH4)2 mixed borohydrides. *Journal of Alloys and Compounds*, **2013**, 580, S282-S286	5.7	21
332	Cr-doped porous silica glass as a model material to describe Phillips catalyst properties. *Journal of Catalysis*, **2013**, 308, 319-327	7.3	12
331	Characterization of Cu-exchanged SSZ-13: a comparative FTIR, UV-Vis, and EPR study with Cu-ZSM-5 and Cu-□ with similar Si/Al and Cu/Al ratios. *Dalton Transactions*, **2013**, 42, 12741-61	4.3	247
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