Marco Daturi

List of Publications by Year
in descending order

214 papers	19,026 citations	17440 63 h-index	12272 133 g-index
229 all docs	229 docs citations	229 times ranked	16687 citing authors

#	Article	IF	Citations
1	Amine Grafting on Coordinatively Unsaturated Metal Centers of MOFs: Consequences for Catalysis and Metal Encapsulation. Angewandte Chemie - International Edition, 2008, 47, 4144-4148.	13.8	1,111
2	High Uptakes of CO₂ and CH₄ in Mesoporous Metalâ€”Organic Frameworks MIL-100 and MIL-101. Langmuir, 2008, 24, 7245-7250.	3.5	1,067
3	Synthesis Modulation as a Tool To Increase the Catalytic Activity of Metalâ€“Organic Frameworks: The Unique Case of UiO-66(Zr). Journal of the American Chemical Society, 2013, 135, 11465-11468.	13.7	871
4	Metalâ€“organic and covalent organic frameworks as single-site catalysts. Chemical Society Reviews, 2017, 46, 3134-3184.	38.1	861
5	IR study of polycrystalline ceria properties in oxidised and reduced states. Catalysis Today, 1999, 50, 207-225.	4.4	786
6	Why hybrid porous solids capture greenhouse gases?. Chemical Society Reviews, 2011, 40, 550-562.	38.1	603
7	Controlled Reducibility of a Metalâ€“Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption. Angewandte Chemie - International Edition, 2010, 49, 5949-5952.	13.8	526
8	An Explanation for the Very Large Breathing Effect of a Metalâ€“Organic Framework during CO₂ Adsorption. Advanced Materials, 2007, 19, 2246-2251.	21.0	501
9	Functionalization in Flexible Porous Solids: Effects on the Pore Opening and the Hostâˆ’Guest Interactions. Journal of the American Chemical Society, 2010, 132, 1127-1136.	13.7	445
10	Co-adsorption and Separation of CO₂âˆ’CH₄ Mixtures in the Highly Flexible MIL-53(Cr) MOF. Journal of the American Chemical Society, 2009, 131, 17490-17499.	13.7	398
11	Catalytic CO2 valorization into CH4 on Ni-based ceria-zirconia. Reaction mechanism by operando IR spectroscopy. Catalysis Today, 2013, 215, 201-207.	4.4	395
12	How Linkerâ€™s Modification Controls Swelling Properties of Highly Flexible Iron(III) Dicarboxylates MIL-88. Journal of the American Chemical Society, 2011, 133, 17839-17847.	13.7	383
13	Investigation of Acid Sites in a Zeotypic Giant Pores Chromium(III) Carboxylate. Journal of the American Chemical Society, 2006, 128, 3218-3227.	13.7	343
14	Energyâ€Efficient Dehumidification over Hierachically Porous Metalâ€“Organic Frameworks as Advanced Water Adsorbents. Advanced Materials, 2012, 24, 806-810.	21.0	298
15	Nitric Oxide Adsorption and Delivery in Flexible MIL-88(Fe) Metalâ€“Organic Frameworks. Chemistry of Materials, 2013, 25, 1592-1599.	6.7	243
16	Metal Organic Framework Crystals in Mixedâ€Matrix Membranes: Impact of the Filler Morphology on the Gas Separation Performance. Advanced Functional Materials, 2016, 26, 3154-3163.	14.9	225
17	FT-IR study of CO adsorption on Pt/CeO2: characterisation and structural rearrangement of small Pt particles. Physical Chemistry Chemical Physics, 2005, 7, 187.	2.8	218
18	Comparison of Porous Iron Trimesates Basolite F300 and MIL-100(Fe) As Heterogeneous Catalysts for Lewis Acid and Oxidation Reactions: Roles of Structural Defects and Stability. ACS Catalysis, 2012, 2, 2060-2065.	11.2	213

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19	The Structure of the Aluminum Fumarate Metalâ€“Organic Framework A520. Angewandte Chemie - International Edition, 2015, 54, 3664-3668.	13.8	206
20	Selective nitrogen capture by porous hybrid materials containing accessible transition metal ion sites. Nature Materials, 2017, 16, 526-531.	27.5	201
21	Analysing and understanding the active site by IR spectroscopy. Chemical Society Reviews, 2010, 39, 4928.	38.1	196
22	Surface and structural characterization of CexZr1-xO2 CEZIRENCAT mixed oxides as potential three-way catalyst promoters. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3717-3726.	1.7	193
23	Infrared study of the influence of reducible iron(iii) metal sites on the adsorption of CO, CO2, propane, propene and propyne in the mesoporous metalâ€“organic framework MIL-100. Physical Chemistry Chemical Physics, 2011, 13, 11748.	2.8	192
24	An Evaluation of UiOâ€66 for Gasâ€Based Applications. Chemistry - an Asian Journal, 2011, 6, 3270-3280.	3.3	192
25	Modification of the oxygen storage capacity of CeO2â€“ZrO2 mixed oxides after redox cycling aging. Catalysis Today, 2000, 59, 373-386.	4.4	190
26	Explanation of the Adsorption of Polar Vapors in the Highly Flexible Metal Organic Framework MIL-53(Cr). Journal of the American Chemical Society, 2010, 132, 9488-9498.	13.7	185
27	Acid-functionalized UiO-66(Zr) MOFs and their evolution after intra-framework cross-linking: structural features and sorption properties. Journal of Materials Chemistry A, 2015, 3, 3294-3309.	10.3	174
28	Vibrational and XRD Study of the System CdWO4â^'CdMoO4. Journal of Physical Chemistry B, 1997, 101, 4358-4369.	2.6	171
29	Surface investigation on CexZr1-xO2 compounds. Physical Chemistry Chemical Physics, 1999, 1, 5717-5724.	2.8	163
30	Studying the NOx-trap mechanism over a Pt-Rh/Ba/Al2O3catalyst by operando FT-IR spectroscopy. Physical Chemistry Chemical Physics, 2003, 5, 4435-4440.	2.8	151
31	Reduction of High Surface Area CeO2â^'ZrO2Mixed Oxides. Journal of Physical Chemistry B, 2000, 104, 9186-9194.	2.6	150
32	Influence of ZIF-8 particle size in the performance of polybenzimidazole mixed matrix membranes for pre-combustion CO2 capture and its validation through interlaboratory test. Journal of Membrane Science, 2016, 515, 45-53.	8.2	145
33	A rare example of a porous Ca-MOF for the controlled release of biologically active NO. Chemical Communications, 2013, 49, 7773.	4.1	138
34	N/S-Heterocyclic Contaminant Removal from Fuels by the Mesoporous Metalâ€“Organic Framework MIL-100: The Role of the Metal Ion. Journal of the American Chemical Society, 2013, 135, 9849-9856.	13.7	138
35	Infrared Spectroscopy Investigation of the Acid Sites in the Metalâ€“Organic Framework Aluminum Trimesate MIL-100(Al). Journal of Physical Chemistry C, 2012, 116, 5710-5719.	3.1	136
36	A robust amino-functionalized titanium(iv) based MOF for improved separation of acid gases. Chemical Communications, 2013, 49, 10082.	4.1	135

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37	Tuning the breathing behaviour of MIL-53 by cation mixing. Chemical Communications, 2012, 48, 10237.	4.1	129
38	Effect of the organic functionalization of flexible MOFs on the adsorption of CO2. Journal of Materials Chemistry, 2012, 22, 10266.	6.7	125
39	Probing the adsorption performance of the hybrid porous MIL-68(Al): a synergic combination of experimental and modelling tools. Journal of Materials Chemistry, 2012, 22, 10210.	6.7	124
40	Evidence of CO2 molecule acting as an electron acceptor on a nanoporous metalâ€“organic-framework MIL-53 or Cr3+(OH)(O2Câ€“C6H4â€“CO2). Chemical Communications, 2007, , 3291.	4.1	117
41	Study of Bulk and Surface Reduction by Hydrogen of CexZr1-xO2 Mixed Oxides Followed by FTIR Spectroscopy and Magnetic Balance. Journal of Physical Chemistry B, 1999, 103, 4884-4891.	2.6	114
42	FTIR spectroscopy study of CO and NO adsorption and co-adsorption on Pt/TiO2. Journal of Molecular Catalysis A, 2007, 274, 179-184.	4.8	109
43	Thermal evolution of the adsorbed methoxy species on CexZr1â^'xO2 solid solution samples: a FT-IR study. Catalysis Today, 1999, 52, 53-63.	4.4	108
44	Investigation of Methanol Oxidation over Au/Catalysts Using Operando IR Spectroscopy: Determination of the Active Sites, Intermediate/Spectator Species, and Reaction Mechanism. Journal of the American Chemical Society, 2010, 132, 10832-10841.	13.7	103
45	Methanol as an IR probe to study the reduction process in ceriaâ€“zirconia mixed compounds. Catalysis Today, 2001, 70, 155-167.	4.4	100
46	Metal dispersion of CeO2â€“ZrO2 supported platinum catalysts measured by H2 or CO chemisorption. Applied Catalysis A: General, 2004, 260, 1-8.	4.3	99
47	Real-Time Infrared Detection of Cyanide Flip on Silver-Alumina NO <i> _x </i> Removal Catalyst. Science, 2009, 324, 1048-1051.	12.6	98
48	Discovering the Active Sites for C3 Separation in MILâ€100(Fe) by Using Operando IR Spectroscopy. Chemistry - A European Journal, 2012, 18, 11959-11967.	3.3	97
49	Transition metal mixed oxides as combustion catalysts: preparation, characterization and activity mechanisms. Catalysis Today, 1997, 33, 239-249.	4.4	95
50	The Porosity, Acidity, and Reactivity of Dealuminated Zeolite ZSMâ€5 at the Single Particle Level: The Influence of the Zeolite Architecture. Chemistry - A European Journal, 2011, 17, 13773-13781.	3.3	94
51	MIL-100(V) â€“ A mesoporous vanadium metal organic framework with accessible metal sites. Microporous and Mesoporous Materials, 2012, 157, 18-23.	4.4	94
52	Lanthanum oxides for the selective synthesis of phytosterol esters: Correlation between catalytic and acidâ€“base properties. Journal of Catalysis, 2007, 251, 113-122.	6.2	93
53	Creation of Controlled BrÃ¸nsted Acidity on a Zeotypic Mesoporous Chromium(III) Carboxylate by Grafting Water and Alcohol Molecules. Journal of Physical Chemistry C, 2007, 111, 383-388.	3.1	92
54	Well-studied Cuâ€“BTC still serves surprises: evidence for facile Cu2+/Cu+ interchange. Physical Chemistry Chemical Physics, 2012, 14, 4383.	2.8	91

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55	Influence of the Oxidation State of the Metal Center on the Flexibility and Adsorption Properties of a Porous Metal Organic Framework: MIL-47(V). Journal of Physical Chemistry C, 2011, 115, 19828-19840.	3.1	89
56	Infrared Spectroscopic Study on the Surface Properties of Î³-Gallium Oxide as Compared to Those of Î³-Alumina. Journal of Physical Chemistry B, 2005, 109, 9656-9664.	2.6	88
57	Surface FTIR investigations on CexZr1?xO2 system. Surface and Interface Analysis, 2000, 30, 273-277.	1.8	80
58	Tuning the properties of the UiO-66 metal organic framework by Ce substitution. Chemical Communications, 2015, 51, 14458-14461.	4.1	79
59	Mechanism of the selective catalytic reduction of NO in oxygen excess by propane on Hâ€“Cuâ€“ZSM-5. Catalysis Today, 2001, 70, 197-211.	4.4	75
60	Evidence of a lacunar mechanism for deNOx activity in ceria-based catalysts. Physical Chemistry Chemical Physics, 2001, 3, 252-255.	2.8	71
61	Dynamics of CrO₃â€“Fe₂O₃ Catalysts during the High-Temperature Water-Gas Shift Reaction: Molecular Structures and Reactivity. ACS Catalysis, 2016, 6, 4786-4798.	11.2	68
62	In Situ Fourier Transform Infrared Study of the Selective Reduction of NO with Propene over Ga2O3â€“Al2O3. Journal of Catalysis, 2002, 206, 114-124.	6.2	66
63	Porous, rigid metal(III)-carboxylate metal-organic frameworks for the delivery of nitric oxide. APL Materials, 2014, 2, .	5.1	66
64	Isomorphous Substitution in a Flexible Metalâ€“Organic Framework: Mixed-Metal, Mixed-Valent MIL-53 Type Materials. Inorganic Chemistry, 2013, 52, 8171-8182.	4.0	64
65	Direct accessibility of mixed-metal (<scp>iii</scp>/<scp>ii</scp>) acid sites through the rational synthesis of porous metal carboxylates. Chemical Communications, 2015, 51, 10194-10197.	4.1	63
66	Tuning Cellular Biological Functions Through the Controlled Release of NO from a Porous Tiâ€MOF. Angewandte Chemie - International Edition, 2020, 59, 5135-5143.	13.8	62
67	Selective catalytic reduction of NOx over Cu- and Fe-exchanged zeolites and their mechanical mixture. Applied Catalysis B: Environmental, 2019, 250, 419-428.	20.2	61
68	Surface and structure characterization of some perovskite-type powders to be used as combustion catalysts. Chemistry of Materials, 1995, 7, 2115-2126.	6.7	60
69	Unexpected similarities between the surface chemistry of cubic and hexagonal gallia polymorphs. Physical Chemistry Chemical Physics, 2003, 5, 1301-1305.	2.8	60
70	Operando FTIR study of NOx storage over a Pt/K/Mn/Al2O3-CeO2 catalyst. Applied Catalysis B: Environmental, 2007, 72, 166-177.	20.2	59
71	Searching for the active sites of Co-H-MFI catalyst for the selective catalytic reduction of NO by methane: A FT-IR in situ and operando study. Applied Catalysis B: Environmental, 2007, 71, 216-222.	20.2	58
72	Evidence by in situ FTIR spectroscopy and isotopic effect of new assignments for isocyanate species vibrations on Ag/Al2O3. Physical Chemistry Chemical Physics, 2001, 3, 4811-4816.	2.8	55

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73	Cu state and behaviour in MCM-41 mesoporous molecular sieves modified with copper during the synthesisâ€“â€“comparison with copper exchanged materials. Microporous and Mesoporous Materials, 2004, 74, 23-36.	4.4	54
74	Determination of the Acidity of High Surface AlF3by IR Spectroscopy of Adsorbed CO Probe Molecules. Journal of Physical Chemistry C, 2007, 111, 18317-18325.	3.1	54
75	Fe-H-BEA and Fe-H-ZSM-5 for NO2 removal from ambient air â€“ A detailed in situ and operando FTIR study revealing an unexpected positive water-effect. Journal of Catalysis, 2010, 271, 1-11.	6.2	54
76	Adsorptive Separation of Acetylene from Light Hydrocarbons by Mesoporous Iron Trimesate MILâ€100(Fe). Chemistry - A European Journal, 2015, 21, 18431-18438.	3.3	51
77	Synthesis and characterization of a series of porous lanthanide tricarboxylates. Microporous and Mesoporous Materials, 2011, 140, 25-33.	4.4	50
78	Structural investigations and acidic properties of high surface area pyrochlore aluminium hydroxyfluoride. Journal of Materials Chemistry, 2008, 18, 2483.	6.7	49
79	Direct dehydration of 1,3-butanediol into butadiene over aluminosilicate catalysts. Catalysis Science and Technology, 2016, 6, 5830-5840.	4.1	49
80	Cobalt on and in zeolites and silicaâ€“alumina: Spectroscopic characterization and reactivity. Catalysis Today, 2005, 110, 339-344.	4.4	48
81	Transient operando study on the NH3/NH4+ interplay in V-SCR monolithic catalysts. Applied Catalysis B: Environmental, 2018, 224, 109-115.	20.2	48
82	Use of pyridine CH(D) vibrations for the study of Lewis acidity of metal oxides. Applied Catalysis A: General, 2006, 307, 98-107.	4.3	47
83	Nitrosyl complexes on Coâ€“ZSM-5: an FTIR spectroscopic study. Chemical Physics Letters, 2003, 370, 712-718.	2.6	46
84	The NO/NOx ratio effect on the NH3-SCR efficiency of a commercial automotive Fe-zeolite catalyst studied by operando IR-MS. Applied Catalysis B: Environmental, 2012, 113-114, 52-60.	20.2	46
85	Relevance of the Nitrite Route in the NO_{<i>x</i>} Adsorption Mechanism over Ptâ€“Ba/Al₂O₃ NO_{<i>x</i>} Storage Reduction Catalysts Investigated by using Operando FTIR Spectroscopy. ChemCatChem, 2012, 4, 55-58.	3.7	46
86	Catalytic Performance of Nanoscopic, Aluminium Trifluorideâ€Based Catalysts in the Synthesis of (allâ€<i>rac</i>)â€Î±â€Tocopherol. Advanced Synthesis and Catalysis, 2008, 350, 2517-2524.	4.3	45
87	Comparison Between a Ptâ€“Rh/Ba/Al₂O₃and a Newly Formulated NO_X-Trap Catalysts Under Alternate Leanâ€“Rich Flows. Topics in Catalysis, 2004, 30/31, 31-36.	2.8	44
88	Infrared Study of the Surface Properties of HTB-Type Alâˆ’, Crâˆ’, Feâˆ’Hydroxyfluorides. Journal of Physical Chemistry B, 2004, 108, 3246-3255.	2.6	44
89	A co-templating route to the synthesis of Cu SAPO STA-7, giving an active catalyst for the selective catalytic reduction of NO. Microporous and Mesoporous Materials, 2011, 146, 36-47.	4.4	44
90	On the mechanism of methanol photooxidation to methylformate and carbon dioxide on TiO₂: an operando-FTIR study. Physical Chemistry Chemical Physics, 2015, 17, 11277-11283.	2.8	44

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91	FTIR Spectroscopic Study of Low Temperature NO Adsorption and NO + O2Coadsorption on Hâˆ’ZSM-5. Langmuir, 2004, 20, 5425-5431.	3.5	42
92	Evaluation of MIL-47(V) for CO₂-Related Applications. Journal of Physical Chemistry C, 2013, 117, 962-970.	3.1	42
93	Defects in Divided Zincâˆ’Copper Aluminate Spinels:Â Structural Features and Optical Absorption Propertiesâ€. Inorganic Chemistry, 2007, 46, 4067-4078.	4.0	41
94	Infrared Investigation of the Acid and Basic Properties of a Solâˆ’Gel Prepared MgF₂. Journal of Physical Chemistry C, 2010, 114, 5113-5120.	3.1	41
95	Characterisation of zirconia-titania powders prepared by coprecipitation. Journal of the European Ceramic Society, 1998, 18, 1079-1087.	5.7	40
96	Synthesis and characterization of Al3+, Cr3+, Fe3+ and Ga3+ hydroxyfluorides: correlations between structural features, thermal stability and acidic properties. Journal of Materials Chemistry, 2003, 13, 2330.	6.7	40
97	A High Proton Conductive Hydrogen-Sulfate Decorated Titanium Carboxylate Metalâˆ’Organic Framework. ACS Sustainable Chemistry and Engineering, 2019, 7, 5776-5783.	6.7	40
98	New Types of Nonclassical Iridium Carbonyls Formed in Ir-ZSM-5:Â A Fourier Transform Infrared Spectroscopy Investigation. Journal of Physical Chemistry B, 2006, 110, 10383-10389.	2.6	39
99	Zeolite MCM-22 Modified with Au and Cu for Catalytic Total Oxidation of Methanol and Carbon Monoxide. Journal of Physical Chemistry C, 2013, 117, 2147-2159.	3.1	39
100	CO and NO adsorption for the IR characterization of Fe2+ cations in ferrierite: An efficient catalyst for NOx SCR with NH3 as studied by operando IR spectroscopy. Catalysis Today, 2010, 149, 295-303.	4.4	38
101	IR study of CS2 adsorption on metal oxides: relation with their surface oxygen basicity and mobility. Journal of Molecular Catalysis A, 2000, 162, 125-134.	4.8	37
102	Reaction intermediates in the selective reduction of NO with propene over Ga2O3-Al2O3 and In2O3-Al2O3 catalysts. Journal of Molecular Catalysis A, 2001, 175, 179-188.	4.8	37
103	An operando IR study of the unburnt HC effect on the activity of a commercial automotive catalyst for NH3-SCR. Applied Catalysis B: Environmental, 2011, 102, 190-200.	20.2	37
104	Operando Infrared (IR) Coupled to Steady-State Isotopic Transient Kinetic Analysis (SSITKA) for Photocatalysis: Reactivity and Mechanistic Studies. ACS Catalysis, 2013, 3, 2790-2798.	11.2	35
105	Destructive Adsorption of CCl4over Lanthanum-Based Solids:Â Linking Activity to Acidâˆ’Base Properties. Journal of Physical Chemistry B, 2005, 109, 23993-24001.	2.6	34
106	Mesoâ€“macroporous zirconia modified with niobia as support for platinumâ€”Acidic and basic properties. Catalysis Today, 2010, 152, 33-41.	4.4	34
107	Ferrimagnetic zinc ferrite fine powders. IEEE Transactions on Magnetics, 1995, 31, 3808-3810.	2.1	33
108	Title is missing!. Topics in Catalysis, 2000, 11/12, 343-350.	2.8	33

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109	Surface characterization of alumina-supported catalysts prepared by solâ€“gel method. Part I. Acidâ€“base properties. Physical Chemistry Chemical Physics, 2001, 3, 1366-1370.	2.8	33
110	A MOF-assisted phosphine free bifunctional iron complex for the hydrogenation of carbon dioxide, sodium bicarbonate and carbonate to formate. Chemical Communications, 2019, 55, 4977-4980.	4.1	33
111	Physicochemical Properties and Catalytic Activity of Cuâ€“NbZSM-5â€"A Comparative Study with Cuâ€“AlZSM-5. Journal of Catalysis, 2002, 207, 101-112.	6.2	32
112	Evidencing three distinct FeII sites in Feâ€“FER zeolites by using CO and NO as complementary IR probes. Applied Catalysis B: Environmental, 2010, 93, 325-338.	20.2	32
113	FTIR spectroscopic study of CO adsorption on Coâ€“ZSM-5: Evidence of formation of Co+(CO)4 species. Physical Chemistry Chemical Physics, 2003, 5, 1695-1702.	2.8	31
114	Iron Nitrosyl Species in Fe-FER: A Complementary MÃ¶ssbauer and FTIR Spectroscopy Study. Journal of Physical Chemistry C, 2009, 113, 8387-8393.	3.1	31
115	New types of polycarbonyls of Co+formed after interaction of CO with Coâ€“ZSM-5: An FTIR spectroscopic study. Physical Chemistry Chemical Physics, 2003, 5, 243-245.	2.8	30
116	New insights into the methanol oxidation mechanism over Au/CeO2 catalyst through complementary kinetic and FTIR operando SSITKA approaches. Catalysis Today, 2012, 182, 3-11.	4.4	30
117	The influence of CO2 and H2O on the storage properties of Pt-Ba/Al2O3 LNT catalyst studied by FT-IR spectroscopy and transient microreactor experiments. Catalysis Today, 2014, 231, 116-124.	4.4	29
118	Dimorphism of the Vanadium(V) Monophosphate PbVO2PO4: Î±-Layered and Î²-Tunnel Structures. Journal of Solid State Chemistry, 2000, 149, 149-154.	2.9	28
119	A thermogravimetric and FT-IR study of the reduction by H2 of sulfated Pt/CexZr1âˆ'xO2 solids. Applied Catalysis B: Environmental, 2009, 90, 368-379.	20.2	28
120	Does Pelletizing Catalysts Influence the Efficiency Number of Activity Measurements? Spectrochemical Engineering Considerations for an Accurate Operando Study. ACS Catalysis, 2013, 3, 86-94.	11.2	28
121	Novel mesoporous zirconia-based catalysts for WGS reaction. Applied Catalysis B: Environmental, 2010, 97, 49-56.	20.2	27
122	FTIR study of defects produced in ZrO2 samples by thermal treatment Residual species into cavities and surface defects. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1143-1147.	1.7	26
123	Infrared Spectroscopic Studies of Surface Properties of Mo/SnO2 Catalyst. Journal of Catalysis, 2002, 209, 427-432.	6.2	26
124	How to determine IR molar absorption coefficients of co-adsorbed species? Application to methanol adsorption for quantification of MgO basic sites. Physical Chemistry Chemical Physics, 2011, 13, 10797.	2.8	26
125	Novel solâ€“gel prepared zinc fluoride: synthesis, characterisation and acidâ€“base sites analysis. Journal of Materials Chemistry, 2012, 22, 14587.	6.7	26
126	The role of MCM-41 composition in the creation of basicity by alkali metal impregnation. Microporous and Mesoporous Materials, 2006, 90, 362-369.	4.4	25

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127	Influence of the activation conditions on the elimination of residual impurities on ceria-zirconia mixed oxides. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1998, 95, 2048-2060.	0.2	25
128	FTIR Spectroscopy Study of CO Adsorption on Ptâˆ'Naâˆ'Mordenite. Langmuir, 2005, 21, 11821-11828.	3.5	24
129	Infrared Evidence of Three Distinct Acidic Hydroxyls in Defect-Free HY Faujasite. Journal of Physical Chemistry B, 2005, 109, 1660-1662.	2.6	24
130	CO/H2 adsorption on a Ru/Al2O3 model catalyst for Fischer Trospch: Effect of water concentration on the surface species. Applied Catalysis B: Environmental, 2018, 237, 986-995.	20.2	24
131	Crystallographic and catalytic studies of a new solid solution CdMoxW1â€"xO4. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1996, 93, 2043-2053.	0.2	24
132	Preparation and characterisation of SrTi1âˆ'xâˆ'yZrxMnyO3 solid solution powders in relation to their use in combustion catalysis. Applied Catalysis B: Environmental, 1997, 12, 325-337.	20.2	23
133	Trimethylamine as a Probe Molecule To Differentiate Acid Sites in Yâˆ'FAU Zeolite:Â FTIR Study. Journal of Physical Chemistry B, 2006, 110, 13130-13137.	2.6	23
134	Modelling a reactor cell for operando IR studies: From qualitative to fully quantitative kinetic investigations. Catalysis Today, 2017, 283, 176-184.	4.4	23
135	Vibrational spectroscopy study of the lattice defects in CaZrO3 ceramics. Journal of the European Ceramic Society, 2004, 24, 1805-1809.	5.7	22
136	Characterization of Î±-(Fe,Al)2O3solid-solution powders. Journal of Materials Chemistry, 1995, 5, 1943-1951.	6.7	21
137	Monitoring catalysts at work in their final form: spectroscopic investigations on a monolithic catalyst. Physical Chemistry Chemical Physics, 2012, 14, 2171-2177.	2.8	20
138	On the reducibility of sulfated Pt/CeXZr1âˆ'XO2 solids: A coupled thermogravimetric FT-IR study using CO as the reducing agent. Applied Catalysis B: Environmental, 2012, 119-120, 207-216.	20.2	20
139	<i>Operando</i> Reactor-Cell with Simultaneous Transmission FTIR and Raman Characterization (IRRaman) for the Study of Gas-Phase Reactions with Solid Catalysts. Analytical Chemistry, 2020, 92, 5100-5106.	6.5	20
140	Preparation, characterization and surface structure of coprecipitated high-area SrxTiO2 +x(0 â©½xâ©½ 1) powders. Journal of Materials Chemistry, 1996, 6, 879-886.	6.7	19
141	New type of rhodium gem-dicarbonyls formed in Rh-ZSM-5: An FTIR spectroscopy study. Journal of Catalysis, 2005, 236, 168-171.	6.2	19
142	Infrared evidence of room temperature dissociative adsorption of carbon monoxide over Ag/Al2O3. Catalysis Today, 2012, 197, 155-161.	4.4	19
143	Understanding the storage function of a commercial NOx-storage-reduction material using operando IR under realistic conditions. Applied Catalysis B: Environmental, 2014, 160-161, 335-343.	20.2	19
144	Insight into methanol photooxidation over mono- (Au, Cu) and bimetallic (AuCu) catalysts supported on niobium pentoxide â€" An operando-IR study. Applied Catalysis B: Environmental, 2019, 258, 117978.	20.2	19

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145	The use of multiple probe molecules for the study of the acidâ€“base properties of aluminium hydroxyfluoride having the hexagonal tungsten bronze structure: FTIR and [36Cl] radiotracer studies. Physical Chemistry Chemical Physics, 2009, 11, 1369.	2.8	18
146	Impact of thermal and vehicle aging on the structure and functionalities of a lean NOx-trap. Catalysis Today, 2011, 176, 56-62.	4.4	17
147	The effect of niobium and tantalum on physicochemical and catalytic properties of silver and platinum catalysts based on MCF mesoporous cellular foams. Journal of Catalysis, 2016, 336, 58-74.	6.2	17
148	Effects of temperature and rich-phase composition on the performance of a commercial NOx-Storage-Reduction material. Applied Catalysis B: Environmental, 2016, 181, 534-541.	20.2	17
149	In-depth insights into N2O formation over Rh- and Pt-based LNT catalysts. Catalysis Today, 2019, 320, 141-151.	4.4	17
150	Phase equilibria in the Nd2â^’xCexCuO4 system (0.0â‰xâ‰0.6). Physica C: Superconductivity and Its Applications, 1994, 235-240, 347-348.	1.2	16
151	Effect of the ligand functionalization on the acidâ€“base properties of flexible MOFs. Microporous and Mesoporous Materials, 2014, 195, 197-204.	4.4	16
152	Study of N2O Formation over Rh- and Pt-Based LNT Catalysts. Catalysts, 2016, 6, 36.	3.5	16
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