## Guido Busca

## List of Publications by Year in descending order

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513 papers 35,932 citations

93 h-index 161 g-index

554 all docs

554 docs citations

554 times ranked

21179 citing authors

#	Article	IF	CITATIONS
1	Chemical and mechanistic aspects of the selective catalytic reduction of NO by ammonia over oxide catalysts: A review. Applied Catalysis B: Environmental, 1998, 18, 1-36.	10.8	1,981
2	Technologies for the removal of phenol from fluid streams: A short review of recent developments. Journal of Hazardous Materials, 2008, 160, 265-288.	6.5	1,057
3	Infrared spectroscopic identification of species arising from reactive adsorption of carbon oxides on metal oxide surfaces. Materials Chemistry, 1982, 7, 89-126.	0.4	814
4	Acid Catalysts in Industrial Hydrocarbon Chemistry. Chemical Reviews, 2007, 107, 5366-5410.	23.0	581
5	FT-IR study of the adsorption and transformation of formaldehyde on oxide surfaces. Journal of the American Chemical Society, 1987, 109, 5197-5202.	6.6	555
6	The surface acidity of solid oxides and its characterization by IR spectroscopic methods. An attempt at systematization. Physical Chemistry Chemical Physics, 1999, 1, 723-736.	1.3	480
7	Exploring, Tuning, and Exploiting the Basicity of Hydrotalcites for Applications in Heterogeneous Catalysis. Chemistry - A European Journal, 2009, 15, 3920-3935.	1.7	450
8	Spectroscopic characterization of the acid properties of metal oxide catalysts. Catalysis Today, 1998, 41, 191-206.	2.2	445
9	Fourier transform-infrared study of the adsorption and coadsorption of nitric oxide, nitrogen dioxide and ammonia on vanadia-titania and mechanism of selective catalytic reduction. Applied Catalysis, 1990, 64, 259-278.	1.1	405
10	Adsorption, Activation, and Oxidation of Ammonia over SCR Catalysts. Journal of Catalysis, 1995, 157, 523-535.	3.1	387
11	FT-IR characterization of the surface acidity of different titanium dioxide anatase preparations. Applied Catalysis, 1985, 14, 245-260.	1.1	372
12	Ammonia activation over catalysts for the selective catalytic reduction of NOx and the selective catalytic oxidation of NH3. An FT-IR study. Catalysis Today, 1996, 28, 373-380.	2.2	368
13	Reactivity and Physicochemical Characterization of V2O5-WO3/TiO2 De-NO Catalysts. Journal of Catalysis, 1995, 155, 117-130.	3.1	355
14	Characterization and Reactivity of V2O5–MoO3/TiO2 De-NOx SCR Catalysts. Journal of Catalysis, 1999, 187, 419-435.	3.1	326
15	Catalytic combustion of C3 hydrocarbons and oxygenates over Mn3O4. Applied Catalysis B: Environmental, 1998, 16, 43-51.	10.8	300
16	An FT-IR study of ammonia adsorption and oxidation over anatase-supported metal oxides. Applied Catalysis B: Environmental, 1997, 13, 45-58.	10.8	292
17	The surface of transitional aluminas: A critical review. Catalysis Today, 2014, 226, 2-13.	2.2	286
18	Infrared studies of the reactive adsorption of organic molecules over metal oxides and of the mechanisms of their heterogeneously-catalyzed oxidation. Catalysis Today, 1996, 27, 457-496.	2.2	277

#	Article	IF	CITATIONS
19	Vibrational and electronic spectroscopic properties of zirconia powders. Journal of Materials Chemistry, 2001, 11, 1891-1897.	6.7	271
20	Magnetic properties of partially-inverted zinc ferrite aerogel powders. Journal of Applied Physics, 1997, 81, 1851-1857.	1.1	257
21	Production of hydrogen from oxidative steam reforming of methanoll. Preparation and characterization of Cu/ZnO/Al2O3 catalysts from a hydrotalcite-like LDH precursor. Journal of Catalysis, 2004, 228, 43-55.	3.1	239
22	A study of the methanation of carbon dioxide on Ni/Al2O3 catalysts at atmospheric pressure. International Journal of Hydrogen Energy, 2014, 39, 11557-11565.	3.8	225
23	Fourier transform infrared study of the adsorption and coadsorption of nitric oxide, nitrogen dioxide and ammonia on TiO2 anatase. Applied Catalysis, 1990, 64, 243-257.	1.1	223
24	An FT-IR study of the adsorption of urea and ammonia over V2O5–MoO3–TiO2 SCR catalysts. Applied Catalysis B: Environmental, 2000, 27, L145-L151.	10.8	222
25	Spectroscopic Characterization of Silicalite-1 and Titanium Silicalite-1. Journal of Catalysis, 1995, 157, 482-500.	3.1	212
26	Acidity and basicity of zeolites: A fundamental approach. Microporous and Mesoporous Materials, 2017, 254, 3-16.	2.2	200
27	Mechanism of selective methanol oxidation over vanadium oxide-titanium oxide catalysts: a FT-IR and flow reactor study. The Journal of Physical Chemistry, 1987, 91, 5263-5269.	2.9	199
28	FT Raman and FTIR studies of titanias and metatitanate powders. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 3181.	1.7	199
29	Characterization of alumina-supported Pt, Ni and PtNi alloy catalysts for the dry reforming of methane. Journal of Catalysis, 2010, 274, 11-20.	3.1	199
30	Characterization of manganese and iron oxides as combustion catalysts for propane and propene. Applied Catalysis B: Environmental, 1998, 17, L175-L182.	10.8	195
31	Characterization of tungsta-titania catalysts. Langmuir, 1992, 8, 1744-1749.	1.6	193
32	FT-IR Studies on Light Olefin Skeletal Isomerization Catalysis. Journal of Catalysis, 1998, 179, 581-596.	3.1	188
33	Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2-furaldehyde. Journal of Molecular Catalysis A, 2000, 151, 233-243.	4.8	187
34	Selective saccharides dehydration to 5-hydroxymethyl-2-furaldehyde by heterogeneous niobium catalysts. Applied Catalysis A: General, 1999, 183, 295-302.	2.2	185
35	Solid-State and Surface Spectroscopic Characterization of BaTiO3 Fine Powders. Chemistry of Materials, 1994, 6, 955-961.	3.2	184
36	Nature and mechanism of formation of vanadyl pyrophosphate: Active phase in n-butane selective oxidation. Journal of Catalysis, 1986, 99, 400-414.	3.1	183

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37	Low-temperature CO2 adsorption on metal oxides: spectroscopic characterization of some weakly adsorbed species. Materials Chemistry and Physics, 1991, 29, 425-435.	2.0	182
38	Bases and Basic Materials in Chemical and Environmental Processes. Liquid versus Solid Basicity. Chemical Reviews, 2010, 110, 2217-2249.	23.0	182
39	Surface sites on spinel-type and corundum-type metal oxide powders. Langmuir, 1993, 9, 1492-1499.	1.6	180
40	Methanation of carbon dioxide on Ru/Al 2 O 3 andÂNi/Al 2 O 3 catalysts at atmospheric pressure: Catalysts activation, behaviour and stability. International Journal of Hydrogen Energy, 2015, 40, 9171-9182.	3.8	179
41	Dehydration of ethanol over zeolites, silica alumina and alumina: Lewis acidity, Brønsted acidity and confinement effects. Applied Catalysis A: General, 2015, 493, 77-89.	2.2	175
42	FT-113 study of the surface properties of the spinels NiAl2O4 and CoAl2O4 in relation to those of transitional aluminas. Journal of Catalysis, 1991, 131, 167-177.	3.1	172
43	Vibrational and XRD Study of the System CdWO4â^'CdMoO4. Journal of Physical Chemistry B, 1997, 101, 4358-4369.	1.2	171
44	A study of commercial transition aluminas and of their catalytic activity in the dehydration of ethanol. Journal of Catalysis, 2014, 311, 102-113.	3.1	171
45	Reactivity of V2O5-WO3/TiO2 catalysts in the selective catalytic reduction of nitric oxide by ammonia. Catalysis Today, 1996, 29, 143-148.	2.2	168
46	Effects of crystal size and Si/Al ratio on the surface properties of H-ZSM-5 zeolites. Applied Catalysis A: General, 2006, 306, 78-84.	2.2	163
47	Characterization and composition of commercial V2O5&z.sbndWO3&z.sbndTiO2 SCR catalysts. Applied Catalysis B: Environmental, 1996, 10, 299-311.	10.8	161
48	The Activation of Hydrocarbon CH Bonds over Transition Metal Oxide Catalysts: A FTIR Study of Hydrocarbon Catalytic Combustion over MgCr2O4. Journal of Catalysis, 1995, 151, 204-215.	3.1	160
49	Differentiation of mono-oxo and polyoxo and of monomeric and polymeric vanadate, molybdate and tungstate species in metal oxide catalysts by IR and Raman spectroscopy. Journal of Raman Spectroscopy, 2002, 33, 348-358.	1.2	157
50	Chemical and spectroscopic study of the nature of a vanadium oxide monolayer supported on a high-surface-area TiO2 anatase. Langmuir, 1986, 2, 568-577.	1.6	150
51	Catalytic abatement of NOx: Chemical and mechanistic aspects. Catalysis Today, 2005, 107-108, 139-148.	2.2	150
52	On the surface structure of vanadia-titania catalysts: Combined laser-Raman and fourier transform-infrared investigation. Journal of Catalysis, 1989, 116, 586-589.	3.1	147
53	An FT-IR study of the adsorption and oxidation of N-containing compounds over Fe2O3-TiO2 SCR catalysts. Applied Catalysis B: Environmental, 2001, 30, 101-110.	10.8	147
54	On the mechanism of adsorption and separation of CO2 on LTA zeolites: An IR investigation. Vibrational Spectroscopy, 2008, 46, 45-51.	1.2	145

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55	Characterization of cubic ceria–zirconia powders by X-ray diffraction and vibrational and electronic spectroscopy. Solid State Sciences, 2003, 5, 1369-1376.	1.5	144
56	Microcalorimetric and Fourier transform infrared spectroscopic studies of methanol adsorption on alumina. The Journal of Physical Chemistry, 1985, 89, 5433-5439.	2.9	143
57	Surface acidity of vanadyl pyrophosphate, active phase in n-butane selective oxidation. The Journal of Physical Chemistry, 1986, 90, 1337-1344.	2.9	143
58	Alumina-Supported Manganese Oxide Catalysts. Journal of Catalysis, 1994, 150, 105-116.	3.1	143
59	A study of Ni/La-Al2O3 catalysts: A competitive system for CO2 methanation. Applied Catalysis B: Environmental, 2019, 248, 286-297.	10.8	142
60	Fourier transform IR study of NOx adsorption on a CuZSM-5 DeNOx catalyst. Applied Catalysis B: Environmental, 1996, 7, 251-267.	10.8	138
61	Textural and structural properties and surface acidity characterization of mesoporous silica-zirconia molecular sieves. Journal of Solid State Chemistry, 2003, 175, 159-169.	1.4	138
62	Production of hydrogen from oxidative steam reforming of methanolli. Catalytic activity and reaction mechanism on Cu/ZnO/Al2O3 hydrotalcite-derived catalysts. Journal of Catalysis, 2004, 228, 56-65.	3.1	135
63	An FT-IR study of the internal and external surfaces of HZSM5 zeolite. Applied Catalysis A: General, 2000, 192, 125-136.	2.2	133
64	A review of catalytic processes for the destruction of PCDD and PCDF from waste gases. Applied Catalysis B: Environmental, 2006, 62, 12-20.	10.8	132
65	Chemical, structural and mechanistic aspects on NOx SCR over commercial and model oxide catalysts. Catalysis Today, 1998, 42, 101-116.	2.2	129
66	Selective catalytic reduction of NOx by methane over Co-H-MFI and Co-H-FER zeolite catalysts: characterisation and catalytic activity. Journal of Catalysis, 2003, 214, 179-190.	3.1	129
67	Diethyl ether cracking and ethanol dehydration: Acid catalysis and reaction paths. Chemical Engineering Journal, 2015, 272, 92-101.	6.6	129
68	Hydrogen production by ethanol steam reforming over Ni catalysts derived from hydrotalcite-like precursors: Catalyst characterization, catalytic activity and reaction path. Applied Catalysis A: General, 2009, 355, 83-93.	2.2	127
69	Nickel versus cobalt catalysts for hydrogen production by ethanol steam reforming: Ni–Co–Zn–Al catalysts from hydrotalcite-like precursors. International Journal of Hydrogen Energy, 2010, 35, 5356-5366.	3.8	125
70	Fourier-transform infrared study of the surface properties of cobalt oxides. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 989.	1.7	121
71	Mullite-Type Structures in the Systems Al2O3-Me2O (Me = Na, K) and Al2O3-B2O3. Journal of the American Ceramic Society, 1992, 75, 1929-1934.	1.9	117
72	On the role of acidity in catalytic oxidation. Catalysis Today, 1996, 32, 133-143.	2.2	116

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73	Infrared study of the adsorption of nitrogen dioxide, nitric oxide and nitrous oxide on hematite. Journal of Catalysis, 1981, 72, 303-313.	3.1	114
74	FT-IR study of the surface of copper oxide. Journal of Molecular Catalysis, 1987, 43, 225-236.	1.2	114
75	Characterization of silica-titania mixed oxides. Journal of Catalysis, 1990, 125, 541-553.	3.1	114
76	CO2 separation and landfill biogas upgrading: A comparison of 4A and 13X zeolite adsorbents. Energy, 2011, 36, 314-319.	4.5	114
77	The Role of Titania Support in Mo-Based Hydrodesulfurization Catalysts. Journal of Catalysis, 1999, 184, 59-67.	3.1	111
78	Infrared study of methanol, formaldehyde, and formic acid adsorbed on hematite. Journal of Catalysis, 1980, 66, 155-161.	3.1	109
79	FTIR studies on the selective oxidation and combustion of light hydrocarbons at metal oxide surfaces. Part 2.â€"Propane and propene oxidation on Co3O4. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 1587-1593.	1.7	107
80	Potassium doping of vanadia/titania de-NOxing catalysts: Surface characterisation and reactivity study. Applied Catalysis B: Environmental, 1993, 3, 13-35.	10.8	106
81	A study of the surface acidity of acid-treated montmorillonite clay catalysts. Journal of Molecular Catalysis A, 2001, 168, 247-256.	4.8	106
82	Methanol oxidation over vanadia-based catalysts. Applied Catalysis A: General, 1997, 157, 387-408.	2.2	105
83	An EPR Study of the Surface Chemistry of the V2O5–WO3/TiO2Catalyst: Redox Behaviour and State of V(IV). Journal of Catalysis, 1997, 166, 195-205.	3.1	104
84	A study of Ni/Al2O3 and Ni–La/Al2O3 catalysts for the steam reforming of ethanol and phenol. Applied Catalysis B: Environmental, 2015, 174-175, 21-34.	10.8	104
85	Abatement of ammonia and amines from waste gases: a summary. Journal of Loss Prevention in the Process Industries, 2003, 16, 157-163.	1.7	103
86	FT-IR study of the surface properties of polycrystalline vanadia. Journal of Molecular Catalysis, 1989, 50, 231-240.	1.2	101
87	On the Vibrational Spectra and Structure of FeCrO3 and of the Ilmenite-Type Compounds CoTiO3 and NiTiO3. Journal of Solid State Chemistry, 1994, 112, 9-14.	1.4	100
88	Basic catalysis and catalysis assisted by basicity: FT-IR and TPD characterization of potassium-doped alumina. Applied Catalysis A: General, 2011, 400, 61-69.	2.2	99
89	Performance of ZrO 2 -supported Nb- and W-oxide in the gas-phase dehydration of glycerol to acrolein. Journal of Catalysis, 2013, 297, 93-109.	3.1	99
90	Yttria-stabilized zirconia (YSZ) supported Ni–Co alloys (precursor of SOFC anodes) as catalysts for the steam reforming of ethanol. International Journal of Hydrogen Energy, 2008, 33, 3728-3735.	3.8	98

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91	An investigation of the surface acidity of mesoporous Al-containing MCM-41 and of the external surface of ferrierite through pivalonitrile adsorption. Applied Catalysis A: General, 1999, 182, 225-235.	2.2	97
92	FT-IR study of the surface chemistry of anatase-supported vanadium oxide monolayer catalysts. Langmuir, 1986, 2, 577-582.	1.6	96
93	Surface and catalytic properties of Vanadia-Titania and Tungsta-Titania systems in the Selective Catalytic Reduction of nitrogen oxides. Catalysis Today, 1993, 17, 131-139.	2.2	95
94	Transition metal mixed oxides as combustion catalysts: preparation, characterization and activity mechanisms. Catalysis Today, 1997, 33, 239-249.	2.2	95
95	An FT-IR study of the conversion of 2-chloropropane, o-dichlorobenzene and dibenzofuran on V2O5-MoO3-TiO2 SCR-DeNOx catalysts. Applied Catalysis B: Environmental, 2002, 39, 343-352.	10.8	95
96	Oxidation and ammoxidation of toluene over vanadium-titanium oxide catalysts: A Fourier transform infrared and flow reactor study. Journal of Catalysis, 1987, 106, 471-482.	3.1	94
97	Gas-phase dehydration of glycerol to acrolein over Al2O3-, SiO2-, and TiO2-supported Nb- and W-oxide catalysts. Journal of Catalysis, 2013, 307, 170-184.	3.1	94
98	Methanation of carbon dioxide on Ru/Al2O3: Catalytic activity and infrared study. Catalysis Today, 2016, 277, 21-28.	2.2	94
99	An IR study of thermally stable V2O5-WO3 -TiO2 SCR catalysts modified with silica and rare-earths (Ce,) Tj ETQq1	18:88431	l4.rgBT /Ov
100	A FT-IR study of the adsorption of indole, carbazole, benzothiophene, dibenzothiophene and 4,6-dibenzothiophene over solid adsorbents and catalysts. Applied Catalysis A: General, 2002, 224, 167-178.	2.2	92
101	Bulk and surface properties of commercial kaolins. Applied Clay Science, 2010, 48, 446-454.	2.6	92
102	A study of Mn-Ti oxide powders and their behaviour in propane oxidation catalysis. Journal of Materials Chemistry, 1998, 8, 2525-2531.	6.7	91
103	A study of anatase–supported Mn oxide as catalysts for 2-propanol oxidation. Applied Catalysis B: Environmental, 1999, 22, 249-259.	10.8	90
104	A Fourier Transform Infrared (FTIR) Study of the Reaction of Triethoxysilane (TES) and Bis[3-triethoxysilylpropyl]tetrasulfane (TESPT) with the Surface of Amorphous Silica. Journal of Physical Chemistry B, 2004, 108, 3563-3572.	1.2	90
105	Thermal stability of vanadia–titania catalysts. Journal of Materials Chemistry, 1993, 3, 1239-1249.	6.7	89
106	Characterization and hydrocarbon oxidation activity of coprecipitated mixed oxides Mn3O4/Al2O3. Catalysis Today, 2001, 70, 213-225.	2.2	89
107	Low-Temperature Dehydrogenation of Ethanol on Atomically Dispersed Gold Supported on ZnZrO <sub><i>x</i></sub> . ACS Catalysis, 2016, 6, 210-218.	5.5	89
108	Fourier transform infrared spectroscopic studies of the reactivity of vanadia-titania catalysts toward olefins. 1. Propylene. The Journal of Physical Chemistry, 1990, 94, 8939-8945.	2.9	88

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109	One-step synthesis of a structurally organized mesoporous CuO-CeO2-Al2O3 system for the preferential CO oxidation. Applied Catalysis A: General, 2008, 335, 46-55.	2.2	88
110	Surface chemistry and reactivity of ceria–zirconia-supported palladium oxide catalysts for natural gas combustion. Journal of Catalysis, 2009, 263, 134-145.	3.1	86
111	Surface structure and reactivity of vanadium oxide supported on titanium dioxide. V2O5/TiO2(rutile) Catalysts prepared by Hydrolysis. Journal of the Chemical Society Faraday Transactions I, 1988, 84, 237.	1.0	85
112	Anatase crystal growth and phase transformation to rutile in high-area TiO2, MoO3–TiO2and other TiO2-supported oxide catalytic systems. Journal of Materials Chemistry, 1995, 5, 1245-1249.	6.7	85
113	IR study of alkene allylic activation on magnesium ferrite and alumina catalysts. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 4687.	1.7	85
114	Microcalorimetric and FT-IR spectroscopic study of the adsorption of isopropyl alcohol and hexafluoroisopropyl alcohol on titanium dioxide. Langmuir, 1987, 3, 52-58.	1.6	84
115	Are the active sites of protonic zeolites generated by the cavities?. Catalysis Today, 2006, 116, 132-142.	2.2	84
116	Preparation, solid-state characterization, and surface chemistry of high-surface-area nickel-aluminum (NixAl2-2xO3-2x) mixed oxides. Chemistry of Materials, 1992, 4, 595-605.	3.2	83
117	PREPARATION AND CHARACTERIZATION OF MAGNESIUM CHROMITE AND MAGNESIUM FERRITE AEROGELS. Chemical Engineering Communications, 1993, 123, 1-16.	1.5	82
118	A spectroscopic study of amorphous and crystalline Ti-containing silicas and their surface acidity. Topics in Catalysis, 2001, 15, 63-71.	1.3	82
119	On the mechanisms and the selectivity determining steps in syngas conversion over supported metal catalysts: An IR study. Applied Catalysis A: General, 2007, 316, 68-74.	2.2	82
120	Ethanol dehydration on silica-aluminas: Active sites and ethylene/diethyl ether selectivities. Catalysis Communications, 2015, 68, 110-115.	1.6	82
121	On the effect of dopants and additives on the state of surface vanadyl centers of vanadia-titania catalysts. Catalysis Letters, 1993, 18, 299-303.	1.4	81
122	FT-IR Studies on Light Olefin Skeletal Isomerization Catalysis. Journal of Catalysis, 1997, 168, 334-348.	3.1	81
123	FT-IR study of the surface properties of silicon nitride. Materials Chemistry and Physics, 1986, 14, 123-140.	2.0	80
124	Use of overtone bands to monitor the state of the catalyst active phases during infrared studies of adsorption and catalytic reactions. Spectrochimica Acta Part A: Molecular Spectroscopy, 1986, 42, 443-445.	0.1	80
125	Structural effects on the adsorption of alcohols on titanium dioxides. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 1591.	1.0	80
126	IR studies on the activation of C–H hydrocarbon bonds on oxidation catalysts. Catalysis Today, 1999, 49, 453-465.	2.2	80

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127	An IR study of methanol steam reforming over ex-hydrotalcite Cu–Zn–Al catalysts. Journal of Molecular Catalysis A, 2007, 266, 188-197.	4.8	79
128	Surface characterization of amorphous alumina and its crystallization products. Journal of Catalysis, 1989, 117, 42-51.	3.1	78
129	Spectroscopic characterization of magnesium vanadate catalysts. Part 1.â€"Vibrational characterization of Mg3(VO4)2, Mg2V2O7and MgV2O6powders. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 1161-1170.	1.7	77
130	Characterization and reactivity of MoO3/SiO2 catalysts in the selective catalytic oxidation of ammonia to N2. Catalysis Today, 2000, 61, 187-195.	2.2	77
131	Methanol steam reforming over ex-hydrotalcite Cu–Zn–Al catalysts. Applied Catalysis A: General, 2006, 310, 70-78.	2.2	77
132	Influence of the Silane Modifiers on the Surface Thermodynamic Characteristics and Dispersion of the Silica into Elastomer Compounds. Journal of Physical Chemistry B, 2007, 111, 4495-4502.	1.2	77
133	Phosphoric acid on oxide carriers. 1. Characterization of silica, alumina, and titania impregnated by phosphoric acid. Langmuir, 1989, 5, 911-916.	1.6	76
134	Surface acidity modifications induced by thermal treatments and acid leaching on microcrystalline H-BEA zeolite. A FTIR, XRD and MAS-NMR study. Physical Chemistry Chemical Physics, 2000, 2, 3529-3537.	1.3	76
135	Surface characterization of a grafted vanadium–titanium dioxide catalyst. Journal of the Chemical Society Faraday Transactions I, 1985, 81, 1003.	1.0	75
136	Characterization of alumina–titania mixed oxide supports. Microporous and Mesoporous Materials, 1998, 23, 265-275.	2.2	75
137	Purification of Biogases from Siloxanes by Adsorption: On the Regenerability of Activated Carbon Sorbents. Energy & Carbon Sorbents. Energy & Carbon Sorbents. Energy & Carbon Sorbents. Energy & Carbon Sorbents.	2.5	74
138	In Situ DRIFTS-MS Study of the Anaerobic Oxidation of Ethanol over Spinel Mixed Oxides. Journal of Physical Chemistry C, 2013, 117, 23908-23918.	1.5	74
139	Deoxygenation of waste cooking oil and non-edible oil for the production of liquid hydrocarbon biofuels. Waste Management, 2016, 47, 62-68.	3.7	73
140	FTIR studies on the selective oxidation and combustion of light hydrocarbns at metal oxide surfaces. Propane and propene oxidation on MgCr2O4. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 3347.	1.7	72
141	Modification of the surface pathways in alkane oxidation by selective doping of Broensted acid sites of vanadyl pyrophosphate. The Journal of Physical Chemistry, 1990, 94, 6813-6819.	2.9	71
142	New Pd/Pt on Mg/Al basic mixed oxides for the hydrogenation and hydrogenolysis of naphthalene. Journal of Catalysis, 2004, 223, 372-381.	3.1	71
143	n-Butane selective oxidation on vanadium-based oxides: Dependence on catalyst microstructure. Applied Catalysis, 1986, 25, 265-272.	1.1	70
144	Surface acidity of silica-titania mixed oxides. Journal of Catalysis, 1992, 135, 505-517.	3.1	70

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145	FTIR study of species arising after NO adsorption and NO+O2 co-adsorption on CoY: comparison with Co-ZSM-5. Microporous and Mesoporous Materials, 2001, 46, 299-309.	2.2	70
146	Solid acid catalysts from clays. Applied Catalysis A: General, 2000, 193, 55-69.	2.2	69
147	Structural, Surface, and Catalytic Properties of Aluminas. Advances in Catalysis, 2014, 57, 319-404.	0.1	69
148	Facile synthesis of a mesoporous alumina and its application as a support of Ni-based autothermal reforming catalysts. International Journal of Hydrogen Energy, 2016, 41, 3456-3464.	3.8	68
149	Catalytic materials based on silica and alumina: Structural features and generation of surface acidity. Progress in Materials Science, 2019, 104, 215-249.	16.0	68
150	On the consistency of data obtained from different techniques concerning the surface structure of vanadia-titania catalysts: Reply to the comment of Israel E. Wachs. Journal of Catalysis, 1990, 124, 574-576.	3.1	67
151	FTIR studies on the selective oxidation and combustion of light hydrocarbons at metal oxide surfaces Part $3.\hat{a}\in$ Comparison of the oxidation of C3 organic compounds over Co3O4, MgCr2O4 and CuO. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 175-180.	1.7	67
152	A Vibrational and Spectroscopic Study of WO3/TiO2â^Al2O3Catalyst Precursors. Langmuir, 1998, 14, 630-639.	1.6	67
153	Surface and catalytic properties of some Î <sup>3</sup> -Al2O3 powders. Applied Catalysis A: General, 2014, 483, 41-51.	2.2	67
154	The use of vibrational spectroscopies in studies of heterogeneous catalysis by metal oxides: an introduction. Catalysis Today, 1996, 27, 323-352.	2.2	66
155	FTIR study of the interaction of some branched aliphatic molecules with the external and internal sites of H-ZSM5 zeolite. Physical Chemistry Chemical Physics, 2000, 2, 3341-3348.	1.3	66
156	Zinc–aluminum hydrotalcites as precursors of basic catalysts: Preparation, characterization and study of the activation of methanol. Catalysis Today, 2010, 152, 104-109.	2.2	66
157	Ceria–zirconia based catalysts for ethanol steam reforming. Fuel, 2015, 153, 166-175.	3.4	66
158	Conversion of ethanol over transition metal oxide catalysts: Effect of tungsta addition on catalytic behaviour of titania and zirconia. Applied Catalysis A: General, 2015, 489, 180-187.	2.2	66
159	On the mechanism of methanol oxidation over vanadia-based catalysts: a FT-IR study of the adsorption of methanol, formaldehyde and formic acid on vanad. Journal of Molecular Catalysis, 1989, 50, 241-249.	1.2	65
160	Surface dynamics of adsorbed species on heterogeneous oxidation catalysts. Evidence from the oxidation of C4 and C5 alkanes on vanadyl pyrophosphate. Journal of the American Chemical Society, 1989, 111, 46-54.	6.6	64
161	FT-IR characterization of silicated aluminas, active olefin skeletal isomerization catalysts. Catalysis Today, 1997, 33, 335-352.	2,2	64
162	Redox and acid reactivity of wolframyl centers on oxide carriers: Brønsted, Lewis and redox sites. Applied Catalysis A: General, 2001, 216, 181-194.	2.2	64

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163	Cobalt-based nanoparticles as catalysts for low temperature hydrogen production by ethanol steam reforming. International Journal of Hydrogen Energy, 2013, 38, 82-91.	3.8	64
164	Oxidation of methanol to methyl formate over V-Ti oxide catalysts. Catalysis Today, 1987, 1, 209-218.	2.2	63
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