Fernando Rey

List of Publications by Citations

191 papers	11,668 citations	60 h-index	104 g-index
208 ext. papers	12,628 ext. citations	8.1 avg, IF	6.07 L-index

#	Paper	IF	Citations
191	Heterogeneous catalysts obtained by grafting metallocene complexes onto mesoporous silica. *Nature*, **1995**, 378, 159-162	50.4	1023
190	A large-cavity zeolite with wide pore windows and potential as an oil refining catalyst. *Nature*, **2002** , 418, 514-7	50.4	464
189	Supramolecular self-assembled molecules as organic directing agent for synthesis of zeolites. *Nature*, **2004**, 431, 287-90	50.4	453
188	Metal-organic nanoporous structures with anisotropic photoluminescence and magnetic properties and their use as sensors. *Angewandte Chemie - International Edition*, **2008**, 47, 1080-3	16.4	367
187	A miniaturized linear pH sensor based on a highly photoluminescent self-assembled europium(III) metal-organic framework. *Angewandte Chemie - International Edition*, **2009**, 48, 6476-9	16.4	293
186	Thermal decomposition of hydrotalcites. An infrared and nuclear magnetic resonance spectroscopic study. *Journal of the Chemical Society, Faraday Transactions*, **1992**, 88, 2233-2238		237
185	Determination of base properties of hydrotalcites: Condensation of benzaldehyde with ethyl acetoacetate. *Journal of Catalysis*, **1992**, 134, 58-65	7.3	237
184	Pure Polymorph C of Zeolite Beta Synthesized by Using Framework Isomorphous Substitution as a Structure-Directing Mechanism. *Angewandte Chemie - International Edition*, **2001**, 40, 2277-2280	16.4	233
183	A zeolite with interconnected 8-, 10- and 12-ring pores and its unique catalytic selectivity. *Nature Materials*, **2003**, 2, 493-7	27	226
182	Towards the rational design of efficient organic structure-directing agents for zeolite synthesis. *Angewandte Chemie - International Edition*, **2013**, 52, 13880-9	16.4	225
181	New insights on CO2-methane separation using LTA zeolites with different Si/Al ratios and a first comparison with MOFs. *Langmuir*, **2010**, 26, 1910-7	4	201
180	Control of zeolite framework flexibility and pore topology for separation of ethane and ethylene. *Science*, **2017**, 358, 1068-1071	33.3	195
179	Preferential Location of Ge in the Double Four-Membered Ring Units of ITQ-7 Zeolite. *Journal of Physical Chemistry B*, **2002**, 106, 2634-2642	3.4	194
178	Synthesis of MCM-41 with Different Pore Diameters without Addition of Auxiliary Organics. *Chemistry of Materials*, **1997**, 9, 2123-2126	9.6	191
177	ITQ-15: the first ultralarge pore zeolite with a bi-directional pore system formed by intersecting 14- and 12-ring channels, and its catalytic implications. *Chemical Communications*, **2004**, 1356-7	5.8	191
176	Strategies to improve the epoxidation activity and selectivity of Ti-MCM-41. *Chemical Communications*, **1998**, 2211-2212	5.8	182
175	Vanadium Oxide Supported on Mesoporous MCM-41 as Selective Catalysts in the Oxidative Dehydrogenation of Alkanes. *Journal of Catalysis*, **2001**, 203, 443-452	7.3	181

174	Synthesis of a new zeolite structure ITQ-24, with intersecting 10- and 12-membered ring pores. *Journal of the American Chemical Society*, **2003**, 125, 7820-1	16.4	167
173	Structure and catalytic properties of the most complex intergrown zeolite ITQ-39 determined by electron crystallography. *Nature Chemistry*, **2012**, 4, 188-94	17.6	151
172	Structure–functionality relationships of grafted Ti-MCM41 silicas. Spectroscopic and catalytic studies. *Physical Chemistry Chemical Physics*, **1999**, 1, 585-592	3.6	150
171	Multifunctional Luminescent and Proton-Conducting Lanthanide Carboxyphosphonate Open-Framework Hybrids Exhibiting Crystalline-to-Amorphous-to-Crystalline Transformations. *Chemistry of Materials*, **2012**, 24, 3780-3792	9.6	149
170	Hydrotalcites as Base Catalysts: Influence of the Chemical Composition and Synthesis Conditions on the Dehydrogenation of Isopropanol. *Journal of Catalysis*, **1994**, 148, 205-212	7.3	142
169	Methane hydrate formation in confined nanospace can surpass nature. *Nature Communications*, **2015**, 6, 6432	17.4	133
168	Preferential location of Ge atoms in polymorph C of beta zeolite (ITQ-17) and their structure-directing effect: a computational, XRD, and NMR spectroscopic study. *Angewandte Chemie - International Edition*, **2002**, 41, 4722-6	16.4	123
167	A zeolite structure (ITQ-13) with three sets of medium-pore crossing channels formed by 9- and 10-rings. *Angewandte Chemie - International Edition*, **2003**, 42, 1156-9	16.4	121
166	Catalytic cracking performance of alkaline-treated zeolite Beta in the terms of acid sites properties and their accessibility. *Journal of Catalysis*, **2014**, 312, 46-57	7.3	120
165	Zeolite Rho: a highly selective adsorbent for CO2/CH4 separation induced by a structural phase modification. *Chemical Communications*, **2012**, 48, 215-7	5.8	118
164	High proton conductivity in a flexible, cross-linked, ultramicroporous magnesium tetraphosphonate hybrid framework. *Inorganic Chemistry*, **2012**, 51, 7689-98	5.1	110
163	Modular organic structure-directing agents for the synthesis of zeolites. *Science*, **2010**, 330, 1219-22	33.3	110
162	Using the "memory effect" of hydrotalcites for improving the catalytic reduction of nitrates in water. *Journal of Catalysis*, **2004**, 221, 62-66	7.3	110
161	Spin-crossover modification through selective CO2 sorption. *Journal of the American Chemical Society*, **2013**, 135, 15986-9	16.4	108
160	Desilication of highly siliceous zeolite ZSM-5 with NaOH and NaOH/tetrabutylamine hydroxide. *Microporous and Mesoporous Materials*, **2013**, 168, 195-205	5.3	103
159	A zeolitic structure (ITQ-34) with connected 9- and 10-ring channels obtained with phosphonium cations as structure directing agents. *Journal of the American Chemical Society*, **2008**, 130, 16482-3	16.4	99
158	V-containing MCM-41 and MCM-48 catalysts for the selective oxidation of propane in gas phase. *Applied Catalysis A: General*, **2001**, 209, 155-164	5.1	97
157	Simultaneous Catalytic Removal of SOxand NOxwith Hydrotalcite-Derived Mixed Oxides Containing Copper, and Their Possibilities to Be Used in FCC Units. *Journal of Catalysis*, **1997**, 170, 140-149	7.3	96

156	MCM-41‐Quaternary organic tetraalkylammonium hydroxide composites as strong and stable Br‐sted base catalysts. *Chemical Communications*, **1999**, 593-594	5.8	93
155	P-derived organic cations as structure-directing agents: synthesis of a high-silica zeolite (ITQ-27) with a two-dimensional 12-ring channel system. *Journal of the American Chemical Society*, **2006**, 128, 8862-7	16.4	89
154	One step synthesis of highly active and selective epoxidation catalysts formed by organic‐inorganic Ti containing mesoporous composites. *Chemical Communications*, **1998**, 1899-1900	5.8	88
153	Mesoporous Materials as Catalysts for the Production of Chemicals: Synthesis of Alkyl Glucosides on MCM-41. *Journal of Catalysis*, **1999**, 183, 76-82	7.3	88
152	Extraction of extra-framework aluminium in ultrastable Y zeolites by (NH4)2SiF6 treatments. *Applied Catalysis*, **1990**, 59, 267-274		88
151	Synthesis and characterization of the all-silica pure polymorph C and an enriched polymorph B intergrowth of zeolite beta. *Angewandte Chemie - International Edition*, **2006**, 45, 8013-5	16.4	81
150	Ti/ITQ-2, a new material highly active and selective for the epoxidation of olefins with organic hydroperoxides. *Chemical Communications*, **1999**, 779-780	5.8	80
149	Elucidating the local environment of Ti(IV) active sites in Ti-MCM-48: a comparison between silylated and calcined catalysts. *Microporous and Mesoporous Materials*, **2001**, 44-45, 345-356	5.3	78
148	Pure silica ITQ-32 zeolite allows separation of linear olefins from paraffins. *Chemical Communications*, **2007**, 1233-5	5.8	76
147	A new aluminosilicate molecular sieve with a system of pores between those of ZSM-5 and beta zeolite. *Journal of the American Chemical Society*, **2011**, 133, 9497-505	16.4	75
146	Crystal Structure of ITQ-26, a 3D Framework with Extra-Large Pores. *Chemistry of Materials*, **2008**, 20, 5325-5331	9.6	75
145	Synthesis of pure polymorph C of Beta zeolite in a fluoride-free system. *Chemical Communications*, **2001**, 1486-1487	5.8	73
144	One-step synthesis of citronitril on hydrotalcite derived base catalysts. *Applied Catalysis A: General*, **1994**, 114, 215-225	5.1	73
143	Computational and Experimental Approach to the Role of Structure-Directing Agents in the Synthesis of Zeolites: The Case of Cyclohexyl Alkyl Pyrrolidinium Salts in the Synthesis of EU-1, ZSM-11, and ZSM-12 Zeolites. *Journal of Physical Chemistry B*, **2003**, 107, 5432-5440	3.4	72
142	Heterogeneized Br‐sted base catalysts for fine chemicals production: grafted quaternary organic ammonium hydroxides as catalyst for the production of chromenes and coumarins. *Applied Catalysis A: General*, **2000**, 194-195, 241-252	5.1	71
141	Catalytic Air Oxidation of Thiols Mediated at a Mo(VI)O2 Complex Center Intercalated in a Zn(II)-Al(III) Layered Double Hydroxide Host. *Journal of Catalysis*, **1995**, 152, 237-242	7.3	70
140	Metal‐Organic Nanoporous Structures with Anisotropic Photoluminescence and Magnetic Properties and Their Use as Sensors. *Angewandte Chemie*, **2008**, 120, 1096-1099	3.6	69
139	Cation Gating and Relocation during the Highly Selective ‘Trapdoor’ Adsorption of CO2 on Univalent Cation Forms of Zeolite Rho. *Chemistry of Materials*, **2014**, 26, 2052-2061	9.6	68

138	Paving the way for methane hydrate formation on metal-organic frameworks (MOFs). *Chemical Science*, **2016**, 7, 3658-3666	9.4	66
137	Synthesis design and structure of a multipore zeolite with interconnected 12- and 10-MR channels. *Journal of the American Chemical Society*, **2012**, 134, 6473-8	16.4	64
136	Synthesis and structure of the bidimensional zeolite ITQ-32 with small and large pores. *Journal of the American Chemical Society*, **2005**, 127, 11560-1	16.4	63
135	Distribution of Fluorine and Germanium in a New Zeolite Structure ITQ-13 Studied by 19F Nuclear Magnetic Resonance. *Chemistry of Materials*, **2003**, 15, 3961-3963	9.6	61
134	Intercalation of [MoVIO2(O2CC(S)Ph2)2]2- in a Zn(II)-Al(III) Layered Double Hydroxide Host: A Strategy for the Heterogeneous Catalysis of the Air Oxidation of Thiols. *Journal of the American Chemical Society*, **1994**, 116, 1595-1596	16.4	61
133	Probing active sites in solid catalysts for the liquid-phase epoxidation of alkenes. *Journal of the Chemical Society Chemical Communications*, **1994**, 2279		61
132	Ultrafast Electron Diffraction Tomography for Structure Determination of the New Zeolite ITQ-58. *Journal of the American Chemical Society*, **2016**, 138, 10116-9	16.4	59
131	Pyrene covalently anchored on a large external surface area zeolite as a selective heterogeneous sensor for iodide. *Chemical Communications*, **2002**, 1100-1	5.8	58
130	Pure Polymorph C of Zeolite Beta Synthesized by Using Framework Isomorphous Substitution as a Structure-Directing Mechanism. *Angewandte Chemie*, **2001**, 113, 2337-2340	3.6	56
129	A New United Atom Force Field for Adsorption of Alkenes in Zeolites. *Journal of Physical Chemistry C*, **2008**, 112, 2492-2498	3.8	55
128	Synthesis, characterization, and framework heteroatom localization in ITQ-21. *Journal of the American Chemical Society*, **2004**, 126, 13414-23	16.4	54
127	Synchrotron-Based Method for the Study of Crystallization: Templated Formation of CoALPO-5 Catalyst. *Chemistry of Materials*, **1995**, 7, 1435-1436	9.6	54
126	Synthesis and characterisation by X-ray absorption spectroscopy of a suite of seven mesoporous catalysts containing metal ions in framework sites. *Topics in Catalysis*, **1996**, 3, 121-134	2.3	54
125	Hydrothermal stability and catalytic performance of desilicated highly siliceous zeolites ZSM-5. *Journal of Catalysis*, **2016**, 339, 256-269	7.3	53
124	Mesopore-modified mordenites as catalysts for catalytic pyrolysis of biomass and cracking of vacuum gasoil processes. *Green Chemistry*, **2013**, 15, 1647	10	51
123	Probing the onset of crystallization of a microporous catalyst by combined X-ray absorption spectroscopy and X-ray diffraction. *Journal of the Chemical Society Chemical Communications*, **1995**, 2549		51
122	Photochemical modification of the surface area and tortuosity of a trans-1,2-bis(4-pyridyl)ethylene periodic mesoporous MCM organosilica. *Chemical Communications*, **2002**, 2012-3	5.8	50
121	A new microporous zeolitic silicoborate (ITQ-52) with interconnected small and medium pores. *Journal of the American Chemical Society*, **2014**, 136, 3342-5	16.4	49

120	Synthesis and structure determination of a new microporous zeolite with large cavities connected by small pores. *Journal of the American Chemical Society*, **2012**, 134, 13232-5	16.4	47
119	Rationales Design von effizienten organischen strukturdirigierenden Reagentien für die Zeolithsynthese. *Angewandte Chemie*, **2013**, 125, 14124-14134	3.6	47
118	Solvent-Free Synthesis of ZIFs: A Route toward the Elusive Fe(II) Analogue of ZIF-8. *Journal of the American Chemical Society*, **2019**, 141, 7173-7180	16.4	46
117	Electrostatic and covalent immobilisation of enzymes on ITQ-6 delaminated zeolitic materials. *Chemical Communications*, **2001**, 419-420	5.8	46
116	Optimization of SOx additives of FCC catalysts based on MgO-Al2O3 mixed oxides produced from hydrotalcites. *Applied Catalysis B: Environmental*, **1994**, 4, 29-43	21.8	44
115	On the shape selective acylation of 2-methoxynaphthalene over polymorphic of Beta (ITQ-17). *Journal of Catalysis*, **2003**, 217, 406-416	7.3	43
114	Analysis of the ITQ-12 Zeolite Performance in Propane/Propylene Separations Using a Combination of Experiments and Molecular Simulations. *Journal of Physical Chemistry C*, **2010**, 114, 14907-14914	3.8	42
113	Synthesis of cubic mesoporous MCM-48 materials from the system SiO2:CTAOH/Br:H2O. *Microporous and Mesoporous Materials*, **2001**, 44-45, 9-16	5.3	39
112	Hydrotalcite-derived mixed oxides containing copper: catalysts for the removal of nitric oxide. *Journal of the Chemical Society, Faraday Transactions*, **1996**, 92, 4331		38
111	A highly stable and hierarchical tetrathiafulvalene-based metal-organic framework with improved performance as a solid catalyst. *Chemical Science*, **2018**, 9, 2413-2418	9.4	37
110	Observation of a 390-nm Emission Band Associated with Framework Ti in Mesoporous Titanosilicates. *Chemistry of Materials*, **2000**, 12, 3068-3072	9.6	37
109	Tuning the Adsorption Properties of Zeolites as Adsorbents for CO2 Separation: Best Compromise between the Working Capacity and Selectivity. *Industrial & Engineering Chemistry Research*, **2014**, 53, 9860-9874	3.9	36
108	Synthesis of a novel zeolite through a pressure-induced reconstructive phase transition process. *Angewandte Chemie - International Edition*, **2013**, 52, 10458-62	16.4	36
107	A fluoride-catalyzed sol–gel route to catalytically active non-ordered mesoporous silica materials in the absence of surfactants. *Journal of Materials Chemistry*, **2005**, 15, 1742		36
106	A Miniaturized Linear pH Sensor Based on a Highly Photoluminescent Self-Assembled Europium(III) Metal–Organic Framework. *Angewandte Chemie*, **2009**, 121, 6598-6601	3.6	35
105	Characterisation of the active copper species for the NOx removal on Cu/Mg/Al mixed oxides derived from hydrotalcites: an in situ XPS/XAES study. *Journal of Materials Chemistry*, **2001**, 11, 1675-1680		34
104	The first zeolite with a tri-directional extra-large 14-ring pore system derived using a phosphonium-based organic molecule. *Chemical Communications*, **2015**, 51, 7602-5	5.8	32
103	An NMR study on the adsorption and reactivity of chloroform over alkali exchanged zeolites X and Y. *Physical Chemistry Chemical Physics*, **1999**, 1, 4529-4535	3.6	32

102	Quinoline as a probe molecule for determination of external Brønsted and Lewis acidity in zeolites. *Zeolites*, **1993**, 13, 56-59		32
101	Ultra fast and efficient synthesis of Ti-ITQ-7 and positive catalytic implications. *Chemical Communications*, **2000**, 1725-1726	5.8	31
100	Hierarchical Mordenite Dedicated to the Fluid Catalytic Cracking Process: Catalytic Performance Regarding Textural and Acidic Properties. *Journal of Physical Chemistry C*, **2014**, 118, 28043-28054	3.8	29
99	Synthesis and characterization of silica-alumina prepared from tetraalkylammonium hydroxides. *Applied Catalysis*, **1990**, 63, 145-164		29
98	Transformation of layered aluminosilicates and gallosilicates with kanemite structure into mesoporous materials. *Journal of Materials Chemistry*, **2000**, 10, 993-1000		28
97	SPEEK-based proton exchange membranes modified with MOF-encapsulated ionic liquid. *Materials Chemistry and Physics*, **2019**, 236, 121792	4.4	26
96	Cobalt Metal-Organic Framework Based on Two Dinuclear Secondary Building Units for Electrocatalytic Oxygen Evolution. *ACS Applied Materials & Interfaces*, **2019**, 11, 46658-46665	9.5	26
95	Determination of Phase Composition of MCM-48/Lamellar Phase Mixtures Using Nitrogen Adsorption and Thermogravimetry. *Chemistry of Materials*, **2002**, 14, 4434-4442	9.6	25
94	Spectroscopic, calorimetric, and catalytic evidences of hydrophobicity on Ti-MCM-41 silylated materials for olefin epoxidations. *Applied Catalysis A: General*, **2015**, 507, 14-25	5.1	24
93	Bioethanol steam reforming on Ni-based modified mordenite. Effect of mesoporosity, acid sites and alkaline metals. *International Journal of Hydrogen Energy*, **2012**, 37, 7101-7108	6.7	24
92	Intensified Biobutanol Recovery by using Zeolites with Complementary Selectivity. *ChemSusChem*, **2017**, 10, 2968-2977	8.3	23
91	Thermochemistry of (GexSi1⊠)O2 zeolites. *Microporous and Mesoporous Materials*, **2003**, 59, 177-183	5.3	23
90	Synthesis of ITQ-21 in OH- media. *Chemical Communications*, **2003**, 1050-1	5.8	23
89	The effect of extra framework species on the intrinsic negative thermal expansion property of zeolites with the LTA topology. *Chemical Communications*, **2012**, 48, 5829-31	5.8	22
88	ITQ-16, a new zeolite family of the beta group with different proportions of polymorphs A, B and C. *Chemical Communications*, **2001**, 1720-1	5.8	22
87	Model Reactions of Molybdo-Reductase. A Novel and Highly Efficient Reduction of Nitrobenzene to Aniline Catalyzed by a Molybdenum-Mediated Oxygen Atom Transfer Reaction. *Journal of the American Chemical Society*, **1995**, 117, 6781-6782	16.4	22
86	Cobalt Metal-Organic Framework Based on Layered Double Nanosheets for Enhanced Electrocatalytic Water Oxidation in Neutral Media. *Journal of the American Chemical Society*, **2020**, 142, 19198-19208	16.4	22
85	Synthesis, characterisation and catalytic performance of the solid acid DAF-1. *Journal of the Chemical Society, Faraday Transactions*, **1995**, 91, 3537		21

84	On the atomic environment and the mode of action of the catalytic centre in an intercalated oxo□holybdenum complex [MoO2{O2CC(S)Ph2}2]2□for oxygen-transfer reactions. *Chemical Communications*, **1996**, 1613-1614	5.8	21
83	Ag-zeolites as fungicidal material: Control of citrus green mold caused by Penicillium digitatum. *Microporous and Mesoporous Materials*, **2017**, 254, 69-76	5.3	19
82	Critical Role of Dynamic Flexibility in Ge-Containing Zeolites: Impact on Diffusion. *Chemistry - A European Journal*, **2016**, 22, 10036-43	4.8	19
81	Correspondence: Strongly-driven Re+CO redox reaction at high-pressure and high-temperature. *Nature Communications*, **2016**, 7, 13647	17.4	19
80	Thermochemistry of (GexSi1□)O2 zeolites. *Microporous and Mesoporous Materials*, **2003**, 64, 127-133	5.3	18
79	A new synthesis method for the preparation of ITQ-7 zeolites and the characterisation of the resulting materials. *Comptes Rendus Chimie*, **2005**, 8, 369-378	2.7	18
78	Synthesis and Characterization of the All-Silica Pure Polymorph C and an Enriched Polymorph B Intergrowth of Zeolite Beta. *Angewandte Chemie*, **2006**, 118, 8181-8183	3.6	17
77	Preferential Location of Ge Atoms in Polymorph C of Beta Zeolite (ITQ-17) and Their Structure-Directing Effect: A Computational, XRD, and NMR Spectroscopic Study. *Angewandte Chemie*, **2002**, 114, 4916-4920	3.6	17
76	Influence of silylation on the catalytic activity of Ti-MCM-41 during epoxidation of olefins.. *Studies in Surface Science and Catalysis*, **2000**, 169-178	1.8	17
75	Reactions of Tin(II) Fluoride with Halogens. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **1989**, 575, 202-208	1.3	17
74	Ligand-Functionalization-Controlled Activity of Metal-Organic Framework-Encapsulated Pt Nanocatalyst toward Activation of Water. *Nano Letters*, **2020**, 20, 426-432	11.5	17
73	Structural Evolution of CO2-Filled Pure Silica LTA Zeolite under High-Pressure High-Temperature Conditions. *Chemistry of Materials*, **2017**, 29, 4502-4510	9.6	16
72	Synthesis and structure determination via ultra-fast electron diffraction of the new microporous zeolitic germanosilicate ITQ-62. *Chemical Communications*, **2018**, 54, 2122-2125	5.8	16
71	Inelastic Neutron Scattering Study on the Location of Br□sted Acid Sites in High Silica LTA Zeolite. *Journal of Physical Chemistry C*, **2016**, 120, 24904-24909	3.8	16
70	Enthalpies of formation of Ge-zeolites: ITQ-21 and ITQ-22. *Microporous and Mesoporous Materials*, **2004**, 74, 87-92	5.3	16
69	An in situ XAS study of the activation of precursor-dependent Pd nanoparticles. *Physical Chemistry Chemical Physics*, **2018**, 20, 12700-12709	3.6	15
68	Thermodynamic analysis of framework deformation in Na,Cs-RHO zeolite upon CO2 adsorption. *Physical Chemistry Chemical Physics*, **2014**, 16, 24391-400	3.6	15
67	Metastable solid solutions of alumina in magnesia. *Journal of Physics and Chemistry of Solids*, **1997**, 58, 1619-1624	3.9	15

66	Catalytic reduction of nitrates in natural water: is this a realistic objective?. *Journal of Catalysis*, **2004**, 227, 561-562	7.3	15
65	Intercalation of the oxo-transfer molybdenum(VI) complex [MoO2{O2CC(S) Ph2}2]2− into a zinc(II)–aluminium(III) layered double hydroxide host. Catalysis of the air oxidalton of thiols. *Journal of the Chemical Society Dalton Transactions*, **1994**, 2953-2957		15
64	High-Performance of Gas Hydrates in Confined Nanospace for Reversible CH4 /CO2 Storage. *Chemistry - A European Journal*, **2016**, 22, 10028-35	4.8	15
63	The First Study on the Reactivity of Water Vapor in Metal-Organic Frameworks with Platinum Nanocrystals. *Angewandte Chemie - International Edition*, **2019**, 58, 11731-11736	16.4	14
62	Influence of post-synthetic modifications on the composition, acidity and textural properties of ZSM-22 zeolite. *Catalysis Today*, **2018**, 299, 120-134	5.3	13
61	An Ultrahigh CO-Loaded Silicalite-1 Zeolite: Structural Stability and Physical Properties at High Pressures and Temperatures. *Inorganic Chemistry*, **2018**, 57, 6447-6455	5.1	13
60	Synthesis of a Novel Zeolite through a Pressure-Induced Reconstructive Phase Transition Process. *Angewandte Chemie*, **2013**, 125, 10652-10656	3.6	13
59	TNU-9, a new zeolite for the selective catalytic reduction of NO: An in situ X-ray absorption spectroscopy study. *Journal of Catalysis*, **2012**, 295, 22-30	7.3	12
58	Gas confinement in compartmentalized coordination polymers for highly selective sorption. *Chemical Science*, **2017**, 8, 3109-3120	9.4	11
57	Influence of Superacid Sites in Ultrastable Y Zeolites on Gas Oil Cracking. *ACS Symposium Series*, **1991**, 12-26	0.4	10
56	Highly active hybrid mesoporous silica-supported base organocatalysts for CC bond formation. *Catalysis Today*, **2020**, 345, 227-236	5.3	10
55	Zeolites and Other Adsorbents. *Green Energy and Technology*, **2019**, 173-208	0.6	9
54	Unequivocal evidence of the presence of titanols in Ti-MCM-48 mesoporous materials. A combined diffuse reflectance UV-Vis-Nir and 29Si-MAS-NMR study. *Research on Chemical Intermediates*, **2004**, 30, 871-877	2.8	9
53	Computational screening of structure directing agents for the synthesis of zeolites. A simplified model. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2019**, 234, 451-460	1	9
52	Isostructural compartmentalized spin-crossover coordination polymers for gas confinement. *Inorganic Chemistry Frontiers*, **2016**, 3, 808-813	6.8	8
51	Silver exchanged zeolites as bactericidal additives in polymeric materials. *Microporous and Mesoporous Materials*, **2020**, 305, 110367	5.3	7
50	Inelastic Neutron Scattering Study of the Aluminum and Brønsted Site Location in Aluminosilicate LTA Zeolites. *Journal of Physical Chemistry C*, **2018**, 122, 11450-11454	3.8	7
49	ITQ-39 zeolite, an efficient catalyst for the conversion of low value naphtha fractions into diesel fuel: The role of pore size on molecular diffusion and reactivity. *Journal of Catalysis*, **2016**, 333, 127-138	7.3	7

48	Host□Guest and Guest□Guest Interactions of P- and N-Containing Structure Directing Agents Entrapped inside MFI-Type Zeolite by Multinuclear NMR Spectroscopy. *Journal of Physical Chemistry C*, **2019**, 123, 22324-22334	3.8	7
47	High-Resolution Transmission Electron Microscopy (HRTEM) and X-ray Diffraction (XRD) Study of the Intergrowth in Zeolites ITQ-13/ITQ-34. *Journal of Physical Chemistry C*, **2009**, 113, 9305-9308	3.8	7
46	Charge matching between the occluded organic cations and zeolite framework as structure directing effect in zeolite synthesis. *Studies in Surface Science and Catalysis*, **2008**, 174, 249-252	1.8	7
45	The investigation of beta polymorphs by 19F nuclear magnetic resonance. *Studies in Surface Science and Catalysis*, **2004**, 154, 1289-1294	1.8	7
44	Thermal analysis of large pore microporous zincophosphates. *Thermochimica Acta*, **2001**, 376, 155-162	2.9	7
43	One-electron donor sites and their strength distribution on some hydrotalcite and MgO surfaces as studied by EPR spectroscopy. *Journal of the Chemical Society, Faraday Transactions*, **1994**, 90, 213-218		7
42	Functional Ag-Exchanged Zeolites as Biocide Agents. *ChemistrySelect*, **2018**, 3, 4676-4682	1.8	6
41	Evaluation of the silver species nature in Ag-ITQ2 zeolites by the CO oxidation reaction. *Catalysis Today*, **2020**, 345, 22-26	5.3	6
40	Adsorption of Alkanes in Zeolites LTA and FAU: Quasi-Equilibrated Thermodesorption Supported by Molecular Simulations. *Journal of Physical Chemistry C*, **2019**, 123, 29665-29678	3.8	6
39	Evidence of Hydronium Formation in Water□Chabazite Zeolite Using Inelastic Neutron Scattering Experiments and ab Initio Molecular Dynamics Simulations. *Journal of Physical Chemistry C*, **2020**, 124, 5436-5443	3.8	5
38	Use of Alkylarsonium Directing Agents for the Synthesis and Study of Zeolites. *Chemistry - A European Journal*, **2019**, 25, 16390-16396	4.8	5
37	Zeolite ITQ-21 as catalyst for the alkylation of benzene with propylene. *Studies in Surface Science and Catalysis*, **2008**, 1087-1090	1.8	5
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