

# Elena Groppo

## List of Publications by Year in descending order

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156  
papers

7,283  
citations

57758

44  
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64796

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171  
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171  
docs citations

171  
times ranked

7364  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reactivity of Surface Species in Heterogeneous Catalysts Probed by In Situ X-ray Absorption Techniques. Chemical Reviews, 2013, 113, 1736-1850.	47.7	553
2	Probing the surfaces of heterogeneous catalysts by in situ IR spectroscopy. Chemical Society Reviews, 2010, 39, 4951.	38.1	407
3	The Structure of Active Centers and the Ethylene Polymerization Mechanism on the Cr/SiO <sub>2</sub> Catalyst: A Frontier for the Characterization Methods. Chemical Reviews, 2005, 105, 115-184.	47.7	396
4	Adsorption properties of HKUST-1 toward hydrogen and other small molecules monitored by IR. Physical Chemistry Chemical Physics, 2007, 9, 2676.	2.8	358
5	Adsorption properties and structure of CO <sub>2</sub> adsorbed on open coordination sites of metal-organic framework Ni <sub>2</sub> (dhtp) from gas adsorption, IR spectroscopy and X-ray diffraction. Chemical Communications, 2008, , 5125.	4.1	348
6	Local Structure of CPO-27-Ni Metallorganic Framework upon Dehydration and Coordination of NO. Chemistry of Materials, 2008, 20, 4957-4968.	6.7	195
7	Insights into Adsorption of NH <sub>3</sub> on HKUST-1 Metal-Organic Framework: A Multitechnique Approach. Journal of Physical Chemistry C, 2012, 116, 19839-19850.	3.1	176
8	Comparative study of hydrotalcite-derived supported Pd <sub>2</sub> Ga and PdZn intermetallic nanoparticles as methanol synthesis and methanol steam reforming catalysts. Journal of Catalysis, 2012, 293, 27-38.	6.2	135
9	Determination of the Particle Size, Available Surface Area, and Nature of Exposed Sites for Silica-Alumina-Supported Pd Nanoparticles: A Multitechnical Approach. Journal of Physical Chemistry C, 2009, 113, 10485-10492.	3.1	124
10	CO Adsorption on CPO-27-Ni Coordination Polymer: Spectroscopic Features and Interaction Energy. Journal of Physical Chemistry C, 2009, 113, 3292-3299.	3.1	121
11	Functionalization of UiO-66 Metal-Organic Framework and Highly Cross-Linked Polystyrene with Cr(CO) <sub>3</sub> : In Situ Formation, Stability, and Photoreactivity. Chemistry of Materials, 2010, 22, 4602-4611.	6.7	120
12	In situ formation of hydrides and carbides in palladium catalyst: When XANES is better than EXAFS and XRD. Catalysis Today, 2017, 283, 119-126.	4.4	103
13	In situ, Cr K-edge XAS study on the Phillips catalyst: activation and ethylene polymerization. Journal of Catalysis, 2005, 230, 98-108.	6.2	102
14	A comprehensive approach to investigate the structural and surface properties of activated carbons and related Pd-based catalysts. Catalysis Science and Technology, 2016, 6, 4910-4922.	4.1	96
15	Selective Catalysis and Nanoscience: An Inseparable Pair. Chemistry - A European Journal, 2007, 13, 2440-2460.	3.3	94
16	Oxide/Metal Interface Distance and Epitaxial Strain in the NiO/Ag(001) System. Physical Review Letters, 2003, 91, 046101.	7.8	87
17	Response of CPO-27-Ni towards CO, N <sub>2</sub> and C <sub>2</sub> H <sub>4</sub> . Physical Chemistry Chemical Physics, 2009, 11, 9811.	2.8	87
18	In situ FTIR spectroscopy of key intermediates in the first stages of ethylene polymerization on the Cr/SiO <sub>2</sub> Phillips catalyst: Solving the puzzle of the initiation mechanism?. Journal of Catalysis, 2006, 240, 172-181.	6.2	84

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19	Surface Investigation and Morphological Analysis of Structurally Disordered $\text{MgCl}_2$ and $\text{MgCl}_2/\text{TiCl}_4$ Ziegler-Natta Catalysts. ACS Catalysis, 2016, 6, 5786-5796.	11.2	83
20	Model oxide supported $\text{MoS}_2$ HDS catalysts: structure and surface properties. Catalysis Science and Technology, 2011, 1, 123.	4.1	81
21	The potential of spectroscopic methods applied to heterogeneous catalysts for olefin polymerization. Catalysis Science and Technology, 2013, 3, 858-878.	4.1	81
22	Iodide substitution in lithium borohydride, $\text{LiBH}_4$ . J. Journal of Alloys and Compounds, 2011, 509, 8299-8305.	5.5	80
23	X-ray absorption study at the Mg and O K edges of ultrathin $\text{MgO}$ epilayers on $\text{Ag}(001)$ . Physical Review B, 2004, 69, .	3.2	77
24	Quantitative structural determination of active sites from in situ and operando XANES spectra: From standard ab initio simulations to chemometric and machine learning approaches. Catalysis Today, 2019, 336, 3-21.	4.4	70
25	Graphitization of Activated Carbons: A Molecular-level Investigation by INS, DRIFT, XRD and Raman Techniques. Physics Procedia, 2016, 85, 20-26.	1.2	68
26	Core-Shell Structure of Palladium Hydride Nanoparticles Revealed by Combined X-ray Absorption Spectroscopy and X-ray Diffraction. Journal of Physical Chemistry C, 2017, 121, 18202-18213.	3.1	67
27	New Strategies in the Raman Study of the $\text{Cr}/\text{SiO}_2$ Phillips Catalyst: Observation of Molecular Adducts on $\text{Cr(II)}$ Sites. Chemistry of Materials, 2005, 17, 2019-2027.	6.7	63
28	Effect of reduction in liquid phase on the properties and the catalytic activity of $\text{Pd}/\text{Al}_2\text{O}_3$ catalysts. Journal of Catalysis, 2012, 287, 44-54.	6.2	62
29	Effect of Pre-Reduction on the Properties and the Catalytic Activity of $\text{Pd}/\text{Carbon}$ Catalysts: A Comparison with $\text{Pd}/\text{Al}_2\text{O}_3$ . ACS Catalysis, 2014, 4, 187-194.	11.2	62
30	Preparation of Supported Pd Catalysts: From the Pd Precursor Solution to the Deposited $\text{Pd}^{2+}$ Phase. Langmuir, 2010, 26, 11204-11211.	3.5	61
31	Palladium Carbide and Hydride Formation in the Bulk and at the Surface of Palladium Nanoparticles. Journal of Physical Chemistry C, 2018, 122, 12029-12037.	3.1	61
32	Direct evidence of adsorption induced $\text{Cr(II)}$ mobility on the $\text{SiO}_2$ surface upon complexation by CO. Chemical Communications, 2010, 46, 976-978.	4.1	59
33	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.	10.3	58
34	0.5wt.% $\text{Pd}/\text{C}$ catalyst for purification of terephthalic acid: Irreversible deactivation in industrial plants. Journal of Catalysis, 2011, 280, 150-160.	6.2	57
35	Growth of $\text{NiO}$ on $\text{Ag}(001)$ : Atomic Environment, Strain, and Interface Relaxations Studied by Polarization Dependent Extended X-ray Absorption Fine Structure. Journal of Physical Chemistry B, 2003, 107, 4597-4606.	2.6	54
36	Role of the Support in Determining the Vibrational Properties of Carbonyls Formed on Pd Supported on $\text{SiO}_2$ , $\text{Al}_2\text{O}_3$ , and $\text{MgO}$ . Journal of Physical Chemistry C, 2007, 111, 7021-7028.	3.1	54

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37	Preference towards Fiveâ€Coordination in Ti Silicaliteâ€1 upon Molecular Adsorption. ChemPhysChem, 2013, 14, 79-83.	2.1	53
38	Revisiting the identity of Î·-MgCl <sub>2</sub> : Part I. Structural disorder studied by synchrotron X-ray total scattering. Journal of Catalysis, 2020, 385, 76-86.	6.2	51
39	Tuning the structure, distribution and reactivity of polymerization centres of Cr(II)/SiO <sub>2</sub> Phillips catalyst by controlled annealing. Journal of Catalysis, 2005, 236, 233-244.	6.2	50
40	FTIR Investigation of the H <sub>2</sub> , N <sub>2</sub> , and C <sub>2</sub> H <sub>4</sub> Molecular Complexes Formed on the Cr(II) Sites in the Phillips Catalyst: A Preliminary Step in the understanding of a Complex System. Journal of Physical Chemistry B, 2005, 109, 15024-15031.	2.6	50
41	Infrared Spectroscopy of Transient Surface Species. Advances in Catalysis, 2007, 51, 1-74.	0.2	48
42	Spectroscopic Investigation of Heterogeneous Zieglerâ€Natta Catalysts: Ti and Mg Chloride Tetrahydrofurates, Their Interaction Compound, and the Role of the Activator. Chemistry - A European Journal, 2011, 17, 8648-8656.	3.3	48
43	Time-resolved operando studies of carbon supported Pd nanoparticles under hydrogenation reactions by X-ray diffraction and absorption. Faraday Discussions, 2018, 208, 187-205.	3.2	47
44	Effect of Different Face Centered Cubic Nanoparticle Distributions on Particle Size and Surface Area Determination: A Theoretical Study. Journal of Physical Chemistry C, 2014, 118, 4085-4094.	3.1	45
45	Ligands Make the Difference! Molecular Insights into Cr <sup>VI</sup> /SiO <sub>2</sub> Phillips Catalyst during Ethylene Polymerization. Journal of the American Chemical Society, 2017, 139, 17064-17073.	13.7	45
46	The Active Sites in the Phillips Catalysts: Origins of a Lively Debate and a Vision for the Future. ACS Catalysis, 2018, 8, 10846-10863.	11.2	45
47	Influence of K-doping on a Pd/SiO <sub>2</sub> â€Al <sub>2</sub> O <sub>3</sub> catalyst. Journal of Catalysis, 2009, 267, 40-49.	6.2	44
48	From Isolated Ag <sup>+</sup> Ions to Aggregated Ag <sup>0</sup> Nanoclusters in Silver-Exchanged Engelhard Titanosilicate (ETS-10) Molecular Sieve: Reversible Behavior. Chemistry of Materials, 2009, 21, 1343-1353.	6.7	43
49	Subnanometric Pd Particles Stabilized Inside Highly Cross-Linked Polymeric Supports. Chemistry of Materials, 2010, 22, 2297-2308.	6.7	40
50	Enhancing the Initial Rate of Polymerisation of the Reduced Phillips Catalyst by One Order of Magnitude. Chemistry - A European Journal, 2011, 17, 11110-11114.	3.3	40
51	Vibrational Properties of CrII Centers on Reduced Phillips Catalysts Highlighted by Resonant Raman Spectroscopy. ChemPhysChem, 2006, 7, 342-344.	2.1	38
52	Dehydrogenation reactions of 2NaBH <sub>4</sub> â€MgH <sub>2</sub> system. International Journal of Hydrogen Energy, 2011, 36, 7891-7896.	7.1	38
53	Formation and Growth of Pd Nanoparticles Inside a Highly Cross-Linked Polystyrene Support: Role of the Reducing Agent. Journal of Physical Chemistry C, 2014, 118, 8406-8415.	3.1	37
54	On the fraction of CrII sites involved in the C <sub>2</sub> H <sub>4</sub> polymerization on the Cr/SiO <sub>2</sub> Phillips catalyst: a quantification by FTIR spectroscopy. Physical Chemistry Chemical Physics, 2006, 8, 2453.	2.8	36

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55	New frontier in transmission IR spectroscopy of molecules adsorbed on high surface area solids: Experiments below liquid nitrogen temperature. <i>Catalysis Today</i> , 2006, 113, 65-80.	4.4	36
56	Defect Sites in H <sub>2</sub> -Reduced TiO <sub>2</sub> Convert Ethylene to High Density Polyethylene without Activator. <i>ACS Catalysis</i> , 2014, 4, 986-989.	11.2	36
57	Pd-Supported Catalysts: Evolution of Support Porous Texture along Pd Deposition and Alkali-Metal Doping. <i>Langmuir</i> , 2009, 25, 6476-6485.	3.5	34
58	Silica-supported Ti chloride tetrahydrofuranates, precursors of Ziegler-Natta catalysts. <i>Dalton Transactions</i> , 2013, 42, 12706.	3.3	33
59	Activation and In Situ Ethylene Polymerization on Silica-Supported Ziegler-Natta Catalysts. <i>ACS Catalysis</i> , 2015, 5, 5586-5595.	11.2	33
60	Spectroscopic Evidences for TiCl <sub>4</sub> /Donor Complexes on the Surface of MgCl <sub>2</sub> -Supported Ziegler-Natta Catalysts. <i>Journal of Physical Chemistry C</i> , 2018, 122, 5615-5626.	3.1	33
61	A Multitechnique Approach to Spin-Flips for Cp <sub>2</sub> Cr(II) Chemistry in Confined State. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4451-4458.	3.1	32
62	Towards efficient catalysts for the oxidative dehydrogenation of propane in the presence of CO <sub>2</sub> : Cr/SiO <sub>2</sub> systems prepared by direct hydrothermal synthesis. <i>Catalysis Science and Technology</i> , 2016, 6, 840-850.	4.1	32
63	Electronic Properties of Ti Sites in Ziegler-Natta Catalysts. <i>ACS Catalysis</i> , 2021, 11, 9949-9961.	11.2	32
64	Selective Phenylacetylene Hydrogenation on a Polymer-Supported Palladium Catalyst Monitored by FTIR Spectroscopy. <i>ChemCatChem</i> , 2011, 3, 222-226.	3.7	31
65	Surface chromium single sites: open problems and recent advances. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 2087-2098.	2.1	31
66	XAS and XES Techniques Shed Light on the Dark Side of Ziegler-Natta Catalysts: Active-Site Generation. <i>ChemCatChem</i> , 2015, 7, 1432-1437.	3.7	31
67	Dynamics of Reactive Species and Reactant-Induced Reconstruction of Pt Clusters in Pt/Al <sub>2</sub> O <sub>3</sub> Catalysts. <i>ACS Catalysis</i> , 2019, 9, 7124-7136.	11.2	31
68	Flexible ligands in heterogeneous catalysts for olefin polymerization: Insights from spectroscopy. <i>Coordination Chemistry Reviews</i> , 2022, 451, 214258.	18.8	31
69	Exploring the Chemistry of Electron-Accepting Molecules in the Cavities of the Basic Microporous P4VP Polymer by in situ FTIR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19493-19500.	3.1	30
70	Hydride phase formation in carbon supported palladium hydride nanoparticles by in situ EXAFS and XRD. <i>Journal of Physics: Conference Series</i> , 2016, 712, 012032.	0.4	30
71	Ethylene, propylene and ethylene oxide in situ polymerization on the Cr(II)/SiO <sub>2</sub> system: A temperature- and pressure-dependent investigation. <i>Catalysis Today</i> , 2007, 126, 228-234.	4.4	29
72	Structure and Enhanced Reactivity of Chromocene Carbonyl Confined inside Cavities of NaY Zeolite. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7305-7315.	3.1	29

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73	The role of palladium carbides in the catalytic hydrogenation of ethylene over supported palladium nanoparticles. <i>Catalysis Today</i> , 2019, 336, 40-44.	4.4	29
74	OK-edge x-ray absorption study of ultrathin NiO epilayers deposited in situ on Ag(001). <i>Physical Review B</i> , 2004, 70, .	3.2	28
75	Direct IR observation of vibrational properties of carbonyl species formed on Pd nano-particles supported on amorphous carbon: comparison with Pd/SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3676-3681.	2.8	28
76	Insights into Cr/SiO <sub>2</sub> catalysts during dehydrogenation of propane: an operando XAS investigation. <i>Catalysis Science and Technology</i> , 2017, 7, 1690-1700.	4.1	28
77	Reactivity of Cr Species Grafted on SiO <sub>2</sub> /Si(100) Surface: A Reflection Extended X-ray Absorption Fine Structure Study down to the Submonolayer Regime. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16437-16444.	3.1	27
78	Ethylene polymerization on a SiH <sub>4</sub> -modified Phillips catalyst: detection of in situ produced 1-olefins by operando FT-IR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2239.	2.8	27
79	Dichloromethane as a Selective Modifying Agent To Create a Family of Highly Reactive Chromium Polymerization Sites. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 1465-1468.	13.8	26
80	Stability and Reactivity of Grafted Cr(CO) <sub>3</sub> Species on MOF Linkers: A Computational Study. <i>Inorganic Chemistry</i> , 2009, 48, 5439-5448.	4.0	26
81	Fast carbon dioxide recycling by reaction with <sup>13</sup> Mg(BH <sub>4</sub> ) <sub>2</sub> . <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 22482-22486.	2.8	26
82	Incorporation of Ni into HZSM-5 zeolites: Effects of zeolite morphology and incorporation procedure. <i>Microporous and Mesoporous Materials</i> , 2016, 229, 76-82.	4.4	26
83	Revisiting the identity of <sup>13</sup> MgCl <sub>2</sub> : Part II. Morphology and exposed surfaces studied by vibrational spectroscopies and DFT calculation. <i>Journal of Catalysis</i> , 2020, 387, 1-11.	6.2	25
84	The Influence of Alcohols in Driving the Morphology of Magnesium Chloride Nanocrystals. <i>ChemCatChem</i> , 2017, 9, 1782-1787.	3.7	24
85	The Effect of Hydrosilanes on the Active Sites of the Phillips Catalyst: The Secret for In Situ 1-Olefin Generation. <i>Chemistry - A European Journal</i> , 2013, 19, 17277-17282.	3.3	23
86	Formation of Highly Active Ziegler-Natta Catalysts Clarified by a Multifaceted Characterization Approach. <i>ACS Catalysis</i> , 2021, 11, 13782-13796.	11.2	23
87	Progress in the Characterization of the Surface Species in Activated Carbons by means of INS Spectroscopy Coupled with Detailed DFT Calculations. <i>Advances in Condensed Matter Physics</i> , 2015, 2015, 1-8.	1.1	22
88	Titanium Defective Sites in TS-1: Structural Insights by Combining Spectroscopy and Simulation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18145-18150.	13.8	22
89	Modeling CO and N <sub>2</sub> Adsorption at Cr Surface Species of Phillips Catalyst by Hybrid Density Functionals: Effect of Hartree-Fock Exchange Percentage. <i>Journal of Physical Chemistry A</i> , 2009, 113, 14261-14269.	2.5	21
90	Unraveling the Catalytic Synergy between Ti <sup>3+</sup> and Al <sup>3+</sup> Sites on a Chlorinated Al <sub>2</sub> O <sub>3</sub> : A Tandem Approach to Branched Polyethylene. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11203-11206.	13.8	21

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91	Pre-reduction of the Phillips CrVI/SiO <sub>2</sub> catalyst by cyclohexene: A model for the induction period of ethylene polymerization. Journal of Catalysis, 2016, 337, 45-51.	6.2	21
92	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.	3.1	21
93	The effect of surface chemistry on the performances of Pd-based catalysts supported on activated carbons. Catalysis Science and Technology, 2017, 7, 4162-4172.	4.1	21
94	NiO and MgO ultrathin films by polarization dependent XAS. Surface Science, 2004, 566-568, 84-88.	1.9	20
95	Looking for the active hydrogen species in a 5Åwt% Pt/C catalyst: a challenge for inelastic neutron scattering. Faraday Discussions, 2018, 208, 227-242.	3.2	20
96	Effect of surface hydroxylation on the catalytic activity of a Cr(II)/SiO <sub>2</sub> model system of Phillips catalyst. Journal of Catalysis, 2015, 324, 79-87.	6.2	19
97	Structure and Redox Activity of Copper Sites Isolated in a Nanoporous P4VP Polymeric Matrix. Angewandte Chemie - International Edition, 2008, 47, 9269-9273.	13.8	18
98	Capsules and Cavitands: Synthetic Catalysts of Nanometric Dimension. , 2011, , 105-168.		18
99	Chromocene in porous polystyrene: an example of organometallic chemistry in confined spaces. Physical Chemistry Chemical Physics, 2009, 11, 2218.	2.8	17
100	Tuning the Ti <sup>3+</sup> and Al <sup>3+</sup> Synergy in an Al <sub>2</sub> O <sub>3</sub> /TiCl <sub>3</sub> Catalyst To Modulate the Grade of the Produced Polyethylene. ACS Catalysis, 2017, 7, 4915-4921.	11.2	17
101	<i>In Situ</i> X- and Q-Band EPR Investigation of Ethylene Polymerization on Cr/SiO <sub>2</sub> Phillips Catalyst. Journal of Physical Chemistry C, 2018, 122, 21531-21536.	3.1	17
102	Time-dependent carbide phase formation in palladium nanoparticles. Radiation Physics and Chemistry, 2020, 175, 108079.	2.8	17
103	Disclosing the Interaction between Carbon Monoxide and Alkylated Ti <sup>3+</sup> Species: a Direct Insight into Ziegler-Natta Catalysis. Journal of Physical Chemistry Letters, 2020, 11, 5632-5637.	4.6	17
104	Anatomy of Catalytic Centers in Phillips Ethylene Polymerization Catalyst. , 0, , 1-35.		16
105	Genesis of MgCl <sub>2</sub> -based Ziegler-Natta Catalysts as Probed with Operando Spectroscopy. ChemPhysChem, 2018, 19, 2662-2671.	2.1	16
106	Photoinduced Ethylene Polymerization on the Cr <sup>VI</sup> /SiO <sub>2</sub> Phillips Catalyst. Journal of Physical Chemistry C, 2019, 123, 8145-8152.	3.1	16
107	Ni atomic environment in epitaxial NiO layers on Ag(001). Nuclear Instruments & Methods in Physics Research B, 2003, 200, 371-375.	1.4	15
108	The Pyridyl Functional Groups Guide the Formation of Pd Nanoparticles Inside A Porous Poly(4-vinylpyridine). ChemCatChem, 2015, 7, 2188-2195.	3.7	15



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109	Tracking the reasons for the peculiarity of Cr/Al <sub>2</sub> O <sub>3</sub> catalyst in ethylene polymerization. Journal of Catalysis, 2018, 357, 206-212.	6.2	15
110	Rationalizing the Effect of Triethylaluminum on the Cr/SiO <sub>2</sub> /Phillips Catalysts. ACS Catalysis, 2020, 10, 2694-2706.	11.2	15
111	Correlating the Morphological Evolution of Individual Catalyst Particles to the Kinetic Behavior of Metallocene-Based Ethylene Polymerization Catalysts. JACS, 2021, 1, 1996-2008.	7.9	15
112	When Does Catalysis with Transition Metal Complexes Turn into Catalysis by Nanoparticles?. , 2011, , 73-103.		14
113	Structural Disorder of Mechanically Activated $\gamma$ -MgCl <sub>2</sub> Studied by Synchrotron X-ray Total Scattering and Vibrational Spectroscopy. Catalysts, 2020, 10, 1089.	3.5	14
114	Cr-doped porous silica glass as a model material to describe Phillips catalyst properties. Journal of Catalysis, 2013, 308, 319-327.	6.2	13
115	Toward the Understanding of the Comonomer Effect on Cr <sup>II</sup> /SiO <sub>2</sub> Phillips Catalyst. ACS Catalysis, 2016, 6, 2918-2922.	11.2	13
116	Dynamic Behavior of Pd/P4VP Catalyst during the Aerobic Oxidation of 2-Propanol: A Simultaneous SAXS/XAS/MS Operando Study. ACS Catalysis, 2018, 8, 6870-6881.	11.2	13
117	Highly Unsaturated Cr <sup>II</sup> /SiO <sub>2</sub> Single-Site Catalysts for Reducing Nitrogen Oxides with CO: Reaction Intermediates and Catalytic Cycle. ChemCatChem, 2010, 2, 259-262.	3.7	12
118	Polyethylene Microtubes from Silica Fiber-based Polyethylene Composites Synthesized by an In Situ Catalytic Method. Advanced Materials, 2006, 18, 3111-3114.	21.0	10
119	In Situ Investigation of the Deactivation Mechanism in Ni-ZSM5 During Ethylene Oligomerization. Topics in Catalysis, 2017, 60, 1664-1672.	2.8	10
120	Concerted Electron Transfer in Iminopyridine Chromium Complexes: Ligand Effects on the Polymerization of Various (Di)olefins. Organometallics, 2018, 37, 4827-4840.	2.3	10
121	NEt <sub>3</sub> -Triggered Synthesis of UHMWPE Using Chromium Complexes Bearing Non-innocent Iminopyridine Ligands. Macromolecules, 2021, 54, 1243-1253.	4.8	10
122	CHAPTER 4. Raman, IR and INS Characterization of Functionalized Carbon Materials. RSC Catalysis Series, 2018, , 103-137.	0.1	10
123	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.	2.8	9
124	How do the graphenic domains terminate in activated carbons and carbon-supported metal catalysts?. Carbon, 2020, 169, 357-369.	10.3	9
125	Hydrogenation of ethylene over palladium: evolution of the catalyst structure by operando synchrotron-based techniques. Faraday Discussions, 2021, 229, 197-207.	3.2	9
126	Evidence for H <sub>2</sub> -Induced Ductility in a Pt/Al <sub>2</sub> O <sub>3</sub> Catalyst. ACS Catalysis, 2022, 12, 5979-5989.	11.2	9



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127	Position and flux stabilization of X-ray beams produced by double-crystal monochromators for EXAFS scans at the titanium K-edge. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 401-408.	2.4	8
128	Formation and growth of palladium nanoparticles inside porous poly(4-vinyl-pyridine) monitored by operando techniques: The role of different reducing agents. <i>Catalysis Today</i> , 2017, 283, 144-150.	4.4	8
129	Operando X-ray absorption spectra and mass spectrometry data during hydrogenation of ethylene over palladium nanoparticles. <i>Data in Brief</i> , 2019, 24, 103954.	1.0	8
130	Preparation of Pd/C catalysts: from the Pd-precursor solution to the final systems. <i>Studies in Surface Science and Catalysis</i> , 2006, 162, 721-728.	1.5	7
131	Assessing the functional groups in activated carbons through a multi-technique approach. <i>Catalysis Science and Technology</i> , 2022, 12, 1271-1288.	4.1	7
132	Crystal Engineering of Metal-Organic Frameworks for Heterogeneous Catalysis. , 2011, , 271-298.		6
133	Unraveling the Catalytic Synergy between $Ti^{3+}$ and $Al^{3+}$ Sites on a Chlorinated $Al_2O_3$ : A Tandem Approach to Branched Polyethylene. <i>Angewandte Chemie</i> , 2016, 128, 11369-11372.	2.0	6
134	Heterogeneous, homogeneous, and enzymatic catalysis: three branches of the same scientific chapter. Introductory remarks to the "Concepts in catalysis" issue. <i>Rendiconti Lincei</i> , 2017, 28, 1-4.	2.2	6
135	Photoinduced Ethylene Polymerization on Titania Nanoparticles. <i>ChemCatChem</i> , 2017, 9, 4324-4327.	3.7	6
136	Exploring the benefits beyond the pre-reduction in methane of the Cr/SiO <sub>2</sub> Phillips catalyst: The molecular structure of the Cr sites and their role in the catalytic performance. <i>Journal of Catalysis</i> , 2019, 373, 173-179.	6.2	6
137	Cr[CH(SiMe <sub>3</sub> ) <sub>2</sub> ] <sub>3</sub> /SiO <sub>2</sub> catalysts for ethene polymerization: The correlation at a molecular level between the chromium loading and the microstructure of the produced polymer. <i>Journal of Catalysis</i> , 2021, 394, 131-141.	6.2	6
138	Low temperature activation and reactivity of CO <sub>2</sub> over a CrII-based heterogeneous catalyst: a spectroscopic study. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6538.	2.8	5
139	Inelastic Neutron Scattering Investigation of MgCl <sub>2</sub> Nanoparticle-Based Ziegler-Natta Catalysts for Olefin Polymerization. <i>ACS Applied Nano Materials</i> , 2020, 3, 11118-11128.	5.0	5
140	Catalyst Characterization by XAS and XES Spectroscopies: In Situ and Operando Experiments. , 2015, , 717-736.		5
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