Carlos Henriques

List of Publications by Year
in descending order

		185998	214527
65 papers	2,328 citations	28 h-index	47 g-index
67 all docs	67 docs citations	67 times ranked	2386 citing authors

#	Article	IF	Citations
1	Insight into CO2 methanation mechanism over NiUSY zeolites: An operando IR study. Applied Catalysis B: Environmental, 2015, 174-175, 120-125.	10.8	223
2	CO2 hydrogenation into CH4 on NiHNaUSY zeolites. Applied Catalysis B: Environmental, 2014, 147, 101-110.	10.8	182
3	Micro- and mesoporous supports for CO2 methanation catalysts: A comparison between SBA-15, MCM-41 and USY zeolite. Chemical Engineering Science, 2018, 175, 72-83.	1.9	111
4	The promoting effect of Ce in the CO2 methanation performances on NiUSY zeolite: A FTIR In Situ/Operando study. Catalysis Today, 2017, 283, 74-81.	2.2	90
5	Controlled Photocatalytic Oxidation of Methane to Methanol through Surface Modification of Beta Zeolites. ACS Catalysis, 2017, 7, 2878-2885.	5.5	89
6	Structure-activity relationship in zeolites. Journal of Molecular Catalysis A, 1995, 96, 245-270.	4.8	87
7	Characterisation of CuMFI catalysts by temperature programmed desorption of NO and temperature programmed reduction. Effect of the zeolite Si/Al ratio and copper loading. Applied Catalysis B: Environmental, 1997, 12, 249-262.	10.8	86
8	NO TPD and H2-TPR studies for characterisation of CuMOR catalysts The role of Si/Al ratio, copper content and cocation. Applied Catalysis B: Environmental, 1997, 14, 261-272.	10.8	85
9	Selective catalytic reduction of NO on copper-exchanged zeolites: the role of the structure of the zeolite in the nature of copper-active sites. Catalysis Today, 1999, 54, 407-418.	2.2	85
10	Magnesium as Promoter of CO₂ Methanation on Ni-Based USY Zeolites. Energy & Fuels, 2017, 31, 9776-9789.	2.5	60
11	DBD plasma-assisted CO2 methanation using zeolite-based catalysts: Structure composition-reactivity approach and effect of Ce as promoter. Journal of CO2 Utilization, 2018, 26, 202-211.	3.3	58
12	The effect of the compensating cation on the catalytic performances of Ni/USY zeolites towards CO2 methanation. Journal of CO2 Utilization, 2017, 21, 280-291.	3.3	57
13	Enhanced activity of CO2 hydrogenation to CH4 over Ni based zeolites through the optimization of the Si/Al ratio. Microporous and Mesoporous Materials, 2018, 267, 9-19.	2.2	53
14	Al-containing MCM-41 type materials prepared by different synthesis methods: Hydrothermal stability and catalytic properties. Microporous and Mesoporous Materials, 2006, 94, 56-65.	2.2	52
15	Power-to-methane over Ni/zeolites: Influence of the framework type. Microporous and Mesoporous Materials, 2019, 274, 102-112.	2.2	50
16	An FT-IR study of NO adsorption over Cu-exchanged MFI catalysts: Effect of Si/Al ratio, copper loading and catalyst pre-treatment. Applied Catalysis B: Environmental, 1998, 16, 79-95.	10.8	47
17	Tuning Zeolite Properties towards CO₂ Methanation: An Overview. ChemCatChem, 2019, 11, 2388-2400.	1.8	47
18	Chemical engineering aspects of plasma-assisted CO 2 hydrogenation over nickel zeolites under partial vacuum. Journal of CO2 Utilization, 2017, 22, 97-109.	3.3	45

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19	CO2 Hydrogenation Over Ni-Based Zeolites: Effect of Catalysts Preparation and Pre-reduction Conditions on Methanation Performance. Topics in Catalysis, 2016, 59, 314-325.	1.3	44
20	Niâ€Ce/Zeolites for CO₂ Hydrogenation to CH₄: Effect of the Metal Incorporation Order. ChemCatChem, 2018, 10, 2773-2781.	1.8	40
21	Selective catalytic reduction of NO with propene over CuMFI zeolites: dependence on Si/Al ratio and copper loading. Applied Catalysis B: Environmental, 1997, 11, 383-401.	10.8	39
22	On the enhancing effect of Ce in Pd-MOR catalysts for NOx CH4-SCR: A structure-reactivity study. Applied Catalysis B: Environmental, 2016, 195, 121-131.	10.8	39
23	Particular characteristics of silver species on Ag-exchanged LTL zeolite in K and H form. Microporous and Mesoporous Materials, 2013, 169, 137-147.	2.2	37
24	CH4-SCR of NO over Co and Pd ferrierite catalysts: Effect of preparation on catalytic performance. Catalysis Today, 2007, 119, 156-165.	2.2	36
25	NO+ ions as IR probes for the location of OH groups and Na+ ions in main channels and side pockets of mordenite. Microporous and Mesoporous Materials, 2001, 50, 167-171.	2.2	35
26	Promising Catalytic Systems for CO2 Hydrogenation into CH4: A Review of Recent Studies. Processes, 2020, 8, 1646.	1.3	34
27	Investigation of the nature of silver species on different Ag-containing NOx reduction catalysts: On the effect of the support. Applied Catalysis B: Environmental, 2014, 150-151, 204-217.	10.8	31
28	Reduction of NO with metal-doped carbon aerogels. Applied Catalysis B: Environmental, 2009, 88, 135-141.	10.8	28
29	Title is missing!. Catalysis Letters, 1997, 43, 31-36.	1.4	26
30	The Oil Shale Transformation in the Presence of an Acidic BEA Zeolite under Microwave Irradiation. Energy & Fuels, 2014, 28, 2365-2377.	2.5	25
31	Enhancing the CO2 methanation activity of Î³-Al2O3 supported mono- and bi-metallic catalysts prepared by glycerol assisted impregnation. Applied Catalysis B: Environmental, 2021, 296, 120322.	10.8	25
32	Boosting Ni Dispersion on Zeolite-Supported Catalysts for CO₂ Methanation: The Influence of the Impregnation Solvent. Energy & Fuels, 2020, 34, 14656-14666.	2.5	24
33	Influence of rare earth elements La, Nd and Yb on the acidity of H-MCM-22 and H-Beta zeolites. Catalysis Today, 2005, 107-108, 663-670.	2.2	23
34	SCR of NO with methane over Co-HBEA and PdCo-HBEA catalysts. Catalysis Today, 2005, 107-108, 181-191.	2.2	23
35	Title is missing!. Catalysis Letters, 1997, 43, 25-29.	1.4	21
36	NO2 disproportionation for the IR characterisation of basic zeolites. Chemical Communications, 2005, , 1049.	2.2	20

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37	Mesoporous nickel-alumina catalysts derived from MIL-53(Al) metal-organic framework: A new promising path for synthesizing CO2 methanation catalysts. Journal of CO2 Utilization, 2021, 51, 101651.	3.3	20
38	Structural State and Redox Behavior of Framework Co(II) in CoIST-2:â€‰ A Novel Cobalt-Substituted Aluminophosphate with AEN Topology. Journal of Physical Chemistry B, 2004, 108, 8344-8354.	1.2	19
39	Vanadium phosphate catalysts for biodiesel production from acid industrial by-products. Journal of Biotechnology, 2013, 164, 433-440.	1.9	18
40	Assessing the potential of xNi-yMg-Al2O3 catalysts prepared by EISA-one-pot synthesis towards CO2 methanation: An overall study. International Journal of Hydrogen Energy, 2020, 45, 28626-28639.	3.8	17
41	Catalytic epoxidation and degradation of propylene by dioxygen over silver. Catalysis Today, 1987, 1, 101-110.	2.2	15
42	NO+: Infrared probe for basic zeolites. Studies in Surface Science and Catalysis, 2005, 158, 663-670.	1.5	14
43	Copper-exchanged mordenites as active catalysts for NO selective catalytic reduction by propene under oxidising conditions: Effect of Si/Al ratio, copper content and BrÃ¶nsted acidity. Applied Catalysis B: Environmental, 1997, 13, 251-264.	10.8	13
44	NO_x SCR with decane using Agâ€“MFI catalysts: on the effect of silver content and co-cation presence. Catalysis Science and Technology, 2016, 6, 3038-3048.	2.1	12
45	Influence of tin on the stability of Sn/Pd Hy zeolites in the hydrocracking and hydroisomerization of n-heptane. Applied Catalysis, 1986, 21, 169-177.	1.1	11
46	Methanol interaction with NO2: An attempt to identify intermediate compounds in CH4-SCR of NO with Co/Pd-HFER catalyst. Catalysis Today, 2008, 137, 157-161.	2.2	11
47	deNOx over Ag/H-ZSM-5: Study of NO2 interaction with ethanol. Catalysis Today, 2011, 176, 81-87.	2.2	11
48	Ni-based catalysts for plasma-assisted CO2 methanation. Current Opinion in Green and Sustainable Chemistry, 2021, 32, 100540.	3.2	11
49	Infrared and microwaves at 5.8 GHz in a catalytic reactor. Physical Chemistry Chemical Physics, 2009, 11, 1697.	1.3	9
50	Fluidized bed plasma for pre-treatment of Co-ferrierite catalysts: An approach to NOx abatement. Catalysis Today, 2011, 176, 234-238.	2.2	9
51	On the Effect of Preparation Methods of PdCe-MOR Catalysts as NOx CH4-SCR System for Natural Gas Vehicles Application. Catalysts, 2015, 5, 1815-1830.	1.6	9
52	Potential synergic effect between MOR and BEA zeolites in NOx SCR with methane: A dual bed design approach. Applied Catalysis A: General, 2015, 506, 246-253.	2.2	9
53	Monitoring cobalt ions siting in BEA and FER zeolites by in-situ UVâ€“Vis spectroscopy: A DRS study. Inorganica Chimica Acta, 2017, 455, 568-574.	1.2	9
54	Reduction of NO with new vanadium-carbon xerogel composites. Effect of the oxidation state of vanadium species. Carbon, 2020, 156, 194-204.	5.4	9

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55	A Comparison Between Epoxidation and Degradation of Ethylene and Propylene over Silver. Studies in Surface Science and Catalysis, 1993, , 1995-1998.	1.5	8
56	Optimizing Washcoating Conditions for the Preparation of Zeolite-Based Cordierite Monoliths for NO_{<i>x</i>} CH₄-SCR: A Required Step for Real Application. Industrial & Engineering Chemistry Research, 2019, 58, 11799-11810.	1.8	8
57	On the Effect of Cobalt Promotion over Ni/CeO2 Catalyst for CO2 Thermal and Plasma Assisted Methanation. Catalysts, 2022, 12, 36.	1.6	8
58	Catalysts based on carbon xerogels with high catalytic activity for the reduction of NOx at low temperatures. Catalysis Today, 2020, 356, 301-311.	2.2	5
59	Carbon Dioxide Reforming of Methane over Nickel-Supported Zeolites: A Screening Study. Processes, 2022, 10, 1331.	1.3	4
60	Metallic active species for deNOx SCR by methane with Co and Pd/Co HFER catalysts. Studies in Surface Science and Catalysis, 2008, 174, 1033-1038.	1.5	3
61	Application of PdCe-HMOR Catalyst as NOx CH4-SCR System for Heavy-Duty Vehicles Moved by Natural Gas. Topics in Catalysis, 2016, 59, 982-986.	1.3	3
62	A temperature programmed surface reaction study of the catalytic epoxidation and total oxidation of ethylene on silver. Studies in Surface Science and Catalysis, 1994, , 499-506.	1.5	2
63	Alkali and Alkali-Earth Metals Incorporation to Ni/USY Catalysts for CO2 Methanation: The Effect of the Metal Nature. Processes, 2021, 9, 1846.	1.3	2
64	Selective Catalytic Reduction of NO_x over Zeolite-Coated Cordierite-Based Ceramic Foams: Water Deactivation. Materials Science Forum, 0, 587-588, 810-814.	0.3	1
65	Improved therapeutic nitric oxide delivery by microporous Cu-bearing titanosilicate. Microporous and Mesoporous Materials, 2021, 322, 111154.	2.2	0