Gemma Turnes Palomino

List of Publications by Year in descending order

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86 papers

4,891 citations

39 h-index 95083 68 g-index

87 all docs 87 docs citations

87 times ranked

4325 citing authors

#	Article	IF	CITATIONS
1	Computational and Experimental Studies on the Adsorption of CO, N ₂ , and CO ₂ on Mg-MOF-74. Journal of Physical Chemistry C, 2010, 114, 11185-11191.	1.5	307
2	Oxidation States of Copper Ions in ZSM-5 Zeolites. A Multitechnique Investigation. Journal of Physical Chemistry B, 2000, 104, 4064-4073.	1.2	253
3	XRD, XAS, and IR Characterization of Copper-Exchanged Y Zeolite. Journal of Physical Chemistry B, 2000, 104, 8641-8651.	1.2	251
4	Magnetic solid-phase extraction using metal-organic frameworks (MOFs) and their derived carbons. TrAC - Trends in Analytical Chemistry, 2017, 90, 142-152.	5.8	249
5	Fourier-Transform Infrared Study of CO Adsorbed at 77 K on H-Mordenite and Alkali-Metal-Exchanged Mordenites. Langmuir, 1995, 11, 527-533.	1.6	158
6	Thermal Reduction of Cu2+â^'Mordenite and Re-oxidation upon Interaction with H2O, O2, and NO. Journal of Physical Chemistry B, 2003, 107, 7036-7044.	1.2	150
7	The vibrational spectroscopy of H2, N2, CO and NO adsorbed on the titanosilicate molecular sieve ETS-10. Physical Chemistry Chemical Physics, 1999, 1, 1649-1657.	1.3	121
8	N2 Adsorption at 77 K on H-Mordenite and Alkali-Metal-Exchanged Mordenites: An IR Study. The Journal of Physical Chemistry, 1995, 99, 11167-11177.	2.9	120
9	Mono-, Di-, and Tricarbonylic Species in Copper(I)-Exchanged Zeolite ZSM-5:  Comparison with Homogeneous Copper(I) Carbonylic Structures. Journal of Physical Chemistry B, 1999, 103, 3833-3844.	1.2	109
10	Characterization of Gallosilicate MFI-Type Zeolites by IR Spectroscopy of Adsorbed Probe Molecules. The Journal of Physical Chemistry, 1996, 100, 6678-6690.	2.9	103
11	An in situ temperature dependent IR, EPR and high resolution XANES study on the NO/Cu+–ZSM-5 interaction. Chemical Physics Letters, 2002, 363, 389-396.	1.2	97
12	X-ray photoelectron spectroscopy and x-ray absorption near edge structure study of copper sites hosted at the internal surface of ZSM-5 zeolite: A comparison with quantitative and energetic data on the CO and NH3 adsorption. Journal of Chemical Physics, 2000, 113, 9248-9261.	1.2	96
13	Alumina-Supported Copper Chloride. Journal of Catalysis, 2000, 189, 91-104.	3.1	95
14	Thermodynamics of hydrogen adsorption on the zeolite Li-ZSM-5. Chemical Physics Letters, 2003, 370, 631-635.	1.2	94
15	Structure of Homoleptic Cul(CO)3 Cations in Cul-Exchanged ZSM-5 Zeolite: An X-ray Absorption Study. Angewandte Chemie - International Edition, 2000, 39, 2138-2141.	7.2	93
16	Vibrational spectroscopy of H2, N2, CO and NO adsorbed on H, Li, Na, K-exchanged ferrierite. Microporous and Mesoporous Materials, 2000, 34, 67-80.	2.2	93
17	Controlling the Adsorption Enthalpy of CO ₂ in Zeolites by Framework Topology and Composition. ChemSusChem, 2012, 5, 2011-2022.	3.6	93
18	Hydrogen adsorption on magnesium-exchanged zeolites. Journal of Materials Chemistry, 2006, 16, 2884-2885.	6.7	84

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19	Cul-Y and Cull-Y zeolites: a XANES, EXAFS and visible-NIR study. Chemical Physics Letters, 1997, 269, 500-508.	1.2	81
20	Single and Dual Cation Sites in Zeolites:Â Theoretical Calculations and FTIR Spectroscopic Studies on CO Adsorption on K-FER. Journal of Physical Chemistry B, 2006, 110, 22542-22550.	1.2	79
21	Automatic In-Syringe Dispersive Microsolid Phase Extraction Using Magnetic Metal–Organic Frameworks. Analytical Chemistry, 2015, 87, 7545-7549.	3.2	75
22	Combined Theoretical and FTIR Spectroscopic Studies on Hydrogen Adsorption on the Zeolites Naâ^'FER and Kâ^'FER. Journal of Physical Chemistry B, 2006, 110, 395-402.	1.2	72
23	Infrared studies of the interaction of carbon monoxide and dinitrogen with ferrisilicate MFI-type zeolites. Catalysis Letters, 1996, 42, 25-33.	1.4	69
24	Stoichiometric and sodium-doped titanium silicate molecular sieve containing atomically defined $\hat{a} \in \text{"OTiOTiOâ} \in \text{"}$ chains: Quantumab initiocalculations, spectroscopic properties, and reactivity. Journal of Chemical Physics, 2000, 112, 3859-3867.	1.2	69
25	Variable-temperature infrared spectroscopy: An access to adsorption thermodynamics of weakly interacting systems. Physical Chemistry Chemical Physics, 2002, 4, 5713-5715.	1.3	69
26	Metal-organic framework mixed-matrix disks: Versatile supports for automated solid-phase extraction prior to chromatographic separation. Journal of Chromatography A, 2017, 1488, 1-9.	1.8	61
27	Enhanced CO ₂ adsorption capacity of amine-functionalized MIL-100(Cr) metal–organic frameworks. CrystEngComm, 2015, 17, 430-437.	1.3	60
28	Thermodynamic studies on hydrogen adsorption on the zeolites Na-ZSM-5 and K-ZSM-5. Microporous and Mesoporous Materials, 2005, 80, 247-252.	2.2	57
29	FTIR spectroscopic and computational studies on hydrogen adsorption on the zeolite Li–FER. Physical Chemistry Chemical Physics, 2006, 8, 2286-2292.	1.3	57
30	UiO-66 derived etched carbon/polymer membranes: High-performance supports for the extraction of organic pollutants from water. Chemical Engineering Journal, 2018, 346, 85-93.	6.6	56
31	Metal–organic framework mixed-matrix coatings on 3D printed devices. Applied Materials Today, 2019, 16, 21-27.	2.3	54
32	Well defined carbonyl complexes in Ag+- and Cu+-exchanged ZSM-5 zeolite: a comparison with homogeneous counterparts. Journal of Molecular Catalysis A, 1999, 146, 97-106.	4.8	49
33	Preparation and characterization of spinel-type high surface area Al2O3-ZnAl2O4 mixed metal oxides by an alkoxide route. Microporous Materials, 1997, 8, 187-192.	1.6	48
34	Thermodynamics of Hydrogen Adsorption on Metalâ€Organic Frameworks. ChemPhysChem, 2010, 11, 3237-3242.	1.0	45
35	Spectroscopic study in the UV-Vis, near and mid IR of cationic species formed by interaction of thiophene, dithiophene and terthiophene with the zeolite H-Y. Physical Chemistry Chemical Physics, 1999, 1, 561-569.	1.3	44
36	Periodic density functional and FTIR spectroscopic studies on CO adsorption on the zeolite Na-FER. Microporous and Mesoporous Materials, 2007, 106, 162-173.	2.2	44

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37	Metal–Organic Framework@Carbon Hybrid Magnetic Material as an Efficient Adsorbent for Pollutant Extraction. ACS Applied Materials & Samp; Interfaces, 2020, 12, 6419-6425.	4.0	44
38	Submicrometric Magnetic Nanoporous Carbons Derived from Metal–Organic Frameworks Enabling Automated Electromagnet-Assisted Online Solid-Phase Extraction. Analytical Chemistry, 2016, 88, 6990-6995.	3.2	43
39	Hydrogen adsorption on the zeolite Ca-A: DFT and FT-IR investigation. Chemical Physics Letters, 2009, 477, 139-143.	1.2	40
40	EXAFS studies on MFIâ€type gallosilicate molecular sieves. Catalysis Letters, 1999, 63, 213-216.	1.4	39
41	Determination of phthalate acid esters plasticizers in polyethylene terephthalate bottles and its correlation with some physicochemical properties. Polymer Testing, 2018, 68, 87-94.	2.3	39
42	Carbon dioxide adsorption on MIL-100(M) (M=Cr, V, Sc) metal–organic frameworks: IR spectroscopic and thermodynamic studies. Microporous and Mesoporous Materials, 2014, 190, 234-239.	2.2	38
43	Incorporation of zeolitic imidazolate framework (ZIF-8)-derived nanoporous carbons in methacrylate polymeric monoliths for capillary electrochromatography. Talanta, 2017, 164, 348-354.	2.9	38
44	Thermodynamics of hydrogen adsorption on calcium-exchanged faujasite-type zeolites. International Journal of Hydrogen Energy, 2009, 34, 4371-4378.	3.8	36
45	Variable temperature FT-IR studies on hydrogen adsorption on the zeolite (Mg,Na)-Y. Applied Surface Science, 2007, 253, 5701-5704.	3.1	35
46	A rapid microwave-assisted synthesis of a sodium–cadmium metal–organic framework having improved performance as a CO ₂ adsorbent for CCS. Dalton Transactions, 2015, 44, 9955-9963.	1.6	35
47	Nanoparticle-Directed Metal–Organic Framework/Porous Organic Polymer Monolithic Supports for Flow-Based Applications. ACS Applied Materials & Interfaces, 2017, 9, 1728-1736.	4.0	35
48	Variable-temperature infrared spectrometry of carbon monoxide adsorbed on the zeolite K-ZSM-5. Vibrational Spectroscopy, 2001, 26, 107-111.	1.2	34
49	Zeolitic imidazolate framework dispersions for the fast and highly efficient extraction of organic micropollutants. RSC Advances, 2015, 5, 28203-28210.	1.7	34
50	Cation–carbon stretching vibration of adducts formed upon CO adsorption on alkaline zeolites. Physical Chemistry Chemical Physics, 1999, 1, 4139-4140.	1.3	33
51	Emerging materials for sample preparation. Journal of Separation Science, 2018, 41, 262-287.	1.3	33
52	Immobilization of Metal–Organic Frameworks on Supports for Sample Preparation and Chromatographic Separation. Chromatographia, 2019, 82, 361-375.	0.7	33
53	Methylene blue encapsulated in silica-based mesophases: characterisation and electrochemical activity. Microporous and Mesoporous Materials, 2005, 79, 275-281.	2.2	30
54	In-syringe dispersive $\hat{l}\frac{1}{4}$ -SPE of estrogens using magnetic carbon microparticles obtained from zeolitic imidazolate frameworks. Analytical and Bioanalytical Chemistry, 2017, 409, 225-234.	1.9	30

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55	Photocatalytic behaviour of WO3/TiO2-N for diclofenac degradation using simulated solar radiation as an activation source. Environmental Science and Pollution Research, 2017, 24, 4613-4624.	2.7	28
56	Nitrosylic complexes in Ag(I)–ZSM-5: a comparison with Cu(I)–ZSM-5. Microporous and Mesoporous Materials, 1999, 30, 129-135.	2.2	27
57	Quantum Chemical and FTIR Spectroscopic Studies on the Linkage Isomerism of Carbon Monoxide in Alkali-Metal-Exchanged Zeolites: A Review of Current Research. International Journal of Molecular Sciences, 2002, 3, 764-776.	1.8	27
58	Alkyne polymerization on the titanosilicate molecular sieve ETS-10. Physical Chemistry Chemical Physics, 2001, 3, 1228-1231.	1.3	26
59	Electrochemical properties of mesoporous iron phosphate in lithium batteries. Journal of Solid State Electrochemistry, 2006, 10, 1-9.	1.2	26
60	Calorimetric and spectroscopic study of the coordinative unsaturation of copper(I) and silver(I) cations in ZSM-5 zeolite. Thermochimica Acta, 2001, 379, 131-145.	1.2	25
61	UV and visible activation of Cr(III)-doped TiO2 catalyst prepared by a microwave-assisted sol–gel method during MCPA degradation. Environmental Science and Pollution Research, 2017, 24, 12673-12682.	2.7	25
62	Carbon composite membrane derived from MIL-125-NH2 MOF for the enhanced extraction of emerging pollutants. Chemosphere, 2019, 231, 510-517.	4.2	25
63	Linkage isomerism of carbonyl coordination complexes formed upon CO adsorption on the zeolite Li-ZSM-5: variable-temperature FTIR studies. Chemical Physics Letters, 2002, 362, 109-113.	1.2	24
64	Enthalpy–Entropy Correlation for Hydrogen Adsorption on MOFs: Variableâ€Temperature FTIR Study of Hydrogen Adsorption on MILâ€100(Cr) and MILâ€101(Cr). European Journal of Inorganic Chemistry, 2011, 2011, 1703-1708.	1.0	24
65	Automated growth of metal–organic framework coatings on flow-through functional supports. Chemical Communications, 2015, 51, 8169-8172.	2.2	24
66	Metal Oxide Assisted Preparation of Core–Shell Beads with Dense Metal–Organic Framework Coatings for the Enhanced Extraction of Organic Pollutants. Chemistry - A European Journal, 2016, 22, 11770-11777.	1.7	24
67	Title is missing!. Catalysis Letters, 2000, 66, 231-235.	1.4	23
68	Thermodynamics of hydrogen adsorption on the zeolite Ca-Y. Catalysis Today, 2008, 138, 249-252.	2.2	23
69	Spectroscopic and Thermodynamic Characterization of Strontium Carbonyls Formed upon Carbon Monoxide Adsorption on the Zeolite Srâ^Y. Journal of Physical Chemistry B, 2003, 107, 2537-2542.	1.2	22
70	Isomeric states of polar molecules on ionic surfaces: electrostatic model and FTIR studies. Applied Surface Science, 2004, 238, 390-394.	3.1	20
71	Magnetic porous carbons derived from cobalt(<scp>ii</scp>)-based metal–organic frameworks for the solid-phase extraction of sulfonamides. Dalton Transactions, 2020, 49, 8959-8966.	1.6	20
72	Amphipathic hydrogen bonding of CO in protonic zeolites. Chemical Communications, 2001, , 455-456.	2.2	18

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73	Automated on-line monitoring of the TiO2-based photocatalytic degradation of dimethyl phthalate and diethyl phthalate. Photochemical and Photobiological Sciences, 2019, 18, 863-870.	1.6	18
74	Preparation and Characterization of High Surface Area Al2O3-MgAl2O4 Solid Solutions. Journal of Catalysis, 1994, 148, 403-405.	3.1	17
75	Hydrogen adsorption on the faujasite-type zeolite Mg–X: An IR spectroscopic and thermodynamic study. Applied Surface Science, 2010, 256, 5281-5284.	3.1	17
76	Automated solidâ€phase extraction of phenolic acids using layered double hydroxide–alumina–polymer disks. Journal of Separation Science, 2018, 41, 2012-2019.	1.3	17
77	Formation and partial self-healing of lattice defects during thermal treatments of GaZSM-5: An FTIR study using CO as a probe molecule. Physical Chemistry Chemical Physics, 2001, 3, 1223-1227.	1.3	16
78	Infrared spectroscopic and thermodynamic study on hydrogen adsorption on the metal organic framework MIL-100(Sc). Chemical Physics Letters, 2012, 521, 104-106.	1.2	16
79	Hyperporous carbon-coated 3D printed devices. Applied Materials Today, 2019, 14, 29-34.	2.3	16
80	Synthesis of Cr ³⁺ -doped TiO ₂ nanoparticles: characterization and evaluation of their visible photocatalytic performance and stability. Environmental Technology (United) Tj ETQq0 0 0 rgBT/	Ov er zock 1	.0 1 650 457 T
81	Title is missing!. Catalysis Letters, 1999, 60, 139-143.	1.4	9
82	Nanoparticle@Metalâ€Organic Frameworks as a Template for Hierarchical Porous Carbon Sponges. Chemistry - A European Journal, 2018, 24, 13450-13456.	1.7	6
83	Reply to Comments on "N2Adsorption at 77 K on H-Mordenite and Alkali-Metal-Exchanged Mordenites:Â An IR Study― The Journal of Physical Chemistry, 1996, 100, 18883-18883.	2.9	5
84	Negative electrodes for lithium ion batteries: Tin/silica nanocomposites obtained from chemical reduction of SnI4 grafted Si-MCM-41. Applied Physics Letters, 2006, 89, 093125.	1.5	2
85	XAFS Study of Cu _I -Y and Cu _{II} -Y Interacting with CO and NO. European Physical Journal Special Topics, 1997, 7, C2-903-C2-904.	0.2	1
86	Caract \tilde{A} ©risation des analcimolites du bassin de Tim Merso \tilde{A}^- (Nord du Niger) par diffraction des rayons X. Comptes Rendus Chimie, 2007, 10, 546-551.	0.2	0