

# Enrique Vilarrasa Garcia

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

1,212  
citations

361045

20  
h-index

377514

34  
g-index

49  
all docs

49  
docs citations

49  
times ranked

1283  
citing authors

#	ARTICLE	IF	CITATIONS
1	CO <sub>2</sub> adsorption on amine modified mesoporous silicas: Effect of the progressive disorder of the honeycomb arrangement. <i>Microporous and Mesoporous Materials</i> , 2015, 209, 172-183.	2.2	96
2	How Reproducible are Surface Areas Calculated from the BET Equation?. <i>Advanced Materials</i> , 2022, 34, .	11.1	82
3	Adsorption equilibria of CO <sub>2</sub> and CH <sub>4</sub> in cation-exchanged zeolites 13X. <i>Adsorption</i> , 2016, 22, 71-80.	1.4	79
4	CO <sub>2</sub> adsorption on APTES functionalized mesocellular foams obtained from mesoporous silicas. <i>Microporous and Mesoporous Materials</i> , 2014, 187, 125-134.	2.2	73
5	Evaluation of porous clay heterostructures modified with amine species as adsorbent for the CO <sub>2</sub> capture. <i>Microporous and Mesoporous Materials</i> , 2017, 249, 25-33.	2.2	63
6	Evaluation of two fibrous clay minerals (sepiolite and palygorskite) for CO <sub>2</sub> Capture. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 4573-4587.	3.3	60
7	Functionalization of hollow silica microspheres by impregnation or grafted of amine groups for the CO <sub>2</sub> capture. <i>International Journal of Greenhouse Gas Control</i> , 2016, 52, 344-356.	2.3	59
8	Synthesis, Characterization, Uses and Applications of Porous Clays Heterostructures: A Review. <i>Chemical Record</i> , 2018, 18, 1085-1104.	2.9	52
9	CO <sub>2</sub> Adsorption of Materials Synthesized from Clay Minerals: A Review. <i>Minerals (Basel, Switzerland)</i> , 2019, 9, 514.	0.8	51
10	Low Cost Pore Expanded SBA-15 Functionalized with Amine Groups Applied to CO <sub>2</sub> Adsorption. <i>Materials</i> , 2015, 8, 2495-2513.	1.3	48
11	The effect of structure modifying agents in the SBA-15 for its application in the biomolecules adsorption. <i>Microporous and Mesoporous Materials</i> , 2016, 232, 53-64.	2.2	48
12	Microwave-assisted nitric acid treatment of sepiolite and functionalization with polyethylenimine applied to CO <sub>2</sub> capture and CO <sub>2</sub> /N <sub>2</sub> separation. <i>Applied Surface Science</i> , 2017, 410, 315-325.	3.1	43
13	CO <sub>2</sub> Capture with Mesoporous Silicas Modified with Amines by Double Functionalization: Assessment of Adsorption/Desorption Cycles. <i>Materials</i> , 2018, 11, 887.	1.3	36
14	Insights into CO <sub>2</sub> adsorption in amino-functionalized SBA-15 synthesized at different aging temperature. <i>Adsorption</i> , 2020, 26, 225-240.	1.4	36
15	Thiophene Adsorption on Microporous Activated Carbons Impregnated with PdCl <sub>2</sub> . <i>Energy &amp; Fuels</i> , 2010, 24, 3436-3442.	2.5	34
16	CO <sub>2</sub> /CH <sub>4</sub> adsorption separation process using pore expanded mesoporous silicas functionalized by APTES grafting. <i>Adsorption</i> , 2015, 21, 565-575.	1.4	29
17	Assessing the potential of nanoporous carbon adsorbents from polyethylene terephthalate (PET) to separate CO <sub>2</sub> from flue gas. <i>Adsorption</i> , 2018, 24, 279-291.	1.4	23
18	Polyamine-Grafted Magadiite: High CO <sub>2</sub> Selectivity at Capture from CO <sub>2</sub> /N <sub>2</sub> and CO <sub>2</sub> /CH <sub>4</sub> Mixtures. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 23, 29-41.	3.3	23

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19	Influence of buffer solutions in the adsorption of human serum proteins onto layered double hydroxide. <i>International Journal of Biological Macromolecules</i> , 2018, 106, 396-409.	3.6	23
20	Adsorption microcalorimetry as a tool in the characterization of amine-grafted mesoporous silicas for CO <sub>2</sub> capture. <i>Adsorption</i> , 2020, 26, 165-175.	1.4	23
21	Adsorption behavior of bovine serum albumin on Zn-Al and Mg-Al layered double hydroxides. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 80, 748-758.	1.1	19
22	Evaluation of the thermal regeneration of an amine-grafted mesoporous silica used for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Adsorption</i> , 2020, 26, 203-215.	1.4	18
23	Ferric sludge derived from the process of water purification as an efficient catalyst and/or support for the removal of volatile organic compounds. <i>Chemosphere</i> , 2019, 219, 286-295.	4.2	17
24	Amino-modified pillared adsorbent from water-treatment solid wastes applied to CO <sub>2</sub> /N <sub>2</sub> separation. <i>Adsorption</i> , 2017, 23, 405-421.	1.4	16
25	Parametric Analysis of a Moving Bed Temperature Swing Adsorption (MBTSA) Process for Postcombustion CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 10736-10752.	1.8	16
26	Assessing CO <sub>2</sub> Adsorption on Amino-Functionalized Mesocellular Foams Synthesized at Different Aging Temperatures. <i>Frontiers in Chemistry</i> , 2020, 8, 591766.	1.8	15
27	Kaolinite-based zeolites synthesis and their application in CO <sub>2</sub> capture processes. <i>Fuel</i> , 2022, 320, 123953.	3.4	15
28	Assessment of the potential use of zeolites synthesized from power plant fly ash to capture CO <sub>2</sub> under post-combustion scenario. <i>Adsorption</i> , 2020, 26, 1153-1164.	1.4	14
29	Valorization of agricultural waste as a carbon materials for selective separation and storage of CO <sub>2</sub> , H <sub>2</sub> and N <sub>2</sub> . <i>Biomass and Bioenergy</i> , 2021, 155, 106297.	2.9	13
30	Pure and Binary Adsorption of Carbon Dioxide and Nitrogen on AQSOA FAM Z02. <i>Journal of Chemical &amp; Engineering Data</i> , 2018, 63, 661-670.	1.0	11
31	Simple Procedure to Estimate Mass Transfer Coefficients from Uptake Curves on Activated Carbons. <i>Chemical Engineering and Technology</i> , 2018, 41, 1622-1630.	0.9	9
32	Adsorption of biomolecules in porous silicas modified with zirconium. Effect of the textural properties and acidity. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 146-154.	2.2	8
33	Synthesis and Characterization of Metal-Supported Mesoporous Silicas Applied to the Adsorption of Benzothiophene. <i>Adsorption Science and Technology</i> , 2011, 29, 691-704.	1.5	7
34	Synthesis of lipase/silica biocatalysts through the immobilization of CALB on porous SBA-15 and their application on the resolution of pharmaceutical derivatives and on nutraceutical enrichment of natural oil. <i>Molecular Catalysis</i> , 2021, 505, 111529.	1.0	7
35	CO <sub>2</sub> selectivity in CO <sub>2</sub> :CH <sub>4</sub> and CO <sub>2</sub> :N <sub>2</sub> mixtures on carbon microfibers (CMFs) and carbon microspheres (CMSs). <i>Fuel</i> , 2022, 324, 124242.	3.4	7
36	Benzothiophene adsorption on M/SBA-15 and M/SBA-15/NH <sub>4</sub> F modified (M = Fe or Co) in liquid phase batch system. <i>Canadian Journal of Chemical Engineering</i> , 2017, 95, 2315-2323.	0.9	6

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37	H <sub>2</sub> S and H <sub>2</sub> O Combined Effect on CO <sub>2</sub> Capture by Amino Functionalized Hollow Microsphere Silicas. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 10139-10154.	1.8	6
38	Characterization Study of an Oxide Film Layer Produced under CO <sub>2</sub> /Steam Atmospheres on Two Different Maraging Steel Grades. <i>Metals</i> , 2021, 11, 746.	1.0	5
39	Glyphosate adsorption onto porous clay heterostructure (PCH): kinetic and thermodynamic studies. <i>Brazilian Journal of Chemical Engineering</i> , 2022, 39, 903-917.	0.7	5
40	Protein Adsorption onto Modified Porous Silica by Single and Binary Human Serum Protein Solutions. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9164.	1.8	4
41	CO <sub>2</sub> Valorization and Its Subsequent Valorization. <i>Molecules</i> , 2021, 26, 500.	1.7	2
42	Water adsorption in fresh and thermally aged zeolites: equilibrium and kinetics. <i>Adsorption</i> , 2021, 27, 1043-1053.	1.4	2
43	Insights into optimized synthesis conditions of hollow microspheres of silica for water vapor adsorption. <i>Chemical Engineering Research and Design</i> , 2022, 177, 583-593.	2.7	2
44	Design of Activated Carbons from the Cellulose Fraction of Agricultural Waste. Applications in Selective Separation and Storage of Gases. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
45	ADSORÇÃO DE IMUNOGLOBULINAS G EM SILICAS MESOPOROSAS DO TIPO SBA 15. , 0, , .		0
46	ZEOLITA 4A PARA PURIFICAÇÃO DO GÁS DE ATERRO SANITÁRIO. <i>Quimica Nova</i> , 0, , .	0.3	0
47	AVALIAÇÃO PRELIMINAR DO PARÂMETRO TERMOCINÉTICO PARA CARBONOS ATIVADOS. , 0, , .		0
48	Nanosponges for Carbon Dioxide Sequestration. <i>Sustainable Agriculture Reviews</i> , 2019, , 1-39.	0.6	0