Pablo Cubillas

List of Publications by Year
in descending order

43 papers	1,912 citations	331670 21 h-index	265206 42 g-index
47 all docs	47 docs citations	47 times ranked	2550 citing authors

#	Article	IF	Citations
1	Morphology-dependent zeolite intergrowth structures leading to distinct internal and outer-surface molecular diffusion barriers. Nature Materials, 2009, 8, 959-965.	27.5	251
2	Experimental determination of the dissolution rates of calcite, aragonite, and bivalves. Chemical Geology, 2005, 216, 59-77.	3.3	144
3	Revelation of the Molecular Assembly of the Nanoporous Metal Organic Framework ZIF-8. Journal of the American Chemical Society, 2011, 133, 13304-13307.	13.7	142
4	Uptake of dissolved Cd by biogenic and abiogenic aragonite: a comparison with sorption onto calcite. Geochimica Et Cosmochimica Acta, 2003, 67, 3859-3869.	3.9	131
5	Removal of Cadmium from Wastewaters by Aragonite Shells and the Influence of Other Divalent Cations. Environmental Science & Technology, 2007, 41, 112-118.	10.0	114
6	How do mineral coatings affect dissolution rates? An experimental study of coupled CaCO3 dissolutionâ€"CdCO3 precipitation. Geochimica Et Cosmochimica Acta, 2005, 69, 5459-5476.	3.9	109
7	Molecular Dynamic Simulations of Montmorilloniteâ€"Organic Interactions under Varying Salinity: An Insight into Enhanced Oil Recovery. Journal of Physical Chemistry C, 2015, 119, 7282-7294.	3.1	100
8	The Porosity, Acidity, and Reactivity of Dealuminated Zeolite ZSMâ€5 at the Single Particle Level: The Influence of the Zeolite Architecture. Chemistry - A European Journal, 2011, 17, 13773-13781.	3.3	94
9	Predicting crystal growth via a unified kinetic three-dimensional partition model. Nature, 2017, 544, 456-459.	27.8	88
10	Crystal Growth Mechanisms and Morphological Control of the Prototypical Metalâ€"Organic Framework MOFâ€5 Revealed by Atomic Force Microscopy. Chemistry - A European Journal, 2012, 18, 15406-15415.	3.3	75
11	Crystal growth of nanoporous metal organic frameworks. Dalton Transactions, 2012, 41, 3869-3878.	3.3	41
12	Geomechanical characterisation of organic-rich calcareous shale using AFM and nanoindentation. Rock Mechanics and Rock Engineering, 2021, 54, 303-320.	5.4	40
13	Unstitching the Nanoscopic Mystery of Zeolite Crystal Formation. Journal of the American Chemical Society, 2010, 132, 13858-13868.	13.7	39
14	Predicting the elastic response of organicâ€rich shale using nanoscale measurements and homogenisation methods. Geophysical Prospecting, 2017, 65, 1597-1614.	1.9	38
15	Assessing Molecular Transport Properties of Nanoporous Materials by Interference Microscopy: Remarkable Effects of Composition and Microstructure on Diffusion in the Silicoaluminophosphate Zeotype STA-7. Journal of the American Chemical Society, 2010, 132, 11665-11670.	13.7	36
16	Multi-technique approach to the petrophysical characterization of Berea sandstone core plugs (Cleveland Quarries, USA). Journal of Petroleum Science and Engineering, 2017, 149, 436-455.	4.2	36
17	Synthesis and characterization of hierarchical porous materials incorporating a cubic mesoporous phase. Journal of Materials Chemistry, 2008, 18, 4985.	6.7	34
18	Growth Mechanism of Microporous Zincophosphate Sodalite Revealed by In Situ Atomic Force Microscopy. Journal of the American Chemical Society, 2012, 134, 13066-13073.	13.7	28

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19	Spiral Growth on Nanoporous Silicoaluminophosphate STA-7 as Observed by Atomic Force Microscopy. Crystal Growth and Design, 2009, 9, 4041-4050.	3.0	24
20	AFM and HRSEM Invesitigation of Zeolite A Crystal Growth. Part 1: In the Absence of Organic Additives. Journal of Physical Chemistry C, 2011, 115, 12567-12574.	3.1	24
21	Materials Discovery and Crystal Growth of Zeoliteâ€…A Type Zeoliticâ€“Imidazolate Frameworks Revealed by Atomic Force Microscopy. Chemistry - A European Journal, 2013, 19, 8236-8243.	3.3	24
22	Crystal growth of MOF-5 using secondary building units studied by in situ atomic force microscopy. CrystEngComm, 2014, 16, 9834-9841.	2.6	24
23	Unified Internal Architecture and Surface Barriers for Molecular Diffusion of Microporous Crystalline Aluminophosphates. Angewandte Chemie - International Edition, 2010, 49, 6790-6794.	13.8	23
24	Influence of Isomorphous Substituting Cobalt Ions on the Crystal Growth of the MOF-5 Framework Determined by Atomic Force Microscopy of Growing Coreâ€“Shell Crystals. Crystal Growth and Design, 2013, 13, 4526-4532.	3.0	21
25	Friction characteristics of Cd-rich carbonate films on calcite surfaces: implications for compositional differentiation at the nanometer scale. Geochemical Transactions, 2009, 10, 7.	0.7	19
26	<i>CrystalGrower</i>: a generic computer program for Monte Carlo modelling of crystal growth. Chemical Science, 2021, 12, 1126-1146.	7.4	18
27	Growth Mechanisms in SAPO-34 Studied by White Light Interferometry and Atomic Force Microscopy. Crystal Growth and Design, 2010, 10, 2824-2828.	3.0	17
28	Effect of Diagenesis on Geomechanical Properties of Organicâ€Rich Calcareous Shale: A Multiscale Investigation. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021365.	3.4	16
29	In situ crystal growth of nanoporous zincophosphate observed by atomic force microscopy. Chemical Communications, 2010, 46, 1047.	4.1	15
30	Nanometre resolution using high-resolution scanning electron microscopy corroborated by atomic force microscopy. Chemical Communications, 2008, , 3894.	4.1	13
31	Crystal Growth Studies on Microporous Zincophosphate-Faujasite Using Atomic Force Microscopy. Crystal Growth and Design, 2011, 11, 3163-3171.	3.0	12
32	Assessment of the potential for in-plume sulphur dioxide gas-ash interactions to influence the respiratory toxicity of volcanic ash. Environmental Research, 2019, 179, 108798.	7.5	12
33	A New Framework to Quantify the Wetting Behaviour of Carbonate Rock Surfaces Based on the Relationship between Zeta Potential and Contact Angle. Energies, 2020, 13, 993.	3.1	12
34	Hierarchical porous materials: Internal structure revealed by argon ion-beam cross-section polishing, HRSEM and AFM. Solid State Sciences, 2011, 13, 745-749.	3.2	9
35	Properties of Ca-Rich and Mg-Rich Carbonate Films on Dolomite: Implications for Compositional Surface Mapping with Scanning Force Microscopy. Langmuir, 2010, 26, 4769-4775.	3.5	7
36	Atomic Force Microscopy and High Resolution Scanning Electron Microscopy Investigation of Zeolite A Crystal Growth. Part 2: In Presence of Organic Additives. Journal of Physical Chemistry C, 2014, 118, 23092-23099.	3.1	7

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37	Nanoscale Electron Beam Damage Studied by Atomic Force Microscopy. Journal of Physical Chemistry C, 2009, 113, 18441-18443.	3.1	6
38	High-Resolution scanning electron and atomic force microscopies: observation of nanometer features on zeolite Surfaces. Studies in Surface Science and Catalysis, 2008, 174, 775-780.	1.5	4
39	Modelling crystal growth in zeolite A. Studies in Surface Science and Catalysis, 2008, 174, 705-708.	1.5	4
40	Strontium incorporation during calcite growth: Implications for chemical mapping using friction force microscopy. Chemical Geology, 2015, 411, 274-282.	3.3	4
41	Chemical Force Microscopy Study on the Interactions of COOH Functional Groups with Kaolinite Surfaces: Implications for Enhanced Oil Recovery. Minerals (Basel, Switzerland), 2017, 7, 250.	2.0	4
42	Geomechanical Characterisation of Posidonia Shale Using Nanomechanical Testing. , 2019, , .		1
43	Assessment of the elastic response of shale using multiscale mechanical testing and homogenisation. E3S Web of Conferences, 2020, 205, 04013.	0.5	0