Aurelio Cabeza

List of Publications by Year
in descending order

86 papers	3,444 citations	117453 34 h-index	149479 56 g-index
87 all docs	87 docs citations	87 times ranked	3038 citing authors

#	Article	IF	Citations
1	Properties and Applications of Metal Phosphates and Pyrophosphates as Proton Conductors. Materials, 2022, 15, 1292.	1.3	20
2	Exploiting the Multifunctionality of M²⁺/Imidazoleâ€“Etidronates for Proton Conductivity (Zn²⁺) and Electrocatalysis (Co²⁺, Ni²⁺) toward the HER, OER, and ORR. ACS Applied Materials & Interfaces, 2022, 14, 11273-11287.	4.0	8
3	Homologous alkyl side-chain diphosphonate inhibitors for the corrosion protection of carbon steels. Chemical Engineering Journal, 2021, 405, 126864.	6.6	21
4	Phase Transformation Dynamics in Sulfate-Loaded Lanthanide Triphosphonates. Proton Conductivity and Application as Fillers in PEMFCs. ACS Applied Materials & Interfaces, 2021, 13, 15279-15291.	4.0	7
5	Structural and proton conductivity studies of fibrous Ï€-Ti₂O(PO₄)₂Â·2H₂O: application in chitosan-based composite membranes. Dalton Transactions, 2021, 50, 7667-7677.	1.6	8
6	Synthesis and electrochemical properties of metal(<scp>ii</scp>)-carboxyethylphenylphosphinates. Dalton Transactions, 2021, 50, 6539-6548.	1.6	8
7	NH3/H2O-mediated proton conductivity and photocatalytic behaviour of Fe(ii)-hydroxyphosphonoacetate and M(ii)-substituted derivatives. Dalton Transactions, 2020, 49, 3981-3988.	1.6	9
8	Phosphonate Decomposition-Induced Polyoxomolybdate Dumbbell-Type Cluster Formation: Structural Analysis, Proton Conduction, and Catalytic Sulfoxide Reduction. Inorganic Chemistry, 2019, 58, 11522-11533.	1.9	10
9	Relationship between the Structure and Transport Properties in the Ce_{1â€“<i>x</i>}La_{<i>x</i>}O_{2â€“<i>x</i>/2} System. Inorganic Chemistry, 2019, 58, 9368-9377.	1.9	17
10	Layered Lanthanide Sulfophosphonates and Their Proton Conduction Properties in Membrane Electrode Assemblies. Chemistry of Materials, 2019, 31, 9625-9634.	3.2	34
11	Mineralogical Characterization and Firing Temperature Delineation on Minoan Pottery, Focusing on the Application of Micro-Raman Spectroscopy. Heritage, 2019, 2, 2652-2664.	0.9	8
12	New Directions in Metal Phosphonate and Phosphinate Chemistry. Crystals, 2019, 9, 270.	1.0	81
13	From light to heavy alkali metal tetraphosphonates (M = Li, Na, K, Rb, Cs): cation size-induced structural diversity and water-facilitated proton conductivity. CrystEngComm, 2018, 20, 7648-7658.	1.3	13
14	High-Throughput Synthesis of Pillared-Layered Magnesium Tetraphosphonate Coordination Polymers: Framework Interconversions and Proton Conductivity Studies. Inorganics, 2018, 6, 96.	1.2	4
15	Three-Component Copper-Phosphonate-Auxiliary Ligand Systems: Proton Conductors and Efficient Catalysts in Mild Oxidative Functionalization of Cycloalkanes. Inorganic Chemistry, 2018, 57, 10656-10666.	1.9	19
16	Structural variability in M²⁺ 2-hydroxyphosphonoacetate moderate proton conductors. Pure and Applied Chemistry, 2017, 89, 75-87.	0.9	10
17	Influence of Proton Conducting Cations on the Structure and Properties of 2D Anilate-Based Magnets. Inorganic Chemistry, 2017, 56, 13865-13877.	1.9	16
18	Effect of Preparation Conditions on the Polymorphism and Transport Properties of La_{6â€“<i>x</i>}MoO_{12âˆ’Î´} (0 â‰¤ <i>x</i> â‰¤ 0.8). Chemistry of Materials, 2017, 29, 6966-6975.	3.2	35

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19	Zinc(<scp>ii</scp>), cobalt(<scp>ii</scp>) and manganese(<scp>ii</scp>) networks with phosphoserine ligand: synthesis, crystal structures and magnetic and proton conductivity properties. Dalton Transactions, 2017, 46, 16570-16579.	1.6	8
20	New evidence about the use of serpentinite in the Minoan architecture. A Î¼-Raman based study of the â€œHouse of the High Priestâ€•drain in Knossos. Journal of Archaeological Science: Reports, 2017, 16, 316-321.	0.2	3
21	Single-crystal and humidity-controlled powder diffraction study of the breathing effect in a metalâ€“organic framework upon water adsorption/desorption. Chemical Communications, 2016, 52, 7229-7232.	2.2	15
22	Structure of stratlingite and effect of hydration methodology on microstructure. Advances in Cement Research, 2016, 28, 13-22.	0.7	35
23	Luminescent and Proton Conducting Lanthanide Coordination Networks Based On a Zwitterionic Tripodal Triphosphonate. Inorganic Chemistry, 2016, 55, 7414-7424.	1.9	57
24	Tailored setting times with high compressive strengths in bassanite calcium sulfoaluminate eco-cements. Cement and Concrete Composites, 2016, 72, 39-47.	4.6	29
25	Insights into the Dynamics of Grotthuss Mechanism in a Proton-Conducting Chiral <i>bio</i>MOF. Chemistry of Materials, 2016, 28, 4608-4615.	3.2	105
26	<scp>G</scp>â€Factor, a Suitable Tool for Characterization of Ancient Ceramics: Application to Monitoring Amphorae Phase Transformations in Firing. Archaeometry, 2015, 57, 110-129.	0.6	3
27	Influence of the synthesis method on the structure and electrical properties of Sr1âˆ’K GeO3âˆ’/2. Ceramics International, 2015, 41, 6542-6551.	2.3	15
28	Tuning Proton Conductivity in Alkali Metal Phosphonocarboxylates by Cation Size-Induced and Water-Facilitated Proton Transfer Pathways. Chemistry of Materials, 2015, 27, 424-435.	3.2	82
29	Synthesis and structural characterization of 2-D layered copper(II) styrylphosphonate coordination polymers. Journal of Coordination Chemistry, 2014, 67, 1562-1572.	0.8	19
30	High valence transition metal doped strontium ferrites for electrode materials in symmetrical SOFCs. Journal of Power Sources, 2014, 249, 405-413.	4.0	105
31	Guest Molecule-Responsive Functional Calcium Phosphonate Frameworks for Tuned Proton Conductivity. Journal of the American Chemical Society, 2014, 136, 5731-5739.	6.6	206
32	The Baetican workshops: a starting point to study Terra Sigillata Hispanica. Journal of Archaeological Science, 2014, 45, 26-35.	1.2	7
33	Proton conductors based on alkaline-earth substituted La28âˆ’xW4+xO54+3x/2. Dalton Transactions, 2014, 43, 6490.	1.6	19
34	Terra-cotta figurines from the Roman theatre of Malaga (Spain): An archaeometric study. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2014, 53, 139-148.	0.9	3
35	Structural Variability in Multifunctional Metal Xylenediaminetetraphosphonate Hybrids. Inorganic Chemistry, 2013, 52, 8770-8783.	1.9	46
36	Structural and surface study of calcium glyceroxide, an active phase for biodiesel production under heterogeneous catalysis. Journal of Catalysis, 2013, 300, 30-36.	3.1	74

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37	Multifunctional lanthanum tetraphosphonates: Flexible, ultramicroporous and proton-conducting hybrid frameworks. Dalton Transactions, 2012, 41, 4045.	1.6	85
38	Photodegradation of Phenol over a Hybrid Organo-Inorganic Material: Iron(II) Hydroxyphosphonoacetate. Journal of Physical Chemistry C, 2012, 116, 14526-14533.	1.5	13
39	Crystal engineering in confined spaces. A novel method to grow crystalline metal phosphonates in alginate gel systems. CrystEngComm, 2012, 14, 5385.	1.3	32
40	Preparation of photocatalytic TiO2 coatings by gel-dipping with polysaccharides. Ceramics International, 2012, 38, 6531-6540.	2.3	10
41	High Proton Conductivity in a Flexible, Cross-Linked, Ultramicroporous Magnesium Tetraphosphonate Hybrid Framework. Inorganic Chemistry, 2012, 51, 7689-7698.	1.9	118
42	Multifunctional Luminescent and Proton-Conducting Lanthanide Carboxyphosphonate Open-Framework Hybrids Exhibiting Crystalline-to-Amorphous-to-Crystalline Transformations. Chemistry of Materials, 2012, 24, 3780-3792.	3.2	162
43	2D Corrugated Magnesium Carboxyphosphonate Materials: Topotactic Transformations and Interlayer â€œDecorationâ€•with Ammonia. Inorganic Chemistry, 2012, 51, 7889-7896.	1.9	18
44	Colloidal Processing of Macroporous <scp><scp>TiO₂</scp></scp> Materials for Photocatalytic Water Treatment. Journal of the American Ceramic Society, 2012, 95, 502-508.	1.9	29
45	Common Structural Features in Calcium Hydroxyphosphonoacetates. A High-Throughput Screening. Crystal Growth and Design, 2011, 11, 1713-1722.	1.4	32
46	Divalent Metal Vinylphosphonate Layered Materials: Compositional Variability, Structural Peculiarities, Dehydration Behavior, and Photoluminescent Properties. Inorganic Chemistry, 2011, 50, 11202-11211.	1.9	25
47	Stepwise Topotactic Transformations (1D to 3D) in Copper Carboxyphosphonate Materials: Structural Correlations. Crystal Growth and Design, 2010, 10, 357-364.	1.4	43
48	Structural Mapping and Framework Interconversions in 1D, 2D, and 3D Divalent Metal <i>R,S</i>-Hydroxyphosphonoacetate Hybrids. Inorganic Chemistry, 2010, 49, 761-768.	1.9	33
49	â€œBreathingâ€•in Adsorbateâ€Responsive Metal Tetraphosphonate Hybrid Materials. Chemistry - A European Journal, 2009, 15, 6612-6618.	1.7	40
50	Crystal Packing in Diâ€(Î¼â€OH)â€<i>ortho</i>â€palladated Complexes â€" A DFT Insight into the Molecular Structure and Solidâ€State Interactions. European Journal of Inorganic Chemistry, 2008, 2008, 3687-3697.	1.0	7
51	From non-porous crystalline to amorphous microporous metal(IV) bisphosphonates. Microporous and Mesoporous Materials, 2008, 114, 322-336.	2.2	21
52	Structure and Electrons in Mayenite Electrides. Inorganic Chemistry, 2008, 47, 2661-2667.	1.9	51
53	Layered microporous tin(iv) bisphosphonates. Dalton Transactions, 2007, , 2394-2404.	1.6	30
54	Layered and pillared metal carboxyethylphosphonate hybrid compounds. Dalton Transactions, 2006, , 577-585.	1.6	26

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55	Microporous aluminum bisphosphonates. Microporous and Mesoporous Materials, 2006, 88, 293-303.	2.2	39
56	Quantitative phase analysis of ordinary Portland cements using synchrotron radiation powder diffraction. Zeitschrift FÃ¼r Kristallographie, Supplement, 2006, 2006, 587-592.	0.5	8
57	High-resolution synchrotron powder diffraction analysis of ordinary Portland cements: Phase coexistence of alite. Nuclear Instruments & Methods in Physics Research B, 2005, 238, 87-91.	0.6	14
58	Synthesis and characterization of metal carboxyalkylphosphonates hybridÂmaterials. Solid State Sciences, 2004, 6, 479-487.	1.5	37
59	Structure of trihydrated rare-earth acid diphosphates LnHP2O7Â·3H2O (Ln=La, Er). Journal of Solid State Chemistry, 2004, 177, 2129-2137.	1.4	23
60	Synthesis and Characterization of a New Bisphosphonic Acid and Several Metal Hybrids Derivatives. Inorganic Chemistry, 2004, 43, 5283-5293.	1.9	54
61	Crystalchemistry and Oxide Ion Conductivity in the Lanthanum Oxygermanate Apatite Series. Chemistry of Materials, 2003, 15, 2099-2108.	3.2	110
62	Crystalchemistry and Oxide Ion Conductivity in the Lanthanum Oxygermanate Apatite Series.. ChemInform, 2003, 34, no.	0.1	1
63	Complexes Formed between Nitrilotris(methylenephosphonic acid) and M2+ Transition Metals:â€‰ Isostructural Organicâ^'Inorganic Hybrids. Inorganic Chemistry, 2002, 41, 2325-2333.	1.9	190
64	Synthesis, Structures, and Thermal Expansion of the La2W2â^'xMoxO9 Series. Journal of Solid State Chemistry, 2002, 167, 80-85.	1.4	85
65	ModificaciÃ³n de una membrana de alÃºmina (ÃŽÂ³-Al2O3): CaracterizaciÃ³n mediante parÃ¡metros electroquÃmicos y espectroscopia de fotoelectrones de rayos X. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2002, 41, 122-125.	0.9	4
66	Full Phase Analysis of Portland Clinker by Penetrating Synchrotron Powder Diffraction. Analytical Chemistry, 2001, 73, 151-156.	3.2	74
67	Deprotonation of Phosphonic Acids with M2+Cations for the Design of Neutral Isostructural Organicâ^'Inorganic Hybrids. Journal of the American Chemical Society, 2001, 123, 2885-2886.	6.6	94
68	Syntheses, Structures, and Thermal Expansion of Germanium Pyrophosphates. Journal of Solid State Chemistry, 2001, 156, 213-219.	1.4	25
69	Two New Organo-Inorganic Hybrid Compounds: Nitrilophosphonates of Aluminum and Copper. Journal of Solid State Chemistry, 2001, 160, 278-286.	1.4	40
70	Synthesis and Structure of Na2[(HO3PCH2)3NH]1.5H2O: The First Alkaline Triphosphonate. Journal of Solid State Chemistry, 2000, 151, 122-129.	1.4	60
71	New lead triphosphonates: synthesis, properties and crystal structures. Journal of Materials Chemistry, 1999, 9, 571-578.	6.7	78
72	Synthesis, ab initio structure determination, and characterization of manganese(III) phenyl phosphonates. Materials Research Bulletin, 1998, 33, 1265-1274.	2.7	18

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73	Layered acid arsenates Î±-M(HAsO4)2Â·H2O (M=Ti, Sn, Pb): synthesis optimization and crystal structures. Journal of Molecular Structure, 1998, 470, 93-104.	1.8	28
74	Effective Correction of Peak Asymmetry: Rietveld Refinement of High-Resolution Synchrotron Powder Data of Li1.8(Hf1.2Fe0.8)(PO4)3. Journal of Applied Crystallography, 1998, 31, 16-21.	1.9	17
75	Structural complexity and metal coordination flexibility in two acetophosphonates. Journal of Materials Chemistry, 1998, 8, 2479-2485.	6.7	48
76	Polymorphism and Phase Transition in Nanotubular Uranyl Phenylphosphonate:Â (UO2)3(HO3PC6H5)2(O3PC6H5)2Â·H2O. Inorganic Chemistry, 1998, 37, 1827-1832.	1.9	63
77	Aluminum Phenylphosphonates:Â A Fertile Family of Compounds. Inorganic Chemistry, 1998, 37, 4168-4178.	1.9	78
78	Structure Determination of a Complex Tubular Uranyl Phenylphosphonate, (UO2)3(HO3PC6H5)2(O3PC6H5)2Â·H2O, from Conventional X-ray Powder Diffraction Data. Inorganic Chemistry, 1996, 35, 1468-1473.	1.9	119
79	Synthesis and crystal structures of two metal phosphonates, M(HO3PC6H5)2(M = Ba, Pb). Journal of Materials Chemistry, 1996, 6, 639.	6.7	80
80	Ab initio powder structure determination and thermal behavior of a new lead(II) phenylphosphonate, Pb(O3PC6H5). Acta Crystallographica Section B: Structural Science, 1996, 52, 982-988.	1.8	24
81	Electrical Behavior of an Inorganic Film from ac and dc Measurements. Journal of Colloid and Interface Science, 1996, 180, 116-121.	5.0	18
82	Synthesis, Structure, and Characterization of Uranium(IV) Phenyl Phosphonate, U(O3PC6H5)2, and Uranium(IV) Pyro Phosphate, UP2O7. Journal of Solid State Chemistry, 1996, 121, 181-189.	1.4	46
83	How to Solve the Problems for the Indexation of Complex Materials Using Laboratory Powder Diffraction: Application to Metal Phosphonates. Materials Science Forum, 1996, 228-231, 165-170.	0.3	1
84	A comparative study of the electrical behaviour of different uranyl phosphate-based membranes by a.c. and d.c. measurements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1995, 97, 13-20.	2.3	15
85	Current rectification and electrical parameters of NH4UO2PO4Â·3H2O (NUP) films in contact with the generating electrolytes. Solid State Ionics, 1993, 61, 175-178.	1.3	1
86	Current rectification by H3OUO2PO4Â·3H2O (HUP) thin films in electrolyte mediaâ˜†. Solid State Ionics, 1992, 51, 127-131.	1.3	15