Miguel A G Aranda

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11573346/publications.pdf

Version: 2024-02-01

71 papers	3,763 citations	101543 36 h-index	123424 61 g-index
73 all docs	73 docs citations	73 times ranked	3343 citing authors

#	Article	IF	Citations
1	Interstitial oxygen conduction in lanthanum oxy-apatite electrolytes. Journal of Materials Chemistry, 2004, 14, 1142-1149.	6.7	237
2	Guest Molecule-Responsive Functional Calcium Phosphonate Frameworks for Tuned Proton Conductivity. Journal of the American Chemical Society, 2014, 136, 5731-5739.	13.7	206
3	Complexes Formed between Nitrilotris(methylenephosphonic acid) and M2+ Transition Metals:â€‰Isostructural Organicâ^'Inorganic Hybrids. Inorganic Chemistry, 2002, 41, 2325-2333.	4.0	190
4	Metalâ^'Insulator Transitions, Structural and Microstructural Evolution of RNiO3(R = Sm, Eu, Gd, Dy,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 HoNiO3and YNiO3. Journal of the American Chemical Society, 1999, 121, 4754-4762.	13.7	171
5	Multifunctional Luminescent and Proton-Conducting Lanthanide Carboxyphosphonate Open-Framework Hybrids Exhibiting Crystalline-to-Amorphous-to-Crystalline Transformations. Chemistry of Materials, 2012, 24, 3780-3792.	6.7	162
6	Structure, Atomistic Simulations, and Phase Transition of Stoichiometric Yeelimite. Chemistry of Materials, 2013, 25, 1680-1687.	6.7	123
7	High Proton Conductivity in a Flexible, Cross-Linked, Ultramicroporous Magnesium Tetraphosphonate Hybrid Framework. Inorganic Chemistry, 2012, 51, 7689-7698.	4.0	118
8	Understanding Na Mobility in NASICON Materials:Â A Rietveld,23Na and31P MAS NMR, and Impedance Study. Chemistry of Materials, 1998, 10, 665-673.	6.7	107
9	Interstitial oxygen in oxygen-stoichiometric apatites. Journal of Materials Chemistry, 2005, 15, 2489.	6.7	106
10	High Lithium Ionic Conductivity in the Li1+xAlxGeyTi2-x-y(PO4)3 NASICON Series. Chemistry of Materials, 2003, 15, 1879-1885.	6.7	95
11	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.	13.7	94
12	Synthesis Optimization and Crystal Structures of Layered Metal(IV) Hydrogen Phosphates, .alpha.-M(HPO4)2.cntdot.H2O (M = Ti, Sn, Pb). Inorganic Chemistry, 1995, 34, 893-899.	4.0	92
13	Evolution with Temperature of Crystalline and Amorphous Phases in Porcelain Stoneware. Journal of the American Ceramic Society, 2009, 92, 229-234.	3.8	92
14	Active Iron-Rich Belite Sulfoaluminate Cements: Clinkering and Hydration. Environmental Science & Technology, 2010, 44, 6855-6862.	10.0	90
15	Multifunctional lanthanum tetraphosphonates: Flexible, ultramicroporous and proton-conducting hybrid frameworks. Dalton Transactions, 2012, 41, 4045.	3.3	85
16	High Oxide Ion Conductivity in Al-Doped Germanium Oxyapatite. Chemistry of Materials, 2005, 17, 596-600.	6.7	84
17	Crystal Structures and in-Situ Formation Study of Mayenite Electrides. Inorganic Chemistry, 2007, 46, 4167-4176.	4.0	82
18	Synthesis and crystal structures of two metal phosphonates, M(HO3PC6H5)2(M = Ba, Pb). Journal of Materials Chemistry, 1996, 6, 639.	6.7	80

#	Article	IF	Citations
19	Aluminum Phenylphosphonates:Â A Fertile Family of Compounds. Inorganic Chemistry, 1998, 37, 4168-4178.	4.0	78
20	New lead triphosphonates: synthesis, properties and crystal structures. Journal of Materials Chemistry, 1999, 9, 571-578.	6.7	78
21	Full Phase Analysis of Portland Clinker by Penetrating Synchrotron Powder Diffraction. Analytical Chemistry, 2001, 73, 151-156.	6.5	74
22	Pseudocubic Crystal Structure and Phase Transition in Doped Yeâ€™elimite. Crystal Growth and Design, 2014, 14, 5158-5163.	3.0	71
23	Reversible Triclinic-Rhombohedral Phase Transition in LiHf2(PO4)3:Â Crystal Structures from Neutron Powder Diffraction. Chemistry of Materials, 1997, 9, 1678-1685.	6.7	60
24	Hydration Reactions and Mechanical Strength Developments of Iron-Rich Sulfobelite Eco-cements. Industrial & Engineering Chemistry Research, 2013, 52, 16606-16614.	3.7	60
25	Quantitative Phase Analysis of Laboratoryâ€Active Belite Clinkers by Synchrotron Powder Diffraction. Journal of the American Ceramic Society, 2007, 90, 3205-3212.	3.8	59
26	Synthesis and Characterization of a New Bisphosphonic Acid and Several Metal Hybrids Derivatives. Inorganic Chemistry, 2004, 43, 5283-5293.	4.0	54
27	Sodium Mobility in the NASICON Series Na1+xZr2-xInx(PO4)3. Chemistry of Materials, 2000, 12, 2134-2142.	6.7	53
28	Structure and Electrons in Mayenite Electrides. Inorganic Chemistry, 2008, 47, 2661-2667.	4.0	51
29	Structure and microstructure of gypsum and its relevance to Rietveld quantitative phase analyses. Powder Diffraction, 2004, 19, 240-246.	0.2	50
30	Structural complexity and metal coordination flexibility in two acetophosphonates. Journal of Materials Chemistry, 1998, 8, 2479-2485.	6.7	48
31	Hydration of beliteâ€“ye'elimiteâ€“ferrite cements with different calcium sulfate sources. Advances in Cement Research, 2016, 28, 529-543.	1.6	47
32	Structural Variability in Multifunctional Metal Xylenediaminetetraphosphonate Hybrids. Inorganic Chemistry, 2013, 52, 8770-8783.	4.0	46
33	Ba44Cu48(CO3)6O87.9: The Structure of ?BaCuO2? from Simultaneous X-ray and Neutron Powder Diffraction. Angewandte Chemie International Edition in English, 1993, 32, 1454-1456.	4.4	43
34	Stepwise Topotactic Transformations (1D to 3D) in Copper Carboxyphosphonate Materials: Structural Correlations. Crystal Growth and Design, 2010, 10, 357-364.	3.0	43
35	â€œBreathingâ€•in Adsorbateâ€Responsive Metal Tetraphosphonate Hybrid Materials. Chemistry - A European Journal, 2009, 15, 6612-6618.	3.3	40
36	Chemistry and Mass Density of Aluminum Hydroxide Gel in Eco-Cements by Ptychographic X-ray Computed Tomography. Journal of Physical Chemistry C, 2017, 121, 3044-3054.	3.1	37

#	Article	IF	Citations
37	In situpowder diffraction study of belite sulfoaluminateÂclinkering. Journal of Synchrotron Radiation, 2011, 18, 506-514.	2.4	35
38	Structure of stratlingite and effect of hydration methodology on microstructure. Advances in Cement Research, 2016, 28, 13-22.	1.6	35
39	Quantitative analysis of mineralized white Portland clinkers: The structure of Fluorellestadite. Powder Diffraction, 2002, 17, 281-286.	0.2	33
40	Structural Mapping and Framework Interconversions in 1D, 2D, and 3D Divalent Metal R,S-Hydroxyphosphonoacetate Hybrids. Inorganic Chemistry, 2010, 49, 761-768.	4.0	33
41	Common Structural Features in Calcium Hydroxyphosphonoacetates. A High-Throughput Screening. Crystal Growth and Design, 2011, 11, 1713-1722.	3.0	32
42	Crystal engineering in confined spaces. A novel method to grow crystalline metal phosphonates in alginate gel systems. CrystEngComm, 2012, 14, 5385.	2.6	32
43	Layered microporous tin(iv) bisphosphonates. Dalton Transactions, 2007, , 2394-2404.	3.3	30
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.	3.8	29
45	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.	3.6	28
46	Layered and pillared metal carboxyethylphosphonate hybrid compounds. Dalton Transactions, 2006, , 577-585.	3.3	26
47	Structure of galliumâ€doped mayenite and its reduction behaviour. Physica Status Solidi (B): Basic Research, 2008, 245, 666-672.	1.5	26
48	Divalent Metal Vinylphosphonate Layered Materials: Compositional Variability, Structural Peculiarities, Dehydration Behavior, and Photoluminescent Properties. Inorganic Chemistry, 2011, 50, 11202-11211.	4.0	25
49	Quantitative disentanglement of nanocrystalline phases in cement pastes by synchrotron ptychographic X-ray tomography. IUCrJ, 2019, 6, 473-491.	2.2	22
50	Rietveld Quantitative Analysis of Buen Retiro Porcelains. Journal of the American Ceramic Society, 2004, 87, 449-454.	3.8	20
51	2D Corrugated Magnesium Carboxyphosphonate Materials: Topotactic Transformations and Interlayer â€œDecorationâ€•with Ammonia. Inorganic Chemistry, 2012, 51, 7889-7896.	4.0	18
52	First-Principles Calculations on Polymorphs of Dicalcium Silicateâ€”Belite, a Main Component of Portland Cement. Journal of Physical Chemistry C, 2019, 123, 6768-6777.	3.1	17
53	Amorphous determination in calcium sulfoaluminate materials by external and internal methods. Advances in Cement Research, 2015, 27, 417-423.	1.6	15
54	Photodegradation of Phenol over a Hybrid Organo-Inorganic Material: Iron(II) Hydroxyphosphonoacetate. Journal of Physical Chemistry C, 2012, 116, 14526-14533.	3.1	13

#	Article	IF	Citations
55	Portland and Belite Cement Hydration Acceleration by C-S-H Seeds with Variable w/c Ratios. Materials, 2022, 15, 3553.	2.9	12
56	Synthesis and Characterization of a New Family of Mixed Oxideâ”Proton Conductors Based on Tristrontium Oxysilicate. Chemistry of Materials, 2008, 20, 2026-2034.	6.7	11
57	Structural variability in M²⁺ 2-hydroxyphosphonoacetate moderate proton conductors. Pure and Applied Chemistry, 2017, 89, 75-87.	1.9	10
58	A new family of oxide ion conductors based on tricalcium oxy-silicate. Dalton Transactions, 2006, , 2691-2697.	3.3	8
59	Synchrotron pair distribution function analyses of ye'elimite-based pastes. Advances in Cement Research, 2019, 31, 138-146.	1.6	7
60	Rietveld quantitative phase analysis with molybdenum radiation. Powder Diffraction, 2015, 30, 25-35.	0.2	6
61	Hydration Activation of Alite-Belite-Yeâ€™elimite Cements by Doping with Boron. ACS Sustainable Chemistry and Engineering, 2020, 8, 3583-3590.	6.7	6
62	Effect of Boron and Water-to-Cement Ratio on the Performances of Laboratory Prepared Belite-Yeâ€™elimite-Ferrite (BYF) Cements. Materials, 2021, 14, 4862.	2.9	6
63	Ceramic Pigments and the European REACH Legislation: Black Fe2O3-Cr2O3, a Case Study. International Journal of Applied Ceramic Technology, 2011, 8, 905-910.	2.1	4
64	X-ray Total Scattering Study of Phases Formed from Cement Phases Carbonation. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.0	4
65	Accuracy in Cement Hydration Investigations: Combined X-ray Microtomography and Powder Diffraction Analyses. Materials, 2021, 14, 6953.	2.9	4
66	Rietveld Quantitative Phase Analysis of Oil Well Cement: In Situ Hydration Study at 150 Bars and 150 Â°C. Materials, 2019, 12, 1897.	2.9	3
67	PreparaciÃ³n y caracterizaciÃ³n de cementos belÃticos blancos activados con dopantes alcalinos. Materiales De Construccion, 2009, 59, 19-29.	0.7	2
68	X-ray diffraction, cements and environment, three worlds in one.. MATEC Web of Conferences, 2018, 149, 01003.	0.2	1
69	High Lithium Ionic Conductivity in the Li1+xAlxGeyTi2-x-y (PO4)3 NASICON Series.. ChemInform, 2003, 34, no.	0.0	0
70	5. Rietveld Quantitative Phase Analysis of OPC Clinkers, Cements and Hydration Products. , 2012, , 169-210.		0
71	X-ray diffraction, cements and environment, three worlds in one.. MATEC Web of Conferences, 2018, 149, 01003.	0.2	0