# Rosario M P Colodrero

List of Publications by Year
in descending order



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|---|---|---|---|
| 32 papers | 1,127 citations | 471509 17 h-index | 454955 30 g-index |
| 33 all docs | 33 docs citations | 33 times ranked | 1174 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Guest Molecule-Responsive Functional Calcium Phosphonate Frameworks for Tuned Proton Conductivity. Journal of the American Chemical Society, 2014, 136, 5731-5739. | 13.7 | 206 |
| 2 | 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 |
| 3 | High Proton Conductivity in a Flexible, Cross-Linked, Ultramicroporous Magnesium Tetraphosphonate Hybrid Framework. Inorganic Chemistry, 2012, 51, 7689-7698. | 4.0 | 118 |
| 4 | Multifunctional lanthanum tetraphosphonates: Flexible, ultramicroporous and proton-conducting hybrid frameworks. Dalton Transactions, 2012, 41, 4045. | 3.3 | 85 |
| 5 | Tuning Proton Conductivity in Alkali Metal Phosphonocarboxylates by Cation Size-Induced and Water-Facilitated Proton Transfer Pathways. Chemistry of Materials, 2015, 27, 424-435. | 6.7 | 82 |
| 6 | Structural Variability in Multifunctional Metal Xylenediaminetetraphosphonate Hybrids. Inorganic Chemistry, 2013, 52, 8770-8783. | 4.0 | 46 |
| 7 | â€œBreathingâ€•in Adsorbateâ€Responsive Metal Tetraphosphonate Hybrid Materials. Chemistry - A European Journal, 2009, 15, 6612-6618. | 3.3 | 40 |
| 8 | Layered Lanthanide Sulfophosphonates and Their Proton Conduction Properties in Membrane Electrode Assemblies. Chemistry of Materials, 2019, 31, 9625-9634. | 6.7 | 34 |
| 9 | Structural Mapping and Framework Interconversions in 1D, 2D, and 3D Divalent Metal <i>R,S</i>-Hydroxyphosphonoacetate Hybrids. Inorganic Chemistry, 2010, 49, 761-768. | 4.0 | 33 |
| 10 | Common Structural Features in Calcium Hydroxyphosphonoacetates. A High-Throughput Screening. Crystal Growth and Design, 2011, 11, 1713-1722. | 3.0 | 32 |
| 11 | Crystal engineering in confined spaces. A novel method to grow crystalline metal phosphonates in alginate gel systems. CrystEngComm, 2012, 14, 5385. | 2.6 | 32 |
| 12 | Synthesis and structural characterization of homochiral 2D coordination polymers of zinc and copper with conformationally flexible ditopic imidazolium-based dicarboxylate ligands. Dalton Transactions, 2017, 46, 471-482. | 3.3 | 27 |
| 13 | Divalent Metal Vinylphosphonate Layered Materials: Compositional Variability, Structural Peculiarities, Dehydration Behavior, and Photoluminescent Properties. Inorganic Chemistry, 2011, 50, 11202-11211. | 4.0 | 25 |
| 14 | Homologous alkyl side-chain diphosphonate inhibitors for the corrosion protection of carbon steels. Chemical Engineering Journal, 2021, 405, 126864. | 12.7 | 21 |
| 15 | Properties and Applications of Metal Phosphates and Pyrophosphates as Proton Conductors. Materials, 2022, 15, 1292. | 2.9 | 20 |
| 16 | Synthesis and structural characterization of 2-D layered copper(II) styrylphosphonate coordination polymers. Journal of Coordination Chemistry, 2014, 67, 1562-1572. | 2.2 | 19 |
| 17 | Three-Component Copper-Phosphonate-Auxiliary Ligand Systems: Proton Conductors and Efficient Catalysts in Mild Oxidative Functionalization of Cycloalkanes. Inorganic Chemistry, 2018, 57, 10656-10666. | 4.0 | 19 |
| 18 | 2D Corrugated Magnesium Carboxyphosphonate Materials: Topotactic Transformations and Interlayer â€œDecorationâ€•with Ammonia. Inorganic Chemistry, 2012, 51, 7889-7896. | 4.0 | 18 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Photodegradation of Phenol over a Hybrid Organo-Inorganic Material: Iron(II) Hydroxyphosphonoacetate. Journal of Physical Chemistry C, 2012, 116, 14526-14533. | 3.1 | 13 |
| 20 | 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. | 2.6 | 13 |
| 21 | Assessment of ATR-FTIR spectroscopy with multivariate analysis to investigate the binding mechanisms of Ag and TiO2 nanoparticles to ChelexÂ®-100 or Metsorbâ„¢ for the DGT technique. Analytical Methods, 2020, 12, 959-969. | 2.7 | 11 |
| 22 | Structural variability in M<sup>2+</sup> 2-hydroxyphosphonoacetate moderate proton conductors. Pure and Applied Chemistry, 2017, 89, 75-87. | 1.9 | 10 |
| 23 | NH3/H2O-mediated proton conductivity and photocatalytic behaviour of Fe(ii)-hydroxyphosphonoacetate and M(ii)-substituted derivatives. Dalton Transactions, 2020, 49, 3981-3988. | 3.3 | 9 |
| 24 | 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. | 3.3 | 8 |
| 25 | Structural and proton conductivity studies of fibrous Ï€-Ti<sub>2</sub>O(PO<sub>4</sub>)<sub>2</sub>Â·2H<sub>2</sub>O: application in chitosan-based composite membranes. Dalton Transactions, 2021, 50, 7667-7677. | 3.3 | 8 |
| 26 | Synthesis and electrochemical properties of metal(<scp>ii</scp>)-carboxyethylphenylphosphinates. Dalton Transactions, 2021, 50, 6539-6548. | 3.3 | 8 |
| 27 | Exploiting the Multifunctionality of M<sup>2+</sup>/Imidazoleâ€“Etidronates for Proton Conductivity (Zn<sup>2+</sup>) and Electrocatalysis (Co<sup>2+</sup>, Ni<sup>2+</sup>) toward the HER, OER, and ORR. ACS Applied Materials & Interfaces, 2022, 14, 11273-11287. | 8.0 | 8 |
| 28 | Phase Transformation Dynamics in Sulfate-Loaded Lanthanide Triphosphonates. Proton Conductivity and Application as Fillers in PEMFCs. ACS Applied Materials & Interfaces, 2021, 13, 15279-15291. | 8.0 | 7 |
| 29 | Homochiral imidazolium-based dicarboxylate compounds: Structure and solution behaviour. Inorganica Chimica Acta, 2020, 513, 119923. | 2.4 | 6 |
| 30 | High-Throughput Synthesis of Pillared-Layered Magnesium Tetraphosphonate Coordination Polymers: Framework Interconversions and Proton Conductivity Studies. Inorganics, 2018, 6, 96. | 2.7 | 4 |
| 31 | Crystal structures and ultramicroporosity in Mg and Ca tetraphosphonate hybrids. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C710-C711. | 0.3 | 0 |
| 32 | Luminescent proton-conducting lanthanide carboxyphosphonate open-framework hybrids. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, s224-s224. | 0.3 | 0 |