

# Philippe Knauth

## List of Publications by Year in descending order

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215  
papers

7,544  
citations

70961

41  
h-index

66788

78  
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230  
all docs

230  
docs citations

230  
times ranked

8167  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Inorganic solid Li ion conductors: An overview. <i>Solid State Ionics</i> , 2009, 180, 911-916.  | 1.3  | 1,030     |
| 2  | Three-Dimensional Self-Supported Metal Oxides for Advanced Energy Storage. <i>Advanced Materials</i> , 2014, 26, 3368-3397.  | 11.1 | 446       |
| 3  | Alternative Li-Ion Battery Electrode Based on Self-Organized Titania Nanotubes. <i>Chemistry of Materials</i> , 2009, 21, 63-67.   | 3.2  | 320       |
| 4  | The Big Problem of Small Particles: A Comparison of Methods for Determination of Particle Size in Nanocrystalline Anatase Powders. <i>Chemistry of Materials</i> , 2005, 17, 2378-2385.  | 3.2  | 256       |
| 5  | Solid State Ionics: Roots, Status, and Future Prospects. <i>Journal of the American Ceramic Society</i> , 2002, 85, 1654-1680.   | 1.9  | 228       |
| 6  | Electrical and defect thermodynamic properties of nanocrystalline titanium dioxide. <i>Journal of Applied Physics</i> , 1999, 85, 897-902.   | 1.1  | 178       |
| 7  | TiO <sub>2</sub> nanotubes manufactured by anodization of Ti thin films for on-chip Li-ion 2D microbatteries. <i>Electrochimica Acta</i> , 2009, 54, 4262-4268.  | 2.6  | 137       |
| 8  | Ionic Conductor Composites: Theory and Materials. , 2000, 5, 111-125.  |      | 117       |
| 9  | Nanoarchitected TiO <sub>2</sub> /SnO: A Future Negative Electrode for High Power Density Li-Ion Microbatteries?. <i>Chemistry of Materials</i> , 2010, 22, 1926-1932.   | 3.2  | 107       |
| 10 | Analysis of Temperature-Promoted and Solvent-Assisted Cross-Linking in Sulfonated Poly(ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf  | 1.2  | 104       |
| 11 | Nanostructured negative electrodes based on titania for Li-ion microbatteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 9925.   | 6.7  | 103       |
| 12 | Building bridges: Crosslinking of sulfonated aromatic polymers A review. <i>Journal of Membrane Science</i> , 2012, 423-424, 113-127.  | 4.1  | 102       |
| 13 | Electrical properties and defect chemistry of anatase (TiO <sub>2</sub> ). <i>Solid State Ionics</i> , 2006, 177, 229-236.   | 1.3  | 92        |
| 14 | Thermogravimetric analysis of SPEEK membranes: Thermal stability, degree of sulfonation and cross-linking reaction. <i>Journal of Analytical and Applied Pyrolysis</i> , 2011, 92, 361-365.  | 2.6  | 92        |
| 15 | Effect of Sn-doping on the electrochemical behaviour of TiO <sub>2</sub> nanotubes as potential negative electrode materials for 3D Li-ion micro batteries. <i>Journal of Power Sources</i> , 2013, 224, 269-277.                              | 4.0  | 89        |
| 16 | A novel architected negative electrode based on titania nanotube and iron oxide nanowire composites for Li-ion microbatteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 4041.   | 6.7  | 88        |
| 17 | A Simple New Route to Covalent Organic/Inorganic Hybrid Proton Exchange Polymeric Membranes. <i>Chemistry of Materials</i> , 2006, 18, 69-75.  | 3.2  | 87        |
| 18 | High ionic exchange capacity polyphenylsulfone (SPPSU) and polyethersulfone (SPES) cross-linked by annealing treatment: Thermal stability, hydration level and mechanical properties. <i>Journal of Membrane Science</i> , 2010, 354, 134-141. | 4.1  | 85        |

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|----|---|-----|-----------|
| 19 | Mechanical properties of proton-conducting sulfonated aromatic polymer membranes: Stress-strain tests and dynamical analysis. <i>Journal of Power Sources</i> , 2010, 195, 7770-7775.   | 4.0 | 84        |
| 20 | Grain growth of pure nickel and of a Ni-Si solid solution studied by differential scanning calorimetry on nanometer-sized crystals. <i>Scripta Metallurgica Et Materialia</i> , 1993, 28, 325-330.                                | 1.0 | 81        |
| 21 | Durability of Sulfonated Aromatic Polymers for Proton-Exchange-Membrane Fuel Cells. <i>ChemSusChem</i> , 2011, 4, 1526-1536.  | 3.6 | 81        |
| 22 | Composite polymer electrolytes of sulfonated poly-ether-ether-ketone (SPEEK) with organically functionalized TiO <sub>2</sub> . <i>Journal of Membrane Science</i> , 2011, 369, 536-544.  | 4.1 | 78        |
| 23 | Composite Proton-Conducting Hybrid Polymers: Water Sorption Isotherms and Mechanical Properties of Blends of Sulfonated PEEK and Substituted PPSU. <i>Chemistry of Materials</i> , 2008, 20, 4327-4334.                           | 3.2 | 72        |
| 24 | Fabrication of self-organized TiO <sub>2</sub> nanotubes from columnar titanium thin films sputtered on semiconductor surfaces. <i>Electrochemistry Communications</i> , 2006, 8, 1840-1844.                                      | 2.3 | 65        |
| 25 | Electrical and Point Defect Properties of TiO <sub>2</sub> Nanotubes Fabricated by Electrochemical Anodization. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5989-5996.  | 1.5 | 64        |
| 26 | Sol-gel synthesis, X-ray photoelectron spectroscopy and electrical conductivity of Co-doped (La) <sub>x</sub> Ti <sub>1-x</sub> O <sub>2</sub> nanotubes. <i>Journal of Applied Electrochemistry</i> , 2011, 41, 107-117.         | 2.8 | 59        |
| 27 | Anion-conducting ionomers: Study of type of functionalizing amine and macromolecular cross-linking. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 14039-14049.  | 3.8 | 58        |
| 28 | Cross-Linking of Sulfonated Poly(ether ether ketone) by Thermal Treatment: How Does the Reaction Occur?. <i>Fuel Cells</i> , 2013, 13, 107-117.   | 1.5 | 56        |
| 29 | Solute segregation, electrical properties and defect thermodynamics of nanocrystalline TiO <sub>2</sub> and CeO <sub>2</sub> . <i>Solid State Ionics</i> , 2000, 136-137, 1215-1224.  | 1.3 | 54        |
| 30 | Development of an ammonia gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2003, 95, 170-176.   | 4.0 | 53        |
| 31 | Electropolymerization of copolymer electrolyte into titania nanotube electrodes for high-performance 3D microbatteries. <i>Electrochemistry Communications</i> , 2011, 13, 894-897.   | 2.3 | 52        |
| 32 | EXAFS Study of Dopant Segregation (Zn, Nb) in Nanocrystalline Anatase (TiO <sub>2</sub> ). <i>Chemistry of Materials</i> , 2003, 15, 4996-5002.   | 3.2 | 51        |
| 33 | Hybrid materials for polymer electrolyte membrane fuel cells: Water uptake, mechanical and transport properties. <i>Journal of Membrane Science</i> , 2007, 304, 76-81.   | 4.1 | 51        |
| 34 | Mechanical properties of anion exchange membranes by combination of tensile stress-strain tests and dynamic mechanical analysis. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1180-1187.                | 2.4 | 51        |
| 35 | The electrochemical behaviour of TiO <sub>2</sub> nanotubes with Co <sub>3</sub> O <sub>4</sub> or NiO submicron particles: Composite anode materials for Li-ion micro batteries. <i>Electrochimica Acta</i> , 2013, 88, 814-820. | 2.6 | 50        |
| 36 | Thermal Stability and Thermodynamic Properties of Hybrid Proton-Conducting Polyaryl Etherketones. <i>Journal of Physical Chemistry B</i> , 2006, 110, 15817-15823.  | 1.2 | 49        |

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|----|--|-----|-----------|
| 37 | Structure and Chemical Bonding in Zr-Doped Anatase TiO <sub>2</sub> Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2008, 112, 43-47.   | 1.5 | 48        |
| 38 | Emf Measurements on Nanocrystalline Copper-Doped Ceria. <i>Journal of Solid State Chemistry</i> , 1998, 140, 295-299.  | 1.4 | 46        |
| 39 | Nonstoichiometry and relaxation kinetics of nanocrystalline mixed praseodymium-Cerium oxide Pr <sub>0.7</sub> Ce <sub>0.3</sub> O <sub>2-x</sub> . <i>Journal of the European Ceramic Society</i> , 1999, 19, 831-836.                                     | 2.8 | 46        |
| 40 | High energy and power density TiO <sub>2</sub> nanotube electrodes for single and complete lithium-ion batteries. <i>Journal of Power Sources</i> , 2015, 273, 1182-1188.  | 4.0 | 45        |
| 41 | Anionic conducting composite membranes based on aromatic polymer and layered double hydroxides. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 3197-3205.   | 3.8 | 44        |
| 42 | Hot pressing of nanocrystalline TiO <sub>2</sub> (anatase) ceramics with controlled microstructure. <i>Journal of the European Ceramic Society</i> , 2007, 27, 2641-2646.  | 2.8 | 41        |
| 43 | Organic-inorganic hybrid membranes based on sulfonated polyaryletherketones: Correlation between water uptake and electrical conductivity. <i>Solid State Ionics</i> , 2008, 179, 1161-1165.   | 1.3 | 41        |
| 44 | High performance sulfonated aromatic ionomers by solvothermal macromolecular synthesis. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8672-8680.   | 3.8 | 41        |
| 45 | Improving the corrosion properties of amorphous Ni-P thin films using different additives. <i>Surface and Coatings Technology</i> , 2018, 345, 40-52.  | 2.2 | 41        |
| 46 | Hybrid composite membranes based on SPEEK and functionalized PPSU for PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8063-8069.   | 3.8 | 39        |
| 47 | Electrochemical fabrication of Sn nanowires on titania nanotube guide layers. <i>Nanotechnology</i> , 2008, 19, 205601.  | 1.3 | 38        |
| 48 | Mechanistic Study of Sn Electrodeposition on TiO <sub>2</sub> Nanotube Layers: Thermodynamics, Kinetics, Nucleation, and Growth Modes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20568-20575.  | 1.5 | 38        |
| 49 | Water Activity Coefficient and Proton Mobility in Hydrated Acidic Polymers. <i>Journal of the Electrochemical Society</i> , 2011, 158, B159.   | 1.3 | 38        |
| 50 | Nanocomposite Electrode for Li-Ion Microbatteries Based on SnO on Nanotubular Titania Matrix. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, A186.   | 2.2 | 37        |
| 51 | Properties of Sn-doped TiO <sub>2</sub> nanotubes fabricated by anodization of co-sputtered Ti-Sn thin films. <i>Electrochimica Acta</i> , 2012, 62, 192-198.  | 2.6 | 37        |
| 52 | Energetics of intra- and intermolecular bonds in 1%o-alkanediols. III. Thermochemical study of 1,6-hexanediol, 1,7-heptanediol, 1,8-octanediol, 1,9-nonanediol, and 1,10-decanediol at 298.15 K. <i>Canadian Journal of Chemistry</i> , 1990, 68, 731-734. | 0.6 | 36        |
| 53 | Self-assembled nanocomposite organic-inorganic proton conducting sulfonated poly-ether-ether-ketone (SPEEK)-based membranes: Optimized mechanical, thermal and electrical properties. <i>Journal of Power Sources</i> , 2009, 192, 353-359.                | 4.0 | 36        |
| 54 | Alkaline stability of model anion exchange membranes based on poly(phenylene oxide) (PPO) with grafted quaternary ammonium groups: Influence of the functionalization route. <i>Polymer</i> , 2019, 185, 121931.   | 1.8 | 36        |

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|----|--|-----|-----------|
| 55 | Ionic and electronic conduction in nanostructured solids: Concepts and concerns, consensus and controversies. <i>Solid State Ionics</i> , 2006, 177, 2495-2502.  | 1.3 | 35        |
| 56 | Crosslinked SPEEK membranes: Mechanical, thermal, and hydrothermal properties. <i>Journal of Materials Research</i> , 2012, 27, 1950-1957.   | 1.2 | 34        |
| 57 | Energetics of intra- and intermolecular bonds in $\beta$ -alkanediols. <i>Structural Chemistry</i> , 1990, 1, 43-46.   | 1.0 | 33        |
| 58 | Electrical conductivity of model composites of an ionic conductor (CuBr) and an insulator (TiO <sub>2</sub> ). <i>Tj ETQq0 0 0 rgBT (Overlock, 10 Tf 50 0</i>  | 1.3 | 33        |
| 59 | Morphology, Electrical Conductivity, and Reactivity of Mixed Conductor CuBr Films: Development of a New Ammonia Gas Detector. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8327-8333.               | 1.2 | 33        |
| 60 | Sulfonated aromatic ionomers: Analysis of proton conductivity and proton mobility. <i>Solid State Ionics</i> , 2012, 225, 255-259.   | 1.3 | 33        |
| 61 | Niobium Alloying of Self-Organized TiO <sub>2</sub> Nanotubes as an Anode for Lithium Ion Microbatteries. <i>Advanced Materials Technologies</i> , 2018, 3, 1700274.                                       | 3.0 | 33        |
| 62 | Effective ion mobility in anion exchange ionomers: Relations with hydration, porosity, tortuosity, and percolation. <i>Journal of Membrane Science</i> , 2021, 617, 118622.                                | 4.1 | 33        |
| 63 | Enhanced conductivity in ionic conductor-insulator composites: Experiments and numerical model. <i>Applied Physics Letters</i> , 1997, 71, 1335-1337.  | 1.5 | 32        |
| 64 | Highly sensitive and selective room temperature NH <sub>3</sub> gas microsensor using an ionic conductor (CuBr) film. <i>Analytica Chimica Acta</i> , 2004, 515, 279-284.                                  | 2.6 | 32        |
| 65 | Highly conformal electrodeposition of copolymer electrolytes into titania nanotubes for 3D Li-ion batteries. <i>Nanoscale Research Letters</i> , 2012, 7, 349.   | 3.1 | 32        |
| 66 | Cross-linked sulfonated aromatic ionomers via SO <sub>2</sub> bridges: Conductivity properties. <i>Journal of Power Sources</i> , 2013, 243, 488-493.  | 4.0 | 32        |
| 67 | Tin-Based composite Materials Fabricated by Anodic Oxidation for the Negative Electrode of Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2011, 158, A1094.                             | 1.3 | 31        |
| 68 | Theoretical Analysis of IS of Polycrystalline Materials with Blocking or Conducting Grain Boundaries: From Microcrystals to Nanocrystals. <i>Journal of the Electrochemical Society</i> , 2003, 150, E348. | 1.3 | 30        |
| 69 | Thermal crosslinked and nanodiamond reinforced SPEEK composite membrane for PEMFC. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 3346-3351.  | 3.8 | 30        |
| 70 | New insight into the mechanism of cathodic electrodeposition of zinc oxide thin films onto vitreous carbon. <i>Electrochimica Acta</i> , 2013, 94, 238-244.  | 2.6 | 29        |
| 71 | Composite anion exchange membranes with functionalized hydrophilic or hydrophobic titanium dioxide. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 19178-19189.                               | 3.8 | 29        |
| 72 | Theoretical analysis of the impedance spectra of electroceramics Part 2: isotropic grain boundaries. <i>Journal of Electroceramics</i> , 2006, 16, 229-238.  | 0.8 | 27        |

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|----|--|-----|-----------|
| 73 | Local Atomic and Electronic Structure in Nanocrystalline Sn-Doped Anatase TiO <sub>2</sub> . <i>ChemPhysChem</i> , 2006, 7, 2377-2383.   | 1.0 | 27        |
| 74 | Mechanical properties of hybrid proton conducting polymer blends based on sulfonated polyetheretherketones. <i>Journal of Power Sources</i> , 2008, 178, 667-670.  | 4.0 | 27        |
| 75 | Sulfonated polyphenyl ether by electropolymerization. <i>Electrochimica Acta</i> , 2012, 81, 58-63.  | 2.6 | 27        |
| 76 | Proton Mobility in Sulfonated PolyEtherEtherKetone (SPEEK): Influence of Thermal Crosslinking and Annealing. <i>Fuel Cells</i> , 2013, 13, 79-85.  | 1.5 | 27        |
| 77 | Tuneable properties of carbon quantum dots by different synthetic methods. <i>Journal of Nanostructure in Chemistry</i> , 2022, 12, 565-580.   | 5.3 | 27        |
| 78 | Energetics of inter. and intramolecular bonds in alkanediols. iv. the thermochemical study of 1,2-alkanediols at 298.15 K. <i>Thermochimica Acta</i> , 1990, 164, 145-152.   | 1.2 | 26        |
| 79 | Hot compaction of nanocrystalline TiO <sub>2</sub> (anatase) ceramics. Mechanisms of densification: Grain size and doping effects. <i>Acta Materialia</i> , 2006, 54, 3575-3583.                                     | 3.8 | 26        |
| 80 | Synthetic strategies for the preparation of proton-conducting hybrid polymers based on PEEK and PPSU for PEM fuel cells. <i>Comptes Rendus Chimie</i> , 2008, 11, 1074-1081.   | 0.2 | 26        |
| 81 | Layered Double Hydroxides Containing an Ionic Liquid: Ionic Conductivity and Use in Composite Anion Exchange Membranes. <i>ChemElectroChem</i> , 2018, 5, 2781-2788.   | 1.7 | 26        |
| 82 | Cation-conducting ionomers made by ion exchange of sulfonated poly-ether-ether-ketone: Hydration, mechanical and thermal properties and ionic conductivity. <i>Journal of Membrane Science</i> , 2014, 465, 185-192. | 4.1 | 25        |
| 83 | Effects of anion substitution on hydration, ionic conductivity and mechanical properties of anion-exchange membranes. <i>New Journal of Chemistry</i> , 2016, 40, 3671-3676.   | 1.4 | 25        |
| 84 | Electrodeposition of Nanocrystalline Silver: Study of Grain Growth by Measurement of Reversible Electromotive Force. <i>Journal of Physical Chemistry B</i> , 1997, 101, 7452-7454.                                  | 1.2 | 24        |
| 85 | Mott-Schottky analysis of polycrystalline copper(I) bromide in aqueous electrolytes. <i>Journal of Electroanalytical Chemistry</i> , 1998, 442, 229-234.   | 1.9 | 24        |
| 86 | Electrochemically engineered single Li-ion conducting solid polymer electrolyte on titania nanotubes for microbatteries. <i>Journal of Power Sources</i> , 2017, 353, 95-103.  | 4.0 | 24        |
| 87 | Bottom-Up Electrochemical Deposition of Poly(styrene sulfonate) on Nanoarchitected Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 22902-22910.   | 4.0 | 24        |
| 88 | Preparation of thin films of copper(I) bromide by r.f. sputtering: morphology and electrical properties. <i>Thin Solid Films</i> , 1998, 323, 31-36.   | 0.8 | 23        |
| 89 | Electrical properties of CuI and the phase boundary Cu <sup>+</sup> /CuI. <i>Solid State Ionics</i> , 1995, 76, 229-235.   | 1.3 | 22        |
| 90 | Direct preparation of crystalline CuInS <sub>2</sub> thin films by radiofrequency sputtering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009, 157, 66-71.          | 1.7 | 21        |

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|-----|--|-----|-----------|
| 91  | Semiconductor Properties of Polycrystalline CuBr by Hall Effect and Capacitive Measurements. Physica Status Solidi A, 1998, 165, 461-465.  | 1.7 | 20        |
| 92  | Microporous Stilbite single crystals for alcohol sensing. Journal of Electroceramics, 2006, 16, 93-98.   | 0.8 | 20        |
| 93  | Electrochemical Fabrication and Properties of Highly Ordered Fe-Doped TiO <sub>2</sub> Nanotubes. ChemPhysChem, 2012, 13, 3707-3713.   | 1.0 | 20        |
| 94  | Enhancing the corrosion resistance of Cu/Ni-P/Au electrical contacts by electropolymerized poly(methyl methacrylate). Corrosion Science, 2019, 149, 75-86.   | 3.0 | 20        |
| 95  | Single-step electrodeposition of superhydrophobic black NiO thin films. Journal of Applied Electrochemistry, 2019, 49, 621-629.  | 1.5 | 19        |
| 96  | Influence of ions and molecules on single crystal zeolite conductivity under in situ conditions. Solid State Ionics, 2001, 143, 433-444.   | 1.3 | 18        |
| 97  | How to improve Nafion with tailor made annealing. RSC Advances, 2018, 8, 27268-27274.  | 1.7 | 18        |
| 98  | Calorimetric analysis of thin-film reactions: Experiments and modeling in the nickel/silicon system. Journal of Applied Physics, 1994, 76, 5195-5201.  | 1.1 | 17        |
| 99  | Sulfonated Aromatic Polymers as Proton-Conducting Solid Electrolytes for Fuel Cells: a Short Review. Zeitschrift Fur Physikalische Chemie, 2013, 227, 595-614.   | 1.4 | 17        |
| 100 | Theoretical and experimental infrared spectra of hydrated and dehydrated sulfonated poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3   | 1.8 | 17        |
| 101 | Porous NASICON-Type Li <sub>3</sub> Fe <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Thin Film Deposited by RF Sputtering as Cathode Material for Li-Ion Microbatteries. Nanoscale Research Letters, 2016, 11, 365. | 3.1 | 17        |
| 102 | Enhanced electrical conductivity of CuBr-TiO <sub>2</sub> composites: Dependence on temperature, volume fractions and grain sizes. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1998, 102, 945-952.           | 0.9 | 16        |
| 103 | Enhanced conductivity in ionic conductor-insulator composites: numerical models in two and three dimensions. European Physical Journal B, 2001, 22, 421-427.   | 0.6 | 16        |
| 104 | Enhanced electrochemical performance of Lithium-ion batteries by conformal coating of polymer electrolyte. Nanoscale Research Letters, 2014, 9, 544.   | 3.1 | 16        |
| 105 | STUDY OF TWO-PHASE MIXTURES COPPER(I) BROMIDE-ALUMINA BY IMPEDANCE SPECTROSCOPY. Journal of Physics and Chemistry of Solids, 1997, 58, 319-324.  | 1.9 | 15        |
| 106 | Electrical properties of thin-films of the mixed ionic-electronic conductor CuBr: influence of electrode metals and gaseous ammonia. Journal of the European Ceramic Society, 1999, 19, 823-826.                   | 2.8 | 15        |
| 107 | Electrodeposited copolymer electrolyte into nanostructured titania electrodes for 3D Li-ion microbatteries. Comptes Rendus Chimie, 2013, 16, 80-88.  | 0.2 | 15        |
| 108 | Electropolymerization of sulfonated phenol by cyclic voltammetry. Journal of Applied Polymer Science, 2013, 129, 1151-1156.  | 1.3 | 15        |

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|-----|--|-----|-----------|
| 109 | Study of compaction and sintering of nanosized oxide powders by in situ electrical measurements and dilatometry: Nano CeO <sub>2</sub> case study. <i>Journal of Electroceramics</i> , 2015, 34, 82-90.                        | 0.8 | 15        |
| 110 | Electrochemical synthesis of thin, dense, and conformal anion exchange membranes with quaternary ammonium groups. <i>Electrochimica Acta</i> , 2018, 265, 78-88.   | 2.6 | 15        |
| 111 | Cu/Ni/Au multilayers by electrochemistry: A crucial system in electronics - A critical review. <i>Microelectronic Engineering</i> , 2019, 206, 25-44.  | 1.1 | 15        |
| 112 | Solid State Electrochemical Characterisation of Nanostructured Silver Prepared by Cold-Rolling and Internal Oxidation. <i>Scripta Materialia</i> , 1998, 38, 1003-1007.  | 2.6 | 14        |
| 113 | Defect and transport properties of nanocrystalline ceramics and thin films. <i>Journal of Solid State Electrochemistry</i> , 2002, 6, 165-171.   | 1.2 | 14        |
| 114 | Preparation and optical absorption of electrodeposited or sputtered, dense or porous nanocrystalline CuInS <sub>2</sub> thin films. <i>Comptes Rendus Chimie</i> , 2008, 11, 1016-1022.  | 0.2 | 14        |
| 115 | Chemomechanics of acidic ionomers: Hydration isotherms and physical model. <i>Journal of Power Sources</i> , 2014, 267, 692-699.   | 4.0 | 14        |
| 116 | Study of Annealed Aquivion <sup>®</sup> Ionomers with the INCA Method. <i>Membranes</i> , 2019, 9, 134.  | 1.4 | 14        |
| 117 | Combustion calorimetry on milligram samples of liquid substances with a CRMT rocking bomb calorimeter. Application to the study of 1% -alkanediols at 298.15 K. <i>Journal of Chemical Thermodynamics</i> , 1989, 21, 203-210. | 1.0 | 13        |
| 118 | Preparation and Electrical Properties of Dense Ceramics with NASICON Composition Sintered at Reduced Temperatures. <i>Journal of Electroceramics</i> , 2004, 13, 817-823.  | 0.8 | 13        |
| 119 | Fluoride-ion-conducting Polymers: Ionic Conductivity and Fluoride Ion Diffusion Coefficient in Quaternized Polysulfones. <i>ChemPhysChem</i> , 2015, 16, 3631-3636.  | 1.0 | 13        |
| 120 | Microstructure and ammonia gas sensitivity of sputtered films of the mixed ionic-electronic conductor CuBr. <i>Thin Solid Films</i> , 2001, 389, 5-7.  | 0.8 | 12        |
| 121 | The Reconstruction of Natural Zeolites. , 2003, , .  |     | 12        |
| 122 | Electrochemical deposition of indium: nucleation mode and diffusional limitation. <i>Russian Journal of Electrochemistry</i> , 2016, 52, 99-105.   | 0.3 | 12        |
| 123 | LoLiPEM: Long life proton exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 1921-1934.   | 3.8 | 12        |
| 124 | Model Long Side-Chain PPO-Based Anion Exchange Ionomers: Properties and Alkaline Stability. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1309-1316.   | 1.5 | 12        |
| 125 | Anion Exchange Membranes with 1D, 2D and 3D Fillers: A Review. <i>Polymers</i> , 2021, 13, 3887.   | 2.0 | 12        |
| 126 | Mixed ionic-electronic conducting thin-films of CuBr: a new active component for gas sensors?. <i>Sensors and Actuators A: Physical</i> , 1999, 74, 237-241.   | 2.0 | 11        |



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|-----|---|-----|-----------|
| 127 | Zeolite Synthesis by the High-Pressure Hydrothermal Method: Synthesis of Natural 6-Ring Zeolites with Different Void Systems. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 3831-3833.   | 7.2 | 11        |
| 128 | Impedance analysis of CuBr films for ammonia gas detection. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 431-436.   | 4.0 | 11        |
| 129 | Zeolite synthesis by simulation of their natural formation conditions: from macroscopic to nanosized crystals. <i>Journal of Solid State Chemistry</i> , 2003, 173, 27-31.  | 1.4 | 11        |
| 130 | Tunable electrical properties of self-organized zirconia nanotubes. <i>Electrochemistry Communications</i> , 2011, 13, 1060-1062.   | 2.3 | 11        |
| 131 | In situ dilatometric and impedance spectroscopic study of core-shell like structures: insights into the exceptional catalytic activity of nanocrystalline Cu-doped CeO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2015, 3, 8369-8379. | 5.2 | 11        |
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