

Marcin Molenda

List of Publications by Year in descending order

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106
papers

1,617
citations

279701

23
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377752

34
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108
all docs

108
docs citations

108
times ranked

1666
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Test of a single module of the J-PET scanner based on plastic scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 317-321. | 0.7 | 109 |
| 2 | The effect of 3d substitutions in the manganese sublattice on the charge transport mechanism and electrochemical properties of manganese spinel. Solid State Ionics, 2004, 171, 215-227. | 1.3 | 80 |
| 3 | Studies of selected synthesis procedures of the conducting LiFePO ₄ -based composite cathode materials for Li-ion batteries. Journal of Power Sources, 2007, 173, 700-706. | 4.0 | 57 |
| 4 | Novel method for hit-position reconstruction using voltage signals in plastic scintillators and its application to Positron Emission Tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 764, 186-192. | 0.7 | 51 |
| 5 | Ground to conduct: mechanochemical synthesis of a metal-organic framework with high proton conductivity. Chemical Communications, 2015, 51, 7637-7640. | 2.2 | 47 |
| 6 | Changes in local structure of lithium manganese spinels (Li:Mn=1:2) characterised by XRD, DSC, TGA, IR, and Raman spectroscopy. Journal of Physics and Chemistry of Solids, 2005, 66, 1761-1768. | 1.9 | 44 |
| 7 | Electrochemical and high temperature physicochemical properties of orthorhombic LiMnO ₂ . Journal of Power Sources, 2007, 173, 707-711. | 4.0 | 41 |
| 8 | Stabilization of the spinel structure in Li _{1+x} Mn _{2-2x} O ₄ obtained by sol-gel method. Journal of Power Sources, 2003, 119-121, 121-124. | 4.0 | 40 |
| 9 | Improving the performance of sulphur doped LiMn ₂ O ₄ by carbon coating. Journal of Power Sources, 2019, 434, 226725. | 4.0 | 37 |
| 10 | Nanocomposite C/Li ₂ MnSiO ₄ cathode material for lithium ion batteries. Journal of Power Sources, 2013, 244, 510-514. | 4.0 | 34 |
| 11 | Functional Starch Based Carbon Aerogels for Energy Applications. Procedia Engineering, 2014, 98, 14-19. | 1.2 | 34 |
| 12 | Synthesis, thermal and electrical properties of Li _{1+x} Mn _{2-2x} O ₄ prepared by a sol-gel method. Solid State Ionics, 2003, 157, 81-87. | 1.3 | 33 |
| 13 | Optimization of Cu doped ceria nanoparticles as catalysts for low-temperature methanol and ethylene total oxidation. Catalysis Today, 2011, 169, 112-117. | 2.2 | 32 |
| 14 | Nanostructured Cu-Doped Ceria Obtained by Reverse Microemulsion Method as Catalysts for Incineration of Selected VOCs. Catalysis Letters, 2010, 135, 68-75. | 1.4 | 31 |
| 15 | A novel method based solely on field programmable gate array (FPGA) units enabling measurement of time and charge of analog signals in positron emission tomography (PET). Bio-Algorithms and Med-Systems, 2014, 10, 41-45. | 1.0 | 31 |
| 16 | Multifunctional Carbon Aerogels Derived by Sol-Gel Process of Natural Polysaccharides of Different Botanical Origin. Materials, 2017, 10, 1336. | 1.3 | 31 |
| 17 | Study of quantitative interactions of potato and corn starch granules with ions in diluted solutions of heavy metal salts. Carbohydrate Polymers, 2015, 134, 102-109. | 5.1 | 27 |
| 18 | Bio-derived carbon nanostructures for high-performance lithium-ion batteries. Carbon, 2019, 145, 426-432. | 5.4 | 27 |

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|----|---|-----|-----------|
| 19 | Electronic structure and reactivity of $\text{Li}_{1-x}\text{Mn}_2\text{O}_4$ cathode. <i>Solid State Ionics</i> , 2000, 135, 53-59. | 1.3 | 26 |
| 20 | An attempt to improve electrical conductivity of the pyrolysed carbon- LiMn_2O_4 - ySy ($0 \leq y \leq 0.5$) composites. <i>Journal of Power Sources</i> , 2007, 174, 613-618. | 4.0 | 25 |
| 21 | Structural, transport and electrochemical properties of $\text{LiNi}_{1-y}\text{Co}_y\text{Mn}_{0.1}\text{O}_2$ and Al, Mg and Cu-substituted $\text{LiNi}_{0.65}\text{Co}_{0.25}\text{Mn}_{0.1}\text{O}_2$ oxides. <i>Solid State Ionics</i> , 2011, 192, 313-320. | 1.3 | 24 |
| 22 | Anomaly in the electronic structure of the Na_xCoO_2 - y cathode as a source of its step-like discharge curve. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 14845. | 1.3 | 24 |
| 23 | Enhancing the lithium ion diffusivity in LiMn_2O_4 - ySy cathode materials through potassium doping. <i>Solid State Ionics</i> , 2018, 317, 190-193. | 1.3 | 24 |
| 24 | Surface modification and carbon coating effect on a high-performance K and S doped LiMn_2O_4 . <i>Applied Surface Science</i> , 2020, 531, 147138. | 3.1 | 24 |
| 25 | Synthesis and characterisation of sulphided lithium manganese spinels LiMnOS prepared by sol-gel method. <i>Solid State Ionics</i> , 2005, 176, 1705-1709. | 1.3 | 22 |
| 26 | Electrochemical and chemical deintercalation of LiMn_2O_4 . <i>Solid State Ionics</i> , 2003, 157, 73-79. | 1.3 | 20 |
| 27 | Direct preparation of conductive carbon layer (CCL) on alumina as a model system for direct preparation of carbon coated particles of the composite Li-ion electrodes. <i>Solid State Ionics</i> , 2008, 179, 197-201. | 1.3 | 20 |
| 28 | Nanostructured Co-Ce-O systems for catalytic decomposition of N_2O . <i>Catalysis Today</i> , 2012, 191, 121-124. | 2.2 | 20 |
| 29 | Trigger-less and reconfigurable data acquisition system for positron emission tomography. <i>Bio-Algorithms and Med-Systems</i> , 2014, 10, 37-40. | 1.0 | 20 |
| 30 | Enhancement of Electrochemical Performance of LiMn_2O_4 Spinel Cathode Material by Synergetic Substitution with Ni and S. <i>Materials</i> , 2016, 9, 366. | 1.3 | 20 |
| 31 | Influence of sulphur substitution on structural and electrical properties of lithium-manganese spinels. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 1347-1350. | 1.9 | 19 |
| 32 | Plastic scintillators for positron emission tomography obtained by the bulk polymerization method. <i>Bio-Algorithms and Med-Systems</i> , 2014, 10, 27-31. | 1.0 | 19 |
| 33 | A new method of coating powdered supports with conductive carbon films. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 503-506. | 2.0 | 18 |
| 34 | Correlation of electrical properties of nanometric copper-doped ceria materials ($\text{Ce}_{1-x}\text{Cu}_x\text{O}_2$) with their catalytic activity in incineration of VOCs. <i>Solid State Ionics</i> , 2013, 251, 18-22. | 1.3 | 18 |
| 35 | Structural, transport and electrochemical properties of $\text{LiNi}_{0.5-y}\text{Cu}_y\text{Mn}_{1.5}\text{O}_4$ spinel cathode materials. <i>Solid State Ionics</i> , 2014, 267, 27-31. | 1.3 | 18 |
| 36 | Structural and electrochemical characterization of sulphur-doped lithium manganese spinel cathode materials for lithium ion batteries. <i>Solid State Ionics</i> , 2015, 272, 127-132. | 1.3 | 18 |

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|----|---|-----|-----------|
| 37 | Electrochemical properties of K and S doped LiMn ₂ O ₄ studied by GITT and EIS. <i>Electrochimica Acta</i> , 2021, 373, 137901. | 2.6 | 18 |
| 38 | Carbon nanocoatings for C/LiFePO ₄ composite cathode. <i>Solid State Ionics</i> , 2013, 251, 47-50. | 1.3 | 16 |
| 39 | Artificial versus natural ageing of paper. Water role in degradation mechanisms. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 100, 625-633. | 1.1 | 15 |
| 40 | Facile synthesis of C/Sn nanocomposite anode material for Li ion batteries. <i>Materials Technology</i> , 2014, 29, A88-A92. | 1.5 | 15 |
| 41 | SYNTHESIS AND PROPERTIES OF $\text{Li}_2\text{MnSiO}_4$ COMPOSITE CATHODE MATERIAL FOR SAFE Li -ION BATTERIES. <i>Functional Materials Letters</i> , 2011, 04, 135-138. | 0.7 | 13 |
| 42 | 3D PET image reconstruction based on the maximum likelihood estimation method (MLEM) algorithm. <i>Bio-Algorithms and Med-Systems</i> , 2014, 10, 1-7. | 1.0 | 13 |
| 43 | Optimization of Sulphur Content in LiMn ₂ O ₄ -ySy Spinel as Cathode Materials for Lithium-ion Batteries. <i>Procedia Engineering</i> , 2014, 98, 20-27. | 1.2 | 12 |
| 44 | Uptake of Cu^{2+} by Starch Granules As Affected by Counterions. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 4054-4059. | 2.4 | 11 |
| 45 | Potassium stabilization in $\text{K}_2\text{Fe}_2\text{O}_3$ by Cr and Ce doping studied by field reversal method. <i>Solid State Ionics</i> , 2011, 192, 664-667. | 1.3 | 11 |
| 46 | A Pilot Study of the Novel J-PET Plastic Scintillator with 2-(4-styrylphenyl)benzoxazole as a Wavelength Shifter. <i>Acta Physica Polonica A</i> , 2015, 127, 1487-1490. | 0.2 | 11 |
| 47 | Parallel migration of potassium and oxygen ions in hexagonal tungsten bronze – Bulk diffusion, surface segregation and desorption. <i>Solid State Ionics</i> , 2016, 297, 1-6. | 1.3 | 11 |
| 48 | Aqueous Binder for Nanostructured Carbon Anode Materials for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A5354-A5361. | 1.3 | 11 |
| 49 | Ions-free electrochemically synthesized in aqueous media flake-like CuO nanostructures as SERS reproducible substrates for the detection of neurotransmitters. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 215, 24-33. | 2.0 | 11 |
| 50 | The Temperature Effect on the Electrochemical Performance of Sulfur-Doped LiMn ₂ O ₄ in Li-Ion Cells. <i>Nanomaterials</i> , 2019, 9, 1722. | 1.9 | 11 |
| 51 | Ceria based novel nanocomposites catalysts $\text{Mn}_x\text{Ce}_{1-x}\text{O}_2/\text{Al}_2\text{O}_3$ for low-temperature combustion of methanol. <i>Catalysis Today</i> , 2015, 257, 104-110. | 2.2 | 10 |
| 52 | Nature of the Electrochemical Properties of Sulphur Substituted LiMn ₂ O ₄ Spinel Cathode Material Studied by Electrochemical Impedance Spectroscopy. <i>Materials</i> , 2016, 9, 696. | 1.3 | 10 |
| 53 | Electrochemical properties of C/LiMn ₂ O ₄ -ySy (0 ≤ y ≤ 0.1) composite cathode materials. <i>Solid State Ionics</i> , 2008, 179, 88-92. | 1.3 | 9 |
| 54 | DIFFUSION, SEGREGATION AND DESORPTION OF POTASSIUM FROM $\text{K}_2\text{Fe}_2\text{O}_3$ FERRITE. <i>Functional Materials Letters</i> , 2011, 04, 179-182. | 0.7 | 9 |

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|----|--|-----|-----------|
| 55 | CARBON ELECTRODE COMPOSITES FOR Li -ION BATTERIES PREPARED FROM POLYMER PRECURSORS. <i>Functional Materials Letters</i> , 2011, 04, 129-134. | 0.7 | 9 |
| 56 | 141: A novel TOF-PET detector based on organic scintillators. <i>Radiotherapy and Oncology</i> , 2014, 110, S69-S70. | 0.3 | 9 |
| 57 | Electrochemical Performance of Sn/SnO_2 Nanoparticles Encapsulated in Carbon Matrix Derived from Plant Polysaccharides. <i>ECS Transactions</i> , 2015, 64, 165-171. | 0.3 | 9 |
| 58 | Comparative study of Co-rich and Ce-rich oxide nanocatalysts ($\text{Co}_x\text{Ce}_{1-x}\text{O}_y$) for low-temperature total oxidation of methanol. <i>Catalysis Today</i> , 2019, 333, 196-207. | 2.2 | 9 |
| 59 | Electrochemical Properties and Structure Evolution of Starch-Based Carbon Nanomaterials as Li-Ion Anodes with Regard to Thermal Treatment. <i>Polymers</i> , 2019, 11, 1527. | 2.0 | 9 |
| 60 | Magnetization and High-Frequency EMR Measurements on the Lithium-Ion Battery Substance LiMn_2O_4 . <i>Japanese Journal of Applied Physics</i> , 2005, 44, 7440-7444. | 0.8 | 8 |
| 61 | Thermal decomposition of $[\text{Cd}(\text{NH}_3)_6](\text{NO}_3)_2$. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 89, 573-578. | 2.0 | 8 |
| 62 | Dehydration of polymeric hydrogels designed for gelcasting method in ceramics. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 499-502. | 2.0 | 8 |
| 63 | $\text{C}/\text{Li}_2\text{MnSiO}_4$ as a Composite Cathode Material for Li-Ion Batteries. <i>ECS Transactions</i> , 2012, 41, 129-137. | 0.3 | 8 |
| 64 | Nitrogen-Doped Carbon Aerogels Derived from Starch Biomass with Improved Electrochemical Properties for Li-Ion Batteries. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9918. | 1.8 | 8 |
| 65 | Morphology and Electrical Conductivity of Carbon Nanocoatings Prepared from Pyrolysed Polymers. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-7. | 1.5 | 7 |
| 66 | J-PET analysis framework for the prototype TOF-PET detector. <i>Bio-Algorithms and Med-Systems</i> , 2014, 10, 33-36. | 1.0 | 7 |
| 67 | Stability of $\text{C}/\text{Li}_2\text{MnSiO}_4$ composite cathode material for Li-ion batteries towards LiPF_6 based electrolyte. <i>Solid State Ionics</i> , 2014, 262, 98-101. | 1.3 | 7 |
| 68 | An influence of carbon matrix origin on electrochemical behaviour of carbon-tin anode nanocomposites. <i>Electrochimica Acta</i> , 2016, 209, 7-16. | 2.6 | 7 |
| 69 | Effect of electrolyte composition on thermal stability and electrochemical performance of $\text{LiMn}_2\text{O}_4\text{S}_y$ cathodes for Li-ion batteries. <i>Materials Technology</i> , 2016, 31, 614-622. | 1.5 | 7 |
| 70 | Thermally Induced Changes in the Structure, Composition, and Chemical Properties of LiMn_2O_4 Spinel Prepared by Sol-Gel Method. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 5132-5137. | 0.8 | 6 |
| 71 | Electrochemical impedance spectroscopy study of $\text{C}/\text{Li}_2\text{MnSiO}_4$ composite cathode material at different states of charge. <i>Solid State Ionics</i> , 2014, 263, 99-102. | 1.3 | 6 |
| 72 | Submillimetre and millimetre wave ESR study of manganese spinel compound LiMn_2O_4 . <i>Journal of Physics Condensed Matter</i> , 2007, 19, 145266. | 0.7 | 5 |

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|----|---|-----|-----------|
| 73 | Pyrolytic carbons derived from water soluble polymers. Journal of Thermal Analysis and Calorimetry, 2013, 113, 329-334. | 2.0 | 5 |
| 74 | A Novel Concept for the Synthesis of Nanometric LiFePO ₄ by Co-precipitation Method in an Anhydrous Environment. Procedia Engineering, 2014, 98, 36-41. | 1.2 | 5 |
| 75 | Simulations of \hat{I}^3 quanta scattering in a single module of the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 71-77. | 1.0 | 5 |
| 76 | Application of WLS strips for position determination in strip PET tomograph based on plastic scintillators. Bio-Algorithms and Med-Systems, 2014, 10, 59-63. | 1.0 | 5 |
| 77 | Novel Method of Preparation of C/Sn-SnO ₂ Nanocomposite Li-ion Anode Material Derived from Plant Polysaccharides. Procedia Engineering, 2014, 98, 2-7. | 1.2 | 5 |
| 78 | Calibration of photomultipliers gain used in the J-PET detector. Bio-Algorithms and Med-Systems, 2014, 10, 13-17. | 1.0 | 5 |
| 79 | Sol-gel synthesis, structural and electrical properties of Li ₂ CoSiO ₄ cathode material. Functional Materials Letters, 2014, 07, 1440001. | 0.7 | 4 |
| 80 | Database and data structure for the novel TOF-PET detector developed for the J-PET project. Bio-Algorithms and Med-Systems, 2014, 10, 79-83. | 1.0 | 4 |
| 81 | Stability of Li ₂ MnSiO ₄ (M ²⁺ = Mn, Co) in the carbon coating process. Solid State Ionics, 2018, 320, 221-225. | 1.3 | 4 |
| 82 | Integrated and Sustainable Solutions for Li-ion Energy Storage Systems. Advances in Inorganic Chemistry, 2018, 72, 287-321. | 0.4 | 4 |
| 83 | INFLUENCE OF DEFECT STRUCTURE ON CATALYTIC ACTIVITY OF NANOMETRIC MATERIALS BASED ON CERIA-DOPED COPPER. Functional Materials Letters, 2011, 04, 165-169. | 0.7 | 3 |
| 84 | Application of gelcasting process in ceria membranes formation. Solid State Ionics, 2011, 188, 135-139. | 1.3 | 3 |
| 85 | Computing support for advanced medical data analysis and imaging. Bio-Algorithms and Med-Systems, 2014, 10, 53-58. | 1.0 | 3 |
| 86 | Determination of the map of efficiency of the Jagiellonian Positron Emission Tomograph (J-PET) detector with the GATE package. Bio-Algorithms and Med-Systems, 2014, 10, 85-90. | 1.0 | 3 |
| 87 | A novel method for calibration and monitoring of time synchronization of TOF-PET scanners by means of cosmic rays. Bio-Algorithms and Med-Systems, 2014, 10, 19-25. | 1.0 | 3 |
| 88 | Preliminary study of structural changes in Li ₂ MnSiO ₄ cathode material during electrochemical reaction. Functional Materials Letters, 2016, 09, 1641003. | 0.7 | 3 |
| 89 | Enhancement of electrochemical performance of LiFePO ₄ nanoparticles by direct nanocoating with conductive carbon layers. Functional Materials Letters, 2016, 09, 1641007. | 0.7 | 3 |
| 90 | A Strategy to Optimize the Performance of Bio-Derived Carbon Aerogels by a Structuring Additive. Nanomaterials, 2020, 10, 1811. | 1.9 | 3 |

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|-----|---|-----|-----------|
| 91 | Li-ion electrode nanocomposites with self-assembled conductive carbon layers. <i>Polimery</i> , 2017, 62, 532-538. | 0.4 | 3 |
| 92 | Reversible Cation-Mediated Anionic Redox in Defect Spinel Structure for High Power Batteries. <i>Advanced Functional Materials</i> , 2022, 32, 2108278. | 7.8 | 3 |
| 93 | Application of Compressive Sensing Theory for the Reconstruction of Signals in Plastic Scintillators. <i>Acta Physica Polonica B, Proceedings Supplement</i> , 2013, 6, 1121. | 0.0 | 3 |
| 94 | System Response Kernel Calculation for List-mode Reconstruction in Strip PET Detector. <i>Acta Physica Polonica B, Proceedings Supplement</i> , 2013, 6, 1027. | 0.0 | 3 |
| 95 | Thermal induced changes in crystal structure and electronic states of Li-ion cathode materials based on Li-Mn-O-S system. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 189-192. | 2.0 | 2 |
| 96 | Illumination of Cellulose with Linearly Polarized Visible Light. <i>Macromolecular Symposia</i> , 2008, 272, 156-160. | 0.4 | 2 |
| 97 | Searching for the Best Electrolyte Composition for the C/Li ₂ MnSiO ₄ Based Battery System. <i>ECS Transactions</i> , 2014, 62, 89-96. | 0.3 | 2 |
| 98 | List-mode reconstruction in 2D strip PET. <i>Bio-Algorithms and Med-Systems</i> , 2014, 10, 9-12. | 1.0 | 2 |
| 99 | Leak testing of carbon-tin nanocomposites by thermal analysis methods. <i>Journal of Thermal Analysis and Calorimetry</i> , 2017, 127, 47-53. | 2.0 | 2 |
| 100 | High field ESR measurements on the lithium-ion battery substance LiMn ₂ O ₄ . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 2820-2823. | 0.8 | 1 |
| 101 | Analysis of the temperature dependence of the high-frequency EMR spectra of Mn ions in the lithium-ion battery material LiMn ₂ O ₄ . <i>Research on Chemical Intermediates</i> , 2007, 33, 853-862. | 1.3 | 1 |
| 102 | C/Li ₂ MnSiO ₄ Nanocomposite Cathode Material for Li-Ion Batteries. , 2012, , . | | 1 |
| 103 | Study on Stability and Electrochemical Properties of Nano-LiMn _{1.9} Ni _{0.1} O _{3.99} S _{0.01} -Based Li-Ion Batteries with Liquid Electrolyte Containing LiPF ₆ . <i>Journal of Nanomaterials</i> , 2016, 2016, 1-9. | 1.5 | 1 |
| 104 | KapitaÅ, spoÅ,eczny jako determinanta przedsiÅ™biorczoÅci etnicznej wÅrÅ³d biaÅ,oruskich imigrantÅ³w w Polsce. <i>PrzeglÅ...d Prawno-Ekonomiczny</i> , 2021, , 79-94. | 0.0 | 1 |
| 105 | Why Is Li ₂ MnSiO ₄ Unstable in Li-Ion Battery Cell? Structural Studies at Different Stages of Electrochemical Reaction. <i>ECS Meeting Abstracts</i> , 2016, , . | 0.0 | 0 |
| 106 | Migracje zarobkowe jako sposÅ³b na pozyskanie pracownikÅ³w w latach 2009-2020. <i>PrzeglÅ...d Prawno-Ekonomiczny</i> , 2020, , 55-70. | 0.0 | 0 |