



# MLZ User Meeting 2021

## Wednesday, December 8, 2021

### Poster Session II (10:30 AM - 12:00 PM)

| [id] title  | presenter              | board |
|---|------------------------|-------|
| [14] A Unique Quenching and Deformation Dilatometer for Combined In Situ Neutron Diffraction Analysis of Engineering Materials                        | LI, Xiaohu             | P-1   |
| [58] Investigation and Tuning of Slot-Die Coated Perovskite Solar Cells Using X-Ray Diffraction   | Mr VITALONI , Andrea   | P-9   |
| [13] GISANS study on whey protein and titania interfaces: Influence of pH on spray deposited biohybrid film morphology                                | Mr HEGER, Julian E.    | P-28  |
| [42] Tack Properties of Pressure-Sensitive Adhesives: Development of Industry-conform Measurement Techniques  | KÖRSTGENS, Volker      | P-29  |
| [127] Silicon detector for neutron beta decay measurements with PERC  | LEBERT, Manuel         | P-33  |
| [9] Tailoring the Optical Properties of Sputter-Deposited Gold Nanostructures on Nanostructured Titanium Dioxide Templates                            | LIANG, Suzhe           | P-34  |
| [25] Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators  | SAKHATSKYI, Kostiantyn | P-35  |
| [29] X-ray Diffraction Studies on the Lithiation of LiAl Electrodes for Lithium Ion Batteries   | Mr PHAM, Thien An      | P-36  |
| [37] Na-ion diffusion in NASICON solid electrolyte material studied by Quasi-Elastic Neutron Scattering   | PIVARNÍKOVÁ, Ivana     | P-37  |
| [39] In-situ characterisation of the newly developed VDM® Alloy 780 via x-ray diffraction using synchrotron radiation                                 | FRITTON, Massimo       | P-38  |
| [44] Interfacial structure and dynamics for PbS quantum dot solar cells   | ZHONG, Huaying         | P-39  |
| [50] Operando study of humidity on the performance of perovskite solar cell   | Mr SUN, Kun            | P-40  |
| [57] Improvement of the thermoelectric properties of PEDOT:PSS films via DMSO addition and DMSO/salt post-treatment resolved from a fundamental view  | TU, Suo                | P-41  |
| [63] Investigating the HiPIMS deposition of gold onto polymers  | BULUT, Yusuf           | P-43  |
| [83] Optimization of printed Perovskite Solar Cells using X-Ray scattering  | LINDENMEIR, Christoph  | P-44  |
| [94] Printed block copolymer templated ZnO photoanodes for photovoltaic applications  | TIAN, Ting             | P-45  |
| [99] Decoding the Self-assembled Plasmonic Nano-structure in Colloidal Quantum Dots for Photodetectors  | GUAN, Tianfu           | P-46  |
| [100] Hybrid Energy Harvester based on Triboelectric Nanogenerator and Solar Cell   | XIAO, TIANXIAO         | P-47  |
| [117] Design, Fabrication and Nano-Scale Characterization of Novel SEI Layers   | XU, Zhuijun            | P-48  |
| [128] Dynamic structure evolution of extensively de-lithiated high voltage spinel $\text{Li}_{1+x}\text{Ni}_{0.5}\text{Mn}_{1.5}\text{O}_4$ $x < 1.5$ | JOBST, Nicola          | P-49  |
| [76] Thin film fabrication in a new laboratory  | PÜTTER, Sabine         | P-50  |
| [80] Magnetic phase diagram of Dy/Co superlattices  | MAKAROVA, Marina       | P-51  |

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|---|-----------------------|------|
| <b>[67] Self-compensated Neutron Super Mirror Magnetic Yoke to Reduce Stray Fields</b>  | BABCOCK, Earl         | P-52 |
| <b>[70] Evaluation and comparison of scattering data driven molecular dynamics simulations of water models</b>  | REICH, Veronika       | P-53 |
| <b>[123] Elemental characterization by PGAA to support decommissioning activities</b>   | MOSSINI, Eros         | P-54 |
| <b>[15] Functionalizing cellulose nanofibril films</b>  | ROTH, Stephan         | P-55 |
| <b>[41] Co-Nonsolvency Transition of PNIPMAM-based Block Copolymer Thin Films in Water/Acetone Mixtures</b>   | WANG, Peixi           | P-57 |
| <b>[45] Influence of Hofmeister Salts on the Swelling Behavior of PNIPMAM Thin Films</b>  | REITENBACH, Julija    | P-58 |
| <b>[47] Grating incidence scattering as a method to understand the influence of non-halogenated solvents on the morphology of organic solar cells</b>                           | SPANIER, Lukas        | P-59 |
| <b>[64] Water Dynamics in Aqueous Poly(N-isopropylacrylamide) Solutions with a Methanol Cosolvent</b>   | SCHULTE, Alfons       | P-60 |
| <b>[109] Effects of polymer block length asymmetry and temperature on the nanoscale morphology of thermoresponsive double hydrophilic block copolymers in aqueous solutions</b> | VAGIAS, Apostolos     | P-61 |
| <b>[120] Structure and dynamics of supramolecular poly(ethylene) oxide polymer blends</b>   | BRÁS WÜRSCHIG, Ana    | P-62 |
| <b>[132] Self-assembly of polymer coated iron oxide nanoparticles in magnetic field</b>   | FOKINA, Vladislava    | P-63 |
| <b>[28] Critical Review of symmetry and structure relationships in graphite intercalation compounds (GICs) and their practical use for lithium ion battery materials</b>        | Dr SEIDLMEYER, Stefan | P-64 |
| <b>[110] Superstructure in inverse perovskite nitrides</b>  | LINK, Lukas           | P-65 |