

Session Program

13-17 Sept 2021

**EUROPEAN CONGRESS AND EXHIBITION ON
ADVANCED MATERIALS AND PROCESSES -
EUROMAT 2021**

***E3_Anion and cation transport in materials
for energy storage***

Virtual

Wednesday 15 September

09:50

E3_Anion and cation transport in materials for energy storage: E3_1_From membranes to nanocomposite electrolytes

Session | Location: Room 13

09:50–10:30

Electrochemical synthesis of thin and conformal ion exchange membranes for Li batteries and other applications(Keynote)

Speaker

Philippe Knauth

10:30–10:50

Stability of Ionomer Membranes in Buffers for Enzymatic Fuel Cell Application: Hydration, Ion Conductivity and Mechanical Properties

Speaker

Dr Luca Pasquini

10:50–11:10

Metal hydride-based nanocomposites as electrolytes for all-solid-state batteries

Speaker

Ms Laura de Kort

11:10–11:30

Different approaches to enhance the Li-ion conductivity of LiBH₄ Solid Electrolyte

Speaker

Dr Valerio Gulino

11:30

11:50

E3_Anion and cation transport in materials for energy storage: E3_2_From mobile ions to Raman measurements

Session | Location: Room 13

11:50–12:10

From the start: ionic and electronic conductivity in Li₄Ti₅O₁₂

Speaker

Mr Bernhard Gadermaier

12:10–12:30

Ionic transport on different length scales: Na⁺ dynamics in the promising ion conductor Na₃PS₄ as seen by broadband conductivity and NMR spectroscopy

Speaker

Ms Katharina Hogrefe

12:30–12:50

Quantifying the density and mobility of mobile ions in solid electrolytes by transient current measurements

Speaker

Dr Moritz Futscher

12:50–13:10

On the nature of transport properties in $(\text{Co,Cu,Mg,Ni,Zn})_{1-x}\text{Li}_x\text{O}$ high-entropy oxides**Speaker**

Mr Maciej Moździerz

13:10–13:30

Surface Enhanced Raman spectroelectrochemistry as a tool in operando studies of energy storage systems**Speaker**

Dr Mariusz Radtke

13:30

15:30

**E3_Anion and cation transport in materials for energy storage:
E3_3_Anion and cation transport****Session** | **Location:** Room 13

15:30–15:50

Tailoring the cation sub-lattice of the $\text{Li}_{3-x}\text{In}_{1-x}\text{Zr}_x\text{Cl}_6$ solid electrolyte by Zr-doping**Speaker**

Eveline van der Maas

15:50–16:10

 $\text{Co}^{3+}/\text{La}^{3+}$ cross-diffusion at the $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ | LiCoO_2 interface**Speaker**

Lukas Ladenstein

16:10–16:30

Li- and Na-Ion conductivity in the porous Metal Organic Framework MIL-121**Speaker**

Dr Ilie Hanzu

16:30–16:50

Transport properties of $\text{YMnO}_{3+\delta}$ and $\text{Y}_{0.95}\text{Pr}_{0.05}\text{MnO}_{3+\delta}$ in O_2 - and H_2O -containing atmospheres**Speaker**

Mr Kacper Cichy

16:50