FAIR-DI European Conference on Data Intelligence 2024

Monday, October 28, 2024

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (8:45 AM - 10:30 AM)

| time | [id] title | presenter |
|----------|--|---------------------|
| 8:45 AM | [67] Active learning for data-efficient optimisation of materials and processes | TODOROVIC, Milica |
| 9:25 AM | [107] The research data life cycle in experimental solid-state physics: challenges, strategies and solutions | WEBER, Heiko |
| 9:45 AM | [93] The MSE-KG: Navigating the MatWerk consortium for Materials Science Discoveries | NOROUZI, Ebrahim |
| 10:05 AM | [99] OFED@NFFA-DI | BAZZOCCHI, Federica |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (11:00 AM - 1:00 PM)

| time | [id] title | presenter |
|----------|---|-------------------------|
| 11:00 AM | [60] Auto-generated Materials Databases and Language Models | COLE, Jacqui |
| 11:40 AM | [110] Towards interoperable materials-science (meta)data: the NOMAD taxonomy of materials properties | GHIRINGHELLI, Luca |
| 12:00 PM | [69] FAIR Data Management for Computational Materials Science using NOMAD | Dr RUDZINSKI, Joseph F. |
| 12:20 PM | [17] Building Knowledge Graphs with the ELN Herbie | KIRCHNER, Fabian |
| 12:40 PM | [16] Customisable open-source research data management system for high-throughput experimentation and collaborative projects in materials science | Dr DUDAREV, Victor |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (2:00 PM - 4:00 PM)

| time | [id] title | presenter |
|---------|--|---------------------|
| 2:00 PM | [61] From Specialist to Generalist Models in AI: The Role of Data and Physics | SANDFELD, Stefan |
| 2:40 PM | [95] Integrating analysis and ML applications within digitalized workflows for experimental materials science | KAPOOR, Sarthak |
| 3:00 PM | [13] RDM-desktop - a helper for data management on a PC | HARASZTI, Tamás |
| 3:20 PM | [73] Kadi4Mat: Automated Extraction of Structure-Property Linkages using AI | GRIEM, Lars |
| 3:40 PM | [96] ALPmat: A platform for accelerating materials design via optimized knowledge exploitation and sample efficiency | Dr SPITALER, Jürgen |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (4:30 PM - 6:30 PM)

| 4:30 PM | [62] Transforming chemistry with transformers | JABLONKA, Kevin |
|---------|--|-------------------------|
| 5:10 PM | [97] RefXAS database: Metadata Fields, Quality Criteria and Data formats | Dr GAUR, Abhijeet |
| 5:30 PM | [100] RefXAS database: Technical developments and features | PARIPSA, Sebastian |
| 5:50 PM | [18] tomato: incremental au-tomation for your lab, without the pain! | KRAUS, Peter |
| 6:10 PM | [105] Representation of computational materials and simulation workflows – leveraging ontologies and knowledge graphs | Dr AZOCAR GUZMAN, Abril |

Tuesday, October 29, 2024

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (8:45 AM - 10:30 AM)

| time | [id] title | presenter |
|----------|---|--------------------|
| 8:45 AM | [63] Machine-learning you can trust: interpretability and uncertainty quantification in chemical machine learning | CERIOTTI, Michele |
| 9:25 AM | [84] Dynamic multi-fidelity decision-making for self-driving labs | FRIEDERICH, Pascal |
| 9:45 AM | [19] Digital twin for a nanophotonic chiral sensing platform | NYMAN, Markus |
| 10:05 AM | [123] FAIR-DI Award for data handling in a PhD thesis | |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (11:00 AM - 1:00 PM)

| time | [id] title | presenter |
|----------|---|-------------------------------------|
| 11:00 AM | [64] AI-ready materials science data | MARQUEZ, Jose |
| 11:40 AM | [94] NFDI4DS Ontology: The NFDI for Data Science Ontology | Dr GESESE, Genet Asefa |
| 12:00 PM | [88] IN DEEP: INterdisciplinary DatabasE for Explainable Peptide prediction | Dr GOMEZ FLORES, Claudia Leticia |
| 12:20 PM | [20] A data format for T-matrices in optics and photonics | ASADOVA, Nigar |
| 12:40 PM | [98] An Ontology for Vapor Deposition Implemented as a Data Schema in NOMAD | NÄSSTRÖM, Hampus |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (2:00 PM - 4:00 PM)

| time | [id] title | presenter |
|---------|--|-----------------------|
| 2:00 PM | [65] Correlative characterization and data science in functional materials | TOMA, Francesca |
| 2:40 PM | [104] Automated local solutions for FAIR data in catalysis | MOSHANTAF, Abdulrhman |
| 3:00 PM | [86] Advancing Catalysis Research through Digitalization: The Role of NOMAD in Facilitating Data Management and Analysis | SCHUMANN, Julia |
| 3:20 PM | [92] Database-Driven Discovery of Molecular Catalysts for Efficient Water Electrolysis | CLARKE, Cian |
| 3:40 PM | [91] New Computational Approaches for Navigating the Deep Chemical Space of Transition Metal Complexes | SOMMER, Timo |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (4:30 PM - 6:30 PM)

| time | [id] title | presenter |
|---------|---|--------------------|
| 4:30 PM | [66] The Role of Data Intelligence in Chemistry Research Data Infrastructures | JUNG, Nicole |
| 5:10 PM | [106] Coupling software tools for reproducible data analysis workflows in Atom Probe Tomography | Dr MENON, Sarath |
| 5:30 PM | [71] Data-driven inverse design of magnetic materials | CHAUDHARY, Vikrant |
| 5:50 PM | [75] Reviving the Perovskite Solar Cell Database: Creating a Living Database with Large Language Models | SHABIH, Sherjeel |

6:10 PM [78] FAIR Data Workflow for High-Throughput Combinatorial Exploration of UNOLD, Thomas Novel Halide Perovskites

Wednesday, October 30, 2024

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (8:45 AM - 10:30 AM)

| time | [id] title | presenter |
|----------|--|----------------------|
| 9:25 AM | [108] Accelerating MOF Synthesis via AI Integration | Dr TSOTSALAS, Manuel |
| 9:45 AM | [11] MOFGalaxyNet: Bridging AI Modeling and Social Networking for Predicting Guest Accessibility in Metal-Organic Frameworks | JALALI, Mehrdad |
| 10:05 AM | [111] Determination of the rate-limiting steps of hydride absorption/desorption reactions aided by unsupervised machine learning algorithm | NEVES, A. |

Session - click on "Detailed view" on the top right to see all contributions - Kurfürstensaal (11:00 AM - 1:00 PM)

| time | [id] title | presenter |
|----------|--|-------------------|
| 11:00 AM | [68] Accelerating formulation design by understanding the physical properties of complex molecular ensembles | ROBINSON, William |
| 11:40 AM | [115] The status of NeXusFormat implementation in ALBA Synchrotron | SAIZ, Fernan |
| 12:00 PM | [117] Deep learning of optical spectra of semiconductors and insulators | GROSSMANN, Max |
| 12:20 PM | [118] Leveraging RAG Architecture and Kadi4Mat Integration to Develop an Advanced Research Assistant Chatbot for Scientific Publications | ZHAO, Yinghan |
| 12:40 PM | [119] Operating complex data analysis workflows in materials science online via a chatbot | KOCH, Christoph |