



Abstract

Ontology-Based Data Acquisition, Refinement, and Utilization for the Development of Electroceramic Materials

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Ontologies are known as IT concept for data structuring and quick accessibility. Their establishment and use therefore requires sound IT knowledge. With the KnowNow approach a scientific demonstrator was established to show how an automated data pipeline is applied to structure the acquired experimental data according to a ceramic domain ontology. The approach bases on the Platform MaterialDigital core ontology and is accessible via a Web Frontend. Example queries to the ontology show how the determined process–property correlations are accessible to nonexperts and thus how suitable data for component design can be identified.

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