Realization of common platform technology, facilities, and equipment that creates innovative knowledge and products

Data-driven Process Informatics for higher-throughput researches on powder film-formation process

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Summary :

Objective

We propose and demonstrate "Data-driven Process Informatics", which realizes higher-throughput development of powder film-formation process. In this system, intermediate data are obtained and process parameters and validation data can be efficiently related.

Background

The powder film-formation process for fuel cells or lithium batteries are so complicated that increase of the throughput of their development is limited by hypothesisdriven method.

• Idea for breakthrough

Intermediate data are obtained and an active learning system efficiently relates process parameters and validation data.

• Expected impacts

Higher-efficient parameter study, support of mechanism understanding, discovery of innovated process parameters, optimization combining materials and processes by corporation with Materials Informatics.



