第306回応用セラミックス研究所講演会

「排ガス用多孔質金属触媒とその場TEM観察」

東北大学 原子分子材料科学高等研究機構 藤田 武志准教授

12月28日(月) 13:00-14:30

元素戦略研究センター レクチャーホール

Dealloyed nanoporous catalysts for exhaust-gas conversion and In-situ TEM study

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Nanoporous metal (NPM) produced by dealloying is an emergent multifunctional material. The simple dealloying technique produces a self-organized and self-supporting three-dimensional nano-architecture offering a variety of attractive applications. NPM is now a new form of 'Gold rush'. In this presentation, some examples will be introduced for catalytic application.

The important implication for general catalyst design will be discussed.

- [1] Fujita, T. et al., Nature Materials, 11 (2012) 775-780.
- [2] Fujita, T. et al., Nano Lett., 14 (2014) 1172-1177
- [3] Kuwano-Nakatani, S. et al., Mater. Trans., 56 (2015) 468-472.
- [4] Fujita et al. Advanced Functional Materials in press.

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