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金属化合物：触媒における擬元素

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Intermetallic : A Pseudoelement for Catalysis

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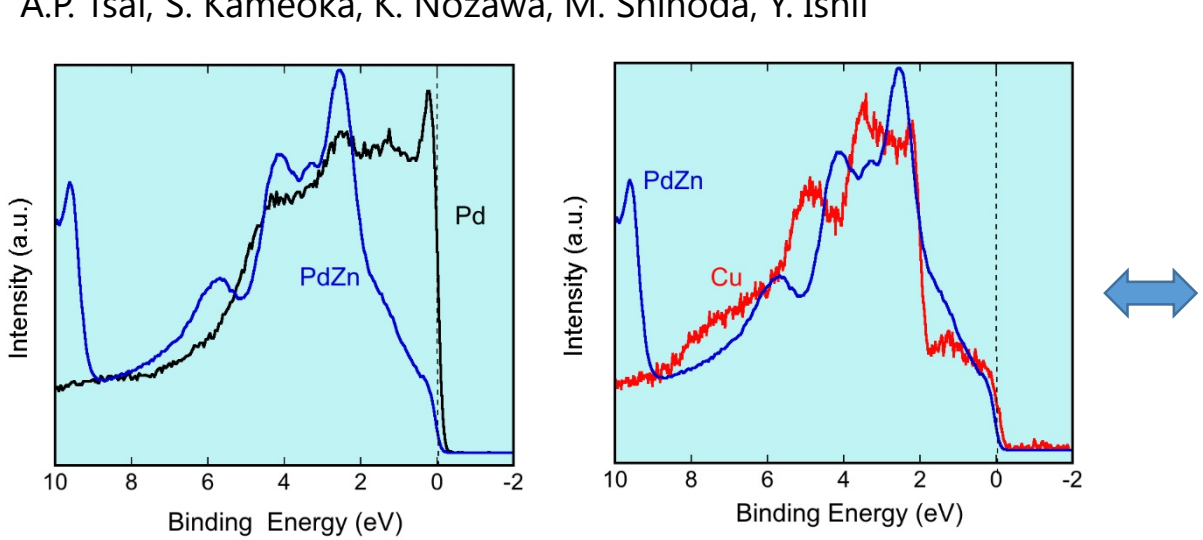

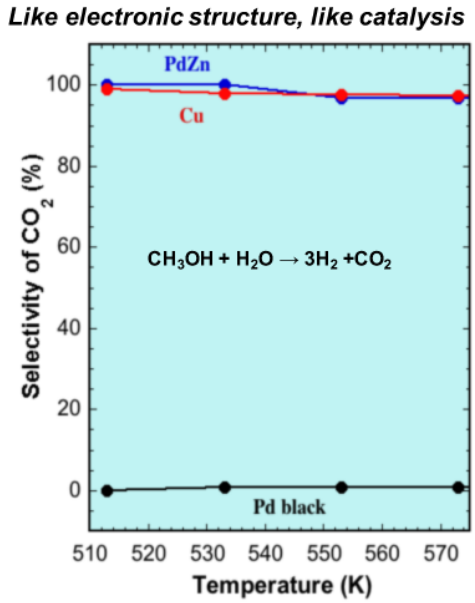

CO_2 selectivity of steam reforming of methanol and valence electronic structures for PdZn, Cu and Pd

PdZn金属間化合物はCuと類似した価電子帯構造を有することで、似通った触媒選択率を示し、触媒的にCuの**擬元素**ともみなせる。元素代替の基本概念を示した論文である。

Intermetallic PdZn and Cu reveal the similar valence electronic structures and consequently show the similar catalytic selectivity. In terms of catalysis PdZn could be viewed as a **pesudoelement** of Cu. The paper raises a principle that an intermetallic can replace a specific element in catalysis.