

Realization of common platform technologies, facilities and equipment that create innovative knowledge and products

R&D Project Title: Application of material informatics and derivation of guiding principles in the material designing of van der Waals composite atomic layers

Project Leader : Tomoki Machida
Professor, Institute of Industrial Science, University of Tokyo

R&D Team : School of Engineering, University of Tokyo



Summary :

We utilize material and process informatics on the subject of van der Waals composite atomic layers. We aim to clarify the correlation between material properties and structure, deriving guiding principles for social implementation. There are infinite combinations of van der Waals composite atomic layers. Thus the van der Waals composite atomic layer is an ideal experimental stage for material discovery, on the other hand, the search space is too vast for exhaustive exploratory material discovery. By combining cyber and physical technologies, we will develop effective methodologies and models for material discovery.

