

## Research Information



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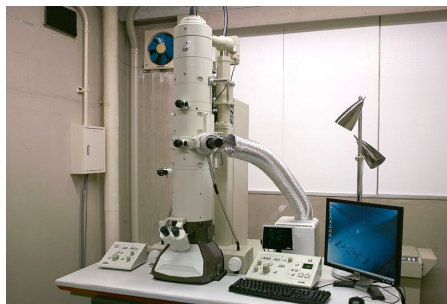
## Research Field

Research on Precise Synthesis and Energy-related Application of Inorganic Nanoparticles, *e.g.*, Single Electronics, Nanomagnetism, Nanoplasmonics, and Photoenergy Conversion Systems

## Research Facility

### TEM

Accelerating voltage: 100 kV



### XRD

Temperature & atmosphere variable



## Research Activities

### 1) On-going research

- Synthesis of catalysis of inorganic clusters
- Near infrared plasmon-induced photoenergy conversion
- Development of novel crystal phases by element replacement

### 2) International collaboration

- Synthesis and optical properties of semiconductor nanoparticles (RMIT, Australia)

### 3) Other appeal point

- We are able to synthesize metal and semiconductor nanoparticles with various sizes, shapes, and crystal structures.

## Comments

### Message to students and potential collaborators

I look forward to seeing students and collaborators who are interested in energy-saving and energy-creating inorganic nanomaterials.

[https://www.scl.kyoto-u.ac.jp/~teranisi/index\\_E.html](https://www.scl.kyoto-u.ac.jp/~teranisi/index_E.html)