



Professor

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Background

- 1999 Ph.D., Graduate School of Engineering, Tokyo Metropolitan University
- 1999 JSPS Research Fellowship for Young Scientists (PD), Osaka University of Education
- 2000 Assistant Professor, Department of Materials Science, Shimane University
- 2006 Associate Professor, Department of Materials Science, Shimane University
- 2014 Professor, Department of Chemistry, Shimane University

Research

- Wet-synthesis of highly functionalized inorganic particles by control of the particle morphology and modification of surface structure focusing on the surface functional groups.
- Development of high corrosion-resistant metal materials using artificial rust particles

Key papers

1. H. Tanaka, Influence of Anions and Cations on the Formation of Iron Oxide Nanoparticles in Aqueous Media, *KONA Powder and Particle Journal*, **39**, 119-129 (2022). (Review)
2. Hidekazu Tanaka, Influence of metals on the Formation of Zinc Rusts, *Rust prevention & control, Japan*, **65**, 161-168 (2021). (Review)
3. H. Tanaka, S. Nagano, T. Ishikawa, T. Nakayama, Simulating Study of Atmospheric Corrosion of Zn-Al Alloy Coating in Industrial Zone: Structure and Properties of Zinc Hydroxysulfate Rust Particles Prepared in the Presence of Al(III), *Adv. Powder Technol.*, **30**, 807-814 (2019).
4. H. Tanaka, A. Miyafuji, T. Ishikawa, T. Nakayama, Influence of Ni(II), Cu(II) and Cr(III) on the Formation, Morphology and Molecular Adsorption Properties of α -FeOOH Rust Particles Prepared by Aerial Oxidation of Neutral Fe(II) Solutions, *Adv. Powder Technol.*, **29**, 9-17 (2018).