Material Design of Amorphous and Liquid States

We study the materials from an amorphous state to a liquid state. Atomic and electronic structures of the amorphous and liquid states have not been well understood. We study the method in order to understand these materials, and apply it to a variety of materials. Moreover we will produce novel materials and their applications.

- **Computer Simulations of Amorphous and liquid States**
  Novel Titanium/Manganese Redox flow battery

  ![A schematic diagram of a redox flow battery](image)

  ![The experimental and calculated total correlation functions](image)

- **Chemical Durability and Phase Separation of Nuclear Waste Glasses**
  Control of the chemical durability of nuclear waste glasses

- **Glasses prepared by using gas levitation furnace and their physical properties**

  ![Diagram of the gas levitation furnace](image)

  ![Refractive index and Abbe number of the glasses prepared](image)

  ![Mechanical properties of the glass prepared](image)