Takanori Hattori

Principal Researcher

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Dynamic Principal Researcher at J-PARC Center with expertise in advanced x-ray diffraction and neutron scattering techniques. Recognized for exceptional communication and adaptability, driving innovative device developments. Proven track record of collaborative success and independent problem-solving, contributing to significant advancements in research initiatives.

Websites, Portfolios, Profiles

- https://www.researchgate.net/profile/Takanori-Hattori-2?ev=hdr_xprf

Skills

Advanced x-ray diffraction methods

Expertise in neutron scattering techniques

Device developments

Work History

2008-04 - Current

Principal Reseacher

J-PARC Center, Japan Atomic Energy Agency, Tokai

- Self-motivated, with a strong sense of personal responsibility.
- Excellent communication skills, both verbal and written.
- Proven ability to learn quickly and adapt to new situations.
- Skilled at working independently and collaboratively in a team environment.

2005-04 - 2008-03

Assistant Principal Researcher

SPring-8, Japan Atomic Energy Agency, Hyogo

2000-04 - 2005-03

Research Associate

Keio University, Yokohama

Education

2000-03 **Ph.D.: High Pressure Science**

Osaka University - Toyonaka

1997-02 **Master of Science: High Pressure Science**

Osaka University - Toyonaka

1995-02 **Bachelor of Science: Lattice Defect**

Osaka University - Toyonaka

Accomplishments

Recent Papers:

- Development of 0.5 mm gauge size radial collimators for high-pressure neutron diffraction experiments at PLANET in J-PARC, Nucl. Instrum. Methods Phys. Res. A**1059**, 168956 (2024)
- Hydrogen vibration excitations of ZrH1.8 and Ti1.84 up to 21 GPa by incoherent inelastic neutron scattering, Phys. Rev. B **106**,134309 (2022).
- Development of a hybrid piston cylinder cell for quasielastic neutron scattering experiments up to 1 GPa, High. Press. Res. **42**, 226 (2022).
- Practical effects of pressure-transmitting media on neutron diffraction experiments using Paris-Edinburgh presses, High Press. Res. **40**, 325 (2020).
- Development of a technique for high pressure neutron diffraction at 40 GPa with a Paris-Edinburgh press, High Pressure Res. **39**, 417 (2019).

Representative Papers:

- Design and Performance of High-Pressure PLANET Beamline at Pulsed Neutron Source at J-PARC, Nuclear Instrum. Meth. A **780**, 55 (2015).
- Does bulk metallic glass of elemental Zr and Ti exist?, Phys. Rev. Lett. **96**, 255504 (2006).
- Structure of liquid GaSb at pressures up to 20 GPa, Phys. Rev. B **68**, 224106 (2003).

Languages

Japanese — Native or Bilingual

English — Elementary

Interests

Near-death experience

Matter and Spirit

Alien interview

Lost Civilization