

Professional Societies and Activities

1. Member of the Japan Institute of Metals and Materials.
2. Member of the Physical Society of Japan.
3. Member of the Cryogenics and Superconductivity Society of Japan.

Awards

1. The Japan Institute of Metals and Materials award, 2016.

2. One of selection as "the 100 top examples of technology transfer from around the world" in the Association of University Technology Managers (AUTM), 2007.
3. The Japan's Ministry of Education, Culture, Sport, Science and Technology Award, 2006.
4. Niigata Nippoh award (the Niigata press), 2006.

Major Publications

Papers

- [1] Piao J., Shoji H., Murakami T., Shiina R. and Harada S., "Acoustic Emission Measurements on Metal-Hydrogenation Process by using an Electrochemical Charging Cell", Materials Transactions, Vol.56, pp.1496-1500, 2015.
- [2] Harada, S., Nagai, Y., and Kazama, K., "Design of Gas Controllable H₂ | H⁺ electrolyte | Pt Cell and the Evaluation Method of a Dilute Hydrogen and Oxygen Gas in the Electrolyte", Materials Transactions, Vol.52, pp.658-662, 2011.
- [3] Harada, S., Donuma, T., H. Araki, H., T. Kakuta, T., R. Nakatsuji, R., R. M. Mueller, R. M., and M. Kubota, M., "Low T Study of PdH_x System by Torsional Oscillator Technique: x Dependent Responses", J. Low Temp. Phys., Vol.162, pp.724-732, 2011.
- [4] Harada, S., Tanaka, H., Araki, H., Kubota, M., "Effect of Oxygen on Hydrogen Outgasing Process from Palladium Hydride", Materials Transactions, Vol. 49, pp.2895-2898, 2008.
- [5] Araki, H., Harada, S., and Kubota, M., "A search for quantum phenomena of hydrogen in palladium at low temperatures; specific heat and torsional oscillator experiments", J. Phys. Chem. Solid, Vol.66, pp.1490-1492, 2005.
- [6] Matsuda, K., and Harada, S., "Dynamical Desorption Process of Oxygen on Platinum by Using a Gas Controllable H₂ | H⁺ Electrolyte | Pt Cell", Materials Transactions, Vol.46, No.5, pp.1058-1063, 2005.
- [7] Araki, H., Nakamura, M., Harada, S., Obata, T., Mikhin, N., Syvokon, V., and Kubota, M., "Phase Diagram of Hydrogen in Palladium", J. Low Temp. Phys., Vol.134, pp.1145-1151, 2004.
- [8] Araki, H., Harada, S., Fukuda, M., Syvokon, V., and Kubota, M., "Specific heat measurements of PdH_x over wide temperature range", Physica B, Vol.284-288, pp.1255-1256, 2000.

- [9] Harada, S., "Desorption Process of Hydrogen on Platinum (100 and 111) Surfaces Measured by an Electrochemical Method", J. Phys. Soc. Jpn., Vol.68, pp.1746-1750, 1999.
- [10] Harada, S., "Surface Structure Dependence of Platinum (111), (110), (100)-Hydrogen Systems Studied by Electrochemical Methods", J. Phys. Soc. Jpn., Vol.66, pp.1733-1738, 1997.

Book Chapters

- [1] Harada, S., "*Suiso Riyuu Gijyutu-Shusei* Vol.3 (Hydrogen energy utilization technology Vol. 3, EMF type Hydrogen sensor, pp.565-572)", (ISBN 978-4-86043-146-4, N. T. S., Tokyo), [in Japanese], 2007.
- [2] Harada, S., and Kobayashi, S., "*Kogakuryoku no Dezain* (New Method for Engineering Design Education, pp.565-572)", (ISBN978-4-621-07817-4, Maruzen, Tokyo), [in Japanese], 2007.

International Conference

- [1] Kubota, M., *et. al.* "Research Activity for New Types of Superfluidity and Related Quantum Phenomena by a NPO", QFS2018, P26.36, 2018.

Patent Rights

- [1] "Hydrogen sensor", Suda, T., and Harada, S., patent number 4048444.
- [2] "Hydrogen amount sensor", Harada, S., and Suda, T., patent number 4061556.
- [3] "Hydrogen sensor", Harada, S., and Matsuda, K., patent number 4035848.
- [4] "Hydrogen sensor", Harada, S., Okada, M., Zheng, Y., and Kazama, K., patent number 4538640.
- [5] "Hydrogen sensor", Harada, S., and Okada, M., patent number 4686726.