

Yasuhiro Iwamura  
Low-Energy Nuclear Reaction Research Bibliography  
November 2015  
(English-language papers only)

**1. Reviewed Research Papers; First Author**

1. Y. Iwamura, T. Itoh and S.Tsuruga, “Transmutation Reactions Induced by Deuterium Permeation through Nano-structured Pd Multilayer Thin Film”, *Current Science*, Vol. 108, NO. 4, p.628-632, 2015.
2. Y. Iwamura, T. Itoh and S.Tsuruga, “Increase of Reaction Products in Deuterium Permeation-induced Transmutation”, *J. Condensed Matter Nucl. Sci.* vol.13, p 242-252, 2014.
3. Y. Iwamura, T. Itoh, N. Yamazaki, H. Yonemura, K. Fukutani and D. Sekiba, “Recent Advances in Deuterium Permeation Transmutation Experiments”, *J. Condensed Matter Nucl. Sci.* vol. 10, p.63–71, 2013.
4. Y. Iwamura, T. Itoh, N.Yamazaki, J. Kasagi,Y. Terada, T. Ishikawa, D. Sekiba, H.Yonemura and K. Fukutani, “Observation of Low Energy Nuclear Transmutation Reactions Induced by Deuterium Permeation through Multilayer Pd and CaO thin Film” , *J. Condensed Matter Nucl. Sci.* vol.4, p. 132–144, 2011
5. Y. Iwamura, T. Itoh, M. Sakano, S.Kuribayashi, Y. Terada and T. Ishikawa, “Observation of Surface Distribution of Products by X-ray Fluorescence Spectrometry during D<sub>2</sub> gas permeation through Pd Complexes”, *Condensed Matter Nuclear Science*, ed. by A.Takahashi et.al, World Scientific, New Jersey, p.178-187, 2006.
6. Y. Iwamura, T. Itoh, M. Sakano , S. Sakai and S.Kuribayashi, “Low Energy Nuclear Transmutation in Condensed Matter induced by D<sub>2</sub> Gas Permeation through Pd Complexes: Correlation between Deuterium Flux and Nuclear Products”, *Condensed Matter Nuclear Science*, ed. by P.H.Hagelstein and S.Chubb, World Scientific, New Jersey, p.435-446, 2006.
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8. Y. Iwamura, M.Sakano and T.Itoh, “Elemental Analysis of Pd Complexes: Effects of D<sub>2</sub> Gas Permeation”, *Japanese Journal of Applied Physics*, Vol.41, p.4642-4650, 2002.
9. Y. Iwamura, T. Itoh, N. Gotoh and I. Toyoda, “Detection of Anomalous Elements, X-ray and Excess Heat in a D<sub>2</sub>-Pd System and its Interpretation by the Electron-Induced Nuclear Reaction Model”, *Fusion Technology*, Vol.33, p.476-492, 1998.

**2. Reviewed Research Papers; Except First Author**

1. H. Yonemura , Y. Kitaoka , D. Sekiba, H. Matsuzaki, S. Ogura , M. Matsumoto, Y. Iwamura T. Ito, T. Narusawa, K. Fukutani “Depth profiling of hydrogen under an atmospheric pressure”, *Nuclear Instruments and Methods in Physics Research B*, 269 (2011) 632–635
2. J. Marwan, M. C. H. McKubre, F. L. Tanzella, P. L. Hagelstein, M. H. Miles, M. R. Swartz, Edmund Storms, Y. Iwamura, P. A. Mosier-Bossh and L. P. G. Forsley, “A new look at low-energy nuclear reaction (LENR) research: a response to Shanahan”, *J. Environ. Monit.*, 12 (2010), 1765-1770.

3. H. Yonemura, D. Sekiba, Y. Kitaoka, S. Ogura, M. Wilde, T. Narusawa, T. Nebiki, Y. Iwamura, T. Ito, H. Matsuzaki, K. Fukutani; “Development of  $H(^{15}N, \gamma\alpha)^{12}C$  Nuclear Reaction Analysis Method at Atmosphere with Glass Capillary, *J. Vac. Soc. Jpn.* 52(2009) 145.
4. D. Sekiba, H. Yonemura, T. Nebiki, M. Wilde, S. Ogura, H. Yamashita, M. Matsumoto, J. Kasagi, Y. Iwamura, T. Itoh, H. Matsuzaki, T. Narusawa, K. Fukutani, “Development of micro-beam NRA for 3D-mapping of hydrogen distribution in solids: Application of tapered glass capillary to 6 MeV  $^{15}N$  ion”, *Nuclear Instruments and Methods in Physics Research B* 266 (2008) 4027–4036.
5. T. Nebiki , D. Sekiba, H. Yonemura, M. Wilde, S. Ogura, H. Yamashita, M. Matsumoto, K. Fukutani, T. Okano, J. Kasagi, Y. Iwamura, T. Itoh, S. Kurabayashi, H. Matsuzaki, T. Narusawa, “Taper angle dependence of the focusing effect of high energy heavy ion beams by glass capillaries” , *Nuclear Instruments and Methods in Physics Research B* 266 (2008) 1324–1327.
6. D. Sekiba, H. Yonemura, T. Nebiki, S. Ogura, M. Wilde, M. Matsumoto, T. Okano, J. Kasagi, T. Narusawa, S. Kurabayashi, Y. Iwamura, T. Ito, H. Matsuzaki, K. Fukutani, “Development and application of micro-beam nuclear reaction analysis for observation of hydrogen distribution, *J. Vac. Soc. Jpn.* 50 (2007) 574-578.

### **3. Proceedings and Reports**

1. Yasuhiro Iwamura, Jirohta Kasagi, Hidetoshi Kikunaga, Hideki Yoshino, Takehiko Itoh, Masanao Hattori, Tadahiko Mizuno, “The Launch of a New Plan on Condensed Matter Nuclear Science at Tohoku University”, ICCF19 Proceeding, to be published.
2. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “Observation of simultaneous transmutation reactions for multi elements induced by deuterium permeation through Pd multilayer Complex by In-situ XRF”, SPring-8 User Experiment Report, 2007B1398, 2007.
3. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “Observation of transmutation products induced by deuterium permeation through Pd multilayer Complex by energy scan XRF”, SPring-8 User Experiment Report, 2007A1518, 2007.
4. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “Observation of time dependence for transmutation reactions induced by deuterium permeation through Pd multilayer Complex by In-situ XRF measurement”, SPring-8 User Experiment Report, 2006B1277, 2006.
5. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “In-situ Elemental Analysis on Pd Complexes during D2 Gas Permeation using X-ray Fluorescence Spectrometry”, SPring-8 User Experiment Report, 2006A0241, 2006.
6. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “Study on the Correlation between Pd Complex Structure and Trace Elements using X-ray microprobe”, SPring-8 User Experiment Report, 2005B0554, 2005.
7. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “In-situ Elemental Analysis on Pd Complexes during D2 Gas Permeation with X-ray Fluorescence Spectrometry”, SPring-8 User Experiment Report, 2005A0250-NXb-np, p.165, 2005.
8. Y. Iwamura, T.Itoh, N.Yamazaki, Y.Terada, T.Ishikawa, “Study on Correlation between Pd Complex Structure and Trace Elements using X-ray microprobe”, SPring-8 User Experiment Report, 2005A0409-NXb-np-Na, p.168, 2005.
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10. Y. Iwamura, M.Sakano and T.Itoh, “Observation of Low Energy Nuclear Reactions Induced by D2 Gas Permeation through the Multilayer Pd Containing CaO”, SPring-8 User Experiment Report, 2004B0456-NXb-np-Na, p.167, 2004.
11. Y. Iwamura, T. Itoh, M. Sakano and S. Sakai, “Observation of Low Energy Nuclear Reactions induced by D2 gas permeation through Pd Complexes”, Proc. of ICCF9 19-24 May 2002, Beijing ,China, Tsinghua University Press, p.141-146.
12. Y. Iwamura, T.Itoh, N.Gotoh, M.Sakano, I.Toyoda and H.Sakata, “Detection of Anomalous Elements, X-ray and Excess Heat Induced by Continuos Diffusion of Deuterium Through Multi-Layer Cathode(Pd/CaO/Pd)”, Applied Electromagnetics and Mechanics, T.Takagi and M.Uesaka (eds), 2001, p.383-384.
13. Y. Iwamura, T. Itoh and M. Sakano, “Nuclear Products and Their Time Dependence Induced by Continuous Diffusion of Deuterium through Multi-layer Palladium Containing Low Work Function”, Proc. of ICCF8, 21-26 May 2000, Lerici (La Spezia), Italy, SIF Conf. Proc.Vol.70, p.141-146.
14. Y. Iwamura, T.Itoh, N.Gotoh, and I.Toyoda, “Correlation between behavior of deuterium in palladium and occurance of nuclear reactions observed by simultaneous measurement of excess heat and nuclear products”. Sixth International Conference on Cold Fusion, Progress in New Hydrogen Energy. Oct.13-18, 1996. Lake Toya, Hokkaido, Japan, p.274-281.
15. T.Itoh, Y.Iwamura, N.Gotoh, and I.Toyoda, “Observation of Nuclear Products in Gas Release Experiments with Electrochemically Deuterated Palladium”. Sixth International Conference on Cold Fusion, Progress in New Hydrogen Energy. Oct.13-18, 1996. Lake Toya, Hokkaido, Japan, p.410-414.
16. Y. Iwamura, N.Gotoh, T.Itoh and I.Toyoda, “Characteristic X-ray and Neutron Emissions from Electrochemically Deuterated Palladium”, 5th International Conference on Cold Fusion, April 9-13, 1995. Monte-Carlo, Monaco, p.197-200.
17. T.Itoh, Y.Iwamura, N.Gotoh, and I.Toyoda, “Obeservation of Nuclear Products under Vacuum Condition from Deuterated Palladium with High Loading Ratio”, 5th International Conference on Cold Fusion. 1 April 9-13, 1995. Monte-Carlo, Monaco, p.189-196.
18. Y. Iwamura, T.Itoh and I.Toyoda, “Observation of Anomalous Nuclear Effects in D2-Pd System”, Fourth International Conference on Cold Fusion, Dec.6-9, Lahaina, Maui,1993, Electric Power Research Institute., TR-104188-V3, Vol.2, p.12.