

List of Publication (論文リスト) (2007.1~2007.12)

Papers Published in Refereed Journals

Photo-Production of Neutral Kaons on ^{12}C in the Threshold Region.

T. Watanabea, P. Bydvozsky, K. Dobashi, S. Endo, Y. Fujiia, O. Hashimoto, T. Ishikawad,
K. Itoh, H. Kanda, M. Katoh, T. Kinoshita, O. Konno, K. Maeda, A. Matsumura,
F. Miyahara, H. Miyase, T. Miyoshi, K. Mizunuma, Y. Miura, S.N. Nakamura, H. Nomura,
Y. Okayasu, T. Osaka, M. Oyamada, A. Sasaki, T. Satoh, H. Shimizu, M. Sotona,
T. Takahashi, T. Tamae, H. Tamura, T. Terasawa, H. Tsubota, K. Tsukada, M. Ukai,
M. Wakamatsu, H. Yamauchi and H. Yamazaki

Phys. Lett. **B651** (2007) 269-274.

Measurement of the $\vec{\gamma}p \rightarrow K^+\Lambda$ Reaction at Backward Angles.

K. Hicks, T. Mibe, M. Sumihama, D. S. Ahn, J. K. Ahn, H. Akimune, Y. Asano, W. C. Chang,
S. Date, H. Ejiri, S. Fukui, H. Fujimura, M. Fujiwara, S. Hasegawa, A. Hosaka, T. Hotta,
K. Imai, T. Ishikawa, T. Iwata, B. Juli'a-D'iaz, Y. Kato, H. Kawai, Z. Y. Kim, K. Kino,
H. Kohri, N. Kumagai, T.-S. H. Lee, S. Makino, T. Matsuda, T. Matsumura, N. Matsuoka,
M. Miyabe, Y. Miyachi, M. Morita, N. Muramatsu, T. Nakano, M. Niiyama, M. Nomachi,
Y. Ohashi, T. Ooba, H. Ohkuma, D. S. Oshuev S. Ozaki, C. Rangacharyulu, A. Sakaguchi,
T. Sasaki, P. M. Shagin, Y. Shiino, A. Shimizu, H. Shimizu, Y. Sugaya, Y. Toi, H. Toyokawa,
A. Wakai, C. W. Wang, S. C. Wang, K. Yonehara, T. Yorita, M. Yoshimura, M. Yosoi, and
R. G. T. Zegers

Phys. Rev. C **76** (2007) 042201(R).

Backward-angle Photoproduction of π^0 Mesons on the Proton at $E_\gamma = 1.5\text{-}2.4$ GeV.

M. Sumihama, J. K. Ahn, H. Akimune, Y. Asano, W.C. Chang, S. Date, H. Ejiri,
H. Fujimura, M. Fujiwara, K. Hicks, T. Hotta, K. Imai, T. Ishikawa, T. Iwata, H. Kawai,
Z. Y. Kim, K. Kino, H. Kohri, N. Kumagai, S. Makino, N. Matsuoka, M. Miyabe, Y. Miyachi,
M. Morita, N. Muramatsu, T. Nakano, M. Niiyama, M. Nomachi, Y. Ohashi, H. Ohkuma,
T. Ooba, D.S. Oshuev, C. Rangacharyulu, A. Sakaguchi, T. Sato, P. M. Shagin, Y. Shiino,
H. Shimizu, Y. Sugaya, H. Toyokawa, A. Wakai, C.W. Wang, S. C. Wang, K. Yonehara,
T. Yorita, M. Yosoi, R. G. T. Zegers,

Physics Letters **B657** (2007) 32-37.

Forward Coherent ϕ -meson Photoproduction from Deuterons near Threshold.

W. C. Chang, K. Horie, S. Shimizu, M. Miyabe, D. S. Ahn, J. K. Ahn, H. Akimune, Y. Asano,
S. Date, H. Ejiri, S. Fukui, H. Fujimura, M. Fujiwara, S. Hasegawa, K. Hicks, T. Hotta,
K. Imai, T. Ishikawa, T. Iwata, Y. Kato, H. Kawai, Z. Y. Kim, K. Kino, H. Kohri,
N. Kumagai, P. J. Lin, S. Makino, T. Matsuda, T. Matsumura, N. Matsuoka, T. Mibe,
Y. Miyachi, M. Morita, N. Muramatsu, T. Nakano, M. Niiyama, M. Nomachi, Y. Ohashi,
H. Ohkuma, T. Ooba, D. S. Oshuev, C. Rangacharyulu, A. Sakaguchi, T. Sasaki,

P. M. Shagin, Y. Shiino, A. Shimizu, H. Shimizu, Y. Sugaya, M. Sumihama, Y. Toi, H. Toyokawa, A. Wakai, C. W. Wang, S.C. Wang, K. Yonehara, T. Yorita, M. Yoshimura, M. Yosoi, R. G. T. Zegers
 Phys. Lett. **B658** (2007) 209-215.

Development and Application of Micro-beam Nuclear Reaction Analysis for Observation of Hydrogen Distribution.

D. Sekiba, H. Yonemura, T. Nebiki, S. Ogura, M. Wilde, M. Matsumoto, T. Okano, J. Kasagi, T. Narusawa, S. Kuribayashi, Y. Iwamura, T. Ito, H. Matsuzaki and K. Fukutani
 J. Vac. Soc. Jpn. **50** (2007) 574-578 (in Japanese).

The Screening Effect of D-D Fusion in Sm in a Sub-Low Energy Region (< 20keV).

T. S. Wang, Z. Yang, H. Yonemura, A. Nakagawa, H. Y. Lv, J. Y. Chen, S. J. Liu, and J. Kasagi,
 J. Phys. **G34** (2007) 2255-2263.

Measurement of D (d,p) T Reaction Cross Sections in Sm Metal in Low Energy Region ($10 < E_d < 20$ keV).

T.S. Wang, Z. Yang, H. Yonemura, A. Nakagawa, H.Y. Lv, J.Y. Chen, S.J. Liu, and J. Kasagi
 Chinese Phys. Lett. **24** (2007) 3103-3106.

Radioactive Decay Speedup at $T = 5$ K: Electron-Capture Decay Rate of ${}^7\text{Be}$ Encapsulated in C_{60} .

T. Ohtsuki, K. Ohno, T. Morisato, T. Mitsugashira, K. Hirose, H. Yuki, and J. Kasagi
 Phys. Rev. Lett. **98** (2007) 252501(1-4).

Comparative Study of Activation Analysis for the Determination of Trace Halogens in Geological and Cosmochemical Samples.

T. Nakamoto, Y. Oura, and M. Ebihara
 Analytical Science, **23** (2007) 1113-1119.

Study of Activation Cross Sections of Deuteron-Induced Reactions on Erbium for Applications.

F. Tarkanyi, A. Hermanne, S. Takacs, F. Ditroi, F. B. Kiraly, M. Baba, T. Ohtsuki, S.F. Kovalev, and A.V. Ignatyuk
 J. Label. Compd. Radiopharm. **50** (2007) 487-488.

Half-life Measurement and Production of Sm-146 Nuclide.

N. Kinoshita, T. Hashimoto, T. Nakanishi, A. Yokoyama, H. Amakawa, T. Mitsugashira, T. Ohtsuki, N. Takahashi, I. Ahmad, J.P. Greene, D.J. Henderson, C.L. Jiang, L. Jisonna, M. Notani, R.C. Pardo, N. Partel, E.K. Rehm, R. Scott, X.D. Tang, R. Vondrasek, P. Collon, Y. Kashiv, M. Paul
 J. Nucl. Radiochem. Sci. **8** (2007) 109-112.

Measurement of Evaporation Residue and Fission Cross Sections of the Reaction ${}^{30}\text{Si} + {}^{238}\text{U}$ at Subbarrier Energies.

K. Nishio, S. Hofmann, H. Ikezoe, F. P. Hesberger, D. Ackermann, S. Antalic, V. F. Comas, Z. Gan, S. Heinz, J. A. Heredia, J. Khuyagbaatar, B. Kindler, I. Kojouharov, P. Kuusiniemi, B. Lommel, M. Mazzocco, S. Mitsuoka, Y. Nagame, T. Ohtsuki, A. G. Popeko, S. Saro, H. J. Schott, B. Sulignano, A. Svirikhin, K. Tsukada, K. Tsuruta, and A. V. Yeremin

J. Nucl. Radiochem. Sci. **8** (2007) 73-78.

Radioactive Decay of Be-7 Speed up by Placing inside C₆₀ Cages.

T. Ohtsuki, K. Hirose, and K. Ohno

J. Nucl. Radiochem. Sci. **11** (2007) A1-A7.

Study of Activation Cross-Sections of Deuteron Induced Reactions on Erbium: Production of Radioisotopes for Practical Applications.

F. Tarkanyi, A. Hermanne, B. Kiraly, S. Takacs, F. Ditroi, M. Baba, T. Ohtsuki, S.F. Kovalev, and A.V. Ignatyuk

Nucl. Instrum. and Meth. **B259** (2007) 829-835.

Radioactive Decay Speedup at $T=5$ K: Electron-Capture Decay Rate of Be-7 Encapsulated in C₆₀.

T. Ohtsuki, K. Ohno, T. Morisato, T. Mitsugashira, K. Hirose, H. Yuki, and J. Kasagi

Phys. Rev. Lett. **98** (2007) 252501 (1-4).

Lifetime Measurement of Be-7 in Beryllium Metal Crystal.

T. Ohtsuki, K. Ohno, T. Morisato, and K. Hirose

Mater. Trans. **48** (2007) 646-648.

Precise Measurement of First Townsend Coefficient, using Parallel Plate Avalanche Chamber.

M. Nakhostin, M. Baba, T. Ohtsuki, T. Oishi, and T. Itoga

Nucl. Instrum. and Meth. **A572** (2007) 999-1003.

Production of Longer Lived Radionuclides in Deuteron Induced Reactions on Niobium.

F. Takanyi, A. Hermanne, F. Ditroi, S. Takacs, B. Kiraly, M. Baba, T. Ohtsuki, S. F. Kovalev, and A. V. Ignatyuk

Nucl. Instrum. and Meth. **B255** (2007) 297-303.

Target Preparation by the Precipitation Method for Nuclear Reactions.

K. Takamiya, T. Ohtsuki, H. Yuki, T. Mitsugashira, N. Sato, T. Suzuki, M. Fujita,

T. Shinozuka, Y. Kasamatsu, H. Kikunaga, A. Shinohara, S. Shibata, and T. Nakanishi

Appl. Rad. Iso **65** (2007) 32-35.

Reductive Atmosphere of Supercritical Water with RuO₂ Resulting in TcO₂ Colloid: Spectroscopic, Morphological and Crystallographic Study on Solutions and Precipitates in Hasteroy C-22.

T. Yamamura, K. Yubuta, I. Satoh, Y. Yoshida, Y. Shiokawa, T. Sekine, W. Sugiyama, K.-C. Park, and H. Tomiyasu

J. Supercritical Fluids **43** (2007) 317-323.

C60のなかは魔法の空間 (軌道電子に影響を受ける原子核の壊変).

大槻勤, 廣瀬健太郎, 大野かおる, 森里嗣生

化学同人 月刊化学 **62** (2007) 18-23.

Papers Published in International Conference Proceedings

Narrow Resonance at $E_\gamma = 1020$ MeV in the D (γ, n) pn Reaction.

F. Miyahara, J. Kasagi, T. Nakabayashi, H. Fukasawa, R. Hashimoto, T. Ishikawa,

T. Iwata, H. Kanda, T. Kinoshita, K. Maeda, K. Nawa, T. Nomura, H. Shimizu, T. Shishido,

K. Suzuki, Y. Tajima, T. Takahashi, H. Ueno, H. Yamazaki, and H. Y. Yoshida,
 Prog. Theor. Phys. Suppl. **168** (2007) 90-96.

S_{11} Resonance Observed in the C, Cu (γ, η) Reactions.

H. Yamazaki for the SCISSORS II collaboration
 Prog. Theo. Phys. Supp. **168** (2007) 552--555.

A Narrow Baryon Resonance Observed at LNS, Sendai.

H. Shimizu
 International Workshop on Hadron and Nuclear Physics (HNP2007),
 Pusan, Korea, Feb. 22-24, 2007 (invited talk).

$N^*(1670)$ Observed at LNS, Sendai.

H. Shimizu,
 11th Workshop on the physics of excited nucleons (NSTAR2007),
 Bonn, Germany, Sep. 5-8, 2007 (invited talk).

Measurement of Evaporation Residue Cross Sections of the Reaction at Subbarrier Energies.

K. Nishio, S. Hofmann, F. P. Hesberger, D. Ackermann, S. Antalic, V. F. Comas, Z. Gan,
 S. Heinz, J. A. Heredia, H. Ikezoe, J. Khuyagbaatar, B. Kindler, I. Kojouharov,
 P. Kuusiniemi, B. Lommel, M. Mazzocco, S. Mitsuoka, Y. Nagame, T. Ohtsuki,
 A. G. Popeko, S. Saro, H. J. Schott, B. Sulignano, A. Svirikhin, K. Tsukada, K. Tsuruta,
 and A. V. Yeremin
 AIP Conference Proceedings **891** (2007) 71-77.

Screening Potential for Low-Energy Deuteron-Nucleus Collisions in Quantum Electron Plasmas.

H. Yonemura, Y. Ishikawa, M. Honmo, A. Nakagawa, J. Kasagi, Y. Zhang, and T. Wang
 Proceedings of International Nuclear Physics Conference INPC2007, vol. 2, 476-479.

Development of an Injector to Generate a Very Short Bunch for a Super Coherent Terahertz Light Source Project.

T. Tanaka, T. Muto, F. Hinode, M. Kawai, K. Nanbu, K. Kasamsook, K. Akiyama,
 M. Yasuda, H. Hama, H. Tanaka, and N. Kumagai
 Proc. 4th Asian Particle Accelerator Conference APAC07 (2007) 178-180.

Study on Compact DC Electron Gun Using Single Crystal Cathode of LaB_6 .

K. Kasamsook, K. Nanbu, M. Kawai, K. Akiyama, F. Hinode, T. Muto, T. Tanaka,
 M. Yasuda, and H. Hama
 Proc. 4th Asian Particle Accelerator Conference APAC07 (2007) 181-183.

A Study on the Applicability of Landau Cavity to the 1.2 GeV Booster Synchrotron at Tohoku University.

F. Hinode, K. Akiyama, H. Hama, M. Kawai, K. Kasamsook, A. Kurihara, T. Muto,
 K. Nanbu, Y. Shibasaki, S. Takahashi, T. Tanaka, and M. Yasuda
 Proc. 4th Asian Particle Accelerator Conference APAC07 (2007) 375-377.

Development of a Low Emittance DC Gun for Smith-Purcell BWO FEL.

K. Kasamsook, K. Akiyama, K. Nanbu, M. Kawai, F. Hinode, T. Muto, T. Tanaka,

M. Yasuda, Y. Mori, and H. Hama

Proc. 29th International Free Electron Laser Conference FEL07 (2007) 417-420.

Coherent THz Light Source Using Very Short Electron Bunches from a Thermionic RF Gun.

T. Muto, T. Tanaka, F. Hinode, M. Kawai, K. Nanbu, K. Kasamsook, K. Akiyama,

M. Yasuda, Y. Mori, and H. Hama

Proc. 29th International Free Electron Laser Conference FEL07 (2007) 476-479.

Review

Low-energy Nuclear Cross Sections in Metals.

J. Kasagi

Surface and Coatings Technology **201** (2007) 8574-8578.