

1. Effect of Structure and Orientation of Incident Cluster Ions on MeV Cluster Ion-induced Secondary-ion Emission  
R. Murase<sup>1</sup>, S. Nakagawa<sup>1</sup>, T. Majima<sup>1</sup>, M. Imai<sup>1</sup>, M. Saito<sup>1,2</sup>, K. Nakajima<sup>3</sup>, A. Chiba<sup>4</sup>, S. Tomita<sup>5</sup> and H. Tsuchida<sup>1,2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC, <sup>3</sup>Dept Micro Engng., <sup>4</sup>QST, <sup>5</sup>Univ. of Tsukuba
2. Production of Water Cluster Ions from Ice Using MeV Ion Beam Bombardment  
K. Suzuki, H. Kubota, K. Yamasaki, T. Majima, M. Imai, H. Tsuchida\*, and M. Saito\*  
Dept. Nucl. Engng., \*QSEC
3. Biomolecular Damage in Liquid Water by UV Laser Irradiation  
T. Sato<sup>1</sup>, M. Hongo<sup>1</sup>, T. Tezuka<sup>1</sup>, T. Majima<sup>1</sup>, M. Imai<sup>1</sup>, M. Saito<sup>1,2</sup>, and H. Tsuchida<sup>1,2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC
4. Negative Secondary Ions Emitted from Microdroplets of Deuterated Methanol CH<sub>3</sub>OD by Fast Heavy-ion Collisions  
Y. Mizunami<sup>1</sup>, T. Majima<sup>1</sup>, H. Tsuchida<sup>2</sup>, and M. Saito<sup>2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC
5. Measurements of Depth Profiles of Li in a Thin All-solid-state Li Battery with ERDA  
Y. Ogura<sup>1</sup>, T. Majima<sup>1</sup>, K. Yasuda<sup>2</sup>, B. Tsuchiya<sup>3</sup>, H. Tsuchida<sup>1,4</sup>, and M. Saito<sup>1,4</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>Kyoto Pref. Univ., <sup>3</sup>Meijo Univ., <sup>4</sup>QSEC
6. Measurements of Positive and Negative Fragment Ions from Water Molecules in Fast Heavy-ion Collisions  
R. Takasu<sup>1</sup>, T. Majima<sup>1</sup>, K. Ueno<sup>1</sup>, H. Tsuchida<sup>1,2</sup>, and M. Saito<sup>1,2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC
7. Observation of Recurrent Fluorescence from Excited Benzene Cations Using Electrostatic Ion Beam Trap  
J. kusuda<sup>1</sup>, K. Yamasaki<sup>1</sup>, T. Majima<sup>1</sup>, H. Tsuchida<sup>1,2</sup>, and M. Saito<sup>1,2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC
8. Research for Solid-liquid Interface Analysis by MeV-SIMS at Atmospheric Pressure  
T. Seki<sup>1</sup>, T. Nonomura<sup>1</sup>, and J. Matsuo<sup>2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC
9. Research on Gas-liquid Two-phase Flow Visualization Data Generation by Generative Adversarial Network  
S. Kim, Z. Kawara, T. Yokomine  
Dept. Nucl. Engng.
10. Study on Fibrous Particle-fluid Interaction in Solid-liquid Multiphase Flow  
T. Fukui, Z. Kawara, T. Yokomine  
Dept. Nucl. Engng.
11. Experimental Study on Hydrogen Reflection on Plasma-facing Glass Surface  
K. Utsumi, K. Takata, I. Takagi  
Dept. Nucl. Engng.
12. Effects of Heavy Irradiation Damage on Hydrogen Diffusion in Zr Alloy Oxide Layers  
S. Ohira, K. Yamaguchi, I. Takagi  
Dept. Nucl. Engng.
13. Recombination Coefficient of Ion-implanted Deuterium on Tungsten  
J. Suzuki, Z. Jiang, I. Takagi  
Dept. Nucl. Engng.
14. Synthesis and Characterization of Uranium-iron Oxide  
R. Tonna, T. Kobayashi, T. Sasaki  
Dept. Nucl. Engng.
15. “Nuclear Engineering Laboratory 2” in 2020 - In-air PIXE and RBS -  
T. Majima<sup>1,2</sup>, K. Suzuki<sup>1</sup> (TA), T. Sato<sup>1</sup> (TA), Y. Ogura<sup>1</sup> (TA), S. Nakagawa<sup>1</sup> (TA), M. Hongo<sup>1</sup> (TA), Y. Mizunami<sup>1</sup> (TA), K. Yamasaki<sup>1</sup> (TA), H. Tsuchida<sup>1,2</sup>, and M. Saito<sup>1,2</sup>  
<sup>1</sup>Dept. Nucl. Engng., <sup>2</sup>QSEC

16. Effect of In-situ Deposition of Silver on a Peptide Surface in Secondary Ion Mass Spectrometry with MeV Primary Ions  
T. Yano, and K. Nakajima  
Dept. Micro Engng.
17. Effect of Deposition of Noble Metal on Negative Ion Yield in MeV-SIMS of a Biomolecular Sample  
Y. Fujimoto, N. Yamamoto, and K. Nakajima  
Dept. Micro Engng.
18. Sputtering of Organic Molecule Thin Films by C<sub>60</sub> Ions  
S. Takeuchi, and K. Nakajima  
Dept. Micro Engng.
19. Measurement of Thickness of Aluminum Thin Films by Backscattering Spectrometry  
Y. Gotoh  
Dept. Electron. Sci. and Engng.
20. Magnetic and Transport Properties of EuTaO<sub>3</sub> Thin Films  
H. Matsui\*, I. Kakeya\*\*, K. Tanaka\*, and K. Fujita\*  
\*Department of Material Chemistry, Graduate School of Engineering,  
\*\*Department of Electronic Science and Engineering, Graduate School of Engineering
21. Study on Carbonization of Vertically-Aligned Organic Nanowires by Elastic Recoil Detection Analysis (ERDA)  
K. Kamiya, S. Sakaguchi, T. Sakurai#, Y. Sasaki\*, M. Saito\*, I. Takagi\*, and S. Seki  
Dept. Mol. Engng., #Dept. Mol. Chem. Eng., Kyoto Inst. Tech.,  
\*Dept. Nucl. Engng.
22. Effect of Mo on Deuterium Retention Behaviors in W-Y<sub>2</sub>O<sub>3</sub> Alloy  
K. Murotani\*, H. Tsuchida\*\*, and Q. Xu\*  
\*Institute for Integrated Radiation and Nuclear Science, \*\*QSEC
23. Experimental Physics Program A5 (2020) - Symmetry in Nature at the School of Science  
T. Murakami, J. Hikida, Y. Hino, K. Matsunaga, H. Nanba, T. Yano, K. Maruyama, N. Matsushita, Y. Muto, K. Shimomura, T. Terao, Y. Tsuge, K. Tsutsumi, and T. Nagae  
Dept. Phys.
24. Comparison of F Measurement Sensitivity between PIXE and PIGE Methods  
K. Yasuda, T. Matsubara and M. Saito\*  
Dept. Life and Environ. Sci., Kyoto Pref. Univ., \*Dept. Nucl. Engng.
25. Characterization of Hydrogen in Anode and Cathode of Lithium-Ion Battery Prepared with Magnetron Sputter Method by Means of ERD and RBS Techniques  
K. Morita<sup>1</sup>, B. Tsuchiya<sup>2</sup>, R. Ye<sup>3</sup>, H. Tsuchida<sup>4</sup>, and T. Majima<sup>4</sup>  
<sup>1</sup>NISRI, <sup>2</sup>Meijo Univ., <sup>3</sup>Iwate Univ., <sup>4</sup>QSEC