

2010

1. M. Hada and J. Matsuo
"Ultrafast optical actuation of VO₂ thin film accompanied by the structural phase transition"
1st CFEL Symposium, (Sylt Germany, 2011/03/18, Poster)
2. J. Matsuo, Y. Wakamatsu, T. Seki and T. Aoki
"Molecular Imaging of Cells and Tissues by Wet-SIMS" Using Swift Heavy Ion Beams"
20th MRS-J Symposium (International Session) (Yokohama, Japan, 2010/12/21, Oral)
3. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"The effects of cluster size on sputtering and surface smoothing with gas cluster ion beams"
20th MRS-J Symposium (International Session) (Yokohama, Japan, 2010/12/22, Poster)
4. T. Aoki, T. Seki and J. Matsuo
"MD Simulation of Huge Fluorine Cluster Impact on Silicon"
20th MRS-J Symposium (International Session) (Yokohama, Japan, 2010/12/22, Poster)
5. Y. Yamamoto, K. Ichiki, T. Seki, T. Aoki and J. Matsuo
"Evaluation of Damage Depth on Organic Materials Surfaces with Molecular Depth Profiling by Ar Cluster"
20th MRS-J Symposium (International Session) (Yokohama, Japan, 2010/12/22, Poster)
6. T. Seki, Y. Yoshino, T. Senoo, K. Koike, T. Aoki and J. Matsuo
"High-speed Si etching with ClF₃ neutral cluster beam"
20th MRS-J Symposium (International Session) (Yokohama, Japan, 2010/12/22, Poster)
7. J. Matsuo, H. Yamada, Y. Wakamatsu, T. Aoki and T. Seki
"A Novel Molecular Imaging Technique for Biological Material Analysis"
AVS 57th International Symposium (New Mexico, USA, 2010/10/20, Oral)
8. J. Matsuo
"What Size of Cluster Ion Is Most Appropriate for SIMS? "
ASTM Workshop on Surface Analysis (New Mexico, USA, 2010/10/17, Invited)
9. J. Matsuo
"Novel primary ion beams for bio-SIMS"
5th International Symposium on Practical Surface Analysis (PSA-10), (Gyeongju, Korea, 2010/10/5, Invited)
10. J. Matsuo
"Characterization of cells and tissues by "wet-SIMS" using swift heavy ion beams"
10th European Conference on Accelerators in Applied Research and Technology (ECAART2010), (Athenes, Greece, 2010/9/15, Oral)
11. J. Matsuo
"Molecular Imaging Technique with swift heavy ions"
The 3rd Workshop on Interaction of Ions with Insulators (WIII2010), (Narita, Japan, 2010/9/4, Invited)
12. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"The effects of cluster size and energy on surface smoothing with gas cluster ion beams"
17th International Conference on Ion Beam Modification of Materials (IBMM2010), (Montreal, Canada, 2010/8/23, Poster)
13. J. Matsuo
"Large Size Cluster Ion Beams:from Fundamental Aspects to Industrial Applications"

14. J. Matsuo
"Biological Material Analysis with Swift Heavy Ions: A Proposal of "Wet SIMS"
21th International Conference on the Application of Accelerators in Research and Industry, (Fort Worth, Texas, USA, 2008/8/11, Invited)
15. J. Matsuo, H. Yamada, Y. Wakamatsu, S. Ninomiya, T. Seki, T. Aoki
"Molecular Imaging of Biological Samples with Swift Heavy Ion Microprobe"
12th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA 2010) (Leipzig, German, 2010/07/27, Invited)
16. Y. Wakamatsu, H. Yamada, S. Ninomiya, T. Seki, T. Aoki, J. Matsuo
"Biomolecular Analysis with Nuclear Microprobe under Near-ambient Conditions"
12th International Conference on Nuclear Microprobe Technology and Applications (ICNMTA 2010) (Leipzig, German, 2010/07/27, Poster)
17. G. Sciaini, M. Hada, J. Matsuo, A. Karantz, G. Moriena and R. J. D. Miller
"Coherent Acoustic Phonons in Highly Oriented Bismuth Films Monitored by Femtosecond Electron Diffraction"
Ultrafast Phenomena 17 (USA, 2010/7/23, Oral)
18. T. Aoki, T. Seki and J. Matsuo
"MD Simulation of Huge Reactive Gas Cluster Impact with Supersonic Velocity"
10th International Conference on Computer Simulations of Radiation Effects in Solids (Krakow, Poland, 2010/7/18, Oral)
19. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki and J. Matsuo
"Characteristics of organic depth profiling using large cluster ion beams"
10th Workshop on Cluster Ion Beam Technology (Kyoto, Japan, 2010/6/14, Oral)
20. T. Aoki, T. Seki and J. Matsuo
"MD simulation of small boron cluster implantation"
10th Workshop on Cluster Ion Beam Technology (Kyoto, Japan, 2010/6/14, Oral)
21. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"The effects of incident cluster size and energy on Si sputtering yield"
10th Workshop on Cluster Ion Beam Technology (Kyoto, Japan, 2010/6/14, Oral)
22. T. Seki, T. Aoki and J. Matsuo
"Etching Characteristics with Ar-Cl₂ Gas Mixed Cluster Ion Beam"
10th Workshop on Cluster Ion Beam Technology (Kyoto, Japan, 2010/6/14, Oral)
23. T. Aoki, T. Seki and J. Matsuo
"Damage and sputtering with cluster impact by MD simulations"
The International Symposium on SIMS and Related Techniques Based on Ion-Solid Interactions at Seikei University (SISS-12) (Seikei Univ. Japan, 2010/6/11, Oral)
24. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki and J. Matsuo,
"Availability of gas cluster SIMS to biomolecular analysis"
The International Symposium on SIMS and Related Techniques Based on Ion-Solid Interactions at Seikei University (SISS-12) (Seikei Univ. Japan, 2010/6/11, Oral)
25. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki and J. Matsuo
"Secondary ion mass spectrometry depth profiling of organic materials with large gas cluster ion beams"
18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/9, Oral)
26. T. Yamanobe, Y. Yamamoto, K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Development of high-intensity Ar cluster ion beam equipment"
18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/8, Poster)
27. M. Hada, S. Ibuki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Evaluation of damage layer in an organic film with irradiation of energetic ion beams"
18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/8, Poster)

28. Y. Yoshino, T. Seki, T. Senoo, K. Koike, S. Ninomiya, T. Aoki and J. Matsuo
 "High Speed Si Etching with ClF₃ Cluster Injection"
 18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/8, Poster)
 29. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
 "Size and energy dependence of the sputtering yield of Si bombarded with gas cluster ion beams"
 18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/7, Poster)
 30. Y. Yamamoto, K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
 "Damage evaluation of organic materials irradiated with Ar cluster ion beam"
 18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/7, Poster)
 31. Y. Wakamatsu, H. Yamada, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
 "SIMS with Fast Heavy Ions for Biomolecule Analysis"
 18th International Conference on Ion Implantation Technology (Kyoto University, Japan, 2010/6/7, Poster)
 32. J. Matsuo, Y. Wakamatsu, H. Yamada, S. Ninomiya, T. Seki and T. Aoki
 "Wet SIMS with Swift Heavy Ions for Biological Material Analysis"
 22nd Annual Workshop on SIMS (Norfolk, USA, 2010/5/21, Oral)
 33. J. Matsuo, K. Ichiki, S. Ninomiya, T. Seki and T. Aoki
 "Measurement of Cluster Size Dependence of Sputtering Yield Using Size-Selected Ar Cluster Ion Beams"
 22nd Annual Workshop on SIMS (Norfolk, USA, 2010/5/20, Oral)
 34. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki and J. Matsuo
 "Depth profile characteristics of organic materials with large Ar cluster ion beams"
 22nd Annual Workshop on SIMS (Norfolk, USA, 2010/5/19, Oral)
 35. T. Aoki, T. Seki and J. Matsuo
 "MD simulation of small boron cluster implantation"
 10th International Workshop on Junction Technology (Fudan University, China, 2010/5/10-11)
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2009

1. G. Moriena, M. Hada, J. Matsuo, C. Lu, Hubert Jean-Ruel, M. Gao, R. Cooney, A. Karantza, G. Sciaini and R.J.D. Miller
 "Coherent acoustic phonons in ultrathin monocrystalline Bismuth"
 The Banff Meeting on Structural Dynamics (Banff, Canada, 2010/2/26, Poster)
2. M. Hada and J. Matsuo
 "Evaluation of Lattice Motion with Vacuum-free Compact Designed Time-resolved X-ray Diffraction"
 The Banff Meeting on Structural Dynamics (Banff, Canada, 2010/2/26, Poster)
3. J. Matsuo and M. Hada
 "In-air femtosecond X-ray source"
 The Banff Meeting on Structural Dynamics (Banff, Canada, 2010/2/25, Oral)
4. J. Matsuo
 "SIMS with Highly Excited Primary Beams"
 ALC'09 (Maui, Hawaii, USA, 2009/12/10, Keynote)
5. T. Seki and J. Matsuo
 "Investigation of Irradiation Damage with Large Gas Cluster Ion Beam using by HR-RBS"
 ALC'09 (Maui, Hawaii, USA, 2009/12/10, Oral)
6. T. Aoki and J. Matsuo
 "Molecular Dynamics Simulation of Cluster Impact with Composite Species"
 19th MRS-J Symposium (Yokohama, Japan, 2009/12/9, Oral)
7. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
 "Molecular depth profiling of biological materials with large Ar cluster ion beams"
 19th MRS-J Symposium (Yokohama, Japan, 2009/12/9, Oral)

8. T. Yamanobe, Y. Yamamoto, K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
 "Development of high-intensity Ar Cluster ion beam source"
 19th MRS-J Symposium (Yokohama, Japan, 2009/12/8, Poster)
9. T. Seki, Y. Yamamoto, K. Ichiki, S. Ninomiya and J. Matsuo
 "Soft Excitation and Processing of Polymer Materials with Cluster Ion Beams"
 International Symposium on the Physics of Excitation-assisted Nano-processes(ISPEN2009) (Wakayama, Japan, 2009/11/20, Poster)
10. M. Hada and J. Matsuo
 "Effect of ambient pressure on Cu K α X-ray radiation with millijoule and high-repetition-rate femtosecond laser"
 International Symposium on the Physics of Excitation-assisted Nano-processes(ISPEN2009) (Wakayama, Japan, 2009/11/20, Poster)
11. S. Ninomiya, K. Ichiki, H. Yamada, T. Seki, T. Aoki and J. Matsuo
 "Secondary ion mass spectrometry depth profiling of organic films with large Ar cluster ion beams"
 5th International Workshop on High-Resolution Depth Profiling (Kyoto, Japan, 2009/11/18, Oral)
12. T. Seki, T. Aoki and J. Matsuo
 "Investigation of cluster ion irradiation damage with HR-RBS"
 5th International Workshop on High-Resolution Depth Profiling (Kyoto, Japan, 2009/11/17, Poster)
13. J. Matsuo, S. Ninomiya, K. Ichiki, H. Yamada, M. Hada, T. Aoki and T. Seki
 "Surface Damage Evaluation of Organic Materials Irradiated with Ar Cluster Ions"
 AVS 56th International Symposium (California, USA, 2009/11/12, Oral)
14. J. Matsuo
 Nanoprocessing with Cluster Beams-Challenges and Opportunities
 31st International Symposium on Dry Process (Busan, Korea, 2009/9/24, Invited)
15. K. Ichiki, S. Ninomiya, Y. Nakata, H. Yamada, T. Seki, T. Aoki and J. Matsuo
 Sputtering and morphology of solid surfaces bombarded with size-selected gas cluster ion beams
 16th International Conference on Surface Modification of Materials by Ion Beams (SMMIB2009) (AIST Tokyo Waterfront, Japan, 2009/9/16, Oral)
16. T. Seki, T. Aoki and J. Matsuo
 Etching of Metallic Materials with Cl₂ Gas Cluster Ion Beam
 16th International Conference on Surface Modification of Materials by Ion Beams (SMMIB2009) (AIST Tokyo Waterfront, Japan, 2009/9/16, Poster)
17. Y. Yamamoto, K. Ichiki, S. Ninomiya, T. Seki and J. Matsuo
 Damage evaluation of polymer materials irradiated with Ar cluster ion beams
 16th International Conference on Surface Modification of Materials by Ion Beams (SMMIB2009) (AIST Tokyo Waterfront, Japan, 2009/9/16, Poster)
18. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
 Molecular depth profiling of polymers with large Ar cluster ion beams
 17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/18, Oral)
19. J. Matsuo
 SIMS with large size cluster ions: Recent Advances and Challenges
 17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/16, Invited)
20. BN. Jones, J. Matsuo, Y. Nakata, H. Yamada, JF. Watts, S. Hinder, RP. Webb
 Comparison of MeV monomer ion and Cluster SIMS
 17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/16, Oral)
21. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
 Analysis of organic semiconductor multilayers with Ar cluster SIMS
 17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/15, Oral)
22. J. L. S. Lee, S. Ninomiya, J. Matsuo, I. S. Gilmore, A. G. Shard, M. P. Seah
 Organic depth profiling of a nanostructured delta layer reference material using large argon cluster ions – A preliminary study
 17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/15, Oral)

23. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
Damage evaluation of organic samples under large Ar cluster ion bombardment
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Oral)
24. M. Hada, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
Evaluation of optical properties in organic films with irradiation of cluster ion beams
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Poster)
25. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
Size effects of sputtering yields with large cluster ion beams
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Poster)
26. Y. Nakata, H. Yamada, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
Matrix-assisted Molecular Emission under MeV Ion Bombardment
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Poster)
27. Y. Nakata, H. Yamada, J. Tamura, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
Wet-SIMS with Swift Heavy Ions for Biological Applications
Y. Nakata, H. Yamada, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Poster)
28. H. Yamada, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
MeV-Energy Probe SIMS Imaging of Pretreated Animal Cells
17th International Conference on Secondary Ion Mass Spectrometry (Toronto, Canada, 2009/9/14, Poster)
29. T. Aoki, T. Seki and J. Matsuo
Study of atomic mixing and migration by low-energy ion irradiation using MEIS and MD simulation
19th Ion Beam Analysis (University of Cambridge, UK, 2009/9/7, Poster)
30. J. Matsuo
Molecular Imaging Technique with Swift Heavy Ions
19th Ion Beam Analysis (University of Cambridge, UK, 2009/9/7, Invited)
31. H. Yamada, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
MeV-Energy Probe SIMS Imaging of Major Components in Washed, Etched or Fractured Animal Cells
19th Ion Beam Analysis (University of Cambridge, UK, 2009/9/7, Poster)
32. T. Aoki and J. Matsuo
Computer simulation of gas cluster ion impact
19th International Conference on Ion-Surface Interactions 2009 (Zvenigorod, Russia, 2009/8/21-25, Invited)
33. M. Hada and J. Matsuo
"Development of Ultrafast Pulse X-ray Source in Ambient Pressure with a Millijoule High Repetition Rate Femtosecond Laser"
Zero-Carbon Energy Kyoto (Kyoto, Japan, 2009/8/20, Poster)
34. J. Matsuo, H. Yamada, K. Ichiki, M. Hada, S. Ninomiya, T. Seki and T. Aoki
Material processing and evaluation with cluster ion beam
10th International Symposium on Sputtering & Plasma Process (Kanazawa, Japan, 2009/7/8, Invited)
35. T. Aoki and J. Matsuo
Study of Damage Accumulation and Annealing Process at Low Energy Boron Implantation Using Molecular Dynamics Simulations
9th International Workshop on Junction Technology (Kyoto University, 2009/6/12, Oral)
36. J. Matsuo, K. Ichiki, M. Hada, S. Ninomiya, T. Seki, T. Aoki, T. Nagayama and M. Tanjo
Stress Measurement of Carbon Cluster implanted layers with in-plane Diffraction Technique
9th International Workshop on Junction Technology (Kyoto University, 2009/6/12, Oral)
37. S. Ninomiya,
TOF-SIMS and depth profile analysis of organic films with Ar cluster ion beams
The International Symposium on SIMS and Related Techniques Based on Ion-Solid Interactions (Seikei University, 2009/6/11, Oral)

38. J. Matsuo, T. Nagayama and M. Tanjo
Characterization of implanted layers obtained with cluster ions of varying size.
International Workshop on INSIGHT-2009 (Embassy Suites, Napa, CA, 2009/4/27, Poster)
39. T. Aoki, T. Seki and J. Matsuo
Molecular dynamics study of surface modification with large cluster ion impact.
2009 MRS spring meeting (San Francisco, CA, 2009/4/16, Poster)
40. K. Ichiki, S. Ninomiya, M. Hada, T. Seki, T. Aoki and J. Matsuo
Size-selected high density large gas cluster ion beam irradiation.
2009 MRS spring meeting (San Francisco, CA, 2009/4/16, Poster)
41. J. Matsuo
Nano Fabrication and Evaluation with Advanced Quantum Beam.
2009 MRS spring meeting (San Francisco, CA, 2009/4/17, Invited)