

研究発表／RESULTS

International Conference 2008-2007

2008

1. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
Low Damage Etching of Polymer Materials for Depth Profile Analysis Using Large Ar Cluster Ion Beam
The International workshop for Surface Analysis and Standardization '09 (Okinawa, Japan, 2009/3/18, Poster)
2. T. Aoki, T. Seki and J. Matsuo
Study of density effect of large gas cluster impact by molecular dynamics simulations
9th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2009/3/12)
3. T. Seki, T. Aoki and J. Matsuo
High-speed processing with Cl₂ cluster ion beam
9th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2009/3/12)
4. S. Ninomiya, K. Ichiki, Y. Nakata, H. Yamada, T. Seki, T. Aoki and J. Matsuo
SIMS depth profiling of organic films with Ar cluster ion beams
9th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2009/3/12)
5. J. Matsuo, S. Ninomiya, H. Yamada, K. Ichiki, Y. Nakata, T. Seki and T. Aoki
Ion beam processing and characterization for organic and biological materials
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/10, Oral)
6. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
SIMS Depth Profiling of Organic Materials with Ar Cluster Ion Beam
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/10, Oral)
7. H. Yamada, K. Ichiki, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
A Processing Technique of Cell Surface Using Cluster Ion Beam for Imaging Mass Spectrometry
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/10, Oral)
8. T. Aoki, T. Seki and J. Matsuo
Computer Simulations of Glancing-Angle Large Gas Cluster Impact
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/10, Oral)
9. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
Size-selected High Density Large Gas Cluster Ion Beam Irradiation
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/11, Poster)
10. T. Seki, T. Aoki and J. Matsuo
Etching Characteristics with Ar-Cl₂ Gas Mixed Cluster Ion Beam
The IUMRS International Conference in Asia (Nagoya Congress Center, Japan, 2008/12/11, Poster)
11. J. Matsuo, S. Ninomiya, H. Yamada, K. Ichiki, Y. Nakata, T. Aoki and T. Seki
"Molecular Depth Profiling for Soft Materials by using Size-Selected Large Cluster Ions"
AVS 55th International Symposium, (Boston, USA, 2008/10/22, Oral)
12. T. Aoki, T. Seki, J. Matsuo
"Study of density effect of large gas cluster impact"
9th International Conference on Computer Simulation of Radiation Effects in Solids, (Beijing, China, 2008/10/13, Oral)
13. J. Matsuo
"Molecular Imaging of a Single Cell with Nuclear Microprobe"
Workshop of Ion - Insulator Interaction, (Nagano, Japan, 2008/9/9, Oral)

14. T. Aoki, T. Seki, S. Ninomiya, K. Ichiki and J. Matsuo
"Study of crater formation process with cluster ion impact"
16th International Conference on Ion Beam Modification of Materials, (Dresden, Germany, 2008/9/3)
15. T. Seki, T. Aoki and J. Matsuo
"High-speed processing with Cl₂ cluster ion beam"
16th International Conference on Ion Beam Modification of Materials, (Dresden, Germany, 2008/9/3)
16. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki and J. Matsuo
"The emission process of secondary ions from solids with large gas cluster ions"
23rd International Conference on Atomic Collisions in Solids, (South Africa, 2008/8/17-22)
17. J. Matsuo
"Molecular imaging with swift heavy ions (MeV-SIMS)"
20th International Conference on the Application of Accelerators in Research and Industry, (Fort Worth, Texas, USA, 2008/8/12, Invited)
18. J. Matsuo
"Secondary ion emission under large cluster ion irradiation"
20th International Conference on the Application of Accelerators in Research and Industry, (Fort Worth, Texas, USA, 2008/8/13, Invited)
19. M. Hada and J. Matsuo
"Development of femtosecond X-ray diffraction"
6th Conference on Ultrafast Surface Dynamics (Kloster Banz, Germany, 2008/7/23)
20. Y. Nakata, H. Yamada, Y. Honda, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Imaging Mass Spectrometry with Nuclear Microprobes for Biologic Applications"
11th International Conference on Nuclear Microprobe Technology and Applications (Debrecen, Hungary, 2008/7/22)
21. T. Aoki, T. Seki and J. Matsuo,
"MD Study of Damage Accumulation Process With Poly-atomic Cluster Implantation"
17th International Conference on Ion Implantation Technology (California, USA, 2008/6/12)
22. T. Seki, T. Aoki and J. Matsuo,
"Investigation of Damage with Cluster Ion Beam Irradiation"
17th International Conference on Ion Implantation Technology (California, USA, 2008/6/12)
23. J. Matsuo,
"Cluster Size Effects in Cluster Ion Beam Process"
17th International Conference on Ion Implantation Technology (California, USA, 2008/6/11)
24. T. Aoki, T. Seki and J. Matsuo
"Computer modeling of cluster ion implantation prosess"
8th International Workshop on Junction Technology (Shanghai, China, 2008/5/16, Invited)
25. J. Matsuo
"Mass Imaging with Swift Heavy Ions (MeV-SIMS)"
21st Annual Workshop on SIMS (Texas, USA, 2008/5/15)
26. S. Ninomiya, K. Ichiki, P. Matthieu, T. Seki, T. Aoki and J. Matsuo
"High-rate and low-damage etching of organic materials with large gas cluster ions"
21st Annual Workshop on SIMS (Texas, USA, 2008/5/15)

2007

1. J. Matsuo
"Nano processing by cluster ion beam",
MRS-J 2007 Symposium (Tokyo, Japan, 2007/12/9, Invited)
2. T. Seki, T. Aoki, J. Matsuo,
"High-Speed Nano-Processing with Cluster Ion Beams",
MRS-J 2007 Symposium (Tokyo, Japan, 2007/12/7-9)

3. S. Ninomiya, J. Matsuo, K. Ichiki, H. Yamada, Y. Nakata, Y. Honda, T. Seki, T. Aoki
"Low damage etching and SIMS depth profiling with large Ar cluster ions"
MRS-J 2007 Symposium (Tokyo, Japan, 2007/12/7-9)
4. Y. Honda, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki, J. Matsuo
"SIMS Analysis of Biological Mixtures with Fast Heavy Ion Irradiation"
MRS-J 2007 Symposium (Tokyo, Japan, 2007/12/7-9)
5. T. Aoki and J. Matsuo,
"Molecular dynamics simulations of gas cluster ion impact with glancing angle incident"
8th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2007/11/8-9)
6. T. Seki, T. Aoki and J. Matsuo,
"High-Speed Nano-Processing with Reactive Cluster Ion Beam"
8th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2007/11/8-9)
7. S. Ninomiya, K. Ichiki, Y. Nakata, Y. Honda, T. Seki, T. Aoki and J. Matsuo,
"Ionization and low damage etching of soft materials with slow Ar cluster ions"
8th Workshop on Cluster Ion Beam Technology (Tokyo, Japan, 2007/11/8-9)
8. J. Matsuo
"What size of cluster is most appropriate for SIMS?"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
9. J. Matsuo, S. Ninomiya, Y. Nakata, K. Ichiki, Y. Honda, T. Seki and T. Aoki
"Challenges and prospects for cluster SIMS"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2, Invited)
10. T. Aoki, T. Seki, S. Ninomiya and J. Matsuo,
"MD simulation study of the sputtering process by high-energy gas cluster impact"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
11. S. Ninomiya, Y. Nakata, Y. Honda, K. Ichiki, T. Seki, T. Aoki and J. Matsuo,
"A Fragment-free ionization technique for organic mass spectrometry with large Ar cluster ions"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
12. S. Ninomiya, K. Ichiki, Y. Nakata, Y. Honda, T. Seki and J. Matsuo,
"The effect of incident velocity on secondary cluster ion emission from Si bombarded with large Ar cluster ions"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
13. Y. Nakata, Y. Honda, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo,
"Yield Enhancement of Molecular Ion with MeV-Ion Induced Electronic Excitation"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
14. K. Ichiki, S. Ninomiya, Y. Nakata, Y. Honda, T. Seki, T. Aoki and J. Matsuo,
"High sputtering yields of organic compounds by large gas cluster ions"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
15. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo,
"Nonlinear effects of secondary ion yields emitted from Si by Ar cluster ion beam irradiation"
The 16th International Conference on Secondary Ion Mass Spectrometry(Kanazawa, Japan, 2007/10/29-11/2)
16. J. Matsuo, S. Ninomiya, K. Ichiki, Y. Nakata, T. Aoki and T. Seki
"Fragment-Free Mass Spectrometry for Bio-molecular Surfaces with Size Selected Cluster SIMS"
AVS 54th International Symposium & Exhibition (Seattle, USA, 2007/10/14-19)

17. T. Seki, J. Matsuo
"Nano-processing with gas cluster ion beams"
15th International Conference on Surface Modification of Materials by Ion Beams (Mumbai, India, 2007/9/30-10/5, Invited)
18. J. Matsuo, T. Aoki, T. Seki
"Cluster Ion Implantation -Prospects and Challenges-"
7th International Workshop on Junction Technology (Kyoto, Japan, 2007/6/8-9, Invited)
19. T. Aoki, T. Seki and J. Matsuo
"MD Study of Damage Structure with Poly-atomic Boron Cluster Implantation"
7th International Workshop on Junction Technology (Kyoto, Japan, 2007/6/8-9)
20. J. Matsuo, S. Ninomiya, K. Ichiki, Y. Nakata, T. Aoki, T. Seki
"Cluster size effect on secondary ion emission"
IUVSTA Workshop (Scotland, UK, 2007/4/23-27, Invited)
21. S. Ninomiya, Y. Nakata, K. Ichiki, Y. Honda, T. Seki, T. Aoki and J. Matsuo
"The effect of incident velocity on secondary ion emission from Si and Arginine with large Ar cluster ions"
IUVSTA Workshop (Scotland, UK, 2007/4/23-27)