

Publications 2010-2009

2010

1. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
"Analysis of organic semiconductor multilayers with Ar cluster secondary ion mass spectrometry"
Surface and Interface Analysis Vol. 43[1-2], pp.95-98 (2011, Jan.-Feb.) (DOI: 10.1002/sia.3587)
2. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
"The effect of incident energy on molecular depth profiling of polymers with large Ar cluster ion beams"
Surface and Interface Analysis Vol. 43[1-2], pp.221-224 (2011, Jan.-Feb.) (DOI: 10.1002/sia.3656)
3. H. Yamada, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki, J. Tamura and J. Matsuo
"MeV-Energy Probe SIMS Imaging of Major Components in Washed and Fractured Animal Cells"
Surface and Interface Analysis Vol. 43[1-2] pp. 363-366 (2011, Jan.-Feb.) (DOI: 10.1002/sia.3408)
4. K. Ichiki, S. Ninomiya, Y. Nakata, H. Yamada, T. Seki, T. Aoki and J. Matsuo
"Surface morphology of PMMA surfaces bombarded with size-selected gas cluster ion beams"
Surface and Interface Analysis Vol. 43[1-2] pp. 120-122 (2011, Jan.-Feb.) (DOI: 10.1002/sia.3444)
5. M. Hada, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Using ellipsometry for the evaluation of surface damage and sputtering yield in organic films with irradiation of argon cluster ion beams"
Surface and Interface Analysis Vol. 43[1-2] pp. 84-87 (2011, Jan.-Feb.) (DOI: 10.1002/sia.3452)
6. B. N. Jones, J. Matsuo, Y. Nakata, H. Yamada, J. Watts, S. Hinder, V. Palitsin and R. Webb
"Comparison of MeV monomer ion and keV cluster ToF-SIMS"
Surface and Interface Analysis Vol. 43[1-2], pp.249-252 (2011, Jan.-Feb.). (DOI: 10.1002/sia.3520)
7. M. Hada, K. Ichiki and J. Matsuo
"Characterization of vapor-deposited L-leucine nanofilm"
Thin Solid Films 519, pp.1993-1997 (2011, Jan.) (doi:10.1016/j.tsf.2010.10.011)
8. K. Koike, Y. Yoshino, T. Senoo, T. Seki, S. Ninomiya, T. Aoki and J. Matsuo
"Anisotropic Etching Using Reactive Cluster Beams"
Appl. Phys. Express 3, pp.126501 (2010, Dec.)
9. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki, J. Matsuo
"SIMS Depth Profiling of Organic Materials with Ar Cluster Ion Beam",
Transactions of the MRS-J 35 [4] pp. 785-788 (2010, Dec.)
10. Kazuya Ichiki, Satoshi Ninomiya, Toshio Seki, Takaaki Aoki, Jiro Matsuo
"Sputtering Properties of Si by Size-Selected Ar Gas Cluster Ion Beam"
Transactions of the MRS-J 35 [4] pp. 789-792 (2010, Dec.)
11. H. Yamada, K. Ichiki, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki, J. Matsuo,
"Processing Techniques of Biomaterials: Using Gas Cluster Ion Beam for Imaging Mass Spectrometry"
Transactions of the MRS-J 35 [4] pp. 793-796 (2010, Dec.)
12. T. Seki, Y. Yoshino, T. Senoo, K. Koike, S. Ninomiya, T. Aoki, and J. Matsuo
"High Speed Si Etching with ClF₃ Cluster Injection"
AIP Conference Proceedings Vol. 1321 (IIT2010) , pp. 317-320 (2010, Dec.)
13. M. Hada, Y. Hontani, S. Ibuki, K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Evaluation of Surface Damage of Organic Films due to Irradiation with Energetic Ion Beams"
AIP Conference Proceedings Vol. 1321 (IIT2010), pp. 314-316 (2010, Dec.)

14. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki, and J. Matsuo
"Energy Effects on the Sputtering Yield of Si Bombarded with Gas Cluster Ion Beams"
AIP Conference Proceedings Vol. 1321 (IIT2010) , pp. 294-297 (2010, Dec.)
15. Y. Wakamatsu, H. Yamada, S. Ninomiya, B. N. Jones, T. Seki, T. Aoki, R. Webb, and J. Matsuo
"Biomolecular Emission by Swift Heavy Ion Bombardment"
AIP Conference Proceedings Vol. 1321 (IIT2010) , pp. 233-236 (2010, Dec.)
16. Y. Yamamoto, K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Evaluation of surface damage on organic materials irradiated with Ar cluster ion beam"
AIP Conference Proceedings Vol. 1321 (IIT2010) , pp. 298-301 (2010, Dec.)
17. 松尾二郎、瀬木利夫、青木学聰
"クラスターイオンビーム技術の最近の進展"
表面科学 Vol. 31, No. 11, pp.564-571 (2010, Nov.)
18. J. Matsuo, S. Ninomiya, H. Yamada, K. Ichiki, Y. Wakamatsu, M. Hada, T. Seki and T. Aoki
"SIMS with highly excited primary beams for molecular depth profiling and imaging for organic and biological materials"
Surface and Interface Analysis Vol. 42 [10-11], pp. 1612-1615 (2010, Oct) (DOI: 10.1002/sia.3585)
19. 松尾二郎
"高速重イオンを用いる質量イメージング技術の開発"(解説)
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20. M. Hada, K. Okimura and J. Matsuo
"Characterization of structural dynamics of VO₂ thin film on c-Al₂O₃ using in-air time-resolved X-ray diffraction"
Physical Review B, 82, 153401 (2010)
Virtual Journal of Ultrafast Science Vol. 9, Issue 11 (2010)
Virtual Journal of Nanoscale Science & Technology Vol. 22, Issue 16 (2010)
21. T. Aoki, T. Seki and J. Matsuo
"MD simulation of small boron cluster implantation"
IWJT2010 Extended Abstracts art. no. 5474974, pp. 114-115 (2010, June)
22. H. Yamada, K. Ichiki, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"MeV-Energy Probe SIMS Imaging of Major Components in Animal Cells Etched Using Large Gas Cluster Ions"
Nuclear Instruments and Methods in Physics Research B, 268, pp. 1736-1740(2010, June)
23. 松尾二郎、北川晃幸、瀬木利夫、青木学聰
"ガスクラスターイオンビームによるナノ加工技術"
トライボロジスト 第 55 卷 第 11 号 p. 776-782 (2010, May)
24. 松尾二郎, 瀬木利夫, 二宮啓, 青木学聰
"クラスターイオンビームによる平坦化加工技術"
砥粒加工学会誌 (Journal of the Japan Society for Abrasive Technology) Vol. 54 No. 5, pp.272-275 (2010, May)
25. 松尾二郎
"高密度励起ビームによる二次イオン質量分析法の有機・生体材料への新展開"
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"Molecular dynamics simulations for gas cluster ion beam processes"
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2. M. Hada, S. Ibuki, S. Ninomiya, T. Seki, T. Aoki, and J. Matsuo
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"Evaluation of Damage Layer in an Organic Film with Irradiation of Energetic Ion Beams"
Virtual Journal of Nanoscale Science & Technology Vol. 21, Issue 15(2010)
4. 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, Green Energy and Technology, pp. 300-305 (2010, Mar.)
5. M. Hada and J. Matsuo
"Effects of ambient pressure on Cu Ka X-ray radiation with millijoule and high-repetition-rate femtosecond laser"
Appl. Phys. B (2010) 99, pp. 173-179(2010, Feb.)
6. M. Hada and J. Matsuo
"Development of femtosecond X-ray source in helium atmosphere with millijoule high-repetetion-rate femtosecond laser"
Transactions of the MRS-J 34 [4] pp. 621-626 (2009) (2010, Jan)
7. J. L. S. Lee, S. Ninomiya, J. Matsuo, I. S. Gilmore, M. P. Seah and A. G. Shard
"Organic Depth Profilling of a Nanostructured Delta Layer Reference Material Using Large Argon Cluster Ions"
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8. K. Ichiki, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
"Sputtering Yield Measurements with Size-selected Gas Cluster Ion Beams"
MRS Symposium Proceedings (2009 MRS Spring Meetings) Vol. 1181-DD13-25, (2009)
9. T. Aoki, T. Seki and J. Matsuo
"Study of density effect of large gas cluster impact by molecular dynamics simulations"
Nuclear Instruments and Methods in Physics Research B, 267, pp. 2999-3001, (2009, Sep. 15)
10. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki and J. Matsuo
"Molecular depth profiling of multilayer structures of organic semiconductor materials by secondary ion massspectrometry with large argon cluster ion beams"
Rapid Communications in Mass Spectrometry, 23, pp. 3264-3268 (2009, September)
11. S. Ninomiya, K. Ichiki, T. Seki, T. Aoki, J. Matsuo,
"The emission process of secondary ions from solids bombarded with large gas cluster ions"
Nuclear Instruments and Methods in Physics Research B, 267, pp. 2601-2604, (2009, Aug. 15)
12. T. Seki
"Nano-processing with gas cluster ion beams"
Surface & Coatings Technology 203 Issues 17-18, pp. 2446-2451, (2009, June)
13. H. Yamada, K. Ichiki, Y. Nakata, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo,
"A Processing Technique for Cell Surfaces Using Gas Cluster Ions for Imaging Mass Spectrometry"
Journal of the Mass Spectrometry Society of Japan vol. 57, No. 3 pp.117-121, (2009, June)
14. Y. Nakata, H. Yamada, Y. Honda, S. Ninomiya, T. Seki, T. Aoki and J. Matsuo
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"High-speed processing with Cl₂ cluster ion beam"
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16. T. Aoki, T. Seki, S. Ninomiya, K. Ichiki and J. Matsuo
"Study of crater formation and sputtering process with large gas cluster impact by molecular dynamics simulations"
Nuclear Instruments and Methods in Physics Research B, 267, pp.1424-1427, (2009, May)
17. S. Ninomiya, K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki, J. Matsuo
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