

Appendix I

List of Publications

Publications Based on Experiments Performed at SRRC Beamlines

03A1 High Flux

1. B.-M. Cheng, M. Bahou, W.-C. Chen, C.-h. Yu, Y.-P. Lee, and L. C. Lee, “*Experimental and Theoretical Studies on VUV Absorption Cross Sections and Photodissociation of CH₃OH, CH₃OD, CD₃OH, and CD₃OD*”, J. Chem. Phys. (in press).
2. C. Y. R. Wu, D. L. Judge, B.-M. Cheng, W.-H. Shih, T.-S. Yih, and W. H. Ip, “*Extreme Ultraviolet Photon-induced Chemical Reactions in the C₂H₂-H₂O Mixed Ices at 10 K*”, Icarus (in press).

04B1 SEYA

3. M. Bahou, C.-Y. Chung, Y.-P. Lee, B.-M. Cheng, Y. L. Yung, and L.-C. Lee, “*Absorption Cross Sections of HCl and DCl in 135-232 nm: Implications for Photodissociation on Venus*”, Astrophys. J. **559**, L179 (2001).
4. B.-M. Cheng, M. Bahou, Y.-P. Lee, and L. C. Lee, “*Absorption Cross Sections and Solar Photodissociation Rates of Deuterated Isotopomers of Methanol*”, J. Geophys. Res. (in press).
5. B.-M. Cheng, C.-P. Liu, W.-J. Lo, Y.-P. Lee, “*Photodissociation Thresholds of OH Produced from CH₃OH in Solid Neon and Argon*”, Nucl. Instr. Meth. Phys. Res. **A 467**, 1461 (2001)
6. S.-Y. Chiang, Y.-C. Lee, and Y. P. Lee, “*Formation of CH₃CFCl⁺ from Photoionization of CH₃CFCl₂: an Application of Threshold Photoelectron Photoion Coincidence (TPEPICO) Technique*”, J. Phys. Chem. **A 105**, 1226 (2001).
7. C.-Y. Chung, Eh Piew Chew, B.-M. Cheng, Mohammed Bahou, Y.-P. Lee, “*Temperature Dependence of Absorption Cross-section of H₂O, HOD, and D₂O in the Spectral Region 140-193 nm*”, Nucl. Instr. Meth. Phys. Res. **A 467**, 1572 (2001)
8. H.-S. Fung, H.-H. Wu, T.-S. Yih, T.-K. Fang, and T.-N. Chang, “*Photoabsorption of Mg Above the 3p Threshold*”, Phys. Rev. **A 64**, 052716 (2001).
9. C.-T. Kuo, S.-C. Li, S.-Y. Wang, and J.-B. Nee, “*Photoabsorption Cross Sections of CO₂ in 104-170 nm*”, Chin. J. Phys. (submitted).
10. C.-T. Kuo, C.-Y. Tseng, S.-C. Li, and J.-B. Nee, “*Fluorescence and Quenching Studies for the D² ⁺(v'=0) State of NO in 170-230 nm Region*”, Chem. Phys. (submitted).
11. A. Y. T. Lee, Y. L. Yung, B.-M. Cheng, M. Bahou, C.-Y. Chung, and Y.-P. Lee, “*Enhancement of Deuterated Ethane on Jupiter*”, Astrophys. J. **551**, L93 (2001).
12. P.-C. Lee and J.-B. Nee, “*Detection of O(¹D) Produced in the Photodissociation of O₂. II. Identification of the ³Σ_u⁻ and ³Π_u Rydberg States in 105-113 nm*”, J. Chem. Phys. **114**, 792 (2001).
13. J.-B. Nee, C.-T. Kuo, and H.-G. Tseng, “*Potential Energy Curves of Xe₂ Derived from the Pressure-dependent Fluorescence Excitation Spectra of the 1st and 2nd Continuum*”, Chem. Phys. Lett. **318**, 402 (2000).

05B1 EPU (Spin-polarized)

14. S.-C. Chung, J. Chen, L.-R. Huang, R. T. Wu, C.-C. Chen, N.-F. Cheng, J. M. Chuang, P.-C. Tseng, D.-J. Huang, C. F. Chang, S.-Y. Perng, C. T. Chen, and K.-L. Tsang, “*Performance of an Elliptically Polarized Undulator Beamline*”, Nucl. Instr. and Meth. **A 467**, 445 (2001).
15. D.-J. Huang, L. H. Tjeng, J. Chen, C.-F. Chang, W.-P. Wu, S.-C. Chung, G.-Y. Guo, H.-J. Lin, S.-G. Shyu, C.-C. Wu, and C. T. Chen, “*Anomalous Spin Polarization and Dualistic Electronic Nature of CrO₂*”, Phys. Rev. Lett. (submitted).
16. D. J. Huang, L. H. Tjeng, J. Chen, C. F. Chang, W. P. Wu, A. D. Rata, T. Hibma, S. C. Chung, S.-G. Shyu, C.-C. Wu, and C. T. Chen, “*Spin-resolved Photoemission Studies of Epitaxial Fe₃O₄(100) Thin Films*”, Surf. Rev. Lett. **9**, 1007 (2002).

08A1 LSGM

17. T.-W. Pi, C.-P. Ouyang, J.-F. Wen, L.-C. Tien, J. Hwang, C.-P. Cheng, and G. K. Wertheim, “*Early Nucleation on the Si(001)-2x1 Surface*”, Surf. Sci. (in press).
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09A1 U5 (SPEM)

21. T. J. Chuang, Y. L. Chan, P. Chuang, R. Klauser, C.-H. Ko, and D.-H. Wei, “*Surface Chemistry: From Vibrational Spectroscopy to Photoemission Spectromicroscopy*”, Appl. Surf. Sci. **169**, 1 (2001).
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23. R. Klauser, I.-H. Hong, T.-H. Lee, G.-C. Yin, D.-H. Wei, K.-L. Tsang, T. J. Chuang, S.-C. Wang, S. Gwo, M. Zharnikov, and J.-D. Liao, “*Zone-plate-based Scanning Photoemission Microscopy at SRRC: Performance and Applications*”, Surf. Rev. Lett. **9**, 213 (2002).
24. R. Klauser, I.-H. Hong, H.-J. Su, T. T. Chen, S. Gwo, S.-C. Wang, T. J. Chuang, and V. A. Gritsenko, “*Oxidation States in Scanning-probe-induced Si₃N₄ to SiO_x Conversion Studied by Scanning Photoemission Microscopy*”, Appl. Phys. Lett. **79**, 3143 (2001).

09A2 U5 (Spectroscopy)

25. Y.-H. Lai, C.-T. Yeh, J.-M. Hwang, H.-L. Hwang, C.-T. Chen, and W.-H. Hung, “*Sputtering and Etching of GaN Surfaces*”, J. Phys. Chem. **B 105**, 10029 (2001).
26. Y.-C. Tyan, J.-D. Liao, I.-D. Wu, and R. Klauser, “*Anticoagulant Activity of Immobilized Heparin upon Polypropylene Non-woven Fabric Surface Using Antenna-coupling Microwave Plasma*”, J. Biomat. Appl. (accepted).
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28. M.-C. Wang, J.-D. Liao, C.-C. Weng, R. Klauser, S. Frey, M. Zharnikov, and M. Grunze, “*The Effect of the Substrate on Response of Thioaromatic Self-assembled Monolayers to Free Radical-dominant Plasma*”, J. Phys. Chem. **B 106**, 6220 (2002).

11A1 Dragon

29. D. J. Huang, H.-T. Jeng, C. F. Chang, G. Y. Guo, H.-J. Lin, and C. T. Chen, “*Unquenched Orbital Magnetic Moments and Charge Localization in Fe₃O₄*”, Phys. Rev. Lett. (submitted).
30. J.-C. Jan, K. Asokan, J. W. Chiou, W.-F. Pong, P.-K. Tseng, M.-H. Tsai, Y.-K. Chang, J.-F. Lee, J.-S. Wu, H. -J. Lin, C.-T. Chen, L.-C. Chen, F.-R. Chen, and J.-K. Ho, “*Electronic Structure of Oxidized Ni/Au Contacts on P-GaN Investigated by X-ray Absorption Spectroscopy*”, Appl. Phys. Lett. **78**, 2718 (2001).
31. J.-Y. Kim, J.-H. Park, B.-G. Park, H.-J. Noh, S.-J. Oh, J. S. Yang, D.-H. Kim, S. D. Bu, T.-W. Noh, H.-J. Lin, H.-H. Hsieh, and C. T. Chen, “*Ferromagnetism Induced by Clustered Co in Co-doped Anatase TiO₂ thin Films*”, Phys. Rev. Lett. (submitted).
32. T. Mizokawa, L. H. Tjeng, H.-J. Lin, C.-T. Chen, S. Schuppler, S. Nakatsuji, H. Fukazawa, and Y. Maeno, “*Orbital State and Metal-insulator Transition in Ca_{2-x}Sr_xRuO₄ Studied by X-ray Absorption Spectroscopy*”, Phys. Rev. Lett. (submitted).

15B1 Tender X-ray

33. T.-S. Gau, Y.-C. Jean, K.-Y. Liu, C.-H. Chung, C.-K. Chen, S.-C. Lai, C.-H. Shu, Y.-S. Huang, C.-H. Chao, Y.-R. Lee, C.-T. Chen, and S.-L. Chang, "Soft X-ray Diffractometer for Synchrotron Radiation", Nucl. Instrum. Methods Phys. Res. A **466**, 569 (2001).
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17A1 Wiggler-A

36. C.-C. Chen, K.-L. Hsieh, J.-K. Sheu, G.-C. Chi, M.-J. Jou, C.-H. Lee, and M.-Z. Lin, "Crystal Orientation Dependence of Optical Gain in InGaN/GaN Multiple Quantum Well Structure", Appl. Phys. Lett. **79**, 1477 (2001).
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38. C.-F. Cheng and H.-H. Cheng, "Synthesis and Morphology of Mesoporous Sieve SBA-15 at Low Acid Concentration" (submitted).
39. C.-F. Cheng and S.-P. Chiu, "Synthesis and Morphology of Mesoporous Molecular Sieves Aluminosilicate SBA-15" (submitted).
40. C.-F. Cheng, S.-P. Chiu, H.-H. Cheng, H.-S. Sheu, and H.-Y. Lee, "Direct Synthesis and Characterization of H^+ -form Aluminosilicate Mesoporous Sieves SBA-15" (submitted).
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44. Y.-W. Tsai, B.-J. Hwang, and H.-S. Sheu, "In-situ XRD Investigation of $LiAl_{0.15}Mn_{1.85}O_4$ Cathode Material During Charging and Discharging in Nonaqueous Solution", J. Electrochem. Soc. (submitted).
45. D.-S. Yang, M.-K. Wang, H.-S. Sheu, and B.-J. Hwang, "A Fast Route to Sub-micron Lithiophorite", Chem. Mat. (submitted).

17B1 Wiggler-B/Material

46. S.-L. Chang, "Thin-film Characterization by Grazing Incidence X-ray Diffraction and Multiple Beam Interference", J. Phys. & Chem. Solids **62**, 1765 (2001).
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50. Y.-M. Hu, J.C.A. Huang, S.-Y. Huang, and T.-H. Wu, "Kerr Effect of Ordered and Disordered $Fe_{1-x}Pt_x(001)$ Alloy Films", IEEE. Trans. Mag. **37**, 2417 (2001).

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53. Y.-S. Huang, C.-S. Chao, Y. P. Stetsko, Y.-R. Lee, C.-H. Ching, C.-Y. Huang, G.-Y. Lin, T.-C. Lin, and S.-L. Chang, “*Substrate-mediated Multi-wave Resonance Grazing Incidence X-ray Diffraction in Thin Films: a Method for Direct Phase Determination*”, Phys. Rev. **B 64**, 085406 (2001).
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17C1 Wiggler-C

70. B. Ammundsen, J. Paulsen, I. Davidson, R.-S. Liu, C.-H. Shen, J.-M. Chen, L.-Y. Jang, and J.-F. Lee, “*Local Structure and Cycling Mechanism of Lithium-rich Layered Lithium Manganese Chromium Oxide Cathode Material*”, Electrochem. Solid State Lett. (submitted).

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