

RESUME

ANIL R. CHOURASIA

Professor
Department of Physics
Texas A & M University - Commerce
Commerce, Texas, 75429.

Phone: (903) 886-5485
Fax: (903) 886-5480
e-mail: Anil_Chourasia@boisdarc.tamu-commerce.edu

EDUCATION

Ph.D. (Physics) Nagpur University, Nagpur, India (1986)
Dissertation title : "X-ray Spectroscopic Investigation of some compounds of Germanium and Arsenic."

M.Sc. (Physics) Nagpur University, Nagpur, India (1978)

B.Sc. (Physics, Mathematics, Chemistry) Nagpur University, Nagpur, India (1975)

EXPERIENCE

Professor
(Fall 2006-Present) Texas A&M University-Commerce
Department of Physics

Acting Head
(Jun 2004-May 2005) Texas A&M University-Commerce
Department of Physics

Associate Professor
(2001 - Summer 2006) Texas A & M University-Commerce
Department of Physics

Assistant Professor
of Physics
(Non-tenure track)
(1996 - 2001) Texas A & M University - Commerce
(Formerly known as East Texas State Univ)
Department of Physics

Visiting Scientist: National Research Institute for Metals, (Jan. 96 - March 96) Tsukuba, Japan (Extended X-ray Absorption Fine Structure (EXAFS) utilizing high intensity x-ray beam from modified rotating anode tube.)

Argonne National Laboratory, Illinois, Summer 1998.

Royal Melbourne Institute of Technology, Melbourne, Australia
June - July, 2005

Adjunct Faculty: East Texas State University,
(1992 - 1996) Department of Physics
Research Associate: East Texas State University,
(1985-90 & 91-95) Department of Physics
Teaching: Teaching undergraduate and graduate courses in Physics; Guiding
graduate and undergraduate students in research theses

Research: UHV Techniques
Thin Film Deposition and Characterization using X-ray Photoelectron
Spectroscopy, RHEED and Appearance Potential Spectroscopy
Low temperature electrical resistivity, magnetoresistance, and Hall
Effect.

Computer Experience: Familiar with Fortran, Basic, C, DOS, UNIX, computer
interfacing. Write my own application programs.

Research Scholar: Nagpur University, Nagpur, India (1979-1985). Analyzed the
Extended X-ray Absorption Fine Structure (EXAFS) associated with
the Ge K absorption discontinuity in the rare earth intermetallics of
the type RGe₂. Studied the electronic structure of arsenic
chalcogenides with the help of X-ray absorption spectroscopy.

GRANTS

Internal

Organized Research, A&M-Commerce	1997-98
TEES	1997
Organized Research, A&M-Commerce	2000-01
Organized Research, A&M-Commerce	2005-06

External

- * NSF Project "NIRT-Molecular Nanomagnets: Summer 2003
Magnetic and Electronic Properties of Novel Texas A&M Univ-
Magnetic Nanostructures and Nanostructured College Station
Materials"
(\$ 7000)
- * Research Corporation 2005-2007
"Chemical Reactivity at Hf/SiO₂ Interface"

(\$ 43,650)

PROFESSIONAL MEMBERSHIPS

American Physical Society
American Vacuum Society

COMMITTEE SERVICES

Physics Senator
Facilities and Scheduling Committee
Departmental Graduate Co-ordinator
Departmental Library Representative
Coordinator, Departmental Scholarship Committee
Various Departmental and University Committees

EXTERNAL RESEARCH COLLABORATION

The University of Houston
The University of Arlington
University of North Texas
Royal Melbourne Institute of Technology, Australia

HONORS AND AWARD

Listed in Who's Who Among America's Teachers (Educational Communications, Inc., Lake Forest, IL)	2000
Sigma Xi Research Award	1992
Robert A. Welch Foundation Fellowship	1991-1995
Robert A. Welch Foundation Fellowship	1985-1990
Junior & Senior Research Fellowship, Council of Scientific & Industrial Research, New Delhi, India	1979-1984
Open Merit Scholarship, Govt. of Maharashtra, India	1976-1978
Talent Development in Math, Govt. of Maharashtra	1972-1975

THESES

Graduate

Christi Emery	Summer 1998
Steve Hood	Spring 1999
Sangho Bae	Spring 2002
Tao Jiang	Fall 2002
S. H. McKinney	May 2003
Richard Miller	Summer 2006
Hong Dong	Summer 2009
Josh Edmondson	Summer 2011

Undergraduate (Honors Thesis)

Richard Miller	May 2004
----------------	----------

PUBLICATIONS IN REFEREED JOURNALS

1. Chemical shifts in K absorption discontinuities of germanium and selenium in some amorphous compounds.
Y. L. Rao, A. R. Chourasia & C. Mande.
Journal of Non-crystalline Solids 43, 13-19 (1981).
2. EXAFS study of intermetallics of the type RGe₂ (R = La, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er and Y).
A. R. Chourasia, V. D. Chafekar, S. D. Deshpande, V. B. Sapre & C. Mande.
Springer Proceedings in Physics 2, 455- 457 (1984).
3. EXAFS study of intermetallics of the type RGe₂ (R = La, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er and Y) Part I: Determination of Ge-Ge distances.
A. R. Chourasia, V. D. Chafekar, S. D. Deshpande & C. Mande.
Pramana 24, 787-796 (1985).
4. EXAFS study of intermetallics of the type RGe₂ (R = La, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er and Y) Part II: Determination of Ge-R distances.
A. R. Chourasia, V. D. Chafekar & C. Mande.
Pramana 24, 867-873 (1985).
5. X-ray spectroscopic study of arsenic chalcogenides of the type As₂X₃ (where X = O,S,Se and Te).
C. Mande & A. R. Chourasia.
Indian Journal of Physics 60B, 72-83 (1986).
6. Study of 4f levels in lanthanides by Appearance Potential Spectroscopy.
D. R. Chopra, A. R. Chourasia & P. V. Prasad.
Journal of Electron Spectroscopy and Related Phenomena 41, 167-173 (1986).

7. Study of the Ti/Si Interface using X-ray Photoelectron and Auger Electron Appearance Potential Spectroscopies.
D. R. Chopra, A. R. Chourasia, T. R. Dillingham, K. L. Peterson & B. Gnade.
Journal of Vacuum Science and Technology A 5, 1984-1987 (1987).
8. XPS study of the Ni/Si oxide/Si Interface.
T. R. Dillingham, A. R. Chourasia, D. R. Chopra, S. R. Martin, K. L. Peterson, C. Z. Hu and B. Gnade.
Journal of Vacuum Science and Technology A 5, 3340-3345 (1987).
9. A study of LaH₃ by Auger Electron Appearance Potential Spectroscopy.
A. R. Chourasia and D. R. Chopra.
Journal of Electron Spectroscopy and Related Phenomena 43, 233-241(1987).
10. Soft X-ray Appearance Potential study of Ni₇₄Fe₂₆.
A. R. Chourasia and D. R. Chopra.
Surface Science 206, 484-494 (1988).
11. SXAPS study of Nd₂Fe₁₄B.
A. R. Chourasia and D. R. Chopra.
Journal of Less Common Metals 148, 413-420 (1989).
12. SXAPS study of Pr₂Fe_{14-x}Co_xB.
A. R. Chourasia and D. R. Chopra.
Journal of Vacuum Science and Technology A 7, 2075-2079 (1989).
13. Soft X-ray Appearance Potential Spectroscopy study of Ni-Fe alloys.
A. R. Chourasia and D. R. Chopra.
Nuclear Instruments and Methods B40/41, 376-378 (1989).
14. X-ray photoelectron study of Al-Mn Alloys.
A. R. Chourasia and D. R. Chopra.
Journal of Electron Spectroscopy and Related Phenomena 52, 541-550 (1990).
15. Deposition of Diamond Films at Low Pressures and their Characterization by Positron annihilation, Raman, SEM, and XPS.
S. C. Sharma, C. A. Dark, R. C. Hyer, M. Green, T. D. Black, A. R. Chourasia, D. R. Chopra, and K. K. Mishra.
Applied Physics Letters 56, 1781-1783 (1990).
16. Characterization of Low Pressure Deposited Diamond Films by X-ray Photoelectron Spectroscopy.
A. R. Chourasia, D. R. Chopra, S.C. Sharma, M.Green, C.A.Dark, R.C. Hyer.
Thin Solid Films 193/194, 1079-1086 (1990).

17. Growth of Diamond and Diamond-like Carbon Films and Characterization by Raman, Scanning Electron Microscopy, and X-ray Photoelectron Spectroscopy. S. C. Sharma, M. Green, R. C. Hyer, C. A. Dark, T. D. Black, A. R. Chourasia, D. R. Chopra, and K. K. Mishra. *Journal of Materials Research* 5, 2424-2432 (1990).
18. Diamond and Amorphous Carbon Films. D. R. Chopra, A. R. Chourasia, M. Green, R. C. Hyer, K. K. Mishra, & S.C. Sharma. *Surface Modification Technologies IV*, 583-591 (1991).
19. A Study of Y-Ba-Cu-O/Si Interfaces by X-ray Photoelectron Spectroscopy. A. R. Chourasia, D. R. Chopra, A. H. Bensaoula, A. Bensaoula, and P. Ruzakowski. *Journal of Vacuum Science and Technology A* 10, 115-121 (1992).
20. A Study of YBaCuO/W/Si by X-ray Photoelectron Spectroscopy. D. R. Chopra, A. R. Chourasia, Li Chen, A. H. Bensaoula, and A. Bensaoula. *Journal of Vacuum Science and Technology A* 10, 1547-1553 (1992).
21. Sputter Deposited Aluminum Nitride. A. R. Chourasia, D. R. Chopra, and T. K. Hatwar. *Surface Science Spectra* 1, 75-79 (1992).
22. Angle-resolved X-ray Photoemission study of CaF₂/Si(111) Interfaces. A. R. Chourasia, D. R. Chopra, C-C. Cho and B. E. Gnade. *Surface Science* 275, 424-432 (1992).
23. X-ray photoelectron study of TiN. A. R. Chourasia and D. R. Chopra. *Surface Science Spectra* 1, 233- 237 (1992).
24. Scanning Tunneling Microscopy of the Electronic Structure of Chemical Vapor Deposited Diamond Films. J. M. Perez, C. Lin, W. Rivera, R. C. Hyer, M. Green, S. C. Sharma, D. R. Chopra and A. R. Chourasia. *Applied Physics Letters* 62, 1889-1891 (1993).
25. A Study of Si₃N₄ by XPS. A. R. Chourasia and D. R. Chopra. *Surface Science Spectra*, 2, 117-122 (1994).
26. A Study of the Electronic Structure of GdMn₂ by Appearance Potential Spectroscopy. A. R. Chourasia, D. R. Chopra and G. Wiesinger. *Journal of Electron Spectroscopy and Related Phenomena* 70, 23-28(1994).

27. Appearance Potential Study of PrMn₂ and SmMn₂ Intermetallics.
A. R. Chourasia, M. A. Seabolt, R. L. Justiss, D. R. Chopra, and G. Wiesinger
Journal of Alloys and Compounds, 224, 287-291 (1995).
28. Elemental Manganese studied by X-ray Photoelectron Spectroscopy using Mg and Zr Radiations.
A. R. Chourasia and D. R. Chopra
Surface Science Spectra, 3, 74-81 (1995).
29. X-ray Photoelectron study of TiN/SiO₂ and TiN/Si Interfaces.
A. R. Chourasia and D. R. Chopra
Thin Solid Films 266, 298-301 (1995).
30. A Study of Si-Compounds by Zr La Photoelectron Spectroscopy.
A. R. Chourasia, S. J. Hood, and D. R. Chopra
Journal of Vacuum Science and Technology A 14, 699-703 (1996).
31. Core level XPS Spectra of elemental silicon using zirconium radiation.
A. R. Chourasia
Surface Science Spectra 5, 115-121 (1998).
32. A Study of CrN_x Thin Films by X-ray Photoelectron Spectroscopy.
Christi Emery, A. R. Chourasia, and P. Yashar
Journal of Electron Spectroscopy and Related Phenomena
104, 91-97 (1999).
33. Soft X-ray Appearance Potential Study of Rare Earth-manganese Compounds.
A. R. Chourasia and S. D. Deshpande
AIP CP475, Applications of Accelerators in Research and Industry,
Edited by J. L. Duggan and I. L. Morgan
488-491 (1999).
34. Spin dynamics and absence of a central peak anomaly in La_{0.67}Ca_{0.33}MnO₃.
J. J. Rhyne, H. Kaiser, L. Stumpe, J. F. Mitchell, T. McCloskey, and A. R. Chourasia
Journal of Applied Physics 87, 5813 (2000).
35. Core level XPS spectra of Cr and N in chromium nitride films
A. R. Chourasia
Surface Science Spectra 7, 150-166 (2000).
36. Auger electron appearance potential spectroscopy study of CrN_x Films.
A. R. Chourasia and S. J. Hood
Surface and Interface Analysis, 31, 291-296 (2001).
37. Core level XPS spectra of silicon carbide using Zirconium and Magnesium radiation

- A. R. Chourasia
Surface Science Spectra 8, 45-55 (2001).
38. Composition dependence of the spin wave stiffness parameter in $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ CMR materials
J. J. Rhyne, H. Kaiser, L. Stumpe, J. F. Mitchell, T. McCloskey, and A. R. Chourasia
Journal of Magnetism and Magnetic Materials, 226-230, 775-776 (2001).
39. Effects of Growth and Postgrowth Parameters on the Microstructure and Copper distribution in $\text{Al}(\text{Cu})/\text{SiO}_2$ Thin Films
N. Hozhabri, K. M. Watson, S. C. Sharma, and A. R. Chourasia
Journal of Electronics materials, 31, L7-L10 (2002).
40. A. Study of Amorphous Ti-Ni Alloys by X-ray Photoelectron Spectroscopy
M. A. Seabolt, W. R. Ogden, A. R. Chourasia, and A. Ishida
Journal of Electron Spectroscopy and Related Phenomena, 135, 135-141 (2004).
41. Auger Parameter of Hafnium in Elemental Hafnium and in Hafnium oxide
A. R. Chourasia and R. L. Miller
Surface Science, 573, 320-326 (2004).
42. Core level of Silicon Dioxide using zirconium and magnesium radiations
A. R. Chourasia
Surface Science Spectra, 13, 48-57 (2008)
43. Core level spectroscopy of elemental hafnium and hafnium dioxide
R. L. Miller, S. H. McKinney, and A. R. Chourasia
Surface Science Spectra 15, 59-69 (2008)
44. X-ray Photoemission study of the oxidation of hafnium
A. R. Chourasia, J. L. Hickman, R. L. Miller, G. A. Nixon, and M. A. Seabolt
International Journal of Spectroscopy, vol. 2009, Article ID 439065, 6 pages, 2009. doi:10.1155/2009/439065
45. Investigation of Chemical Reactivity at the M/CuO Interfaces (where M = Fe, Co, or Ni)
A. R. Chourasia
Journal of Applied Physics 112, 24323 (2012)
46. Chemical Reactivity at Fe/CuO Interface Studied by X-ray Photoelectron Spectroscopy
H. Dong, J. Edmondson, R. L. Miller, and A. R. Chourasia
Submitted to Thin Solid Films

REVIEW ARTICLES AND BOOK CONTRIBUTION

1. Appearance Potential Spectroscopy of Solid Surfaces.
D. R. Chopra and A. R. Chourasia.
Scanning Micros. 2, 677-702 (1988).
2. Characterization of semiconductor surfaces by Appearance Potential Spectroscopy.
D. R. Chopra and A. R. Chourasia.
"Characterization of semiconductor materials" Vol 1.
Editor Dr. G. McGuire (Noyes Publication, 1989) pp 289-327.
3. Surface Characterization.
J. E. Fulghum, G. E. McGuire, I. H. Musselman, R. J. Nemanich, J. M. White, D. R. Chopra, and A. R. Chourasia.
Analytical Chemistry 61, 243R-269R (1989).
4. Surface Characterization.
G. E. McGuire, M. A. Ray, S. J. Simko, F. K. Perkins, S. L. Brandow, A. Dobisz, R. J. Nemanich, A. R. Chourasia and D. R. Chopra.
Analytical Chemistry 65, 311R-333R (1993).
5. Surface Characterization
G. E. McGuire, M. L. Swanson, N. R. Parikh, S. Simko, P. S. Weiss, J. H. Ferris, R. J. Nemanich, D. R. Chopra and A. R. Chourasia
Analytical Chemistry 67, 199R-220R (1995).
6. Appearance Potential Spectroscopy
D. R. Chopra and A. R. Chourasia
Surface Analysis, Encyclopedia of Analytical Science, Academic Press, England, pp. 4893-4899 (1996).
7. X-ray Photoelectron Spectroscopy
D. R. Chopra and A. R. Chourasia
Chapter contribution to the Handbook of Analytical Chemistry, (Prentice Hall, 1997), Chapter 43, pp. 809-827.
8. Auger Electron Spectroscopy
A. R. Chourasia and D. R. Chopra
Chapter contribution to the Handbook of Analytical Chemistry, (Prentice Hall, 1997), Chapter 42, pp. 791-808.
9. Appearance Potential Spectroscopy: A Surface Sensitive Technique to Characterize Materials

A. R. Chourasia
Trends in Vacuum Science and Technology, 2, 113-121 (1997).

10. Appearance Potential Spectroscopy
A. R. Chourasia
Encyclopedia of Analytical Science, Second Edition
Surface Analysis, Encyclopedia of Analytical Science (Academic Press) England,
Second Edition, 474-481 (2004).

PAPERS PRESENTED AT CONFERENCES AND SYMPOSIA

1. Study of the 4f levels in Lanthanides by Appearance Potential Spectroscopy.
American Physical Society, April 4, 1986 at The Univ. of Texas at Dallas, Texas.
2. Electronic Properties of Transition Metal-Silicon Interfaces.
American Chemical Society, Houston, Nov. 19, 1986.
3. XPS study of Transition Metal-Silicon Interfaces.
American Physical Society, March 6, 1987 at Abilene Christian University, Abilene, Texas.
4. Appearance Potential Study of Ni₇₄Fe₂₆.
March 4, 1988 at the 91st Annual Meeting of Texas Academy of Science, Commerce, Texas.
5. A study of W-Ti-Si and W-Ti-Si₂ interfaces by Auger Electron Spectroscopy, Rutherford Backscattering Spectrometry and X-ray Photoelectron Spectroscopy.
Eighth Joint Symposium by North Texas Materials Characterization Society, Texas Chapter of the American Vacuum Society, and the North Texas Section of the Electrochemical Society, Dallas, June 5, 1989.
6. X-ray photoelectron study of Al-Mn alloys.
Fourth International Conference on Electron Spectroscopy, University of Hawaii at Manoa, Honolulu, Hawaii, July 10-14, 1989.
7. SXAPS study of Al-Mn alloys.
36th National Symposium of AVS, Boston, MA, Oct. 23-27, 1989.
8. Characterization of Low Pressure deposited Diamond Films.
8th International Conference on Thin Films, San Diego, CA, April 2-6, 1990.
9. A study of Y-Ba-Cu-O on Si, SiO₂, MgO, and W/Si by X-ray Photoelectron Spectroscopy.
37th Symposium of American Vacuum Society, Toronto, Canada, Oct. 8-12, 1990.
10. Diamond and Amorphous Carbon Films.
Fourth International Conference on Surface Modification Technologies, Paris, France, Nov. 6-8, 1990.
11. Angle Resolved X-ray Photoelectron Spectroscopy Study of CaF₂/Si(111) Interfaces.
American Physical Society, South Western Texas State University, San Marcos, Texas, March 6-7, 1992.

12. Characterization of TiN/Si, TiN/SiO₂, and W/TiN Interfaces.
Twelfth Joint Symposium by North Texas Materials Characterization Society, Texas Chapter of the American Vacuum Society, and the North Texas Section of the Electrochemical Society, Austin, June 7-8, 1993.
13. X-ray photoelectron study of Co/Si interfaces.
124th TMS Annual Meeting, Las Vegas, February 12-16, 1995.
14. Interdiffusion study of cobalt-silicon interfaces by X-ray Photoelectron Spectroscopy.
American Physical Society, Sam Houston State University, Huntsville, Texas, March 2-4, 1995.
15. A study of Si-compounds by Zr La photoelectron spectroscopy.
42nd National Symposium of American Vacuum Society, Minneapolis, MN, Oct. 16 - 20, 1995.
16. Electronic structure of RMn₂ compounds by Appearance Potential Spectroscopy.
42nd National Symposium of American Vacuum Society, Minneapolis, MN, Oct. 16 - 20, 1995.
17. EXAFS studies of amorphous Ni-Ti thin films.
American Physical Society, University of Texas at Arlington, Texas, October 10-12, 1996.
18. Study of CrN_x Films by X-ray Photoelectron Spectroscopy
Christi Emery and A. R. Chourasia
Texas Sections of the AAPT, APS, and SPS,
March 19-21, San Antonio, Texas
19. Electronic Structure Study of Amorphous and Crystalline Ti-Ni Films by X-ray Photoelectron Spectroscopy
Lucian B. Holmes and A. R. Chourasia
Texas Sections of the AAPT, APS, and SPS,
March 19-21, San Antonio, Texas
20. The study of CrN_x films by X-ray Photoelectron Spectroscopy
Christi Emery and A. R. Chourasia
5th annual A & M - Commerce Sigma Xi Student Research Forum,
April 9, 1998
21. Electronic Structure study of amorphous and crystalline Ti-Ni films by X-ray Photoelectron Spectroscopy
Lucian B. Holmes and A. R. Chourasia

5th annual A & M-Commerce Sigma Xi Student Research Forum, April 9, 1998

22. Reactive ion etching of BN and GaN using Cl_2/Ar and $\text{BCl}_3/\text{Cl}_2/\text{Ar}$ plasmas
N. Medelci, A. Tempez, E. Kim, N. Badi, D. Starikov, I. Berichev, and A. Bensaoula
SVEC, University of Houston, Houston, TX
A. R. Chourasia, A & M-Commerce.
The Texas Surface Science Round Up
May 27, Houston, Texas
23. Photoenhanced RIE of III-V Nitrides in $\text{BCl}_3/\text{Cl}_2/\text{Ar}/\text{N}_2$ Plasmas
N. Medelci, A. Tempez, E. Kim, O. Kameli, N. Badi, I. Berichev, D. Starikov, A. Bensaoula
SVEC, University of Houston, Houston, TX
A. R. Chourasia, A & M - Commerce
45th American Vacuum Society International Symposium, Nov. 2-6, 1998, Baltimore, MD.
24. Soft x-ray appearance potential study of Rare Earth Manganese Compounds.
A. R. Chourasia and S. D. Deshpande
Fifteenth International Conference on the Application of Accelerators in Research and Industry, Nov. 4-7, 1998, Denton, Texas.
25. Design of a High Resolution XANES Monochromator.
S. D. Deshpande, S. Prabhu, and A. R. Chourasia
Fifteenth International Conference on the Application of Accelerators in Research and Industry, Nov. 4-7, 1998, Denton, Texas.
26. Unusual T-dependence of the spin wave stiffness in La-Ca Manganites
J. J. Rhyne, H. Kaiser, J. F. Mitchell (Argonne National Lab.)
And A. R. Chourasia
American Physical Society Centennial Meeting, March 20 - 26, 1999, Atlanta, Ga
27. Electronic Structure Study of CrN_x Thin films
K. D. Steed, S. J. Hood, C. Emery, and A. R. Chourasia
American Physical Society Centennial Meeting, March 20 - 26, 1999, Atlanta, Ga
28. A Study of elemental Iron, Cobalt, and Nickel by Soft X-ray Appearance Potential Spectroscopy
S. H. McKinney, J. A. Yancey, and A. R. Chourasia
American Physical Society Centennial Meeting, March 20 - 26, 1999, Atlanta, Ga

29. Investigation of the Electronic Structure of Lanthanum-Calcium-Manganese-Oxide
S. Bae, S. J. Hood, and A. R. Chourasia
American Physical Society Centennial Meeting, March 20 - 26, 1999,
Atlanta, Ga
30. An algorithm to analyze Appearance Potential Spectrum
Jeremy Yancey and A. R. Chourasia
Sigma Xi Annual Student Research Forum, April 15, 1999, A & M - Commerce
31. APS study of Iron, Cobalt and Nickel
S. H. Ryan McKinney and A. R. Chourasia
Sigma Xi Annual Student Research Forum, April 15, 1999, A & M - Commerce
32. A study of La-Ca-Mn-O compounds by X-ray Photoelectron Spectroscopy
S. Bae and A. R. Chourasia
Sigma Xi Annual Student Research Forum, April 15, 1999, A & M - Commerce
28. AEAPS and XPS study of CrN thin films
S. J. Hood and A. R. Chourasia
Sigma Xi Annual Student Research Forum, April 15, 1999, A & M - Commerce
34. Determining Density of Conduction Band States from
Appearance Potential Spectroscopy
Jeremy A. Yancey and A. R. Chourasia
Texas Section of American Physical Society, October 29 - 30, 1999, Austin, TX
35. Appearance Potential Spectroscopy Study of CrN_x Thin Films
A. R. Chourasia and S. J. Hood
Quantitative Surface Analysis - 11, July 3 - 7, 2000,
University of Surrey, Guildford, UK
36. Determination of thickness of deposited films using x-ray
photoelectron spectra
K. Steed and A. R. Chourasia
Eighth Sigma Xi Annual Research Forum, A & M - Commerce, April 19, 2001
37. Importance of background in XPS spectra in estimating the density of
states at the Fermi level
M. Seabolt and A. R. Chourasia
Eighth Sigma Xi Annual Research Forum, A & M - Commerce, April 19, 2001
38. Ti 2p AEAPS spectra in amorphous and crystalline Ti-50%Ni
compounds
S. McKinney and A. R. Chourasia
Eighth Sigma Xi Annual Research Forum, A & M - Commerce, April 19,

2001

39. Estimation of density of states in Crystalline Titanium-Nickel Compounds using X-ray Photoelectron Spectroscopy
M. A. Seabolt and A. R. Chourasia
Joint Fall Meeting of the Texas Section of the American Physical Society,
Texas Christian University, Fort Worth, Texas, October 6, 2001
40. Oxidation of Copper studied by X-ray Photoelectron Spectroscopy
T. Jiang and A. R. Chourasia
Joint Fall Meeting of the Texas Section of the American Physical Society,
Texas Christian University, Fort Worth, Texas, October 6, 2001
41. A study of unoccupied density of states in $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ compounds
by Auger electron appearance potential spectroscopy
C. A. Watson, A. R. Chourasia, and J. F. Mitchell
American Physical Society March Meeting, Indianapolis, IN,
March 18-22, 2002
42. Background effects in the core level XPS spectra of Ti-Ni alloys
M. A. Seabolt, A. R. Chourasia, and A. Ishida
American Physical Society March Meeting, Indianapolis, IN,
March 18-22, 2002
43. Electronic structure study of Ti-Ni amorphous and crystalline alloys
by Auger electron appearance potential spectroscopy
S. H. McKinney, A. R. Chourasia, and A. Ishida
American Physical Society March Meeting, Indianapolis, IN,
March 18-22, 2002
44. AEAPS Study of Ti-Ni Alloys
S. H. McKinney and A. R. Chourasia
Sigma Xi Research Symposium, April 11, 2002, A & M – Commerce.
45. Appearance Potential Spectroscopy study of Ti-Ni Alloys
A. R. Chourasia, S. H. McKinney, C. A. Watson, and A. Ishida
Invited Talk
17th International Conference on the Application of Accelerators in
Research and Industry, Denton, TX Nov. 12-16, 2002
46. Auger Parameter of Elemental Hafnium and Hafnium oxide
R. Miller and A. R. Chourasia
Texas Section of APS, Stephenville, TX, April 2-3, 2004
47. Oxidation of Hafnium as studied by X-ray Photoelectron Spectroscopy

- A. R. Chourasia and R. Miller
Texas Section of APS, Stephen F. Austin State University, Nacagdoches, TX,
March 3-5, 2005
48. Auger parameter of aluminum
R. L. Miller, S. H. McKinney, A. R. Chourasia, and G. A. Nixon
Texas Section of APS, University of Houston, Houston, TX, Oct. 21-22, 2005.
49. Auger parameter of aluminum
R. Miller and A. R. Chourasia
American Physical Society, Baltimore, MD, March, 2006
50. Examination of oxidation of silicon using x-ray photoelectron spectroscopy
A. R. Chourasia
Ab Initio Modelling in Solid State Chemistry, Torino, Italy,
Sep. 3-8, 2006
51. Influence of Hamiltonian on the properties of NaCl
Ryan Jacob and A. R. Chourasia
Texas Section of American Physical Society, The University of Texas at
Arlington, TX, Oct. 5-7, 2006
52. Interaction of Hafnium oxide with Silicon
Richard Miller and A. R. Chourasia
Texas Section of American Physical Society, The University of Texas at
Arlington, TX, Oct. 5-7, 2006
53. Electronic Structure Calculations of Si, SiC, Si₃N₄, and SiO₂.
Ryan Jacob and A. R. Chourasia
March Meeting of the American Physical Society, Denver, CO, March 3-9,
2007
54. Study of Oxidation of silicon by X-ray Photoelectron Spectroscopy
W. Johnston, Ryan Jacob, and A. R. Chourasia
March Meeting of the American Physical Society, Denver, CO, March 3-9,
2007
55. Appearance potential Study of Ti-Ni Alloys
S. H. McKinney and A. R. Chourasia
March Meeting of the American Physical Society, Denver, CO, March 3-9,
2007
56. Interaction between silicon and thin films of hafnium oxide
John Hickman, Steven McDonough, and A. R. Chourasia

Texas Section of American Physical Society, Oct. 18-20, 2007, College Station, TX

57. Oxidation of Hafnium studied by X-ray Photoelectron Spectroscopy
John Hickman, R. L. Miller, G. A. Nixon, M. A. Seabolt, and
A. R. Chourasia
March Meeting of American Physical Society, New Orleans, LA,
March 10-14, 2008
58. Density of States of Silicon, Silicon Oxide, Silicon Nitride and
Silicon Carbide
Hong Dong and A. R. Chourasia
March Meeting of American Physical Society, New Orleans, LA,
March 10-14, 2008
59. Partial Density of States of Silicon in Silicon Compounds
A. R. Chourasia
MSSC2008, Imperial College, London, Sep. 15-19, 2008.
60. Electronic Structure of Aluminum Compounds
Hong Dong and A. R. Chourasia,
American Physical Society, Pittsburgh, PA, March 2009
61. Study of oxidation of titanium by X-ray photoelectron
Spectroscopy
A. R. Chourasia and Hong Dong
American Physical Society, Pittsburgh, PA, March 2009
62. Investigation of the thickness of titanium dioxide by x-ray photoelectron spectroscopy
A. R. Chourasia
American Physical Society, Portland, OR, March 2010
- 63.