

Curriculum Vitae

Personal Data

First Name: Nouar

Middle Name: Amor

Family Name: Tabet

Occupation: Professor, Physics Department, KFUPM.

Nationality: Algerian

E-mail: natabet@kfupm.edu.sa

Web site: <http://faculty.kfupm.edu.sa/PHYS/natabet>

Research interest: Defects in semiconductors and oxides, Silicon Thin films for solar cells, ZnO nanostructures, X-ray and Electron spectroscopies, Monte Carlo Simulations of EBIC.

Languages : Arabic, French, and English (fluent and advanced writing skills in the three languages).

Education

1988: Doctorat ès Sciences (PhD), in Materials Science, University of Orsay (Paris-Sud), France. Thesis entitled: "Electrical properties of bulk and grain boundaries of Ge polycrystals studied by Electron Beam Induced Current technique EBIC".

1980: Doctorat 3eme Cycle in Materials Science, University of Orsay, Paris, France, Thesis entitled: "Impurity diffusion of Co and Mg in pure and chromium doped nickel oxide".

1978: "Diplôme des Etudes Approfondies", DEA in Materials Science, (A grade), University of Orsay, Paris, France.

1977: DES (BSc) In Solid State Physics, University of Constantine, Algeria.

Qualifications and Technical Skills

1. Extensive use of Scanning Electron Microscope (SEM) and related techniques, Experiment and Theory: Electron Beam Induced Current (EBIC) and Cathodoluminescence (CL).
2. Development of a Monte Carlo code to Simulate the Recombination Contrast of Extended Defects in Semiconductors.
3. Use of Surface and Bulk Analytical Techniques: Synchrotron based techniques: X-ray Photoelectron Spectroscopy (XPS), X-ray Absorption Spectroscopy (XAS), X-ray Emission Spectroscopy (XES), Energy and Waves Dispersive Spectroscopy (EDS/WDS), Secondary Ion Mass Spectroscopy (SIMS).
4. Computer programming skills in Fortran, use of various software packages including Mathematica, Maple, Origin, SigmaPlot,...
5. Use of WEBCT in teaching

Academic and administrative Positions

1. Coordinator of the Surface Science Laboratory, Physics Department, KFUPM, 1996-Now.

2. Member of the Advisory Board of the Center of Mathematics and Theoretical Physics (CMTP), KACST, Saudi Arabia, 2007
3. Rector of the University of Constantine. Algeria, August 1990-October 1992 .
4. President of the Regional Council of the Eastern Universities of Algeria. 1990- 1992.
5. Member of the National Scientific Committee (CNE), Algeria, 1992.
6. Member of the National Research Evaluation Committee, Algeria, 1990-1991.
7. Director of the University Magazine, Constantine, Algeria: "Science and Technology" 1991-1992.
8. Vice Rector of Constantine University in charge of Research and Graduate studies 1989-1990.
9. Director of the Cooperation and External Relations of the University of Constantine 1982.
10. Director of the Solid State Physics Laboratory, Physics Department, University of Constantine, Algeria, 1982-1984.

Experience in Strategic Planning for Higher Education:

1. Member of KFUPM Consultant Team advising Hail University on academic affairs (teaching, faculty development and research), 2008.
2. Member of AAFAQ Team: Establish a 25 year Strategic Plan for Higher Education in Saudi Arabia, Leader of the "Best Practices:" Team, 2006-2007.
3. Chairman of The Planning Committee of the College of Sciences, KFUPM, 2004-2005.
4. Chairman of the Planning Committee which established a Strategic Plan for the Colleges of Science in the GCC, KFUPM, 2000.
5. Principal Investigator of a KFUPM funded Project entitled "Aligning Research with International trends". This project is part of KFUPM strategic Plan, 2007-2008

Awards and Recognition

1. Recipient of "Al Marai Prize for Innovation in Physics", 2004.
2. Award for Distinguished Services for the Physics Department and the College of Sciences, King Fahd University of Petroleum and Minerals, September, 28, 2004.
3. Member of the Selection Committee of the King Faisal International Prize for Science, 9-12 Dec. 2000 and 23-26 January 2009.

Organization of International Conferences and Workshops

1. "*International Conference on Nanotechnology and Advanced Materials (ICNAM)*", Bahrain 4-7 May 2009. Member of the International advisory committee
2. "*Nanotechnology: Little-Scale Revolutions to Mega-Scale Challenges in the Upstream E&P?*" SPE APPLIED TECHNOLOGY WORKSHOP, 3-6 February 2008 Dubai, United Arab Emirates, Member of **the Steering Committee**

3. *"First Sharja International Conference on Nanotechnology and its Applications"*, **Co-Chair**, Sharja, 10-12 April, 2007.
4. *"International Joint Conference on Knowledge Management for Composite Materials KMCM 2007 , Düsseldorf, Germany, 3-6 July, 2007"*, **Member of Program Board**
5. *"Workshop on "Beam Assessment of Defects of Semiconductors (BIADS then BIAMS } , Paris, (France, 1991), Bologna (Italy, 1993), El-Escorial (Madrid, Spain 1996), Wulkow) (Berlin, Germany 1998), Then the workshop became BIAMS (M for microstructures) and was held at Fukuoka, Japan, 12-16 November 2000, Lille (France), May 2003, St Petersburg, Russia, 11-14 June 2006, Toledo, Spain , 29-June-3 July 2008. The next session will be held in Germany 2010.*

Participation to International Conferences and Workshops

1. *"Summer Workshop on Clean Water and Clean Energy"*, MIT, Boston, 30 June-1 July 2009.
2. *"Seeing at the Nanoscale VII"*, Santa Barbara, CA, USA, 28-31 July 2009.
3. *"International Conference on Nanotechnology and Advanced Materials (ICNAM)"*, Bahrain 4-7 May 2009. Member of the International advisory committee.
4. *"Nanotechnology Conference"*, co-organized by the University of Jordan, the University of Illinois, and King Saud University, November 10-13, 2008 Amman, Jordan.
5. *"BIAMS'08 International workshop"*, Toledo, Spain, 29-June 3 July 2008.
6. *"Thin Films 2008 and NanoMan2000"*, Singapore. 13-16 July 2008.
7. *"International Workshop on Higher Education in the Kingdom of Saudi Arabia: Towards Excellence"* , London, 19-20 May 2007, Organized by AAFAQ Project and St Antony's College, University of Oxford, UK.
8. *"First Sharja International Conference on Nanotechnology and its Applications"*, Sharja, 10-12 April, 2007..
9. *"International Conference on MEMS and Nanotechnology"*, ICMN06, 11-14 March, 2006, Kuala Lumpur, Malaysia
10. *"Nanotech Insight 2005"*, Feb. 20-25th, Luxor, Egypt, 2005.
11. *"1st Nano-Engineering and Nano-Science Congress 2004"*, Singapore, 7-9 July 2004.
12. *"SESAME third users Meeting"*, Antalya, Turkey, 11 Oct. 2004 .
13. *"International Conference on Applied Physics AP2003"*, Spain, 13-18 Oct, 2003.
14. *"Beam Assessment of Microstructure of Semiconductors (BIAMS)"*, Lille, France , 25-29 May 2003.
15. *"7th International Conference on Nanometer scale Science and Technology (Nano-7- and 21st European Conference on Surface Science (ECOSS-21)"*, Malmo, Sweden, 24-28 June, 2002.
16. *"Asian Science Seminar on Synchrotron Radiation Science (JASS'02)"*, Al Balqa, Jordan, October 19-28, 2002, organized by the Japan Society for the Promotion of Science (JSPS).

17. "Surface Physics Workshop SPW2002", Qaboos University, Muscat, Oman, 19-22 March. 2002.
18. "First Saudi Science Conference", King Fahd University of Petroleum and Minerals, 2001.
19. "Atomically Controlled Surfaces and Interfaces and Nanostructures (ACSIN-6)", Lake Tahoe, California, USA, July 9-12, 2001
20. "Beam Assessment of Microstructure of Semiconductors (BIAMS)", 12-16 November 2000, in Fukuoka, Japan.
21. "8th International Conference on Electronic Spectroscopy and Structure, ICEES-8" held from 8 to 12 August, 2000, Berkeley, CA, USA
22. "International Conference on Structure of Surfaces ICSOS-6", July 26-30, 1999 in Vancouver, Canada.
23. "Vacuum Ultraviolet Radiation Physics (VUVXII)", San Francisco, USA, Aug. 3-7, 1998.
24. "Beam Injection Assessment of Defects in Semiconductors (BIADS'98)", Wulkow, Berlin, Germany, Aug.31-Sept 4,1998
25. "BIADS'96", El-Escorial, Madrid, Spain 1996
26. "BIADS'93", Bologna, Italy, 1993.
27. "Polycrystalline Semiconductors (POLYSE)", Malente, Germany, 1988
28. "POLYSE'93", Saint Malo, France, 1993.
29. "Maghrebin Meeting of Materials", Algiers, Algeria, 1992.
30. "American Society of Materials Meeting (ASM) on " Structure / Properties Relationship for Interfaces.", Detroit, Michigan, USA, 1990, (Invited talk).
31. "Intergranular and Interphase Boundary (IIB'89)", Paris, France, 1989.
32. "BIADS'88", Paris, France, 1988.
33. "NATO- Summer School on " Defects in Solids" , Cetraro, Italy, 1985.
34. "10th International Symposium on the Reactivity of Solids", Dijon, France, 1984.
35. "14th International Conference on Defects in Semiconductors ICDS-14", Paris, France, 1986.
36. "Third Arab Conference on Physics and Mathematics", Tunis, Tunisia, 1984.

Visiting positions and invitations

1. Visiting Scientist at the Advanced Light Source Division (ALS), Lawrence Berkeley National Laboratory, one month visits, July 2000 and June-July 2001, July 2009.
2. Visiting Scientist at the « Institut de Science et Genie des Materiaux », ODEILLO, CNRS / IMP FONT-ROMEUE, France. August 1998, July, 2002.
3. Visiting Scientist at the Institute of Physics and Technology, Almaty, Kazakhstan. August 2004. The visit was sponsored by the Comstech and the Islamic Development Bank (IDB).

Theses supervision

Theses in progress

M. Mekki, "Study of nanostructures obtained by ion irradiation of semiconductor surfaces", co-supervision, PhD, Durham, University. Sept.2006.

Thesis committee member:

1. Mahdi Al Maghrabi, "ZnO Thin films " December 2008.
2. Abdulaziz Hussain Al-Aswad: "Energy efficient coatings based on WO₃/Metal multilayers", 28 January 2009.

Theses supervised and completed

1. R. Al Gaashani, "Design and Test of a Microwave Heater", KFUPM, June 2008.
2. M. Hezam, "Study of the electrical and structural properties of pure and doped ZnO thin films obtained by reactive DC- Magnetron Sputtering., Master Thesis, KFUPM, 2006
3. Amal Lafi Al-Oteibi, PhD Thesis, Physics Department, Girls College of Girls, Dammam, Saudi Arabia, "Study of the growth and the electrical properties of Zinc Oxide films" September 2006
4. N. Boulares, PhD thesis, Physics Department, University of Constantine, Algeria. Title: " Synthesis and study of the structural and catalytic properties of Zinc Oxide nanopowders". June 2005.
5. Mohamed Ledra, PhD thesis, Physics Department, University of Constantine, Algeria. Title: "Monte Carlo Simulation of the recombination Contrast of Defects in Semiconductors". Expected end: June 2006.
6. Lafi Al-Oteibi, Master Thesis, Physics Department, Girls College, Dammam, Saudi Arabia, . "X-ray Photoelectron Spectroscopy (XPS) Investigation of Ge surface oxidation under dry oxygen, 2000.
7. Jihad H. Al-Sadah "XPS Study of the Growth Kinetics of Germanium Oxide Thin Films Obtained by Thermal Oxidation of Germanium Single Crystals" Physics Department, KFUPM, 1999.
8. Y. Beggah, Master Thesis, University of Constantine, Algeria, (1992), Title: "EBIC signal Modeling, effect the generation function shape on the efficiency curves of a Schottky contact".
9. T. Ait Ahcene, Master Thesis, University of Constantine, Algeria (1992). "Synthesis and characterization of ZnS thin films prepared by evaporation techniques" .
10. N. Boulares , Master Thesis, University of Constantine, Algeria (1994), "on the fabrication and characterisation of ZnO varistors"
11. Mekki D., Doctorat d'Etat (PhD), University of Annaba, Algeria, (1994). "on the EBIC contrast of defects and Injection level effect on the collection efficiency of Schottky diodes"
12. M. Ledra, Master Thesis, University of Constantine, Algeria (1996), " Simulation of the electron trajectories in semiconductor and calculation of the generation function of electron-hole pairs".
13. L. Bouchetout Master Thesis, University of Constantine, Algeria (1986) "On the germanium diffusion in silicon". The thesis was co-supervised by C. Monty LPM-CNRS-Bellevue, France.

Research

1. Funded Projects

1. *"Synthesis of Nanostructured ZnO and Development of sensing and biomedical applications"*, N. Tabet (PI), M. Faiz, N. Maalej, A. Mekki, A. Sunaidi, Z. Yamani. Funded by KACST 2009.
2. *"Enhancing the Efficiency of Silicon/Polymer Based Photovoltaic Solar Cells"*, S. Said (PI), N. Tabet, B. Yilbas, I.A. Hussain, M. A. Atieh and A. Ul-Hamid, in collaboration with MIT (USA), Research Proposal submitted to the Centre of Excellence in Renewable Energy, KFUPM.
3. *"Study of the Structural Properties and Hydrodesulfurization Activity of MoS₂ and Co/MoS₂ Catalysts Prepared by Laser Pyrolysis"*, Z. Yamani (PI), N. Tabet, S. Ali, F. Schuster (CEA-France), Funded by Center of Excellence on Nanotechnology (CENT-KFUPM), Approved. start on September 2008.
4. *"Investigation of the Possibility of Enhancing the Processability of Polyolefins by using Nanoclay Additives"* Approved for funding to KACST, 2008. Ibnelwaleed A. Hussein (PI), Abdulhadi A. Al-Juhani and Nouar Tabet (Cols), Jose Covas (Consultant).
5. *"Aligning research at KFUPM with International Trends"*, Approved and Funded by Office of Quality, KFUPM, Jan. 2007. N. Tabet (PI), B. Yilbas, I. Hussain and M. Kariapper (Co-Is), 2007. Final report submitted, April 2009.
6. *"DC-Magnetron sputtering Synthesis and characterization of the physical properties of Zinc oxide thin films"*, KFUPM funded Project, N. Tabet (PI), A. Mekki (Col) and K. Mezghani (Co-I), INT-2006/299.
7. *"Investigation of the effect of the preparation conditions on the properties of barium cuprate thin films obtained by DC magnetron sputtering technique"*, SABIC project, 2004-2006, M. Faiz (PI), N. Tabet Co-I.
8. *"Design of a microwave heater to be used in a kitchen microwave oven"* S. Al Quraishi and N. Tabet, College Grant, 2006.
9. *"Investigation of the growth and the electrical properties of thin oxide layers obtained by dry oxidation of zinc substrates"*, KFUPM, Fast track Project FT-2002/03, N. Tabet (PI), M. Faiz (Col).
10. *"X-ray Photoelectron Spectroscopy (XPS) and Magnetization Studies of Strontium-Borate Vanadate Glasses"* KFUPM, Fast track Project FT-2002/05, Dr. G. Khattak (PI), N. Tabet (Col), Completed, 2004
11. *"Carburization and Metal Dusting Failures of High temperature Alloys"*, Co-investigator, KACST Project, No AT-17-33, KFUPM, 1999-2002.

12. " *Galvanization of Steels containing silicon* " , Co-investigator ONRS project, 1982-1984
13. "*Elaboration and characterization of ZnO varistors*", Principal Investigator, DRS/MES Project, Algeria, 1992- 1994
14. "*Elaboration and characterization of II-VI materials*", Co-investigator, DRS/MES project, Algeria, 1990.
15. " *Study of the properties of Germanium used for Infra-red Applications*", Contract # AFME/MINIMET/CNRS, France, 1987-1988.

Publications

1. "*Influence of bias voltage on the structure and deposition mechanism of diamond-like carbon films produced by rf (13.56MHz) CH₄ plasma*" M.Ouchabane, M. Kechouane, K. Henda, H. Salah, B.Touchrift, **N. Tabet**, M. Herrmann, S. Peter, H. Kupfer and F. Richter, 2009. Submitted,
2. "*Synthesis of Pure and In-doped ZnO Nanowires and their Dynamic Response to Hydrogen Gas*", M. Faiz, Q. Ahsanulhaq, and **N. Tabet**, (2009). Submitted.
3. " *Laser gas assisted Nitriding of Steel*" Residual Stress Analysis" B.S. Yilbas, A.M.F. Arif, C. Karatas, B.J. Abdul Aleem, S. Danisman, **N. Tabet**, to be published in *Industrial Lubrication and Tribology*, 4 (2010).
4. "*Ultra-fast Microwave Synthesis of ZnO Nanowires and their Dynamic Response to Hydrogen Gas*" Ahsanulhaq Qurashi , **N. Tabet** , M. Faiz and Toshinari Yamzaki, *Nanoscale Rese. Lett.* (2009). Accepted
5. "*Ultra Fast Synthesis of Zinc Oxide Nanostructures by Microwaves* " **N. Tabet** , R. Al Ghashani and S. Achour, *Superlattices and Microstructures* 45 (2009) 598.
6. "*Monte Carlo Simulation of the EBIC Collection Efficiency of a Schottky Nanocontact*", M. Ledra and **N. Tabet**, *Superlattices and Microstructures* 45 (2009) 444.
7. "*Synthesis and Characterization of Nitrogen-doped ZnO Thin Films*", A. Mekki, **N. Tabet** and M. Hezam, , *Int. J. Nano and Biomaterials*, Vol. 2, Nos. 1/2/3/4/5, (2009) 216.
8. "*Synthesis and Characterization of Nanostructured Barium Cuprate Thin Films*", M. Faiz and **N. Tabet**, , *Int. J. Nano and Biomaterials*, Vol. 2, Nos. 1/2/3/4/5, (2009)234.
9. "*Electron Beam Induced Current at a Schottky Nanocontact*", M. Ledra and **N. Tabet**, *Int. J. Nano and Biomaterials*, Vol. 2, Nos. 1/2/3/4/5, (2009)307.
10. "Mullite and alumina composites preparation from cordierite and aluminium hydroxide" Aklouche, N.; Achour, S. and **Tabet, N.** *Materials Research Bulletin* (2008), 43(5), 1297.
11. "XPS Study of Nitrogen–implanted ZnO Thin Films obtained by DC-Magnetron Reactive Plasma" **N. Tabet**, M. Faiz and A. Al-Oteibi, *Journal of Electron Spectroscopy and Related Phenomena* 163 (2008) 15–18
12. "TiN-Fe Nanocomposites Thin Films Deposited by Reactive Magnetron Sputtering" S. Zerkout, S. Achour and **N. Tabet**, , *J. Phys. D: Appl. Phys.* 40 (2007) 7508.

13. "Growth of ZnO Nanostructures on Zinc and Pt substrates", **N. Tabet**, M. Faiz and A. L. Oteibi, *Int. J. Nanoscience* 6, 1, (2007) 23.
14. "Effect of tantalum addition on the microstructure and optical properties of TiN thin films", Bourbia , S. Achour , **N. Tabet** , M. Parlinska , A. Harabi, *Thin Solid Films* 515 (2007) 6758.
15. "XANES Investigation of Vanadium-doped ZnO Thin Films", M. Faiz, **N. Tabet**, A. Mekki, B.S. Mun, and Z. Hussain, *Thin Solid Films* 515 (2006) 1377.
16. "Irradiation-Induced gold silicide formation and stoichiometry effects in ion beam-mixed layer" , R. Khalfaoui, C. Benazzouz, A. Guittoum, **N. Tabet** and S.Tobbeche, *Vacuum* , 81(1) (2006), 45.
17. "Effect of zinc nitride precursor on ZnO thin films nanostructure and optical properties" N Toumiat, S Achour, A Harabi, **N Tabet**, M Boumaour and M Maallemi, *Nanotechnology* 17 (2006) 658.
18. "Monte Carlo simulation of the contrast of SEM charge-collection images of dislocations in semiconductors, M Ledra and **N Tabet** 2005 *J. Phys. D: Appl. Phys.* 38 3845
19. "Structural properties of strontium-vanadate and strontium-borovanadate glasses" G.D. Khattak , **N. Tabet** and L.E. Wenger", *Phys. Rev. B*, 72 (2005) 104203.
20. "Local structure and redox state of vanadium in vanadium strontium borate [(V₂O₅)₀×5(SrO)₀×5-y(B₂O₃)_y] oxide glasses", G. D. Khattak, **N. Tabet**, A. Mekki, *Physics and Chemistry of Glasses* 46(2) (2005), 165 .
21. "Irradiation-induced silicide formation in the ion beam-mixed Au/Si(100) system at room temperature" R. Khalfaoui, C. Benazzou, A. Guittoum, **N.Tabet** and S. Tobbeche, *Vacuum*, 78, 2-4 , (2005) 223.
22. "Surface and bulk investigation of ZSM-5 and Al-MCM-41 using synchrotron XPS, XANES, and hexane cracking" , P.A. Jalil , M.S. Kariapper, M. Faiz, **N. Tabet**, N.M. Hamdan, J. Diaz, and Z. Hussain, *Applied Catalysis General A*, 290 (2005) 159.
23. "Surface Investigation on Thermal Stability of Tungstophosphoric Acid Supported on MCM-41 Using Synchrotron Radiation" Pasl A. Jalil, **N. Tabet**, M., Faiz, N.M. Hamdan ,, Z. Hussain. *Applied Catalysis A*, 257 (2004)1.
24. "Local structure and redox state of vanadium in strontium-vanadate glasses G.D. Khattak, and **N. Tabet**, *J. Electr. Spectr. and Rel. Phenomena.*, 136 (2004) 257.
25. "Photoluminescence and photodissociation properties of pure and In₂O₃ doped ZnO nanophases" N. Boulares , K. Guergouri , R. Zouaghi , **N. Tabet** , A . Lussou, F. Sibieude and C. Monty, *Physica Stat. Solidi a*. 201-10 (2004) 2319.
26. " Effect of Si incorporation on the properties of niobium nitride films deposited by DC reactive magnetron sputtering" M. Benkahoul, C.S. Sandu , **N. Tabet**, M. Parlinska-Wojtan , A. Karimi F. Levy, *Surface and Coatings Technology* 188-189. (2004), 435.
27. "X-ray Photoelectron Spectroscopy (XPS) Studies of Vanadium-Strontium-Borate [(V₂O₅)_x(SrO)_{0.2}(B₂O₃)_{0.8-x}] Oxide Glasses " G.D. Khattak, **N. Tabet** , and M.A. Salim, To be published in *J. Electr. Spectr. and Rel. Phenomena.*, 133/1-3 (2003) 103.
28. " XPS/SEM study of the carburization of 310S stainless steel under CH₄-H₂ atmosphere" **N. Tabet**, I. Allam, R.C. Yin, *Appl. Surf. Sci.* 220/1-4, (2003) 259.
29. "On the existence of superstructure in TiN_x thin films" , S. Zerkout, S. Achour, A. Mosser, and **N. Tabet**, *Thin Solid Films*, 441/1-2, (2003), 135.

30. "High resolution XPS study of oxide layer grown on germanium substrate" **N. Tabet**, M. Faiz, N. Hamdan and Z. Hussain, *Surface Science*, 523, (2003) 68.
31. "X-Ray Photoelectron Spectroscopy (XPS) study of copper-sodium tellurite glasses", M.A. Salim, G.D. Khattak, **N. Tabet**, and L.E. Wenger, *J. Electr. Spectr.* 128/1 (2003) 75.
32. "A study of Stability of Tungstophosphoric Acid, H₃PW₁₂O₄₀ using XPS, XANES, Hexane cracking, XRD and IR Spectroscopy", A. Pasl., M. Faiz, **N. Tabet**, N. Hamdan, and H. Zahid, *J. of Catalysis*, 217/2 (2003)292.
33. "X-Ray Photoelectron Spectroscopy Study of the Carburization of the Nickel Based Alloy Haynes 214 " **N. Tabet**, I. Allam, R. C. Yin . *Appl. Surf. Science*, 195/1-4 (2002) 166.
34. "XPS investigation of the Equilibrium Segregation of antimony at germanium Surface""", **N. Tabet**, *J. Electr. Spectr.* 114-116 (2001) 415.
35. "Pressure Effect on the Growth of Oxide Layers on Germanium Substrates" J. Al-Sadah, **N. Tabet** and M. Salim, *J. Electr Spectr.* 114-116 (2001) 409.
36. "Perturbation Approach of the injection Effect on the Electron-Beam Induced Current efficiency in Lightly Doped Semiconductors", R.J. Tarento, D.E. Mekki, **N. Tabet**, *Phil. Mag. B*, 80, 7 (2000) 1347.
37. "Growth of Oxide Layer on Germanium (011) substrate under dry and wet atmospheres", **N. Tabet**, J. Al-Sadah and M. Salim, *Surf. Sci. Rev. and Letters*, 6, 6 (1999) 1053.
38. "XPS study of the growth Kinetics of thin films obtained by thermal oxidation of germanium substrates", **N. Tabet**, M. Salim and A. Al-Oteibi, *J. Electr Spectr.* 101-103 (1999) 233.
39. "Monte Carlo Simulation of the Charge Collection Contrast of Spherical Defects in Semiconductors", **N. Tabet**, *Semicond. Sci. Technol.* 13, (1998), 1392.
40. "KRXPSS study of the oxidation of Ge(001) Surface" , **N. Tabet** and M. Salim, *Appl. Surf. Sci.* 134/1-4 (1998) 275.
41. "Calculation of the Electron Beam Induced Current in the presence of the Shockley-Read-Hall Recombination at the Interface of a Schottky Contact", Y. Beggah, D. Mekki, **N. Tabet** and R.J. Tarento, *Solid-State Electron.* 42, 3, (1998), 379.
42. "Monte Carlo Simulation of the EBIC Grain Boundary Contrast in Semiconductors", **N. Tabet** and M. Ledra, *Mat. Sci. Eng. B42*, (1996) 181.
43. "Cathodoluminescence Dependence upon Irradiation Time", S. Achour, A. Harabi and **N. Tabet**, *Mat. Sci. Eng. B42*, (1996) 289.
44. "On the Effect of the Recombination within the Depletion Zone on the EBIC Signal at a Schottky Contact", Y. Beggah, **N. Tabet** and R.J. Tarento, *Mat. Sci. Eng. B24*, (1994) 101.
45. "Cathodoluminescence Dependence upon the Electron Beam Diameter", S. Achour, M.T. Belahrache, A. Harabi and **N. Tabet**, *Mat. Sci. Eng. B24*, (1994) 141.
46. " A simple derivation of the depletion zone effect on the EBIC collection efficiency" D.Mekki, **N. Tabet** and R.J. Tarento . *Phys. Stat. Sol (a)*, 130 , (1992), 383.
47. "Diffusion du Cobalt et du Magnesium dans NiO Monocristallin" , H. Boussetta, **N. Tabet** and C. Monty. *J. Phys. III* , 2, (1992) 1845.
48. " Calculation of the Electron Beam Induced Current at Schottky Contact and Comparison with Au/ge diodes" , **N. Tabet** and R.J. Tarento . *Phil, Mag, B*, 5 , 2, (1989) 261.

49. "SEM/EBIC study of electrical properties in bulk and at grain boundaries in Sb doped germanium" **N. Tabet** and C. Monty. Rev. Phys. Appl. C5, 6,24, (1989), 156.
50. "Annealing and Temperature dependences of the electrical activity of grain boundaries in Germanium observed by SEM-EBIC techniques", **N. Tabet**, Y. Marfaing and C. Monty. Rev. Phys. Appl., 24 (1989), 871.
51. "Characterization of polycrystalline Germanium by EBIC", **N. Tabet** and C. Monty. Phil. Mag. B, 57,6, (1988) 763.
52. "Grain boundary electrical activity of n-type germanium", **N. Tabet** and C. Monty, J. Phys C5, 10, 49, (1988) 647.
53. "Contribution à l'étude de la galvanisation des aciers au silicium ", M. Seraoui, C. Reille, **N. Tabet** and B. Schmitt. Comptes rend. Acad. Sci. Paris- t 296, Série II (1983), 1587.
54. "Conditions d'apparition de la précipitation continue dans l'alliage de cuivre à 15% indium", D. Hamana, **N. Tabet** and A.F. Sirenko. Mem. Etud. Sci. Rev. metal , Feb. 1985.
55. "Heterodiffusion d'éléments homovalents dans NiO pur et dopé par Cr₂O₃", **N. Tabet**, C. Dolin and C. Monty. Rev. Int. Htes.Temp. Refract., 19, (1982) 413.

Conference publications and presentations

1. "Synthesis and Characterization of DC Magnetron Sputtered Zinc Oxide Thin Films under High Working Pressures", Mahmoud Hezam, Nouar Tabet, A. Mekki, ICMAT & IUMRS-ICA 2009, Singapore, June 2009.
2. "On The structure Of Deposited Diamond-Like Carbon Films Produced By Rf (13.56MHz) CH₄ Plasma" M. Ouchabane, M. Kechouane, K. Henda, H. Salah, B. Touchrift, and **N. Tabet**, in "LASER AND PLASMA APPLICATIONS IN MATERIALS SCIENCE" First International Conference on Laser Plasma Applications in Materials Science—LAPAMS'08", AIP Conf. Proc. 2008, Volume 1047, pp. 123-126,
3. "XPS/XRD/AFM Characterization of Mg_{1-x}Al_xB₂ Superconductor", 'M. Faiz, A. F. Salem, N. Tabet, and Kh. A. Ziq, International Conference on Superconductivity and Magnetism (ICSM2008), Ankara, Turkey, 25-29 August 2008.
4. "Monte Carlo Simulation of the Electron Beam Induced Current at a Nano Schottky Contact", M. Ledra and N. Tabet, in "Proceedings of International Conference on Physics and Its Applications (CIPA 2007)", 2-4th December 2007, Oran Algeria, p. 664.667.
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11. "Properties of nanostructured Zinc Oxide" A. Mekki , N. Tabet , N Toumiat and S Achour, 8th International Workshop on Beam Injection Assessment of Microstructures in Semiconductors, June 11-14, 2006, Saint Petersburg, Russia.
12. "Nanostructured Zinc Oxide: Synthesis and Properties", **N. Tabet**, International Conference on MEMS and Nanotechnology, ICMN06, 14-15 March, 2006, Kuala Lumpur, Malaysia.
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16. "Synthesis and Properties of Nanocrystalline ZnO", **N. Tabet**, N. Boulares, M. Faiz and C. Monty, "International Conference on Nanotechnology: Science and Applications (Nano Insight 2005, Luxor, 20-25 Feb. 2005, Egypt.
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36. "EBIC Measurements of bulk and surface recombination p-type silicon. Influence of oxidation and hydrogenation". I. Delidais, P. Maugis, D. Ballutaud, N. Tabet and J.L. Maurice. Rev. Phys. Appl. C5, 6,24, (1989), 187.
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40. "Microanalysis by SIMS technique. Application to the de determination of diffusion profiles in solids". N. Tabet, in Proceedings of the third Arab conference on Physics and Mathematics, Tunis, 1984.

Technical reports

1. " Benchmarking Best Practices in Higher Education: Korea, Australia, Finland, Malaysia and USA", Final Report of Task Force including 10 members, AAFAQ Project , KFUPM, December 2006.
2. "Research, Innovation, and Graduate Studies: Current realities in Saudi Arabia", Final Report produced by "Research and Innovation" Track-Team, AAFAQ Project, September, 2006.
3. "Investigation of the growth and the electrical properties of thin oxide layers obtained by dry oxidation of zinc substrates", KFUPM, Fast track Project FT-2002/03, Progress report #1, Sept. 2003 and Final report , 2004
4. "X-ray Photoelectron Spectroscopy (XPS) and Magnetization Studies of Strontium-Borate Vanadate Glasses" KFUPM, Fast track Project FT-2002/05, Progress report #1, Sept. 2003 and Final Report, April 2004
5. "Carburization and Metal Dusting Failures of High Temperature Alloys", I.M. Allam, A.N. Shuaib, **N. Tabet** and A.A. Al-Farayedhi, KACST Project No. AT-17-33, Progress Report #1, Sept. 28, 1999, . Progress Report # 2, April . 2000. Report #3, Nov, 2000. Final Report Dec. 2002.

Book

1. "Nanotechnology and Its Applications", AIP Conference Proceedings 929, Ed. by Y.I. Salamin, N.M. Hamdan, H. Al Awadhi, N. M. Jisrawi **and N. Tabet**, N.Y. 2007.
2. "Nanotechnology and Its Applications", **N. Tabet**, Book (in Arabic), to be published by KACST.

Invited Talks

1. "*Nanomaterials and Nanodevices*"., International Workshop, Sultan Qaboos University, 13-14 January 2008.
2. "*Bulk and Surface Analytical Techniques: EDS, SIMS and XPS/AES* ", March, 25th, 2008, Workshop on Characterization Tools for Condensed Matter, organized by Saudi Physics Society (SPS) and King Abdulaziz City of Sciences and technology (KACST), Riyadh, Saudi Arabia.
3. "*The Shift from Micro-to-Nanoelectronics*" Invited Talk, 9 May, 2006, Third Meeting on Science and Education, Dhahran, Saudi Arabia
4. "Photocatalytic Properties of Nanocrystalline ZnO", SEZAME third users Meeting, Antalya, Turkey, 11 Oct. 2004 .
5. "Surface Investigation on Thermal Stability of Tungstophosphoric Acid using Synchrotron Radiation" , SEZAME third users Meeting, Antalya, Turkey, 11 Oct. 2004 .
6. "High Resolution XPS study of germanium oxide layers using synchrotron radiation", Asian Science Seminar on Synchrotron Radiation Science (JASS'02), Al Balqa, Jordan, October 19-28, 2002, organized by the Japan Society for the Promotion of Science (JSPS).

7. "SEM/EBIC investigations of recombination properties of Grain Boundaries in Germanium", American Society of Materials Meeting (ASM) on " Structure / Properties Relationship for Interfaces", Detroit, Michigan, USA, 1990.

Short Courses

1. "Physics for High School Teachers" (in Arabic): KFUPM (Dhahran): 10-21/2/2001, 25-29/8/2001, 24 - 28/08/2002 , 30/08/ - 4/09/03, 6-11 /09/03, Sept. 2005, Jeddah: Aug 2005, KFUPM, Dhahran, Aug. 2006.
2. **Short Course** on" Surface Techniques and Industrial Problems in Catalysis and Corrosion", KFUPM, November, 15-19, 1997.

Invited Seminars and Public Lectures

1. "Surface and bulk analytical techniques for materials", Invited lecture, 7th, June 2008, Physics Department, King Khaled University, Abha, Saudi Arabia,
2. "Nanotechnology, recent developments", Invited lecture, 8th, June 2008, Physics Department, King Khaled University, Abha, Saudi Arabia,
3. "Synthesis and Applications of Nanostructured Zinc Oxide", 4th May, 2008, Physics day organized by the Physics Department, Girls College, King Faisal University, Dammam, Saudi Arabia.
4. Panel Discussion entitled "Nanotechnology: The opportunities, the challenges and the applications in the Kingdom" organized by the Arabian International Chemical Sciences, a Chapter of the American Chemical Society, (SAICSC-ACS), June 1, 2008, Gulf Meridian Hotel, Al-Khobar, Saudi Arabia.
5. "Lectures on Semiconductors", Organized by Saudi Physics Society (SPS), through Internet, 24 April 2008.
6. "Nanotechnology: The idea and its applications"; Invited Lecture, Imam University, Riyadh, 20 November 2007.
7. "Introduction to Nanotechnology", Program for gifted students, KFUPM, 1 July 2007.
8. " What is Nanotechnology?", Public lecture, 12 Oct. 2006 SciTech, Khobar
9. "From Nuclear Technology to Nano-technology", N. Tabet, Invited Talk, Teachers College, Dammam, 27th November, 2006.
10. *Workshop on " Nanotechnology and its possibilities'*, Khobar, 8 Sept. 2006, as part of "The Peer Group Leadership Training Camp" Organized by Center for Information and Guidance of India (CIGI).
11. "Nanotechnology: Small and Luminescent" , Invited talk at First Meeting of the Colleges of Education of Girls, Jeddah, 23 April, 2006
12. "Nanotechnology " , Invited talk, Physics Department, King Abdulaziz University, 12 April, 2006.
13. "Nanotechnology: The power of the Small", KFUPM, Seminar, 19Feb. 2006
14. "Nanotechnology ", March 17th, 2005, King Abdulaziz University (women). Invited Talk .
15. *Nanocrystalline Zinc Oxide in Catalysis and Optoelectronics*, KFUPM, March 7th, 2004
16. *Naissance et Developement de la Nanotechnologie*, Invited Talk, 25 June , 2005, University of Constantine, Algeria

17. "Nanotechnology" KFUPM, Lecture for High School Teachers 6-10 Sept, 2003.
18. "Major inventions which led to the birth of Nanotechnology", KFUPM Program Gifted Students, July 2003.
19. "What is Nanotechnology?", Khobar High School, 13 May, 2003-05-13
20. "Interfaces in Materials and Devices" KFUPM, Ma, 4th , 2003.
21. "Nanotechnology from the visualization of atoms to their manipulation. What is the next? KFUPM, March, 8th, 2003 .
22. " How it became possible to observe atoms", KFUPM Program for Gifted Students, June 2002.
23. "Nanotechnology challenges", KFUPM 21 Oct. 2001.
24. "Defects in Solids", N. Tabet, KFUPM, 3 Oct. 1999.
25. "Growth Kinetics of Ultra-thin oxide Layers on Ge Surfaces", N. Tabet, KFUPM, Sept. 27, 1998.
26. "Local Injection Techniques for Defects Assessment in Semiconductors", N. Tabet, Mini-workshop on Semiconductors and Technology, KFUPM, 11 March 1997.
27. 'Monte Carlo Simulation of the Recombination Contrast of Extended Defects in Semiconductors', N. Tabet, in 'Mini-symposium on Computer Simulation and its Applications', KFUPM, 21 May, 1996.
28. "SEM/EBIC Investigations of the Electrical Properties of Grain Boundaries in Germanium", N. Tabet, KFUPM, Dec. 1994.