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h-index (22/01/2016): 14

Personal

Citizenship: French

Education

1. Ph.D. Physics, University of Bourgogne (France), 2004. Mention : Nano-Optic. Title : "Contribution to study of the optical images formation in Near-field Microscopy: two-dimensional study of the probe".
2. Master of Physics (validation), University of Bourgogne (Dijon, France), (2000). Mention : Quantum mechanics in conjugated polymers.

Academic & research Experience

Al- Faisal University, Riyadh

Assistant Professor of Physics, Summer 2015- current **Teaching** : Undergraduate, engineering, Master of nanotechnology, **Research** : Designing new materials for Solar energy, graphene for catalysis, ZnO, Thermoelectric materials.

Georgia Institute of Technology (GaTech)

Research scientist, Spring 2014- current **Project 1**: organic molecular semiconductors for OPV application, organic spintronic and hybrid Metal-organic interfaces **Project 2**: Large scales methods, Organic LED, Solar energy material, designing new materials for solar cell applications.

King Abdullah University of Science and Technology (KAUST)

Research fellow, Summer 2010- Summer 2012. **Project** : spintronic and magnetic transport in nanofilms, organic molecular semiconductors for OPV application

Summer 2012- Spring 2013. **Project** : Theoretical and experimental measurement of silicon nanoparticles for photonic applications. **Project** : III-V and doped ZnO for photovoltaic and solar cell applications.

University of Namur (Belgium), Department of Physics

Postdoctoral position (CERUNA Project), Spring 2008- Winter 2009. **Project**: Electromagnetic response of metallic nano-particles and plasmom excitations

Research Assistant and Manager of Mirage project : collaboration between Arcelor Mittal-FUNDP (NAMUR) Spring 2009-Summer 2010. **Project:** Thermo-chromic and electrochromic properties of nano-layered tungsten oxide (WO_3) and vanadium oxide (VO_2) : from experience and theory

Université du Maine, Le Mans (France), Department of Physics

Postdoctoral position, Academic year 2006-2007. **Project :** Design route for the synthesis of super transition metal nitride alloys.

Researcher- Assistant Professor, Fall 2007-Winter 2008. **Courses :** Quantum mechanics, Thermodynamics, Optic, mechanics, Matlab and Fortran languages, solid state physics for Undergraduate and Master students

Technische Universität Kaiserslautern (Germany), Condensed Matter Theory Group, Department of Physics

Postdoctoral position, Academic year 2005-2006. **Project :** Magnetic nano-clusters and femto-seconds from ab-initio methods.

Lecturer in physics, Fall-Spring 2005. **Courses :** Quantum mechanics, solid state physics for Undergraduate students

Université Val de Marne, Paris 12 (France), Nano-Materials and condensed matter group, Department of Physics

Researcher-Assistant Professor, **Project :** Cuprates and magnetic oxides : Experience and theory Academic year 2004-2005. **Courses :** Quantum mechanics, Thermodynamics, Matlab, solid state physics for Undergraduate and Master students

Université de Bourgogne, Dijon (France), Nano-optical Near field group, Physics Department

Researcher-Assistant Professor, Academic year 2001-2002, Academic Support Program, Group : Nano-optical Near field. **Courses :** solid state physics, Analytical mechanics, optic and electromagnetism, for Undergraduate students.

Research Assistant, Spring 2002–Spring 2003 **Title :** Modeling Near-field measurements on nano-structures.

Research- Assistant Professor, Academic Support Program, Academic year 2003-2004. **Courses :** solid state physics, Analytical mechanics for Undergraduate students.

Thesis and projects supervision

1. Co-Supervisor of PhD student : Bakhtiar Ul Haq, at Department of Physics University Technology Malaysia (UTM). Title : First Principles Study to search for Diluted Magnetic Semiconductors based on Transition Metals Doped ZnO, defended on Oct. 2014.

2. Co-Supervisor of PhD student : Mazmira Mohamad, at Department of Physics University Technology Malaysia (UTM). Title : Modelling materials for organic photovoltaic devices expected for May. 2016

3. Supervisor of PhD student : N. Kanoun-Bouayed from Solid state physics group, Département de Physique, Faculté des Sciences Tlemcen University (Algeria), 2007–2011. Title : Density functional theory study of physical properties of nitrides, rare-earth dioxides and silicon-germanium oxynitrides.
4. supervisor of Master project, Student : Lagarde Foka, University of Paris 12, mention: Physics (2004-2005). Title : Theoretical study of physical properties for GaAs using the density functional theory".
5. Co-supervisor of Master of science project, Student : D. B. Granato, King Abdullah University of Science and Technology (KAUST), mention: Physical Sciences (2011-2012). Title : A Density Functional Theory Study of the Electronic Structure of Doped Tin Monoxide.

Academic Awards

1. CERUNA project Award, from University of Namur (Belgium) , Solid state physics Laboratory (2008-2009).
2. "Bourse Regional de Pays de la loire" award from Maine University (France) (2006-2007)
3. EU Research and Training Network (contract HPRN-CT-2002-00317) award on "elementary excitations on nano-particles and metallic nanoclusters", from Kaiserslautern University (Germany) (2005-2006).
4. Physics department of Bourgogne University (Dijon, France) Researcher- Assistant Professor, Academic Support Program Fall-2002
5. Physics department of Val de Marne University (Paris, France) Researcher- Assistant Professor, Academic Support Program Fall-2004

International Recognition

1. SciVerse ScienceDirect TOP25 Hottest Articles : <http://top25.sciencedirect.com/subject/materials-science/15/journal/computational-materials-science/09270256/archive/19> Theoretical investigations of structural, elastic, electronic and thermal properties of Damiaoite PtIn² Computational Materials Science, Volume 43, Issue 2, August 2008, Pages 243-250 Goumri-Said, S.; Kanoun, M.B.

Recent Conference Presentations & Workshops

1. Member of scientific committee in NanoMatEn 2015 International Conference and Exhibition Nano MatEn 2015 (15 Jun - 17 Jun 2015), Paris - France (<http://www.setcor.org/conferences/Nano-MatEn-2015>).
2. The first North African workshop on Dielectric Materials for Photovoltaic Systems, NAWDMPV14, 26 to 27 October 2014 Tlemcen, Algeria. Invited talk :Organic solar cell materials: prospects and new challenges for Photovoltaic".
3. E-MRS 2013 Spring Meeting, "Buckling and ripples effects on the electronic structure of graphene" Strasbourg (France) 27 to 31 May 2013. Poster presentation.
4. E-MRS 2013 Spring Meeting, "Exploring the physical properties of the microporous zirconogermanate" Strasbourg (France) 27 to 31 May 2013. Poster presentation.

5. GDR-CoDFT 2013, Lorient (France) 21 to 24 May 2013. Poster presentation.
6. The 19th International Conference on Magnetism with Strongly Correlated Electron Systems 2012 (ICM2012) Busan, Korea From July 8th to 13th, 2012. Poster presentation
7. 56th Annual Conference on Magnetism and Magnetic Materials, Scottsdale, Arizona (USA). Poster presentation : "The origin of the ferromagnetic ordering of zinc vacancies in Sc-doped ZnO: bulk versus thin-films". From October 30 to November 3, 2011.
8. 56th Annual Conference on Magnetism and Magnetic Materials, Scottsdale, Arizona (USA). Poster presentation : "Ab-initio understanding of the spin injection in organic molecular semiconductor systems". From October 30 to November 3, 2011.
9. Functional Metalorganics Magnetism, structure, transport, May 30 to June 1, 2011, Uppsala (Sweden). Poster presentation : "Ab-initio study of organic molecules for spintronic applications".
10. ECNF - European Conference on Nano Films, March 22 - 25, 2010 Liège, (Belgium). Oral Presentation : "Optical Modeling of Electrochromic and thermochromic thin films".
11. EDGE 2009 International EELS Workshop Banff, Alberta, (Canada), May 17 to 22, 2009. Poster presentation : "Low-loss simulation with a discrete dipole approximation".
12. "Journées de la Matière Condensée" (JMC11) - Strasbourg, August 25 to 29 2008. Two posters: (1) "EELS characterisation of subwavelength excitation in metallic nanoparticles : a DDA study". (2) "First-principles calculation of molybdenum nitrides : Structure and mechanical properties"
13. Workshop: "Ion dynamics and relaxation in ion conducting disordered solids" March 26 to 29, 2007. Université du Maine - Le Mans, (France). Oral Presentation: " First principles investigation of LAMOX derived from La₂Mo₂O₉ .

Professional Activities

1. Technical Committee of the "2013 International Conference on Advances in Industrial Control, Electronics and Computer Engineering (AICECE'13)" . <http://www.aicece.net/committee.htm>

Member of Société Française de Physique , 2008–Present.

Member of American Physical Society , 2010–Present.

I. Referee for:

1. *Journal of Applied Physics*. (AIP, American Institute of Physics).
2. *Polymer* (Elsevier).
3. *Material chemistry and physics* (Elsevier).
4. *Physica B* (Elsevier).
5. *physica status solidi* (Wiley-VCH Verlag GmbH and Co. KGaA).
6. *Philosophical Magazine and Philosophical Magazine Letters* (Taylors and Francis Group).
7. *Journal of Magnetism and Magnetic Materials* (Elsevier).
8. *Journal of Physics and Chemistry of Solids* (Elsevier).

I. **Associate Editor** for : Frontiers in physics

www.frontiersin.org/people/SourayaGoumri-Said/124586

II. **Associate Editor (AE)** for : Central European Journal of Physics (Springer)

<http://www.versita.com/science/physics/cejp/>.

III. **Editor** for : Journal of Materials and Chemical Engineering (World academic publishing)

<http://www.academicpub.org/JMCE/>

Published Papers

85. M. Mohamad, R. Ahmed, A.A. Kanoun A. Shaari, and **S. Goumri-Said**, "I-V characterization and efficiency prediction of Vinazene molecular device for organic solar cell applications", *organic electronics*, Under review (2016).

84. N. Shahzad, A. Hussain, N. Mustafa, N. Ali, M. B. Kanoun, **S. Goumri-Said**, *RSC Adv.* 6, 7941-7949 (2016).

83. **S. Goumri-Said**, R. Ahmed, M. B. Kanoun, "Density-functional study of High hydrogen content complex hydrides Mg (BH₄)₂: a promising conducting hydride", *Renewable Energy* 90, 114-119 (2016)

82. Bakhtiar Ul Haq, R. Ahmed, Galila Abdellatif, A. Shaari, Faheem K. Butt, Mohammed B. Kanoun, **S. Goumri-Said**, *Front. Phys.* 11(3), 117101 (2016).

81. Nor Ashwani Abdul Rahim, R. Ahmed, Bakhitar Ul Haq, A. Shaari, Mazmira Mohamad, N. Ali and **S. Goumri-Said** "Computational Modeling and Characterization of X-Bi (X = B, Al, Ga, In) Compounds; Prospective Optoelectronic Materials for Infrared/near infra Applications", *Computational Materials Science* 114, 40-46 (2016)

80. W. Khan and S. Goumri-Said, "Engel–Vosko generalized gradient approximation within DFT investigations of optoelectronic and thermoelectric properties of copper thioantimonates(III) and thioarsenate(III) for solar-energy conversion", *Phys. Status Solidi B*, 18 (2016) / DOI 10.1002/pspb.201552435

79. S. Azam, S. A. Khan, **S. Goumri-Said**, "Engel-Vosko GGA Approach Within DFT Investigations of the Optoelectronic Structure of the Metal Chalcogenide Semiconductor CsAgGa₂Se₄", *Journal of Electronic Materials* 45, 746-754, (2016)

78. **S. Goumri-Said**, On the optical properties and electronic charge transfer of an anticancer agent: ferrocene-substituted dithio-o-carborane conjugate", *Biointerface Research Applied Chemistry* 5 (2), 941-944 (2015).

77. M. Belarbi, B. Benyoucef, A. Benyoucef, T. Benouaz, and **S. Goumri-Said**, "Enhanced electrical model for dye-sensitized solar cell characterization Solar Energy", *Solar Energy*, 122, (2015), Pages 700-711.

76. S. Azam, S. A. Khan, J. Minar, W. Khan, H. Ud Din, R. Khenata, G. Murtaza, S. Bin-Omran and **S. Goumri-Said**, "Coulomb interaction and spin-orbit coupling calculations of thermoelectric properties of the quaternary chalcogenides Tl₂PbXY₄ (X = Zr, Hf and Y = S, Se)", *Semicond. Sci. Technol.* 30 (2015) 105018.

75. S. Azam, S. A. Khan, J. Minar, and **S. Goumri-Said**, "Exploring the electronic structure and optical properties of new inorganic luminescent materials Ba(Si,Al)₅(O,N)₈ compounds for light-emitting diodes devices", *Current Applied Physics* 15, 1160-1167 (2015).

74. W. Khan, S. Azam, F. A. Shah, and **S. Goumri-Said**, "DFT and modified Becke Johnson (mBJ) potential investigations of the optoelectronic properties of SnGa_4Q_7 (Q = S, Se) compounds: Transparent materials for large energy conversion", *Solid State Sciences* 48, 244-250 (2015).
73. S. Azam, S. A. Khan, **S. Goumri-Said**, "Modified BeckeJohnson (mBJ) exchange potential investigations of the optoelectronic structure of the quaternary diamond-like semiconductors $\text{Li}_2\text{CdGeS}_4$ and $\text{Li}_2\text{CdSnS}_4$ ", *Materials Science in Semiconductor Processing*, 39, 606 (2015).
72. A. Yumak, G Turgut, O. Kamoun, H. Ozisik, E. Deligoz, P. Petkova, R. Mimouni, K. Boubaker, M. Amlouk, **S. Goumri-Said**, *Materials Science in Semiconductor Processing*, 39, 103-111 (2015).
71. S. Azam, S. A. Khan, **S. Goumri-Said**, "Revealing the optoelectronic and thermoelectric properties of the Zintl quaternary arsenides ACdGeAs_2 (A= K, Rb)", *Materials Research Bulletin* 70, 847-855 (2015).
70. S. Azam, S. A. Khan, **S. Goumri-Said**, Exploring the electronic structure and optical properties of the quaternary Selenide compound, $\text{Ba}_4\text{Ga}_4\text{SnSe}_{12}$: For photovoltaic applications, *Journal of Solid State Chemistry*, Volume 229, Pages 260-265 (2015)
69. H. H. Nguyen, N. Thu Huong, T. Y. Kim, **S. Goumri-Said**, M. B. Kanoun, "Tuning Magnetic Properties of BiFeO_3 Thin Films by Controlling Rare-Earth Doping: Experimental and First-Principles Studies", *The Journal of Physical Chemistry C* 119 (25), 14351-14357.
68. S. Azam, S. A. Khan, **S. Goumri-Said**, Modified Becke-Johnson (mBJ) exchange potential investigations of the optoelectronic structure of the quaternary diamond-like semiconductors $\text{Li}_2\text{CdGeS}_4$ and $\text{Li}_2\text{CdSnS}_4$, *Materials Science in Semiconductor Processing*, Volume 39, (2015), Pages 606-613
67. S. Azam, S. A. Khan, **S. Goumri-Said**, "Revealing the optoelectronic and thermoelectric properties of the Zintl quaternary Arsenides ACdGeAs_2 (A = K, Rb)", *Materials Research Bulletin* 70, 847-855 (2015).
66. A. Yumak, G. Turgut, O. Kamoun, H. Ozisik, E. Deligoz, P. Petkova, R. Mimouni, K. Boubaker, M. Amlouk, **S. Goumri-Said**, *Materials Science in Semiconductor Processing*, 39, 103-111 (2015).
65. M. Bououdina, A. A. Dakhel, M. El-Hilo, D. H Anjum, M. B. Kanoun, **Souraya Goumri-Said**, "Revealing a room temperature ferromagnetism in cadmium oxide nanoparticles: an experimental and first-principles study", *RSC. Advances*. 5 (42), 33233 (2015).
64. M. Mohamad, R. Ahmed, A. Shaari, and **S. Goumri-Said**, "First principles investigations of vinazene molecule and molecular crystal: a prospective candidate for organic photovoltaic applications", *Journal of Molecular Modeling* 21 (2), 1-7 (2015).
63. N. Ali, R. Ahmed, Bakhtiar ul Haq, A. Shaari, R. Hussain, **S. Goumri-Said**, "A novel approach for the synthesis of tin antimony sulphide thin films for photovoltaic application", *Solar Energy* 113, 25-33 (2015).
62. W. Khan and **S. Goumri-Said**, "Exploring optoelectronic structure and thermoelectricity of recent photoconductive compounds CsCdInQ_3 (Q= Se, Te)", *RSC Advances* 5 (13), 9455-9461 (2015).
61. G. Abadias, M.B. Kanoun, **S. Goumri-Said**, L. Koutsokeras, S.N. Dub, Ph. Djemiaand, "Electronic structure and mechanical properties of ternary ZrTaN alloys studied by ab initio calculations and thin film growth experiments", *Phys. Rev. B*. 90, 144107 (2014).
60. B. Ul Haq, R. Ahmed, and **S. Goumri-Said**, "DFT characterization of Cadmium doped Zinc oxide for photovoltaic and solar cell applications", *Solar Energy Materials and Solar Cells*, 130, 6 (2014).

59. B. Ul Haq, R. Ahmed,, A. Shaari, F. El Haj Hassan, M. B. Kanoun, and **S. Goumri-Said**, "Study of wurtzite and zinblende GaN/InN based solar cells alloys: first- principles investigation within the improved modified Becke–Johnson potential", *Solar energy* 107, 543 (2014).
58. B. Ul Haq, M. B. Kanoun, R. Ahmed, M. Bououdina, **S. Goumri-Said**, "Hybrid functional calculations of potential hydrogen storage material: Complex dimagnesium iron hydride", *International Journal of Hydrogen Energy*, Volume 39, 9709-9717 (2014)
57. M. B. Kanoun, and **S. Goumri-Said**, "Effect of alloying on elastic properties of ZrN based transition metal nitride alloys ". *Surface and Coatings Technology* 255, 140-145 (2014).
56. M. B. Kanoun, **S Goumri-Said**, Udo Schwingenschlöggl, "Ferromagnetism in Cr-doped passivated AlN nanowires", *Journal of Materials Chemistry A* 2 (24), 9287-9290 (2014)
55. B. Ul Haq, R. Ahmed, **S. Goumri-Said**, "Tailoring ferromagnetism in chromium doped zinc oxide", *Materials Research Express*, *Materials Research Express* 1 (1), 016108 (2014).
54. B Ul Haq, R Ahmed, A Shaari, **S Goumri-Said** , "GGA+ U investigations of impurity d-electrons effects on the electronic and magnetic properties of ZnO", *Journal of Magnetism and Magnetic Materials* 362, 104-109 (2014).
53. B. Ul Haq, R. Ahmed, F. El Haj Hassan, R. Khenata, M. K. Kasmina, **S. Goumri-Said**, "Mutual alloying of XAs (X = Ga, In, Al) materials: tuning the optoelectronic and thermodynamic properties for solar energy application", *Solar Energy* 100, 1-8 (2014).
52. M. Zarshenas, R Ahmed, M. B. Kanoun, B. ul Haq, A. R. Mat Isa and **S. Goumri-Said**, "Understanding the physical properties of the hydrogen rich MgH₂ from DFT and DFPT approaches", *Physica Scripta* 88 (6), 065704 (2013).
51. N. H. Hon, M. B. Kanoun, **S. Goumri-Said**, J-H. Song, E. Chikoidze, Y. Dumont, A. Ruyter, and M. Kurisu, "The origin of magnetism in transition-metal-doped ZrO₂ thin films: experiment and theory", *Journal of Physics: Condensed Matter*, *J. Phys.:* *Condens. Matter* 25 436003 (2013).
50. N. Najwa Anua, R. Ahmed, A. Shaari, M. A. Saeed, Bakhtiar Ul Haq and **S. Goumri-Said**, "Non-local exchange correlation functionals impact on the structural, electronic and optical properties of IIIŪV arsenides *Semicond. Sci. Technol.* 28 105015 (2013).
49. **S. Goumri-Said** H. Ozisik, E. Deligoz and M. B. Kanoun, "Ab-initio investigations of the Strontium Gallium Nitrides ternaries Sr₃GaN₃ and Sr₆GaN₅: promising materials for optoelectronic", *Semicond. Sci. Technol.* 28 085005 (2013).
48. **S. Goumri-Said** and M. B. Kanoun, Aurelien Manchon and Udo Schwingenschlöggl, "Spin-polarization reversal at the interface between benzene and Fe(100)" *Journal of Applied Physics* 113, 013905 (2013)
47. B. Ul Haq, R. Ahmed, **S. Goumri-Said**, A. Shaari and A. Afaq. "Electronic structure engineering of ZnO with the modified Becke-ŪJohnson exchange versus the classical correlation potential approaches", *Phase Transitions* 86 (12), 1167-1177 (2013)
46. **S. Goumri-Said** and M. B. Kanoun, "DFT+U study of the oxide-ion conductor pentalanthanum hexamolybdenum hencosaoxide " *Journal of Solid State Chemistry* 197, 304(2013).
45. M. B. Kanoun, **S. Goumri-Said**, A. Manchon, and U. Schwingenschlogl, "Ferromagnetism carried by highly delocalized hybrid states in Sc-doped ZnO thin films", *Appl. Phys. Lett.* 100, 222406 (2012).
44. M. B. Kanoun, P. Hermet, and **S. Goumri-Said** "Structure, elastic stiffness and hardness of Os_{1-x}Ru_xB₂ solid solution transition metal diborides", *JOURNAL OF PHYSICAL CHEMISTRY C*, 116, 11746 (2012).

43. M. B. Kanoun, **S. Goumri-Said**, U. Schwingenschlogl, and A. Manchon, "Magnetism in Sc-doped ZnO with zinc vacancies: A hybrid density functional and GGA+U approaches", *CHEMICAL PHYSICS LETTERS* 532, 96 (2012)
42. M. B. Kanoun, A. H. Reshak, N. Kanoun-Bouayed, and **S. Goumri-Said**, "Evidence of Coulomb correction and spin-orbit coupling in rare-earth dioxides : CeO₂, PrO₂ and TbO₂", *Journal of Magnetism and Magnetic Materials* 324, 1397-1405 (2012).
41. **S. Goumri-Said**, N. Kanoun-Bouayed, A. H. Reshak, M. B. Kanoun, "On the electronic nature of silicon and germanium based oxynitrides and their related mechanical, optical and vibrational properties as obtained from DFT and DFPT" *Computational Materials Science* 53, 158-168 (2012).
40. I. Bantounas, **S. Goumri-Said**, M. B. Kanoun, A. Manchon, I. Roqan and U. Schwingenschlogl, "Ab initio investigation on the magnetic ordering in Gd doped ZnO" . *J. Appl. Phys.* 109, 083929 (2011).
39. Abdullah Al-Sunaidi, **Souraya Goumri-Said**, "Investigating the adsorption of H₂O on ZnO nanoclusters by first principle calculations". *Chemical Physics Letters*, Volume 507, 111 (2011).
38. A. Lafort, H. Kebaili, **S. Goumri-Said**, O. Deparis, R. Cloots, J. De Coninck, M. Voué, F. Mirabella, F. Maseri, S. Lucas, "Optical properties of thermochromic VO₂ thin films on stainless steel: experimental and theoretical studies", *Thin Solid Films*, Volume 519, Issue 10, 1 March 2011, Pages 3283-3287.
37. B. Amin, S. Arif, Iftikhar Ahmad, M. Maqbool, R. Ahmad, **S. Goumri-Said**, K. Pribrey, "Cr doped III-V (nitrides) dilute magnetic alloys: potential candidates for spintronics". *Journal of ELECTRONIC MATERIALS*, Vol. 40, No. 6, (2011).
36. B. Amin, Iftikhar Ahmad, M. Maqbool, **S. Goumri-Said**, and R. Ahmad, "Ab initio study of the bandgap engineering of Al_{1-x}GaxN for optoelectronic applications". *Journal of Applied Physics* 109, 023109 (2011).
35. N. Kanoun-Bouayed, M. B. Kanoun, **Souraya Goumri-Said**, "Structural stability, elastic constants, bonding characteristics and thermal properties of zincblende, rocksalt and fluorite phases in copper nitrides: plane-wave pseudo-potential ab initio calculations", *CENTRAL EUROPEAN JOURNAL OF PHYSICS*, 9 205-212 (2011).
34. M. B. Kanoun, I. R. Shein, S. Goumri-Said, "Origin of incompressibility and hardness from electronic and mechanical properties of hard material ruthenium diboride", *Solid State Communications*, 150, 1095-1098 (2010).
33. **S. Goumri-Said**, M. B. Kanoun, "Ab-initio investigations of the electronic properties of bulk wurtzite Beryllia and its derived nanofilms", *Physics Letters A*, Volume 374, Issue 38, 23 August 2010, Pages 3977-3981.
32. M.B. Kanoun, **S. Goumri-Said**, A. H. Reshak, A. E. Merad, "Electro-structural correlations, elastic and optical properties among the nanolaminated ternary carbides Zr₂AC *Solid State Sciences*, Volume 12, Issue 5, May 2010, Pages 887-898
31. N. Kanoun-Bouayed, S. Goumri-Said, A. E. Merad, and M. B. Kanoun, "Ab initio calculation of electronic structure and magnetism properties of rare earth nitride using LDA plus U approach: EuN and GaEuN". *THIN FILMS AND POROUS MATERIALS, MATERIALS SCIENCE FORUM* 609, 167-172 (2009).
30. M.B. Kanoun, **S. Goumri-Said**, A. H. Reshak, "Theoretical study of mechanical, electronic, chemical bonding and optical properties of Ti₂SnC, Zr₂SnC, Hf₂SnC and Nb₂SnC", *Computational Materials Science* 47, 491 (2009).

29. P. Hermet, **S. Goumri-Said**, M. B. Kanoun, and L. Henrard, "First-principles investigations of physical properties of the magnesium nitridoboride" *J. Phys. Chem. C*, **113**, 4997 (2009).
28. M. B. Kanoun, **S. Goumri-Said** and M. Jaouen, "Steric effect on the M site of nanolaminate compounds M_2SnC ($M = Ti, Zr, Hf$ and Nb)" *J. Phys.: Condens. Matter* **21**, 045404 (2009) .
27. M. B. Kanoun and **S. Goumri-Said**, "Theoretical study of structural parameters and energy gap composition dependence of $Ga_{1-x}B_xN$ alloys" *Semicond. Sci. Technol.* **23**, 125036 (2008).
26. **S. Goumri-Said**, M. B. Kanoun and F. Calvayrac, "PtMn₃No.25: A potential candidate for spintronic applications by ab initio calculations", *Journal of Magnetism and Magnetic Materials*, **321**, 1012 (2009).
25. **S. Goumri-Said**, M. B. Kanoun, "Theoretical investigations of structural, elastic, electronic and thermal properties of Damiaoite PtIn₂", *Computational Materials Science*, **43**, 243 (2008).
24. **S. Goumri-Said**, M. B. Kanoun, "Electronic structure and magnetism of Eu-doped GaN: first-principles study based on LDA+U ". *J. Phys. D: Appl. Phys.* **41** 035004 (2008).
23. M. B. Kanoun and **S. Goumri-Said**, "Analysis of Mn K-edge x-ray absorption spectrum in $Al_{1-x}Mn_xN$ by full potential calculations". *Physica B: Condensed Matter*, **403**, 2847 (2008).
22. M. B. Kanoun, **S. Goumri-Said**, and M. Jaouen, " Structure and mechanical stability of molybdenum nitrides: a first principles study, *Phys. Rev. B* **76**, 134109 (2007).
21. M. B. Kanoun, **S. Goumri-Said**, "Investigation of structural stability and electronic properties of CuN, AgN and AuN by first principles calculations". *Physics Letters A*, Volume **362**, 73 (2007).
20. A. E. Merad, M. B. Kanoun, and **S. Goumri-Said**, " Ab Initio Study of Electronic Structures and Magnetism in ZnMnTe and CdMnTe Diluted Magnetic Semiconductors ". *Journal of Magnetism and Magnetic Materials*, **302** 536 (2006).
19. M. B. Kanoun and **S. Goumri-Said** " Electronic properties of binary noble metal nitride PtN: First principles calculations". *Phys. Phys. Rev. B.* **72** 113103 (2005) .
18. M. B. Kanoun, **S. Goumri-Said**, A. E. Merad and H. Mariette " Ab initio study of structural parameters and gap bowing in Zincblende $Al_xGa_{1-x}N$ and $Al_xIn_{1-x}N$ alloys". *J. Appl. Phys.* **98**, 063710 (2005).
17. M. B. Kanoun, **S. Goumri-Said**, A. E. Merad and J. Cibert " First-principles investigation electronic structure and magnetic properties in ferromagnetic $Gax Mn_{1-x}N$ and $Al_xMn_{1-x}N$ ". *J. Phys. D: Appl. Phys.* **38** 1 (2005).
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Published Books and chapters in books

1. **Chapter title** : "Theoretical study of physical properties and oxygen incorporation effect in nanolaminated ternary carbides 211MAX phases". By M. B. Kanoun and S. Goumri-Said. **Book title** "Advances in Science & Technology of Mn_{n+1}AX_n Phases", edited by Woodhead Publishing Ltd. Book Editor : Prof. Jim Low (Department of Applied Physics Curtin University, Perth, Australia). (date of edition : September 2011).
2. **Book edition** : Applied Physics series: "Investigation of Electronic, Magnetic and Elastic Properties Using First Principles Calculations and New Empirical Approach: Application of III-V, II-VI Semiconductors and Perovskite-Like Fluorides Materials ", by Dr. S.G. Pandalai, Managing Editor. Research Signpost. 37/661 (2), Fort P.O. Trivandrum-695 023, Kerala (India). (Year of edition 2006). Book Editor : Souraya Goumri-Said

3. **Participation by two chapters** in physical book entitled "Theoretical and Experimental Studies of Magnetic Materials Including Rare-Earth Nitrides, Semimagnetic Semiconductors, Perovskites Magnetites and Metallic Multilayers and Films, 2008: ISBN: 978-81-7895-365-6 Editor: Abdelkrim El-Hasnaïne Merad. Titles of Chapters are (1) Electronic and magnetic structure of rare-earth nitrides using the LDA+U approach: EuN and GaEuN. (2) PtMn₃No.25: Looking for a new candidate for spintronic applications.

4. **Participation by two chapters** in Handbook of Research on Nanoscience, Nanotechnology, and Advanced Materials, DOI: 10.4018/978-1-4666-5824-0, SBN13: 9781466658240. Editors: Mohamed Bououdina (University of Bahrain, Bahrain) and J. Paulo Davim (University of Aveiro, Portugal) (<http://www.igi-global.com/book/handbook-research-nanoscience-nanotechnology-advanced/94870>). Titles of Chapters are (1) Understanding the numerical resolution of perturbed soliton propagation in single mode optical fiber. (2) Theoretical assessment of the mechanical, electronic, and vibrational properties of the paramagnetic insulating Cerium dioxide and investigation of intrinsic defects.

Miscellaneous

Computer Skills: Java, C, C++, Fortran, L^AT_EX, Linux, Mathematica, Matlab, OpenMP.

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