

## Abdullah I Alkhateeb Aljaafari

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### EDUCATION

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1994-1998	King Faisal University	Al-Ahssa, Saudi Arabia	BS
1999-2005	University of Idaho	Moscow, ID USA	MS, PhD

### PROFESSIONAL EXPERIENCE

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#### CURRENT POSITIONS

2012- Present King Faisal University Al-Ahssa, SA  
Science and Technology Unit Director

2010- present King Faisal University Al-Ahssa, SA  
Dean, College of Science

2009-Present King Faisal University Al-Ahssa, SA  
Physics Chairman

#### PREVIOUS POSITIONS

2007-2010 King Faisal University Al-Ahssa, SA  
Associate Dean for Academic Affairs, College of Science

#### ACADEMIC RANKINGS

2011- Present King Faisal University /Dept. of Physics Al-Ahssa, SA  
Associate Professor

2005- Present King Faisal University /Dept. of Physics Al-Ahssa, SA  
Assistant Professor

2004-2005 University of Idaho / Dept. of Physics Moscow, ID Research  
Assistant

2002-2004 University of Idaho / Dept. of Physics Moscow, ID Teaching  
Assistant

### RESEARCH INTEREST

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Synthesis and Characterization of One Dimensional Nanomaterials (Nanowires and Nanotubes) (CVD & PECVD)

Synthesis and Characterization of Polymer Nanocomposites (Electrospinning, casting, dipping)

Application of Nanomaterials in Solar Cells and Sensors

## CURRENT PROJECTS

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1. (NSTIP) Multifunctional ZnO Nanostructures for Gas Sensing and Magnetic Applications
2. (KACST) New Designation of Multi Layered Polymer Nano Composites For EMI Shielding.
3. (KECA) with (University of British Columbia, Canada) Development of flexible photovoltaic fabric
4. (KECA) with (University of Auckland), New Zealand) Black Nickle Nano Composite Coatings on Steels

## PUBLICATIONS

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1. *Synthesis of Magnetic Nanoparticles and Nanosheets for Oil Spill Removal* Osama Saber · Nermen H. Mohamed · Abdullah A. Al Jaafari  
Nanoscience and Nanotechnology - Asia 04/2015; 5(1)
2. *Novel Dispersion of MWCNTs in Polystyrene Polymer Induced by the Addition of 3-Hydroxy-2-Napthoic Acid* Rami A. Abdel-Rahem · Ayman S. Ayesh · S. S. Ibrahim · Abdullah A. Al-Jaafari · Nadeem S. Sheikh · Essam Yasin  
Journal of Dispersion Science and Technology 01/2015; 36(6)::747–754.
3. *Double-layered Ni-P/Ni-P-ZrO<sub>2</sub> electroless coatings on AZ31 magnesium alloy with improved corrosion resistanc* Xin Shu · Yuxin Wang · Chuming Liu · Abdullah Aljaafari · Wei Gao  
Surface and Coatings Technology 01/2015; 26
4. *Preparation and Characterization of Some Nanometal Oxides Using Microwave Technique and Their Application to Cotton Fabrics* M. Gouda · A. Aljaafari · Y. Al-Fayz · W. E. Boraie  
Journal of Nanomaterials 01/2015; 2015:1-9
5. *Electrical and mechanical properties of  $\beta$ -hydroxynapthoic acid–multiwalled carbon nanotubes–polystyrene nanocomposites* Ayman S Ayesh, SS Ibrahim Abdullah A Al-Jaafari, Rami A Abdel-Rahem, Nadeem S Sheikh, H Mahfoz Kotb,  
Journal of Thermoplastic Composite Materials **2014**
6. *Mechanochemical synthesis and giant dielectric properties of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>* Mol Ahmad, Eman Al-Libidi, Abdullah Al-Jaafari, Syed Ghazanfar, Koji Yamada, Physics A (2014)
7. *Nanostructured electrodes and photoactive layers for efficient, stable and flexible organic photovoltaic devices* P. Servati, B. Gholamkhass, S. Soltanian, R. Rahmanian, N. Mohseni Kiasari, Z. Jiang, F. K. Ko, J. Shen and A. I. Aljaafari, " ECS Transactions 53 (2013) 11–22.
8. *Electrical, optical, and rheological properties of ozone-treated multiwalled carbon nanotubes–polystyrene nanocomposite* Ayman S Ayesh, Sobhy S Ibrahim, Abdullah A Aljaafari, Journal of Reinforced Plastics and Composites March 2013 vol. 32 no. 6 359-370
9. *Dielectric relaxation and rheological properties of single-walled carbon nanotubes reinforced poly(3-octylthiophene-2,5-diyI)* M Abu-Abdeen, Ayman S Ayesh, AA Aljaafari, Journal of Thermoplastic Composite Materials June 2013 vol. 26 no. 5 605-626
10. *Pressure-Induced Phase Transitions of Single-Walled Carbon Nanotubes: Simulations of X-Ray Diffraction* Talla, Jamal A; Al-Sharif, Abdullah; Al-Jaafari, Abdullah; Sabbah, Hussein  
Journal of Computational and Theoretical Nanoscience, Volume 10, Number 11, November 2013, pp. 2631-2635(5)
11. *Improvement of physical characteristics of petroleum waxes by using nano-structured materials* Osama Saber, Nermen Hefny, Abdullah Al Jaafari, Fuel Processing Technology,(2011)

12. **Catalytic Activity and Surface Characteristics of Layered Zn-Al-Si Materials Supported Platinum**, Osama Saber, Heba M. Gobara, Abdullah A. Al Jaafari, *Applied Clay Science* (2011)
13. **Thermophysical and electrical characterization of PVC–SWNT nanocomposites** A.A. Aljaafari , S.S. Ibrahim , T.A. El-Brolossy *Composites: Part A* 42 (2011) 394–399
14. **Controlling the Morphology of Nano-Hybrid Materials** Aljaafari *American Journal of Applied Sciences* 7 (2): 171-177, 2010
15. **Effect of Hydrostatic Pressure on the Electrical Properties of Blend Vulcanizates Loaded with Paraffin Wax** Aljaafari, *Materials and Design* 31 (2010) 3207–3214
16. **Nano-hybrid materials and nano-composite materials based on PVA** O. Saber and A.A. Al Jaafari *International Journal of Nano and Biomaterials* Volume 2, Number 1-5 / 2009
17. **Crosslink Density and Diffusion Mechanisms in Blend Vulcanizates Loaded with Carbon Black and Paraffin Wax** M. Abu-Abdeen,\* A. Alkhateeb *J Appl Polym Sci* 112: 3232– 3240, 2009
18. **Impact of Bi2O3 addition on the normal state properties of Bi3.4Pb0.3Sr2Ca1.3-x RExCu2Oy ceramics** ALJAAFARI Abdullah; SEDKY A.; AL-SAWALHA Ayman *The Journal of physics and chemistry of solids* 2008, vol. 69, n°11, pp. 2919-2923
19. **A Method for Rapid Growth of Metal Nanoparticles on Nanowire Substrates.** A.D. LaLonde, M.G. Norton, D. Zhang, D. Gangadean, A. Alkhateeb, and D.N. McIlroy, *Journal of Nanoparticle Research* 2006, 8(1), 99
20. **Polymer Nanowire Elastic Moduli Measured with Digital Pulsed Force Mode AFM.** Saravanarajan Shanmugham, Jonghwa Jeong, Abdullah Alkhateeb, and D. Eric Aston , *Langmuir* 21(22): 10214-18 (2005).
21. **Potassium chloride nanowire formation inside a microchannel glass array.** Daqing Zhang; Moore, Sam; Jiang Wei; Alkhateeb, Abdullah; Gangadean, Dev; Mahmood, Hasan; Lantrips, Justin; McIlroy, David N.; LaLonde, Aaron D.; Norton, M. Grant; Young, James S.; Chongmin Wang. *Applied Physics Letters*, June, 2005.
22. **Metal coatings on SiC nanowires by plasma-enhanced chemical vapor deposition.** Aaron D. LaLonde, M. Grant Norton, David N. McIlroy, Daqing Zhang, Radhakrishnan Padmanabhan, Abdullah Alkhateeb, Hongmei Han, Nicholas Lane, Zachery Holman. *Journal of Materials Research*, March, 2005
23. **Nanospring Formation – Unexpected Catalyst Mediated Growth.** D. N. McIlroy, Daqing Zhang, A. Alkhateeb, D.E. Aston, Andrew C. Marcy, and M. Grant Norton, , *J. Phys: Condens. Matter*, 2004.
24. **Silicon Carbide Nanosprings.** D.Zhang, A. Alkhateeb, H.Han, H. Mahmood, D. N. McIlroy, and M.G.Norton. *NANO LETTERS*, 2003.
25. **The Effects of Crystallinity and Catalyst Dynamics on Boron Carbide Nanospring Formation.** D.N. McIlroy, D. Zhang, Y. Kranov, H. Han, A. Alkhateeb, and M. Grant Norton, *Journal of Materials Research*, 2002.

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#### PROFESSIONAL MEMBERSHIPS

American Physical Society

Materials Research Society

European Materials Research Society

Saudi Physical Society

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#### LANGUAGES

Arabic and English

AWARDS AND SCHOLARSHIPS RECEIVED

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**Researcher of the Year 2004**

Physics Department, University of Idaho

**Summer Nanotechnology Scholarship 2006**

King Abdulaziz City for Science and Technology.

**Summer Nanotechnology Scholarship 2007**

King Abdulaziz City for Science and Technology.

**Summer Nanotechnology Scholarship 2008**

King Abdulaziz City for Science and Technology.

**Summer Nanotechnology Scholarship 2009**

King Abdulaziz City for Science and Technology.