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المؤهلات العلمية

2017 **PhD** Subject: **Nanotechnology - Physics**
Title: **Synthesis of Gamma and Theta Alumina Phases Complemented With First Principle Calculation**
Department of Physics, Faculty of Science, Universiti Teknologi Malaysia, Skudai, Johor Bahru, Malaysia.
The PhD work was completed under the supervision *of* ***Prof. Dr. Zulkafli Bin Othaman****, and* ***Prof. Dr. Mohammad Alam Saeed***

2010 **M Sc.** Subject: **Physics – Theoretical Physics**
Title: **Linear Optical and Four Wave Mixing Characteristics of Long Wavelength III-Nitride Quantum Dot Semiconductor Optical Amplifiers**
Department of Physics, Faculty of Science, University of Babylon, Iraq.
The M Sc. work was completed under the supervision *of* ***Assist. Prof. Dr. Hameed I. Abood****, and* ***Prof. Dr. Amin H. Al-Khursan***

2005 **B Sc.** Subject: **Physics**
Title: **Solar Cell**
Department of Physics, Faculty of Science, Al- Muthanna University, Iraq.
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البحوث المنشورة

1. **Ahmed S. Jbara**, H. I. Abood, and Amin H. Al-Khursan, "Effect of doping and in-composition on gain of long wavelength III-nitride QDs", *Journal of Optics*, Vol. 41, No. 4 (2012) 214-223.
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2. Amin H. Al-Khursana, **A. Subhi**, H.I. Abood, "Four-wave mixing in long wavelength III-nitride QD-SOAs", *Optik*, Vol. 124, (2013) 4072– 4079.
DOI: http://dx.doi.org/10.1016/j.ijleo.2012.12.061
3. **Ahmed S. Jbara**, Zulkafli Othaman, and M A Saeed, "Effect of size and indium-composition on linear and nonlinear optical absorption of InGaN/GaN lens-shaped quantum dot", *Chin. Phys. B*, Vol. 25, No. 5 (2016) 057801.
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4. Shadab Dabagh, Ali Ati, S.K. Ghoshal, Samad Zare, R. M. Rosnan, **Ahmed S. Jbara**, Zulkafli Othaman, "Cu^{2+} and Al^{3+} co-substituted cobalt ferrite: Structural analysis, morphology and magnetic properties", *Bulletin of Materials Science*, Vol. 39, No. 4 (2016) 1029–1037.
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5. **Ahmed S. Jbara**, Zulkafli Othaman, Ali A. Ati, and M. A. Saeed, "Characterization of gamma-Al_2O_3 nanopowders synthesized by co-precipitation method", *Materials Chemistry and Physics*, Vol. 188, (2016) 24-29.
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6. **Ahmed S. Jbara**, Zulkafli Othaman, and M. A. Saeed, "Structural, morphological and optical investigations of θ-Al_2O_3 ultrafine powder", *Journal of Alloys and Compounds*, Vol. 718, (2017) 1-6.
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7. **Ahmed S. Jbara**, Zulkafli Othaman, H. A. Rahnamaye Aliabad, and M. A. Saeed, "Electronic and Optical Properties of γ- and θ- Alumina by First Principle Calculations", *Advanced Science, Engineering and Medicine*, Vol. 9, No. 4 (2017) 287-293.
DOI: https://doi.org/10.1166/asem.2017.2007
8. **Ahmed S. Jbara**, Zulkafli Othaman, H. A. Rahnamaye Aliabad, and M. A. Saeed, "Investigated electronic and optical properties of γ- and θ-Al_2O_3: First principles calculations", *Advanced Science Letters*, Vol. 24, No. 4 (2018) 3579-3581(3).
DOI: https://doi.org/10.1166/asl.2018.11439
9. **Ahmed S. Jbara**, M. A. Saeed, and Muhammad Umer Saleem, "Theoretical investigation of structural and electronic properties of $BeS_{1-x}Se_x$ alloys for optoelectronic applications", *Optik*, Vol. 179 (2019) 1118–1122.
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10. **Ahmed S. Jbara**, Junaid Munir, Bakhtiar Ul Haq, and M. A. Saeed, "Density functional theory study of mixed halide influence on structures and optoelectronic attributes of $CsPb(I/Br)_3$", *Applied Optic*, Vol. 59, No. 12 (2020) 3751- 3759.
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13. **Ahmed S. Jbara**, Munir, J., Yousaf, M. and Saeed, M.A., "Pressure effect on structures and optoelectronic attributes of mixed halide CsPb (I/Br) 3: a density functional theory study", *Journal of the Optical Society of America A*, Vol. 38, No. 7 (2021) 940-946.
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14. Munir, J., **Ahmed S. Jbara**, Ain, Q., Fatima, K., Noor, N.A., Naeem, H., Jamil, M. and Yousaf, M., "An insight into the electronic, optical and transport properties of promising Zintl-phase BaMg2P2", *Physica B: Condensed Matter*, Vol. 618, No. 1 (2021) 413181.
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15. Junaid Munir, Muhammad Jamil, **Ahmed S. Jbara**, Kaneez Fatima, Quratul Ain, Hamid Ullah, Masood Yousaf, "Spin-polarized electromagnetic and optical response of full-Heusler Co2VZ (Z Al, Be) alloys for spintronic application", *The European Physical Journal Plus*, Vol. 136, No. 10 (2021) 1-18.
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16. Yousaf, M., Younis, M.W., **Jbara, A.S.**, Khan, M.J.I., Murtaza, G. and Saeed, M.A., 2022. Effect of layer sliding on the interfacial electronic properties of intercalated silicene/indium selenide van der Waals heterostructure. *Communications in Theoretical Physics*, 74(3), p.035701.
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17. Sâad Essaoud, S. and **Jbara, A.S.**, 2022. Electronic-structural, thermo-electric, and thermo-mechanical properties of M_2AC and M_2AB (M= Nb or Mo, A= Al or Ga) compounds. *Indian Journal of Physics*, pp.1-10.
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18. **Ahmed S. Jbara**, Zulkafli Othaman, H. A. Rahnamaye Aliabad, and M. A. Saeed, "Investigated electronic and optical properties of γ- and θ-Al_2O_3: First principles calculations", 2nd International Conference on Science, Engineering, and the Social Sciences (ICSESS 2016), 29th May - 1st June, 2016, Universiti Tecknologi Malaysia, Johor Bahru, Malaysia.

19. **Ahmed S. Jbara**, and M. A. Saeed, "Theoretical investigation of structural and electronic properties of $BeS_{1-x}Se_x$ alloys for optoelectronic applications", 6th International Conference on

Education (ICE 2018): Science Beyond Class room, 15-17 March, 2018, University of Education, Lahore, Pakistan.

20. Iman A. Laim, **Ahmed S. Jbara**, and Hadey K. Mohamad, " Structural, and Electronic Properties of ZnX (X=S, Se, Te) By First-principles Calculation", 1st International Conference on Advanced Research in Pure and Applied Science (ICARPAS 2021): 24th-25th March 2021, College of Science, Al-Muthanna University, Samawah, Iraq.

الخبرة في التدريس

منذ 11 سنة الماضية، لقد شاركت في تدريس طلاب المرحلة الجامعية – بكالوريوس - في مواضيع مختلفة مثل: الميكانيك التحليلي، التحليل العددي، الميكانيك الإحصائي

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- مدير قسم شؤون الطلاب **2013 - 2011**
- مدير قسم ضمان الجودة والأداء الجامعي **2020 - 2019**
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الاهتمامات البحثية

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- فيزياء المواد.
- الفيزياء الحاسوبية.

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المؤتمرات/ورش العمل

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1. National Conference of Physics (NCP), 7-8 November, 2012, University of Baghdad and Babylon.

2. 2nd International Conference on Science, Engineering, and the Social Sciences (ICSESS 2016), 29th May - 1st June, 2016, Universiti Tecknologi Malaysia.

ب) حضور في ورش العمل الدولية

1. Writing for Journal Workshop, 07/01/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
2. Science & Technology Track - Forum of Attending VIVA-VOCE, 28/01/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
3. Critical Literature Review Workshop, 30/01/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
4. Talk on Writing a PhD Thesis, 01/02/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
5. How to write a great paper, and get it published in a research journal, 04/03/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
6. COMSOL Multiphysics Seminar and Workshop, 09-10/06/2014, University of Malaya, Kuala Lumpur, Malaysia.
7. COMSOL Multiphysics workshop, 12/03/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
8. Material Characterization by Thermal and Chemical Analysis, 24/08/2015, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.
9. Training of SEM-EDS, 06/04/2016, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.

أيضا، يمكنك أن تجدني

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