

الإسم رابعياً: عمر مرزوق محمد الدوسري
المرتبة العلمية : أستاذ – جامعة الملك سعود

المؤهلات:

- 1- بكالوريوس فيزياء- جامعة الملك سعود 1406هـ (1986م).
- 2- ماجستير فيزياء – جامعة إسكس – المملكة المتحدة 1989م.
- 3- دكتوراة في الفيزياء النظرية – جامعة إسكس – المملكة المتحدة 1994م.
عنوان رسالة الدكتوراه:

Macroscopic Polar Optical Lattice Vibrations and Electron-Phonon
Interaction in Layered Semiconductor structures.

الذبذبات الشبكية الضوئية القطبية المجهرية وتفاعل الإلكترونات والفوتونات في
البناءات المنخفضة لشرائح أشباه الموصلات
التخصص الدقيق للمتقدم: الفيزياء النظرية (أشباه الموصلات) في المدي متناهي الصغر (النانو).

التاريخ الوظيفي والمساهمات الإدارية:

1 (التاريخ الوظيفي: (يتم ترتيبه تنازليا)

- أ) استاذ 2014 في قسم الفيزياء والفلك – جامعة الملك سعود.
 - ب) استاذ مشارك 2008 في قسم الفيزياء والفلك – جامعة الملك سعود.
 - ج) – أستاذ مساعد 1994 في قسم الفيزياء والفلك – جامعة الملك سعود.
 - د) – مدرس تمارين 1993 للمقررات النظرية في جامعة اسكس – المملكة المتحدة.
 - هـ) – معيد 1986-1987 في قسم الفيزياء والفلك – جامعة الملك سعود.
- 2 (المناصب الإدارية: (يتم ترتيبها تنازليا)

أ) رئيس تحرير مجلة جامعة الملك سعود – للعلوم 1439 الى 1445

ب) مستشار في قسم الفيزياء التطبيقية مدينة الملك عبدالعزيز للعلوم والتقنية 2012 الى
2018

ت) عميد كلية العلوم بالدوادمي 1430/6 حتى 1433/3

ث) رئيس قسم الفيزياء والفلك 1426 - 1430/10/23 – جامعة الملك سعود.

- ج) أمين قسم الفيزياء والفلك 1424-1426 هـ - جامعة الملك سعود.
ح) أمين قسم الفيزياء والفلك 1416-1417 هـ - جامعة الملك سعود.

المنح والجوائز والإشراف:

منحة من شركة أبحاث الفضاء البريطانية.

العديد من المنح من الخطة الوطنية و مشاريع من مدينة الملك عبد العزيز

جائزة المراعي للإبداع العلمي 2012.

جائزة المراعي للأبحاث العلمية 2009

الإشراف على رسائل الماجستير و الدكتوراه:

اشرفت على عدد من طلاب وطالبات دكتوراه و الماجستير من (جامعة الملك سعود و جامعات محلية)

المشاركة في المؤتمرات والندوات وأوجه النشاطات الأخرى:

أ - المؤتمرات:

حضور العديد من المؤتمرات المحلية و العالمية.

حضور العديد من ورش العمل في مدينة الملك عبد العزيز.

ب - اللجان:

- عضو لجنة "الإرشاد الأكاديمي والدراسات العليا و الإمتحان الشامل و الشؤون الطلابية " :
قسم الفيزياء والفلك - جامعة الملك سعود - المملكة العربية السعودية .

ج - المجالس:

. عضو مجلس قسم الفيزياء والفلك - كلية العلوم - جامعة الملك سعود.

. محكم للعديد من البحوث في مدينة الملك عبد العزيز للعلوم و التقنية

. محكم للعديد من المجلات العلمية من داخل المملكة و خارج المملكة

. محكم للعديد من رسائل الماجستير و الدكتوراه في المجال العلمي و طرق تدريس الفيزياء.

. حضور العديد من الدورات المقدمة من عمادة تطوير المهارات بجامعة الملك سعود.

خدمة الجامعة والمجتمع:

1- رئيس مجموعة تعديل كتاب الفيزياء للصف الأول الثانوي بالكامل والذي يدرس حالياً.

- 2- تأليف كتابي (العملي) للصف الأول الثانوي للطالب والمعلم (ضمن مجموعة).
- 3- تحكيم وتعديل مجموعة كتب الفيزياء للثانوية المطورة فيزياء (1) و (2) و (3) و (4) (ضمن مجموعة).
- 4- عضو اللجنة العلمية لتطوير مقررات العلوم والرياضيات بوزارة التربية والتعليم.
- 5- عضو لجنة كتابة مصفوف المدى والتتابع للفيزياء – المرحلة الثانوية بوزارة التربية.
- 6- المشاركة في إعداد و تدريب الطلاب المرشحين للإشتراك في اولمبياد الفيزياء 2010 .
- 7- المساهمة مع احدي الشركات لعرض الفيزياء بواسطة الطريقة التفاعلية بإستخدام الحاسب الألى.

8- عضو لجنة المعايير المهنية للمعلمين 2011 – 2012

الأبحاث المنشورة و المقبولة للبحث في مجلات علمية متخصصة محكمة:

- 1- O Al-Dossary, M Babiker and N. C. Constantinou “ Fuchs-Kliewer interface polaritons and their interactions with electron in GaAs/AIAs double heterostructures” Sci. Technol. 7:B91, (1992)(UK).
- 2- N. C. Constantinou, O Al-Dossary and M Babiker “Interaction of electrons with polaritons” J. Phys. C5: 5581, (1993)(UK).
- 3- N. C. Constantinou, O Al-Dossary and B K Ridley “ Dispersion of superlattice optical phonons” Solid St Common. 86: 191, (1993)(UK).
- 4- B K Ridley, O Al-Dossary, N. C. Constantinou and M Babiker “ Continuum model of the optical modes of vibration of an ionic crystal slab” *Phys. Rev. B*50,11701, (1994)(USA).
- 5- O Al-Dossary, M Babiker and N Enfati, "Quantum optics of plasmon polaritons and velocity sum-rules", *Phys. Rev. Vol. A*54, pp 2419, (1996), (USA).
- 6- M Babiker, N Enfati, O Al-Dossary and A Kamli, "Polariton quantisation and cavity QED in low-dimensional systems", invited Talk, Quantum Optics Conference, Palm Cove, Cairns, July 1996 (AUSTRALIA).
- 7- B K Ridley, O Al-Dossary, M Babiker, N A Zakhleniuk and C R Bennett, "Optical phonon tunnelling and the electron scattering rate", *Superlatt. Microstruct.*, vol. 23, pp 201 (1998), (NETHERLAND).

- 8-** V. N. Stavrou, C. R. Bennett, O. Al-Dossary and M. Babiker, "Electron scattering and capture rates in quantum wells", Phys. Rev. Vol. B63, pp 5304 (2001), (USA).
- 9-** T. Barakat, K. Abodayeh, and O. M. Al-Dossary "Exact solutions for vibrational levels of the Morse potential via the asymptotic iteration method " Czechoslovak Journal of Physics, Vol. 56, pp 583, (2006), (CZECH REPUBLIC).
- 10-** T. Barakat, K. Abodayeh, B. Abdallah, and O. M. Al-Dossary "The asymptotic iteration method for the angular spheroidal eigenvalues with arbitrary complex size parameter c " Canadian Journal physics. Vol. 84, pp 291 , (2006), (CANADA).
- 11-** T. Barakat, O. Al-Dossary "Rare $B \rightarrow K^* \nu \bar{\nu}$ decay with polarized K^* in the fourth generation model" Journal of King Saud University (Science), Vol. 19(2), p 1427 (2007) (KSA).
- 12-** T. Barakat, and O. M. Al-Dossary "The asymptotic iteration method for the eigenenergies of the asymmetrical quantum anharmonic oscillator potentials $V(x) = \sum_{j=2}^{2\alpha} A_j x^j$ " International Journal of Modern Physics, Vol. A22, pp 203, (2007), (USA).
- 13-** O.M. Al-Dossary "Morse Potential eigen-energies through the asymptotic iteration method" International Journal of Quantum Chemistry. Vol.16(3), p2040-2046, (2007), (USA).
- 14-** O.M. Al-Dossary " The asymptotic iteration method for the eigenenergies of quartic-sextic anharmonic oscillator potential, Journal of King Saud University (Science), Vol. 21(1), (KSA).
- 15-** T. Barakat, O. M. Al-Dossary and A. A. Alharbi "The Effect of Mie-Type Potential Range on the cohesive Energy of Metallic nanoparticles" international journal of Nanoscience v6 n6 2007
- 16-** Sadiq, Gehad, Huang, Zhen, O M Aldossary, Kais, Sabre" Nuclear-induced time evolution of entanglement of two-electron spins in anisotropically coupled quantum dot " Molecular Physics, Vol. 106, No. 14. (July 2008), pp. 1777-1786.
- 17-** T. Barakat, O. M. Al-Dossary, Isam Hafeeza, "An investigation of the size-dependent cohesive energy and the structural stability of spherical metallic nanoparticles" J. Phys. B: At. Mol. Opt. Phys. **42** No 16 (28 August 2009) 165104 (5pp)
- 18-** Neji Khelifi , Riadh Dardouri, O. M. Al-Dossary and Brahim Oujia "Theoretical study of the electronic structure of LiNa and LiNa+ molecules" Journal of Russian Laser Research Vol. 30, No. 2 2010
- 19-** O. M. Al-dossary " Ordering of Ground State Energy Levels of Two Electron Quantum Dot in a Magnetic Field".Int. J. Theor phys.49 (2010) 1187-1194

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- 59- Omar Al-Dossary, Neji Khelifi, Marwa Slama, and Mounir Ben El Hadj Rhouma " Theoretical Calculations of the Lowest Electronic States of O₂ Using Multireference Configuration Interaction (MRCI) Method" *Journal of Advanced Physics* Vol. 3, pp. 1–5, 2014
- 60- Rajesh Kumar, Girish Kumar, O. Al-Dossary, and Ahmad Umar "ZnO nanostructured thin films: Depositions, properties and applications—A review" *Mater. Express*, Vol. 5, No. 1, 2015
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- 80- Omar M Aldossary, A Al Rsheed" A New Generalized Morse Potential Function for Calculating Cohesive Energy of Nanoparticles" *Energies* V 13 Issue 13, 2020 3323
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