

Prof. Dr. Omar Mustafa

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PERSONAL DATA

Date and Place of Birth: 28/11/1961, Nablus - Palestine.
Nationality: Palestinian + Jordanian passport + TRNC
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ACADEMIC QUALIFICATIONS

- 1991 PhD in Theoretical Particle/Mathematical Physics, METU, Ankara - TURKEY.
- 1987 MS in Mathematical Physics, METU Ankara - TURKEY.
- 1984 BS in Physics, Yarmouk University, Irbid-JORDAN.

WORK EXPERIENCE

- 1984-1985 Teacher of Physics, Al-Farouq Secondary School, Nablus, Palestine
- 1989 -1991 Research Assistant, Dept. of Phys. METU, Ankara TURKEY
- 1992-Feb 29, 1995 Asst. Prof., Dept of Phys, EMU Famagosta.- TRNC.
- March 1, 1995-Feb 29,2002 Assoc. Prof. Dept of Phys, EMU Famagosta.- TRNC.
- March 1, 2002 Prof. Dept of Phys, EMU Famagosta.- TRNC.
- Oct. 11, 2002 Prof. representative in the Faculty Board of A&S, EMU Famagosta.- TRNC.
- Dec 26 2002, Arab Students' Advisor, EMU Famagosta.- TRNC.
- Nov. 5. 2003, EMU Senator, EMU Famagosta.- TRNC.
- July 5. 2004-Oct. 10, 2005, Phys. & Chem. Dept. Chair person, EMU Famagosta-TRNC..
- Oct. 11, 2005-2006 Prof. representative in the Faculty Board of A&S, EMU Famagosta.- TRNC.
- Oct. 11, 2008-2009 Prof. representative in the Faculty Board of A&S, EMU Famagosta.- TRNC.

LANGUAGES

Arabic (native), English (excellent), and Turkish (excellent).

RESEARCH INTERESTS

- Mathematical methods in quantum mechanics.
- Pseudo-perturbation theories.
- Anharmonic, spiked harmonic, Singular- harmonic, and quasi-relativistic harmonic oscillators.
- Magnetic fingerprints for the spectra of one- and two-electron quantum dots.
- Quarkonium mass spectroscopy and decay widths.
- Quasi-exact (conditional) solvability of some quantum mechanical systems
- PT-symmetric Quantum Mechanics.
- Supersymmetric quantum mechanics.
- Pseudo-Hermiticity of non-Hermitian Hamiltonians.
- Point canonical transformation and position-dependent mass Hamiltonians.
- Position-dependent-mass and ordering ambiguity.
- Position-dependent-mass and ordering ambiguity in the non-Hermitian settings.
- Position-dependent-mass scatterers.

COURSES THAT I HAVE TAUGHT

- General Physics (Phys. 101, Phys. 102, Phys. 205, Phys. 206).
- Modern Physics (Phys. 201).
- Electromagnetic Fields (Phys. 222).
- Quantum Mechanics (Phys. 551).
- Methods in Mathematical Physics (Phys. 511).
- Relativistic Quantum Mechanics (Phys. 652).

REFERENCES

1- Prof. Dr. Ramazan Sever:	Department of Physics, Middle East Technical University (METU), Ankara -TURKEY. Tel: +90-312-210 32 92 Fax: +90-312-210 1281 Email: sever@metu.edu.tr
2- Prof. Dr. Ahmet Eris:	Email: ahmet.eris@emu.edu.tr .
3- Prof. Dr. Miloslav Znojil:	Theoretical Mathematical Group, Institute of Nuclear Physics, AV CR, 250 68 Rez, Prague, Czech Republic. Tel: 00420 2 6617 3286, and Doppler Institute of Mathematical Physics, Fac. Nucl. Sci. and Phys. Eng., Czech Technical University, 115 19 Prague, Czech Republic. Email: znojil@ujf.cas.cz.
4- Prof. Dr. Tekin Dereli:	Department of Physics, College of Arts & Sciences, Koc University, Itanbul-Turkey. Tel +90 212 338 15 10 Email: tdereli@ku.edu.tr

M.Sc. STUDENTS

1. SAIT BAKI: “*Nodeless - states of Schrodinger equation via a shifted – L expansion technique*”, 1998.
2. IBAHIM YASAR: “*Two – electron quantum dot via PSLET*”.2001.
3. OZLEM ONVER: “*Application of quantum mechanical models in nano-technology:Krong - Penney model*”. 2003.
4. Majeed Saleem Saty: “*Radial power-law postion-dependent mass, Cylindrical coordinates and spectral signatures*” 2015.
5. Ibrahim Mustafa Abdulrahman: “*Position-dependent mass lagrangians: Nonlocal transformation, Euler-Lagrange Invariance and exact solvability*” 2016.
6. Fakhir Omer Hama: “*Deformed Schioberg-type potential and rotational-vibrational spectra for some diatomic molecules*” 2017.

Ph.D. STUDENTS

1. MAEN ODEH: “*Pseudo-perturbative shifted – l expansion technique*”, 2001.
2. S. HABIB MAZHARIMOUSAVI: “*Hermitian and pseudo-Hermitian position dependent mass Hamiltonians*”. 2008.

3. ZEINAB ALGADHI "*PDM-charged particles in magnetic fields*" 2020

CONFERENCES ATTENDED

1-	<i>"Mathematical Results in Quantum Mechanics"</i>	Nuclear Physics Institute by the Academy of the Czech Republic, Prague, June 22-26, 1998. Short talk on <i>"The shifted-l expansion technique to eigenvalues of Schrodinger, Dirac, and Klein - Gordon wave equations."</i>
2-	<i>"Mathematical Sciences after the Year 2000; A Prospective View"</i>	American University of Beirut, Lebanon, January 11-15, 1999.
3-	<i>"Analysis and Mathematical Physics"</i>	Lund University, Lund Institute of Technology, Center for Mathematical Sciences, Lund, Sweden, August 16-20, 1999. Short talk on <i>"Bound-states for non-polynomial oscillator potential and Pseudo-perturbative expansion Method."</i>
4-	<i>"6th international workshop on pseudo-Hermitian Hamiltonians in quantum physics"</i>	City University London, UK, 16th -18th of July 2007. Short talk on <i>"Non-Hermitian von Roos Hamiltonian's η-weak-pseudo-Hermiticity, isospectrality and exact solvability"</i>

REVIEW DUTIES:

- 1- Journal of Physics A: Math. and Theor., IOP, Bristol, UK. <http://www.iop.org>
- 2- Physica Scripta, Swedish Academy of Sciences. <http://www.iop.org>
- 3- SIGMA (Symmetry, Integrability and Geometry: Methods and Applications). <http://www.emis.de>
- 4- International Journal of Theoretical Physics: <http://www.springerlink.com/content/1572-9575/>
- 5- American Mathematical Reviews/AMS. <http://www.ams.org/mr-database>.
- 6- International Journal of Modern Physics A. <http://ejournals.wspc.com.sg/ijmpa/ijmpa.shtml>
- 7- International Journal of Modern Physics E. <http://ejournals.wspc.com.sg/ijmpe/ijmpe.shtml>
- 8- Physics Letters A. <http://ees.elsevier.com/pla/default.asp>
- 9- Shota Rustaveli National Science Foundation (SRNSF), Georgia, Peer Reviewer
- 10- Results in Physics.
- 11- Eur. Phys. J. Plus.

LIST OF PUBLICATIONS

1. **O. Mustafa** and R. Sever, **Phys. Rev. A** **43**, 5787 (1991). “Approach to the shifted $1/N$ expansion for the Klein - Gordon equation.” **SCI-journal**.
2. **O. Mustafa** and R. Sever, **Phys Rev A** **44**, 4142 (1991). “Shifted $1/N$ expansion for the Klein - Gordon equation with vector and Scalar potentials.” **SCI-journal**.
3. **O. Mustafa** and R. Sever, **Tr. J. of Physics** **16**, 405 (1992). “Approach to the Shifted $1/N$ Expansion for the Dirac Equation with Vector and Scalar Potential”.
4. S. Ikhdair, **O. Mustafa**, and R. Sever, **Tr. J. of Physics** **16**, 510 (1992). “Light and heavy meson spectra in the shifted $1/N$ expansion method.”
5. S. Ikhdair, **O. Mustafa**, and R. Sever, **Tr. J. of Physics** **17**, 474 (1993). “Bound states of some quark - antiquark potentials.”
6. O. Mustafa and R. Sever, **J. Quant. Spectrosc. Radiat. Transfer.** **49**, 65 (1993). “Approach to the shifted $1/N$ expansion for spin - $1/2$ relativistic particle”. **SCI-journal**.
7. S. Ikhdair, **O. Mustafa**, and R. Sever, **Hadronic Journal** **16**, 57 (1993). “Solution of the Dirac equation for vector and scalar potentials and some applications.” **SCI-journal**.
8. **O. Mustafa**, **J. Phys.: Condens Matter** **5**, 1327 (1993). “The Shifted $1/N$ Expansion for Two - Dimensional Hydrogenic Donor States in an arbitrary Magnetic Field.” **SCI-journal**.
9. **O. Mustafa** and S. C. Chhajlany, **Phys. Rev. A** **50**, 2926 (1994). “Ground - state energies of hydrogenic atoms in a uniform magnetic field of arbitrary strength.” **SCI-journal**.
10. **O. Mustafa**, **J. Phys.: Condens Matter** **8**, 8073 (1996). “On the shifted $1/N$ expansion method for two - dimensional hydrogenic donor states in an arbitrary magnetic field.” **SCI-journal**.
11. **O. Mustafa** and T. Barakat, **Commun. Theor. Phys.** **28**, 257 (1997); arXiv: math-ph/9910040. “Non - relativistic Shifted- 1 Expansion Technique for Three - and Two - Dimensional Schrödinger Equation.” **SCI-journal**.
12. **O. Mustafa** and T. Barakat, **Commun. Theor. Phys.** **29**, 587 (1998); arXiv: math-ph/9910039 “Relativistic Shifted- 1 Expansion Technique for Dirac and Klein-Gordon Equations.” **SCI-journal**.

13. **O. Mustafa** and T. Barakat, **Commun. Theor. Phys.** **30**, 411 (1998); arXiv: math-ph/9910030 “Exact energy eigenvalues of the generalized Dirac - Coulomb equation via a modified similarity transformation”. **SCI-journal**.
14. T. Barakat, M. Odeh, and **O. Mustafa**, **J. Phys. A: Math & Gen** **31**, 3469 (1998); arXiv: math-ph/9910028. “Perturbed Coulomb potentials in Klein - Gordon equation via shifted - l expansion technique.” **SCI-journal**.
15. **O. Mustafa**; “Mathematical Results in Quantum Mechanics”. Nuclear Physics Institute by the Academy of the Czech Republic, Prague, June 22-26, 1998. “The shifted-l expansion technique to eigenvalues of Schrödinger, Dirac, and Klein - Gordon wave equations.”
16. **O. Mustafa** and M. Odeh, **J. Phys. B: At. Mol. Opt. Phys.** **32**, 3055 (1999); arXiv: math-ph/9910027. “Bound-states for spiked harmonic oscillators and truncated Coulomb potentials”. **SCI-journal**.
17. **O. Mustafa** and M. Odeh, **J. Phys. A: Math & Gen** **32**, 6653 (1999); arXiv: math-ph/9910019. “Quasi-relativistic harmonic oscillators bound states”. **SCI-journal**.
18. **O. Mustafa**; Conference on analysis and Mathematical Physics, Lund University, Lund - Sweden, 1999; arXiv: math-ph/0101029. “Pseudo-perturbation expansion method; the non-polynomial, cutoff-Coulomb, and Coulomb plus logarithmic potentials”.
19. **O. Mustafa** and M. Odeh, **Commun. Theor. Phys.** **33**, 469 (2000); arXiv: math-ph/9910050. “2D H-atom in an arbitrary magnetic field via pseudo-perturbative expansions through the quantum number l.” **SCI-journal**.
20. **O. Mustafa** and M. Odeh, **Eur. Phys. J. B** **15**, 143 (2000); arXiv: quant-ph/0001038. “ Anharmonic oscillators energies via artificial perturbation method.” **SCI-journal**.
21. **O. Mustafa** and M. Odeh, **J. Phys. A: Math. & Gen** **33**, 5207 (2000); arXiv: math-ph/0006004. “ Part of the D - dimensional Spiked harmonic oscillator spectra” **SCI-journal**.
22. **O. Mustafa** and M. Odeh, **J. Phys. A: Math. & Gen** **33**, 7013 (2000); arXiv: math-ph/0009014. “Bound-states for truncated Coulomb potentials” **SCI-journal**.
23. **O. Mustafa** and M. Odeh, **Czech. J. Phys.** **51**, 199 (2001); arXiv: math-ph/0007019. “Energy levels of neutral atoms via a new perturbation method.” **SCI-journal**.
24. **O. Mustafa**, **Czech. J. Phys.** **52**, 351 (2002); arXiv: math-ph/0101030. “ On the quasi-exact solvability of a singular potential in D-dimensions; confined and unconfined” **SCI-journal**.

25. **O. Mustafa**; arXiv: cond-mat/0102125. Comment on “ Spectroscopic structure of two interacting electrons in a quantum dot by the shifted $1/N$ expansion Method”.
26. **O Mustafa**; arXiv: cond-mat/0107179. “On the correlation energies for two interacting electrons in a parabolic quantum dot”.
27. **O Mustafa** and M. Odeh; **Czech. J. Phys.** **52**, **795 (2002)**; arXiv: math-ph/0010030. “Magnetic fingerprints on the spectra of one - electron and two - electrons interacting in parabolic quantum dots”. **SCI-journal**.
28. M. Znojil, F. Gemperle, and **O. Mustafa**; **J. Phys. A** **35**, **5781 (2002)**: arXiv: hep-th/0205181. “Asymptotic solvability of an imaginary cubic oscillator with spikes” **SCI-journal**.
29. **O Mustafa** and M. Znojil; **J. Phys. A** **35**, **8929 (2002)**; arXiv: math-ph/0206042, “PT- symmetric pseudo-perturbation recipe; an imaginary cubic oscillator with spikes” **SCI-journal**.
30. **O. Mustafa**; **J. Phys. A** **35**, **10671 (2002)**. Reply to Comment “On large-N expansion.” **SCI-journal**.
31. **O. Mustafa**; **J. Phys. A** **36**, **5067 (2003)** ; arXiv: math-ph/0301017. “Dirac and Klein-Gordon particles in complex Coulombic fields; a similarity transformation” **SCI-journal**.
32. **O. Mustafa**, **Czech J Phys** **53**, **433 (2003)**; arXiv: cond-mat/0102125. “On the spectroscopic structure of two interacting electrons in a quantum dot.” **SCI-journal**.
33. **O. Mustafa**, **Czech J Phys.** **54**, **529 (2004)**; arXiv: math-ph/0307023. “Perturbed-Coulombic potentials in Dirac and Klein-Gordon equations”. **SCI-journal**.
34. M. Odeh and **O. Mustafa**, “Spectra of 2D H-donors in magnetic fields and their Zeeman splitting” Chapter in “Focus on Numerical Analysis”, (2006). Editor J.P. Liu, pp 133-143, Nova Science Publishers, Inc. ISBN 1-59454-453-0.
35. **O. Mustafa** and S. Habib Mazharimousavi, **J. Phys. A: Math. & Gen.** **39**, **10537 (2006)**: arXiv: math-ph/0602044 “d-dimensional generalization of the Point Canonical Transformation for a quantum particle with position dependent mass”. **SCI-journal**.
36. **O. Mustafa** and S. Habib Mazharimousavi, **Phys. Lett. A** **358**, **258 (2006)**: arXiv: quant-ph/0603134 “Quantum particles trapped in a position-dependent mass barriers; a d-dimensional recipe”. **SCI-journal**.
37. **O. Mustafa** and S. Habib Mazharimousavi, **Czech. J. Phys.** **56**, **967 (2006)**: arXiv: quant-ph/0601017 “Non-Hermitian d-dimensional Hamiltonians with position dependent mass and their η -Pseudo-Hermiticity generators”, **SCI-journal**.

38. **O. Mustafa** and S. Habib Mazharimousavi, **Phys. Lett. A** **357**, 295 (2006): arXiv: quant-ph/0604106 " η -weak-pseudo-Hermiticity generators and exact solvability". **SCI-journal**.
39. **O. Mustafa** and S. Habib Mazharimousavi, **Int. J. Theor. Phys.** **46**, 1786 (2007): arXiv: quant-ph/0607158 "Ordering ambiguity revisited via position dependent mass pseudo-momentum operators" **SCI-journal**.
40. **O. Mustafa** and S. Habib Mazharimousavi, **J. Phys. A: Math. Theor.** **40**, 863 (2007): arXiv: quant-ph/0611288 Comment on "Position-dependent effective mass Dirac equation with PT-symmetric and non-PT-symmetric potentials". **SCI-journal**.
41. **O. Mustafa** and S. Habib Mazharimousavi, **Int. J. Theor. Phys.** **47**, 446 (2008): arXiv: quant-ph/0607030 "First-order intertwining operators with position dependent mass and η -weak-pseudo-Hermiticity generators", **SCI-journal**.
42. **O. Mustafa** and S. Habib Mazharimousavi **Int. J. Theor. Phys.** **47**, 1112 (2008): arXiv: quant-ph/0611149 "(1+1)-Dirac particle with position-dependent mass in complexified Lorentz scalar interactions: effectively PT-symmetric", **SCI-journal**.
43. **O. Mustafa**, **Int. J. Theor. Phys.** **47**, 1300 (2008): arXiv: quant-ph/0703078 "Energy-levels crossing and radial Dirac equation: Supersymmetry and quasi-parity spectral signatures", **SCI-journal**.
44. **O. Mustafa** and S. Habib Mazharimousavi **Int. J. Theor. Phys.** **47**, 2029 (2008): arXiv: hep-th/0601017 " η -weak-pseudo-Hermiticity generators and radially symmetric Hamiltonians". **SCI-journal**.
45. **O. Mustafa** and S. Habib Mazharimousavi **J. Phys. A: Math. Theor.** **41**, 244020 (2008): arXiv: quant-ph/0707.3738 "Complexified von Roos Hamiltonian's η -weak-pseudo-Hermiticity, isospectrality and exact solvability". **SCI-journal**.
46. **O. Mustafa** and S. Habib Mazharimousavi (2008): arXiv: 0806.2982 "Non-Hermitian PT-symmetry and Hermitian Hamiltonians' correspondance: Isospectrality and mass signature".
47. **O. Mustafa** and S. Habib Mazharimousavi, **Phys. Lett. A** **373**, 325 (2009): arXiv: 0807.3030 "A singular position-dependent mass particle in an infinite potential well" **SCI-journal**.
48. **O. Mustafa** and S. Habib Mazharimousavi **Int. J. Theor. Phys.** **48**, 183 (2009): arXiv: 0801.3572 "Spherical-separability of non-Hermitian Hamiltonians and pseudo-PT-symmetry". **SCI-journal**.
49. **O. Mustafa** and S. Habib Mazharimousavi **Phys. Scr.** **82**, 065013 (2010): arXiv:0906.4534. "A quasi-free position-dependent-mass jump and self-scattering correspondence". **SCI-journal**

50. S. Habib Mazharimousavi and **O. Mustafa**; **SIGMA 6, 088 (2010)**: arXiv: 1003.3003 "Flatland position dependent mass; Polar coordinates, separability and exact solvability". **SCI-Expanded-journal**
51. **O. Mustafa**: **J. Phys. A: Math. Theor. 43, 385310 (2010)** arXiv: 0051757 "Position-dependent-mass; Cylindrical coordinates, separability, exact solvability, and \mathcal{PT} -symmetry", **SCI-journal**.
52. **O. Mustafa**: **J. Phys. A: Math. Theor. 44, 355303 (2011)** arXiv:1104.1353: "Radial power-law position-dependent mass; Cylindrical coordinates, separability, and spectral signatures" **SCI-journal**.
53. **O. Mustafa**: **Mod. Phys. Lett. A, Vol. 28, No. 19 (2013) 1350082** arXiv:1108.5536: "Auxiliary quantization constraints on the von Roos ordering-ambiguity at zero binding energies; azimuthally symmetrized cylindrical coordinates". **SCI-journal**.
54. **O. Mustafa**: arXiv:1108.5868: "On Dirac equation for a Coulomb scalar, vector, and tensor interaction"
55. S. Habib Mazharimousavi and **O. Mustafa**: **Physics Scripta 87 (2013) 055008** arXiv:1208.1095 "Classical and quantum quasi-free position dependent mass; Pöschl-Teller and ordering-ambiguity". **SCI-journal**.
56. **O. Mustafa**: arXiv:1208.2109: "Comment on the "Classical and quantum position-dependent mass harmonic oscillators" and ordering-ambiguity resolution".
57. **O. Mustafa**: **Cent. Eur. J. Phys.11 (2013) 480** arXiv:1210.0102 "(1+1)-Dirac bound states in one-dimensional heterostructures; position-dependent Fermi velocity and mass". **SCI-Expanded-journal**
58. **O. Mustafa**: **J. Phys. A: Math. Theor. 46 (2013) 368001** arXiv:1304.5331 "Comment on 'Nonlinear dynamics of a position-dependent mass-driven Duffing-type oscillator' " **SCI-journal**.
59. **O. Mustafa**: **J. Phys. B: At. Mol. Opt. Phys. 48 (2015) 065101**. arXiv:1407.1122, "On the ro-vibrational energies for the lithium dimer; maximum-possible rotational levels" **SCI-journal**.
60. **O. Mustafa**: **Phys. Scr. 90 (2015) 065002**. arXiv:1409.6986, "A new deformed Schioberg-type potential and ro-vibrational energies for some diatomic molecules " **SCI-journal**.
61. **O. Mustafa**: **J. Phys. A: Math. Theor. 48 (2015) 225206**. arXiv:1411.4405 "Position-dependent mass Lagrangians: nonlocal transformations, Euler-Lagrange invariance and exact solvability" **SCI-journal**.

62. **O. Mustafa** and Zeinab Algadhi: **Eur. Phys. J. Plus** **134** (2019) **228**. **arXiv: 1806.02983** "Position-dependent mass momentum operator and minimal coupling: point canonical transformation and isospectrality" **SCI-journal**.
63. **O. Mustafa:** **J. Phys. A** **52** (2019) **148001** Comment on "Two-dimensional position-dependent massive particles in the presence of magnetic fields" **SCI-journal**.
64. **O. Mustafa:** **arXiv: 1705.03246** "Two-dimensional position-dependent mass Lagrangians; superintegrability and exact solvability".
65. Zeinab Algadhi and **O. Mustafa** :**Annals of Physics** **418** (2020) **168185** " Landau Quantization for an electric quadrupole moment of Position-Dependent Mass Quantum Particles interacting with Electromagnetic fields " **SCI-journal**.
66. **Omar Mustafa:** **Phys. Lett. A** **384** (2020) **126265** " PDM creation and annihilation operators of the harmonic oscillators and the emergence of an alternative PDM-Hamiltonian" **SCI-journal**.
67. **O. Mustafa** and Zeinab Algadhi: **Chinese Journal of Physics** **65** (2020) **554** " PDM-charged particles in PD-magnetic plus Aharonov-Bohm flux fields: unconfined "almost-quasi-free" and confined in a Yukawa plus Kratzer exact solvability" **SCI-journal**.
68. **O. Mustafa** and Zeinab Algadhi: **Eur. Phys. J. Plus** **135** (2020) **559** " Position-dependent mass charged particles in magnetic and Aharonov-Bohm flux fields: separability, exact and conditionally exact solvability" **SCI-journal**.
69. **O. Mustafa:** **Phys. Scr.** **95** (2021) **065214 (9p)** " n-dimensional PDM non-linear oscillators: Linearizability and Euler-Lagrange or Newtonian invariance" **SCI-journal**.
70. M. A. F. dos Santos, I. S. Gomez, B. G. da Costa, **O. Mustafa:** **Eur. Phys. J. Plus** **136** (2021) **96** "Probability density correlation for PDM-Hamiltonians and superstatistical PDM-partition functions" **SCI-Journal**.
71. **O. Mustafa:** **Eur. Phys. J. Plus** **136** (2021) **249** "Isochronous n-dimensional non-linear PDM-oscillators: linearizability, invariance and exact solvability" **SCI-journal**.
72. **O. Mustafa:** **Phys. Scr.** **96** (2021) **065205** "n-dimensional PDM-damped harmonic oscillators: linearizability, and exact solvability" **SCI-journal**.
73. **O. Mustafa,** **Ann. Phys.** **440** (2022) **168857** "PDM Klein-Gordon oscillators in cosmic string spacetime in magnetic and Aharonov-Bohm flux fields within the Kaluza-Klein theory ". **SCI-journal**.
74. **O. Mustafa,** **Eur. Phys. J. C** **82** (2022) **82** " Confined Klein-Gordon oscillator from a (2+1)-dimensional Gurses to a Gurses or a pseudo-Gurses space-time backgrounds: Invariance and isospectrality". **SCI-journal**.

75. **O. Mustafa, Results in Physics 33 (2022) 105149** "Comment on the "asymmetric variation of a finite mass harmonic like oscillator".
76. **O. Mustafa, Int. J. Geom. Meth. Mod. Phys. 19 (2022) 2250158** " Effect of nonlocal transformations on the linearizability and exact solvability of the nonlinear generalized modified Emden-type equations".
77. **O. Mustafa, Ann. Phys. 446 (2022) 169124** "Confined Klein-Gordon oscillators in Minkowski spacetime and a pseudo-Minkowski spacetime with a space-like dislocation: PDM KG-oscillators, isospectrality and invariance".
78. **O. Mustafa, Phys. Scr. 98 (2023) 015302** "Klein-Gordon particles in Gödel-type Som-Raychaudhuri cosmic string spacetime and the phenomenon of spacetime associated degeneracies".

Published in the American Mathematical Reviews

1. **O. Mustafa**; **MR2281580** by Bagchi, B., Gorain, P. S., Quesne, C., "Morse potential and its relationship with the Coulomb in a position-dependent mass background". **Modern Phys. Lett. A** **21** (2006), no. **36**, 2703–2708.
2. **O. Mustafa**; **MR2303602** by Dasgupta, Ananda; Roy, Dhiranjan; Bhattacharya, Ranjan "Simple systematics in the energy eigenvalues of quantum anharmonic oscillators". **J. Phys. A** **40** (2007), no. **4**, 773–784. **81U05 (34C15)**.
3. **O. Mustafa**; **MR2307728** by Barton, G. On the 1D Coulomb Klein-Gordon equation. **J. Phys. A** **40** (2007), no. **5**, 1011–1031. **81Q05 (35L20 35Q75)**.
4. **O. Mustafa**; **MR2316714** by Killingbeck, J. P. Corrigendum: "Comment on the asymptotic iteration method for polynomial potentials" [**J. Phys. A** **40** (2007), no. **11**, 2819–2824; **MR2320154**]. **J. Phys. A** **40** (2007), no. **16**, 4413. **81Q05 (35Q40)**.
5. **O. Mustafa**; **MR2320154** by Killingbeck, J. P. Comment on the asymptotic iteration method for polynomial potentials. **J. Phys. A** **40** (2007), no. **11**, 2819–2824. **81Q05 (35Q40)**.
6. **O. Mustafa**; **MR2349397** by Soylu, A.; Bayrak, O.; Boztosun, I. An approximate solution of Dirac-Hulthen problem with pseudospin and spin symmetry for any κ state. **J. Math. Phys.** **48** (2007), no. **8**, 082302, 9 pp. **81V35 (81Q05)**.
7. **O. Mustafa**; **MR2372222** by Ikhdaïr, Sameer M.; Sever, Ramazan Approximate eigenvalue and eigenfunction solutions for the generalized Hulthén potential with any angular momentum. **J. Math. Chem.** **42** (2007), no. **3**, 461–471. **81Q05 (33C45 33C90)**.
8. **O. Mustafa**; **MR2398154** by Jain, Sudhir R. Exact solution of the Schrodinger equation for a particle in a regular N -simplex. **Phys. Lett. A** **372** (2008), no. **12**, 1978–1981. **81Q05**.
9. **O. Mustafa**; **MR2390132** by Setare, Mohammad R.; Karimi, Ebrahim Mapping of shape invariant potentials by the point canonical transformation. **Inter. J. Theor. Phys.** **47** (2008), no. **4**, 891–897. **81Q60 (81U15)**.
10. **O. Mustafa**; **MR2455824** by Smilga, A. V. Cryptogauge symmetry and cryptoghosts for crypto-Hermitian Hamiltonians. **J. Phys. A** **41** (2008), no. **24**, 244026, 21 pp. **81Q10 (47N50)**.
11. **O. Mustafa**; **MR2454996** by Graefe, E. M.; Günther, U.; Korsch, H. J.; Niederle, A. E. A non-Hermitian \mathcal{PT} -symmetric Bose-Hubbard model: eigenvalue rings from unfolding higher-order exceptional points. **J. Phys. A** **41** (2008), no. **25**, 255206, 26 pp. **81U15**.

12. **O. Mustafa; MR2493685** by Akcay, H. Dirac equation with scalar and vector quadratic potentials and Coulomb-like tensor potential. **Phys. Lett. A** **373** (2009), no. 6, 616–620. 81Qxx
13. **O. Mustafa; MR2499300** by Barakat, T. Perturbed Coulomb potentials in the Klein-Gordon equation via the asymptotic iteration method. **Ann. Physics** **324** (2009), no. 3, 725–733. 81Q05.
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