Curriculum Vitae

Name: **Dong, Shi-Hai**
Sex: Male
Marital status: married with one son and one daughter.
Birth date and Place: Sept. 22 of 1969, Liaoning Province, China.
Nationality: Mexico
E-mail: dongsh2@yahoo.com
Tel: 0052-55-57296000 ext. 52522
Fax: 0052-55-57296000 ext. 55015

Permanent address:

Prof. Shi-Hai Dong
CIDETEC
Instituto Politécnico Nacional
Unidad Profesional Adolfo López Mateos
A. P. 07700, Mexico D. F.
Mexico

Education

1. Dalian University, Department of Physics, 1989-1993, Bachelor Degree.
2. Liaoning Normal University, Department of Physics, 1993-1996, Master Degree.
3. Institute of High Energy Physics, the Chinese Academy of Sciences, 1996-1999, Ph. D.

Professional Experiences

1. Visiting professor at Physical and Theoretical Chemistry Laboratory, University of Oxford from August 31 of 1999 to November 30 of 1999.
2. Postdoctal fellow at Department of Physics, Kansas State University from December 1, 1999 to October, 2000.
3. Postdoctal fellow (Titular A) at Instituto de Ciencias Nucleares of UNAM (National Autonomous University of Mexico) from October, 2000 to October, 2002.
4. Postdoctal fellow at Instituto Mexicano de Petróleo from October, 2002 to 2004.
5. Distinguished visiting professor at Instituto Mexicano de Petróleo from October, 2004 to 2005.
6. Excellent Program for full Professor (Titular C-Top) at Escuela Superior de Física y Matemáticas, Instituto Politécnico Nacional from 2006 to 2007.
7. Permanent full Professor (Titular C) at Departamento de Física y Matemáticas, Instituto Politécnico Nacional since 2007.
8. Visiting Professor at Department of Physics, Xi'an University of Arts and Science, China from June 24 to July 7, 2006.
9. Visiting Professor at Yancheng Teacher College, Jiangsu, China from December 17 to 31, 2012.

10. Visiting Professor at Department of Physics and Astronomy, Louisiana State University from August, 2013 to July, 2014 (Sabbatical year).
11. Visiting Professor at Yancheng Teacher College, Jiangsu, China from December 22, 2014 to January 3, 2015.
12. Permanent full Professor (Titular C) at CIDETEC, Instituto Politécnico Nacional since 2015.
13. Visiting Professor at Yancheng Teacher College, Jiangsu, China from December 12, 2016 to 23, 2016.
14. Visiting Professor at Yancheng Teacher College, Jiangsu, China from December 17 to 27, 2017.

Editorial Services

1. **Editor, Open Physics (ISI).**
2. **Editorial Board (Academic Editor)**, Advances in High Energy Physics (ISI).
3. **Chief Editor**, Advances in Research.
4. **Editor**, Transactions on Theoretical Physics.
5. **Editor**, Open Journal of Modern Physics.
6. **Editorial Board**, Physical Science International Journal.
7. **Editorial Board,** Journal of Basic and Applied Research international.
8. **Asociated Editor,** Engineering physics and Thermodynamics Journal.
9. **Chief Editor,** Asian Journal of Physical and Chemical Sciences.
10. **Editorial Board**, International Journal of Advanced Applied Physics Research.
11. **Editor,** SciFed Journal of Spintronics & Quantum Electronics.
12. **Chief Editor,** Greener Journal of Physical Sciences.
13. **Editorial Board,** Oriental Journal of Physical Sciences.
14. **Editorial Board**, Semiconductor Science and Information Devices.

Distinctions

1. Regular Member of Mexican Academy of Sciences since 2012.
2. Presea Lázaro Cárdenas 2017, Mexican President Prize, awarded by President Enrique Peña Nieto.
3. SNI Nivel III.

Referee of International Journals

- Foundations of Physics Letters.
- Applied Mathematical Letters.
- American Journal of Physics.
- Physica Scripta.
- Journal of Physics A: Mathematical and General.
- Physics Letters A.

- IEEE Control Systems Society.
- International Journal of Theoretical Physics.
- Springer press, Netherlands (physical science and nanotechnology).
- Central European Journal of Physics.
- Advanced Studies in Theoretical Physics.
- Reviewer of Mathematical Reviews
- Mathematical Problems in Engineering.
- Journal of Mathematical Physics.
- Physica A.
- The Open Nuclear and Particle Physics Journal.
- European Journal Physics D.
- Modern Physics Letters B.
- European Journal Physics B.
- European Physics Letters.
- Annals of Physics.
- Chinese Physics Letters.
- International Journal of Physical Sciences.
- Chemical Physics Letters.
- Communications in Theoretical Physics.
- Advances in High Energy Physics.
- Annales der Physik.
- Sciences in China.
- International Journal of Quantum Chemistry.
- International Journal of Science and Technology Education Research.
- Zeitschrift fuer Naturforschung A.
- Few Body Systems.
- Scientific Research and Essays.
- Journal of Quantum Information Science.
- International Research Journal of Biochemistry and Bioinform.
- World Applied Science Journal.
- Applied Mathematics and Computation.
- Solid State Sciences.
- Journal of Applied Research and Technology.
- Chinese Physics B.
- Acta Physica Sinica.
- Applied Physics.
- Journal of Theoretical and Applied Physics.
- Turkey Journal of Physics.
- European Physics Journal Plus.
- International Journal of Mathematics and Mathematical Sciences.
- The Arabian Journal for Science and Engineering.
- Indian Journal of Physics.
- Revista Mexicana de Física.
- Chinese Physics C.
- Chemical Physics.
- Acta Physica Polonica A.
- Journal of Computers.

- Journal of the Association of Arab Universities for Basic and Applied Sciences
- Education Research Journal.
- Results in Physics.
- Journal of Difference Equations and Applications.
- International Journal of Modern Physics E.
- Physics of Plasma.
- Journal of Mathematics.
- Mathematical Methods in the Applied Sciences.
- Galaxies.
- Physical Research International.
- Journal of Mathematical Chemistry.
- Advances in Mathematical Physics.
- Journal of Computer Engineering and Information Technology.
- Greener Journals.
- International Journal of Modern Physics A.
- Cryogenics.
- Evolving Systems.
- Karbala International Journal of Modern Science.
- The IIOAB Journal.
- Arabian Journal for Science and Engineering.
- Scientia Iranica
- Academic Journal of Engineering Sciences
- Journal of Physics Research and Applications.
- Separation Science and Technology.
- Journal of Symbolic Computation.
- Reports on Mathematical Physics.
- Physics of Plasmas.
- Ukrainian Journal of Physics.
- IEEE Access.
- Quantum Information Proceesing.

Language

1. Chinese. 2. Spanish. 3. English.

Research fields

1. Quantum physics 2. Group theory (symmetry) and its applications 3.Quantum computation.

Conferences

1. Shi-Hai Dong,
   Group theory meeting at Dalian city, from April 26 to May 2 of 1995, China.

2. Shi-Hai Dong,
   Particle physics meeting from December 23 to 30 of 1997, Vietnam.
   Title: The Levinson theorem in 2 dimensions.

3. Shi-Hai Dong,
   The 8th international meeting of mathematical results in quantum mechanics from December 10 to 14 of 2001 at Taxco, México.
   Title: Ladder operators for the Morse potential.

4. Shi-Hai Dong,
   The 2nd international meeting of applied statistical physics from August 28 to 30 of 2003 at Puerto-Vallarta, México.
   Title: A model for fluid-fluid interface with the discontinuity dielectric.

5. Shi-Hai Dong,
   The 5th international meeting of condensed matter physics and computational material sciences from July 10 to 15, 2006 in Lanzhou, China.
   Title: Algebraic approach to position-dependent mass Schrodinger equation with a singular oscillator.

6. Shi-Hai Dong, Xiao-Yan Gu
   The 2007 International Symposium on Nonlinear Dynamics from Oct. 27 to 30 in Shanghai, China.
   Title: Arbitrary l state solutions of the Deng-Fan molecular potential.

7. Shi-Hai Dong et al,
   Quitell 33-congreso de quimicos teoricos de expression latina, 27 de septiembre, 2007, cuba.
   Title: Exact solutions of the s-wave Schrödinger equation with the Manning-Rosen potential.

8. Shi-Hai Dong,
   SPS4 meeting in Saudi Arbia from Nov. 11 to 12, 2008.
   Title: Approximate solutions of Schrodinger equation with some physical potentials.

9. Shi-Hai Dong,
   XXXV QUITEL from September 17 to 22, 2009 at San Andres, Colombia
   Title: The Rotation-Vibration Spectrum for Scarf II Potential.

10. Shi-Hai Dong,
The 8th International Conference on Condensed Matters Theory and Computational Materials Science from July 15 to 19, 2009 at Xiang-Tan, China.
Title: Exact Solutions of the Schrödinger equation with the second Pöschl-Teller l like potential.

11. Shi-Hai Dong,
The 9th International Conference on Condensed Matters Theory and Computational Materials Science from July 4 to 8, 2010 at Dalian, China.
Title: Proper quantization rule.

12. Shi-Hai Dong,
The College Academic Forum on Sept. 24, 2011 at Liaoning Normal University, College of Physics and Electronic Engineering, Dalian, China.
Title: Proper quantization rule.

13. Shi-Hai Dong,
41st International Nathiagali Summer College on Physics and Contemporary Needs" in 2016 from July 18 to 23,Pakistan.
Title: Proper quantization rule.

13. Shi-Hai Dong,
6th International Conference on Control and Optimization with Industrial Applications from July 11 to 13, Azerbaijan.
Title: Radial position-momentum uncertainties for the infinite spherical well and the Fisher entropy.

Seminars

1. Shi-Hai Dong, at UAM-I, February 1 of 2002.
   Title: Schrodinger equation with some anharmonic potentials: wave functions ansatz.

2. Shi-Hai Dong, at Instituto de Física de SLP , July 2 of 2002.
   Title: Non-relativistic and relativistic equation with the Coulomb-like potential in 2+1 dimensions.

3. Shi-Hai Dong, at Instituto de Física de BUAP, August 23 of 2002.
   Title: Non-relativistic and relativistic equation with the Coulomb-like potential in D+1 dimensions.

4. Shi-Hai Dong, at Instituto de Física de la Universidad de Guanajuato, July 16 of 2002.
   Title: The analysis of the Coulomb potential in the lower and higher-dimensional spaces.

5. Shi-Hai Dong, at ESFM de IPN, June 9 of 2004.
   Title: Wave equations in higher dimensions.

6. Shi-Hai Dong, at CINVESTAV in Mérida, June 16 of 2005.
   Title: El segundo hypervirial generalizado y las relaciones de recurrencia para los elementos de matriz radiales.

7. Shi-Hai Dong, at IMP, February 16 of 2006.
   Title: El segundo hypervirial generalizado y las relaciones de recurrencia para los elementos de matriz radiales.

8. Shi-Hai Dong, at ESFM de IPN, March 22 of 2006.
   Title: El segundo hypervirial generalizado y las relaciones de recurrencia para los elementos de matriz radiales.

9. Shi-Hai Dong, at CINVESTAV, September 27, 2007
   Title: Algebraic approach to the position-dependent mass Schrödinger equation for a singular potential.

10. Shi-Hai Dong, at ESFM-IPN, August 19, 2009
    Title: Quantum Systems Solved by a New Approximate Scheme to Centrifugal Term

11. Shi-Hai Dong,
    Seminario en Instituto Mexicano de Petroleo el 4 de noviembre, 2010
    Titulo: Regla de cuantización propia.

12. Shi-Hai Dong,
    Seminario en ESFM de Instituto Politécnico Nacional 3 de noviembre, 2010
    Titulo: Regla de cuantización propia.

13. Shi-Hai Dong, at ESFM-IPN, March 21, 2012
    Title: Interbasis expansions for isotropic harmonic oscillator

14. Shi-Hai Dong, at Yancheng Teachers University, December 29, 2014
    Title: Proper quantization rule

15. Shi-Hai Dong, at UAS, June 10, 2015
    Title: Development of quantization rule in 100 years

16. Shi-Hai Dong, at UAM-I, September 18, 2015
    Title: Development of quantization rule in 100 years

17. Shi-Hai Dong, at Yancheng Teachers University, December 9, 2015
    Title: Construction of a new type shift operators and its application

18. Shi-Hai Dong, at Nanjing Normal University, December 16, 2015
    Title: Development of quantization rule in 100 years

19. Shi-Hai Dong, at Liaoning Normal University, December 18, 2015
    Title: Construction of a new type shift operators and its application

20. Shi-Hai Dong, at Dalian University, October 10, 2017
    Title: Construction of a new type shift operators and its application

21. Shi-Hai Dong, at Liaoning Normal University, October 12, 2017
    Title: Construction of a new type shift operators and its application

22. Shi-Hai Dong, at Guizhou University, December 11, 2017
    Title: Construction of a new type shift operators and its application

23. Shi-Hai Dong, at Universidad Autonoma de Nuevo Leon, 9 de mayo, 2019
    Title: Entanglement measures for W-class states in noninertial frame

24. Shi-Hai Dong, at CINVESTAV, 6 de junio, 2019
    Title: Entanglement measures for W-class states in noninertial frame

Projects participated

1. The National Natural Science Foundation of China and Grant No. LWTZ-1298 from the Chinese Academy of Sciences from 1997-1999.
2. The Climbing Program 8507 of Chinese National Commission of Science and Technology.
3. The National Natural Science Foundation of China (Grant No. 19377103).
4. The support from the Royal Society of London in 1999.
5. The CONACyT, México, under project 32397-E.
6. The DGAPA-UNAM IN 101997.
7. Instituto Mexicano de Cooperación International (Secretaría de Relaciones Exterriores), Mexico.
8. The Support from the Division of Chemical Sciences, Office of Basic Energy Sciences, Office of Energy Research, US Department of Energy.
9. The CONACyT, Mexico, under the project L007E and Co86A and NEGROMEX.

Responsible of projects

1. 20062088-SIP-IPN, Mexico.
   Title: Métodos Matemáticos y sus Aplicaciones en la Física I.
2. 20070914-SIP-IPN, Mexico.
   Title: Métodos matemáticos y sus aplicaciones en la Física II

3. 20080504-SIP-IPN, Mexico.
   Title: Solución aproximada para el potencial de Pöschl-Teller tipo II con término centrífugo
4. 20090513-SIP-IPN, Mexico.
   Title: Soluciones exactas de la ecuación de Schrödinger con segundo potencial Pöschl-Teller
5. 20100297-SIP-IPN, Mexico.
   Title: Regla de cuantización propia
6. 20110491-SIP-IPN, Mexico.
   Title: El método de factorización y sus aplicaciones
7. 20120876-SIP-IPN, Mexico.
   Title: Espectro de la energía para el potencial de Rosen-Morse modificado y sus propiedades termodinámicas
8. 20131150-SIP-IPN, Mexico.
   Title: Entropía de información cuántica
9. 20140772-SIP-IPN, Mexico.
   Title: Entropía de información cuántica para la ecuación de Schrödinger con la masa dependiente de la posición
10. 20150964-SIP-IPN, Mexico.
    Title: Entropía de información cuántica en sistema confinado

11. 20160978-SIP-IPN, Mexico.
    Title: Los cálculos de las integrales definidas para los polinomios asociados universales de Legendre y sus aplicaciones

12. 20170938-SIP-IPN, Mexico.
    Title: Las integrales para los polinomios asociados universales de Legendre via varios métodos

13. 20180677-SIP-IPN, Mexico.
    Title: Estudio de la interacción espín-órbita para el potential de Makarov

14. 20190234-SIP-IPN, Mexico
    Title: La función confluente de Heun y sus aplicaciones a sistemas cuánticos.

15. 266658-CB-16
    Title: Enfoque de independencia de dispositivos en información cuántica
    CONACyT (national level)
    Time: November 1, 2018 to October 31, 21.
    Status: in process.

Teaching activity

1. Quantum mechanics
2. Algebraic method and its application in physics
3. Mathematical methods in Physics

4. Discrete mathematics
5. Quantum Information.

Supervisor of thesis

1) Name: Christian Pacheco García
   Grade: Master.
   Title: Sistemas cuánticos de masa variable
   University: Escuela Superior de Física y Matemáticas, IPN
   Date of examine: September 12, 2008.

2) Name: Alejandro González-Cisneros
   Grade: Master.
   Title: Regla cuantización exacta y sus aplicaciones
   University: Escuela Superior de Física y Matemáticas, IPN
   Date of examine: March 27, 2009.

3) Name: Fernando Adan Serrano Orozco
   Grade: Ph. D.
   Title: Regla Cuantización Propia y sus Alicaciones en Comunicaciones Electrónica
   University: Escuela Superior de Ingeniería Mecánica y Eléctrica, Culhuacán, IPN
   Date of examine: June 29, 2012

4) Name: Blanca Lucía Moreno Ley
   Grade: Master.
   Title: Operadores de desplazamiento para el pozo infinito
   University: Escuela Superior de Física y Matemáticas, IPN
   Date of examine: December 14, 2012

5) Name: Diana Rodrigues-Méndez,
   Grade: Postdoc.

6) Name: Raúl Valencia Torres
   Grade: Master.
   Title: Entropía de información cuántica para el potencial de Rosen-Morse
   University: Escuela Superior de Física y Matemáticas, IPN
   Date of examine: Feberury 3, 2016

7) Name: Carlos Ortega Laurel
   Grade: Ph. D.

Title: Image Cuántica y sus aplicaciones
University: Escuela Superior de Ingeniería Mecánica y Eléctrica, Culhuacán, IPN
Date of examine: March 23, 2017.

8) Name: Gustavo Yañez Navarro
Grade: Ph. D.
Title: Información cuántica de la ecuación de Schrödinger con la masa variable
University: Escuela Superior de Física y Matematicas, IPN
Date of examine: May 30, 2017.

9) Name: Roberto Castro López
Grade: Ph. D.
Title: Celosía de gas cuántico y sus aplicaciones
University: CIDETEC, IPN
Date of examine for predoctorado: June 14, 2018.

10) Name: Eduardo Hernández Márquez
Grade: Ph. D.
Title: Generación de CA a partir de convertidores CD/CD para el manejo de motores: diseño de estrategías de control e implementación
University: CIDETEC, IPN
Date of examine for predoctorado: January 30, 2018.

11) Name: Andrés Emanuel Guerrero Madrigal
Grade: Master.
Title: Application of quantum key distribution to symmetric cipher model
University: CIDETEC, IPN
Date of examine: August 3, 2018.

12) Name: Mario Alberto Mercado Sánchez
Grade: Master.
Title: Fusión de imágenes cuánticas 2D mediante métodos Bayesianos
University: CIDETEC, IPN
Date of examine: June 25, 2018.

13) Name: Ariadna Junuet Torres Arenas
Grade: Master.
Title: Proxy-Blind Signature Scheme for a multi-qubit system

University: CIDETEC, IPN
Status: in process.

14) Name: Qian Dong
Grade: Master.
Title: Quantum Measurs in Quantum Information
University: CIDETEC, IPN
Status: in process.

16. Name: David Castañeda Valle
Grade: Postdoc.
Time: November 1, 2018 to October 31, 2019.
University: CIDETEC, IPN.
Status: in process.

Publication List

1. Feng Pan, Shi-Hai Dong, and J. P. Draayer,
A new young diagrammatic method for Kronecker products of O(n) and Sp(2m), J. Phys. A30, 8279 (1997).

2. Zhong-Qi Ma, Shi-Hai Dong, and Xi-Wen Hou,
The symmetric bases of icosahedral group, Journal of Lanzhou University (natural science, in Chinese), Sup. 33, 5 (1997).

3. Feng Pan, Shi-Hai Dong, and J. P. Draayer,
The induced representations of Brauer algebras and the Clebsch-Gordan coefficients of So(n), J. Phys. A31, 8247 (1998).

4. Shi-Hai Dong, Xi-Wen Hou, and Zhong-Qi Ma,
Irreducible bases and correlations of spin states for double point groups, Inter. J. Theo. Phys. 37, 841 (1998).

5. Xi-Wen Hou, Mi Xie, Shi-Hai Dong, and Zhong-Qi Ma,
Overtone spectra and intensities of tetrahedral molecules in boson-realization models, Ann. Phys. (New York) 263, 340 (1998).

6. Xi-Wen Hou, Shi-Hai Dong, and Zhong-Qi Ma,
Algebraic approach to vibrational spectra of tetrahedral molecules: a case study of silicon tetrafluoride, Chem. Phys. Lett. 283, 174 (1998).

7. Xi-Wen Hou, Shi-Hai Dong, and Zhong-Qi Ma,
Algebraic model applied to vibrations in the electronic ground state of NO2, Comm. Theo. Phys. 30, 355 (1998).

8. Xi-Wen Hou, Shi-Hai Dong, and Zhong-Qi Ma,
Vibrational spectrum of methane in algebraic method, Chinese Physics Letters Vol. 15 (4), 260 (1998).

9. Shi-Hai Dong, Xi-Wen Hou, and Zhong-Qi Ma,
The Levinson theorem for the non-local interactions in two dimensions, J. Phys. A31, 7501 (1998).

10. Shi-Hai Dong, Xi-Wen Hou, Mi Xie, and Zhong-Qi Ma,
Irreducible bases in Icosahedral group space, Inter. J. Theo. Phys. 37, 2135 (1998).

11. Shi-Hai Dong, Xi-Wen Hou, and Zhong-Qi Ma,
The Levinson theorem for the Schrödinger equation in two dimensions, Phys. Rev. A 58, 2790 (1998).

12. Shi-Hai Dong, Xi-Wen Hou, and Zhong-Qi Ma,
Relativistic Levinson theorem in two dimensions, Phys. Rev. A 58, 2160 (1998).

13. Shi-Hai Dong, and Zhong-Qi Ma,
Exact solutions to the Schrödinger equation for the potential V(r)=a r2+b r-4+c r-6 in two dimensions, J. Phys. A 31, 9855 (1998).

14. Mi Xie, Xi-Wen Hou, Shi-Hai Dong, and Zhong-Qi Ma,
The vibrational spectrum of methane in an extended boson-realization model, Comm. Theo. Phys. 31, 161 (1999).

15. Xi-Wen Hou, Shi-Hai Dong, and Zhong-Qi Ma,
Fermi resonance-algebraic model for molecular vibrational spectra, Sciences in China A 42, 207 (1999).

16. Shi-Hai Dong, Xi-Wen Hou, and Zhong-Qi Ma,
Levinson's theorem for the Klein-Gordon equation in two dimensions, Phys. Rev. A 59, 995 (1999).

17. Shi-Hai Dong, Zhong-Qi Ma, and G. Esposito,
Exact solutions of the Schrödinger equation with inverse-power potential, Found. Phys. Lett. 12, 465 (1999).

18. Xi-Wen Hou, Shi-Hai Dong, Zong-Liang Fang, and Zhong-Qi Ma,
Algebraic description of anharmonic stretching vibrations, J. Mole. Spec. 195, 132 (1999).

19. Shi-Hai Dong, and Zhong-Qi Ma,
Levinson's theorem for the Schrödinger equation in one dimension, Inter. J. Theo. Phys. 39(2), 469 (2000).

20. Shi-Hai Dong,
Exact solution of the two-dimensional Schrödinger equation with certain central potentials, Inter. J. Theo. Phys. 39 (4), 1119 (2000).

21. Shi-Hai Dong,
Levinson's theorem for the Klein-Gordon equation in one dimension, E. Phys. J. D 11, 159(2000).

22. Shi-Hai Dong,
Levinson's theorem for the non-local interaction in one dimension, Inter. J. Theo. Phys. 39, 1529(2000).

23. Mark S Child, Shi-Hai Dong, and Xiao-Gang Wang,
Quantum states of a sextic potential: hidden symmetry and quantum monodromy, J. Phys. A 32, 5653 (2000).

24. Shi-Hai Dong, Xi-Wen Hou, Zhong-Qi Ma,
Correlations of spin states for icosahedral double group, Inter. J. Theo. Phys. 40, 569 (2001).

25. Shi-Hai Dong,
A new approach to the relativistic Schrödinger equation with central potential: Ansatz method, Inter. J. Theo. Phys. 40, 559 (2001).

26. Shi-Hai Dong,
Schrödinger equation with the potential $V(r)=Ar-4+Br-3+Cr-2+Dr-1, Physica Scripta 64, 273 (2001).

27. Shi-Hai Dong, and R. Lemus,
Ladder operators for the modified Pöschl-Teller potential, Int. J. Quan. Chem. 86, 265 (2002).

28. Shi-Hai Dong, and R. Lemus,
The overlap integral of three associated Legendre polynomials, App. Math. Lett. 15, 541 (2002).

29. Shi-Hai Dong, R. Lemus and A. Frank,
Ladder operators for the Morse potential, Int. J. Quan. Chem. 86, 433 (2002).

30. Shi-Hai Dong, and Zhong-Qi Ma,
The (2+1) Dirac equation with a delta potential, Found. Phys. Lett. 15(2), 171 (2002).

31. Shi-Hai Dong,
Quantum monodromy in the spectrum of Schrödinger equation with a decatic potential, Int. J. Theo. Phys. 41(1), 89 (2002).

32. Shi-Hai Dong,
The SU(2) realization for the Morse potential and its coherent states, Can. J. Phys. 80, 129 (2002).

33. Shi-Hai Dong,
On the solutions of the Schrödinger equation with some anharmonic potentials: wave function

ansatz, Physica Script. 65, 289 (2002).

34. Shi-Hai Dong,
Algebraic approach to the Morse potential and its coherent states, Z. Phys. Chem. 216 , 103 (2002).

35. Shi-Hai Dong,
The ansatz method for analyzing Schrödinger equation with three anharmonic potentials in D dimensions, Foundation of Physics Letters 15(4), 385(2002).

36. Shi-Hai Dong, and Zhong-Qi Ma,
The hidden symmetry for the quantum system with the infinitely deep square-well potential, Am. J. Phys. 70(5), 520(2002).

37. Shi-Hai Dong , and Zhong-Qi Ma,
Non-relativistic Levinson's theorem in D dimensions, Phys. Rev. A. 65, 042717 (2002).

38. Shi-Hai Dong, and Zhong-Qi Ma,
Algebraic approach to the pseudoharmonic potential in 2D, International Journal of Modern Physics E 11(2), 155 (2002).

39. Shishan Dong, and Shi-Hai Dong,
An alternative approach to study the dynamical group for the modified Pöschl-Teller potential, Czechoslovak Journal of Physics. 52(6), 753 (2002).

40. Shi-Hai Dong,
Comment on "A single-sum expression for the overlap integral of two associated Legendre polynomials", J. Phys. A: Math. Gen. 35, 4187 (2002).

41. Shishan Dong, and Shi-Hai Dong,
A realization of dynamic group for an electron in a uniform magnetic field, Int. J. Mod. Phys. E. 11(4), 265 (2002).

42. Xiao-Yan Gu, Zhong-Qi Ma, and Shi-Hai Dong,
Exact solutions of the Dirac equation for a Coulomb potential in D+1 dimensions, Int. J. Mod. Phys. E. 11(4), 335(2002).

43. Shishan Dong, and Shi-Hai Dong,
Schrödinger equation with a Coulomb field in 2+1 dimensions, Physica Scripta 66, 342 (2002).

44. Shi-Hai Dong,
Unified method for dynamical groups for some anharmonic potentials, Int. J. Theo. Phys. 41, 1991(2002).

45. Lu-Ya Wang, Xiao-Yan Gu, Zhong-Qi Ma, and Shi-Hai Dong,
Exact solutions to D-dimensional Schrödinger equation with a pseudoharmonic oscillator, Foundations of Physics Letters 15(6), 569(2002).

46. Shi-Hai Dong, Xiao-Yan Gu, and Zhong-Qi Ma,
Exact solutions of the Dirac equation with a Coulomb plus scalar potential in 2+1 dimensions, Int. J. Mod. Phys. E. 11(6), 483 (2002).

47. Shi-Hai Dong,
On the bound states of the Dirac equation with a Coulomb potential in 2+1 dimensions, Physica Scripta 67(2), 89 (2003).

48. Shi-Hai Dong,
The realization of dynamical group for the pseudoharmonic oscillator, Applied Mathematical Letters 16(2), 199(2003).

49. Shi-Hai Dong,
The Dirac equation with a Coulomb potential in D dimensions, J. Phys. A. 36, 4977 (2003).

50. Shi-Hai Dong, and Zhong-Qi Ma,
Exact solutions to the Dirac equation with a Coulomb potential in 2+1 dimensions, Phys. Lett. A. 312, 78(2003).

51. Shi-Hai Dong, Xiao-Yan Gu, Zhong-Qi Ma and Jiang Yu
The Klein-Gordon equation with a Coulomb potential in D dimensions, Int. J. Mod. Phys. E. 12(4), 555(2003).

52. X. Y. Gu, Z. Q. Ma and S. H. Dong,
The Levinson theorem for the Dirac equation in D+1 dimensions, Phys. Rev. A 67(6), 062715(2003).

53. Shi-Hai Dong, and Guo-Hua Sun,
Quantum spectrum of some anharmonic central potentials: wave functions ansatz, Found. Phys. Lett. 16(4), 357 (2003).

54. Shi-Hai Dong, Guo-Hua Sun, and D. Popov,
Group theory approach to Dirac equation with the Coulomb potential plus scalar potential in D+1 dimensions, Journal of Mathematical Physics 44(10), 4467 (2003).

55. Shi-Hai Dong,
On the Dirac equation with a Coulomb potential in D+1 dimensions, Physica Scripta 67 (5), 377 (2003).

56. Shi-Hai Dong, and Guo-Hua Sun,
The series solutions of non-relativistic equation with the Morse potential, Phys. Lett. A. 314 (4), 261(2003).

57. Shi-Hai Dong, Yu Tang, and Guo-Hua Sun,
On the controllability of a quantum system for the Morse potential with a compact group SU(2), Phys. Lett. A 320, 145 (2003).

58. Shi-Hai Dong, Guo-Hua Sun, Yu Tang
Realization of the dynamical group for the PT-like potential, Int. J. Mod. Phys. E 12 (6), 809 (2003).

59. Shi-Hai Dong and Guo-Hua Sun,
The quantum spectrum of the 2D Dirac equation with a Coulomb potential: power series approach, Physica Scripta 69, 161 (2004).

60. Shi-Hai Dong,
Realization of dynamical group for the generalized Laguerre functions, Computers and Mathematics with Applications 47 (6-7), 1035 (2004).

61. Jiang Yu, Shi-Hai Dong, and Guo-Hua Sun,
Series solutions of the Schrödinger equation with power-dependent mass for the Morse potential, Phys. Lett. A 322, 290 (2004).

62. Jiang Yu, Shi-Hai Dong, and M. Lozada-Cassou,
Complex dynamics in a periodically perturbed electro-chemical system, Journal of Chemical Physics 120 (18), 8389(2004).

63. Shi-Hai Dong, F. Lara-Rosano and G. H. Sun,
The controllability of the pure states for the Morse potential with a dynamical group SU(1, 1), Phys. Lett. A 325(3-4), 218 (2004).

64. Jiang Yu and Shi-Hai Dong,
Exactly solvable potentials for the Schrödinger equation with spatially dependent mass, Phys. Lett. A 325(3-4), 194(2004).

65. Zhong-Qi Ma, Shi-Hai Dong, Xiao-Yan Gu, J. Yu and M. Lozada-Cassou,
The Klein-Gordon equation with the Coulomb plus the scalar potential in D dimensions, Inter. J. Mod. Phys. E 13 (3), 597 (2004).

66. Jiang Yu, Shi-Hai Dong, and M. Lozada Cassou,
Noise-induced coherence in bistable systems with multiple time delays, Physics Review E 69, 056225 (2004).

67. Shi-Hai Dong, Guo-Hua Sun and M. Lozada-Cassou,
An algebraic approach to the ring-shaped non-spherical oscillator, Phys. Lett. A 328 (4-5), 299 (2004).

68. Shi-Hai Dong, and Guo-Hua Sun,
The Schrödinger equation with a Coulomb plus inverse-square potential in D dimensions, Physica Scripta 70(2-3), 94 (2004).

69. Shi-Hai Dong, Guo-Hua Sun, and Jiang Yu,
The Wigner function for a quantum system with an infinitely deep square-well potential, Physica Scripta 70 (4), 207 (2004).

70. Jiang Yu, Shi-Hai Dong, and M. Lozada-Cassou,
Periodic precursors of nonlinear dynamical transitions, Physical Review E 70, 026214(2004).

71. Shi-Hai Dong and M. Lozada-Cassou,
Scattering of the Dirac particle by a Coulomb plus scalar potential in two dimensions, Phys. Lett. A 330(3-4), 168 (2004).

72. M. Lozada-Cassou, Shi-Hai Dong and Jiang Yu,
Quantum features of semiconductor quantum dots, Phys. Lett. A 331, 45-52(2004).

73. Shi-Hai Dong and M. Lozada-Cassou,
On the analysis of the eigenvalues of the Dirac equation with a 1/r potential in D dimensions, Int. J. Mod. Phys. E 13(5), 917 (2004).

74. Wen Chao Qiang and Shi-Hai Dong,
An alternative approach to calculating the mean values rk for Hydrogen-like atom, Physica Scripta 70, 276 (2004).

75. Shi-Hai Dong, Chang-Yuan Chen, and M. Lozada-Cassou,
Some recurrence relations for the relativistic hydrogenic atoms, Phys. Lett. A 333, 193 (2004).

76. Wen-Chao Qiang and Shi-Hai Dong,
SUSYQM and SWKB approaches to the wave equations with hyperbolic potential, Physica Scripta 72, 127 (2005).

77. Shi-Hai Dong and M. Lozada Cassou,
An algebraic approach to the harmonic oscillator plus an inverse square potential in three dimensions, American Journal of Applied Sciences 2(1), 376 (2005)

78. Shi-Hai Dong, Guo-Hua Sun and M. Lozada-Cassou,
On the Dirac equation with the Coulomb plus the scalar potential in D+1 dimensions, International Journal of Quantum Chemistry 102 (2), 147 (2005).

79. Chang-Yuan Chen and Shi-Hai Dong,
Exactly complete solutions of the Coulomb potential plus a new ring-shaped potential, Phys. Lett. A 335, 374 (2005).

80. Shi-Hai Dong, Yu Tang, Guo-Hua Sun, F. Lara-Rosano and M. Lozada-Cassou,
Controllability of the pure states of the Pöschl-Teller potential with a dynamical group SU(2), Annals of Physics 315, 566 (2005).

81. Shi-Hai Dong and M. Lozada-Cassou,
Exact solutions of the Schrödinger equation with the position-dependent mass for a hard-core potential, Phys. Lett. A 337, 313 (2005).

82. Shi-Hai Dong, M. Lozada-Cassou, Yu Jiang and Wen-Chao Qiang,
Exact solutions of the hydrogen-like atoms confined by a potential step, Physica Scripta 71(5), 436

(2005).

83. Shi-Hai Dong, Guo-Hua Sun and M. Lozada-Cassou,
Exact solutions and ladder operators for a new anharmonic oscillator, Physics Letter A 340(1-4), 94(2005).

84. Shi-Hai Dong, Chang-Yuan Chen and M. Lozada-Cassou,
Generalized hypervirial and Blanchard's recurrence relations for radial matrix elements, Journal of Physics B 38, 2211 (2005).

85. Shi-Hai Dong and M. Lozada-Cassou,
Generalized hypervirial and recurrence relations for radial matrix elements in arbitrary dimensions, Mod. Phys. Lett. A 20, 1533(2005).

86. Shi-Hai Dong, Chang-Yuan Chen and M. Lozada-Cassou,
Quantum properties of complete solutions for a new non-central ring-shaped potential, International Journal of Quantum Chemistry 105 (5): 453 (2005).

87. Shi-Hai Dong, Guo-Hua Sun and M. Lozada-Cassou,
An algebraic approach to a harmonic oscillator plus an inverse square potential in two dimensions, International Journal of Modern Physics A 20 (24): 5663 (2005).

88. Shi-Hai Dong and M. Lozada-Cassou,
Exact solutions, ladder operators and Barut-Girardello coherent states for a harmonic oscillator plus an inverse square potential, International Journal of Modern Physics B 19 (28): 4219 (2005).

89. Yu Jiang, Gabriel E. Aguilar-Pineda, A. Antillón, Shi-Hai Dong and M. Lozada-Cassou,
The effects of unequal ionic sizes for an electrolyte in a charged slits, Journal of Collide and Interface Sciences 295, 124 (2006).

90. Shishan Dong, Shi-Hai Dong and M. Lozada-Cassou,
Algebraic approach to a harmonic oscillator plus an inverse squared potential and its recurrence relation, Physica Scripta 73, 173 (2006).

91. Yu Jiang, Shi-Hai Dong, A. Antillón and M. Lozada-Cassou,
Low momentum scattering of the Dirac particle with an asymmetric cusp potential, European Physical Journal C 45 (2): 525 (2006).

92. D. Popov and Shi-Hai Dong,
Photon-added coherent states for the Morse potential, Czechoslovak Journal of Physics 56 (2), 157 (2006).

93. Chang-Yuan Chen and Shi-Hai Dong,
Evaluation of matrix elements of and recurrence relations for the Klein-Gordon equation with a Coulomb field, Physica Scripta 73，511 (2006).

94. Wen-Chao Qiang and Shi-Hai Dong,
Radial position-momentum uncertainties for the Dirac hydrogen-like atoms, Journal of Physics A 39, 8663 (2006).

95. Shi-Hai Dong and M. Lozada-Cassou,
Exact solutions of the Klein-Gordon equation with scalar and vector ring-shaped potentials, Physica Scripta 74(2), 285 (2006).

96. Zhong-Qi Ma, Shi-Hai Dong and Lu-Ya Wang,
Levinson theorem for Dirac equation in one dimension, Phy. Rev. A 74, 012712 (2006).

97. Shi-Hai Dong, M. Lozada-Cassou and Marco A. Arjona L,
Realization of dynamical group for a symmetric well potential tan2(x/a) and its controllability, Int. J. Mod. Phys. A 21, 5833 (2006).

98. Shi-Hai Dong et al,
Hidden symmetries and thermodynamic properties for a harmonic oscillator in the presence of an inverse square interaction, Int. J. Quan. Chem. 102(2), 366 (2007).

99. Zhong-Qi Ma and Shi-Hai Dong,
Generalized hypervirial theorem for D dimensional single particle system and its applications, International Journal of Modern Physics E 16, 179 (2007).

100. Shi-Hai Dong and J. Garcia-Ravelo,
Exact solutions of the s-wave Schrodinger equation with the Manning-Rosen potential, Physica Scripta 75, 307 (2007).

101. Shi-Hai Dong, D. Morales and J. Garcia-Ravelo,
Exact quantization rule and its applications to physical potentials, International Journal of Modern Physics E 16, 189 (2007).

102. Wen-Chao Qiang and Shi-Hai Dong,
Arbitrary l-state solutions of the rotating Morse potential through exact quantization rule method, Phys. Lett. A 363, 169 (2007).

103. Shi-Hai Dong, J. J. Peña and C. Pacheco-Garcia, and J. Garcia-Ravelo
Algebraic approach to the position-dependent mass Schrodinger equation for a singular oscillator, Modern Physics Letters A 22 (14), 1039 (2007).

104. Wen-Chao Qiang and Shi-Hai Dong,
Analytical approximations to the solutions of the Manning-Rosen potential with centrifugal term, Phys. Lett. A 368, 13 (2007).

105. Shi-Hai Dong, Wen-Chao Qiang, Guo-Hua Sun and V. B. Bezerra,
Analytical approximations to the l-wave solutions of the Schrödinger equation with the Eckart potential, J. Phys. A. 40, 10535 (2007).

106. Shishan Dong, J. Garcia-Ravelo and Shi-Hai Dong,
Analytical approximations to the l-wave solutions of the Schrödinger equation with an exponential-type potential, Physica Scripta 76, 393 (2007).

107. Zhong-Qi Ma, A. Gonzalez-Cisneros, Bo-Wei Xu and Shi-Hai Dong,
Energy spectrum of the trigonometric Rosen-Morse potential using an improved quantization rule, Physics Letters A 371, 180 (2007).

108. Wen-Chao Qiang, Shi-Hai Dong,
Radial position-momentum uncertainties for the Klein-Gordon hydrogen-like atoms, J. Physics A: Math. Theor. 41, 055306 (2008).

109. Gao-Feng Wei, Chao-Yun Long, Xiao-Yong Duan and Shi-Hai Dong,
Arbitrary wave scattering state solutions of the Schrödinger equation for the Eckart potential, Physica Scripta 77, 035001 (2008).

110. Xiao-Yan Gu and Shi-Hai Dong,
The improved quantization rule and Langer modification, Phys. Lett. A 372, 1972 (2008).

111. Gao-Feng Wei, Chao-Yun Long, and Shi-Hai Dong,
The scattering of the Manning-Rosen potential with centrifugal term, Phys. Lett. A 372, 2592 (2008).

112. Shi-Hai Dong and Xiao-Yan Gu,
Arbitrary l state solutions of the Schrödinger equation with the Deng-Fan molecular potential, Journal of Physics: Conference Series 96, 012109 (2008).

113. Shishan Dong, G. Miranda S. , M. Enriquez F. , Shi-Hai Dong
Analytical approximations to the l-wave solutions of the Schrödinger equation with a hyperbolic potential, Modern Physics Letters B 22 (7), 483 (2008).

114. Shi-Hai Dong et al,
Energy spectra of the hyperbolic and second Pöschl-Teller like potentials solved by new exact quantization rule, Annals of Physics 323, 1136 (2008).

115. Shi-Hai Dong and Wen-Chao Qiang,
Analytical approximations to the Schrodinger equation for the second Pöschl-Teller like potential with centrifugal term, International Journal of Modern Physics A 23, 1537 (2008).

116. Wen-Chao Qiang and Shi-Hai Dong,
Analytical approximations to the l-wave solutions of the Klein-Gordon equation for a second Pöschl-Teller like potential, Phys. Lett. A 372, 4789 (2008).

117. J. Garcia-Ravelo, J. J. Peña, J. Morales and Shi-Hai Dong,
One-parameter potential from Darboux theorem, Electronic Journal of Theoretical Physics 5 (18), 39 (2008).

118. Wen-Chao Qiang and Shi-Hai Dong
Erratum to: "Analytical approximations to the solutions of the Manning–Rosen potential with centrifugal term" [Phys. Lett. A 368 (2007) 13], Phys. Lett. A. 372, 5860 (2008).

119. C. Hernández, M. A. Arjona, and Shi-Hai Dong,
An object-oriented knowledge-based system for distribution transformer design, IEEE Transactions on Magnetics 44 (10), art. no. 4629411, 2332 (2008).

120. Gao-Feng Wei and Shi-Hai Dong,
Approximately analytical solutions of the Manning-Rosen potential with the spin-orbit coupling term and spin symmetry, Phys. Lett. A 373, 49 (2008).

121. Xiao-Yan Gu, Shi-Hai Dong and Zhong-Qi Ma,
Energy spectra for modified Rosen-Morse potential solved by exact quantization rule, J. Phys. A: Math. Theor. 42, 035303 (2009).

122. Shi-Hai Dong,
A new quantization rule to the energy spectra for modified hyperbolic-type potentials, International Journal of Quantum Chemistry 109, 701 (2009).

123. Gao-Feng Wei, Shi-Hai Dong and V. Bezerra,
The relativistic bound and scattering states of the Eckart potential with a properly new approximate scheme to the centrifugal term, Int. J. Mod. Phys. A 24(1), 161-172 (2009).

124. Gao-Feng Wei, Zhi-Zhong Zhen and Shi-Hai Dong,
The relativistic bound and scattering states of the Manning-Rosen potential with an improved new approximate scheme to the centrifugal term, Central European Journal of Physics 7(1), 175 (2009).

125. Shi-Hai Dong and J. Garcia-Ravelo,
Exact solutions of the Schrodinger equation with the Pöschl-Teller like potential, Modern Physics Letters B 23(4), 603-606 (2009).

126. Wen-Chao Qiang and Shi-Hai Dong,
The Manning-Rosen potential studied by a new approximate scheme to the centrifugal term, Physica Scripta 79, 045004 (2009).

127. Wen-Chao Qiang, Jing-Yang Wu and Shi-Hai Dong,
The Eckart-like potential studied by a new approximate scheme to the centrifugal term, Physica Scripta 79, 065011 (2009).

128. Gao-Feng Wei and Shi-Hai Dong,
The spin symmetry for deformed generalized Pöschl–Teller potential, Phys. Lett. A 373, 2428 (2009).

129. Gao-Feng Wei and Shi-Hai Dong,
Algebraic approach to pseudospin symmetry for Dirac equation with scalar and vector modified Pöschl-Teller potential, EPL 87, 40004 (2009).

130. Wen-Chao Qiang, Shi-Hai Dong,
Proper quantization rule, EPL 89, 10003 (2010).

131. Min-Cang Zhang, Guo-Hua Sun, Shi-Hai Dong,
Exactly complete solutions of the Schrodinger equation with a spherically harmonic oscillatory ring-shaped potential, Phys. Lett. A 374, 704 (2010).

132. Gao-Feng Wei, Shi-Hai Dong,
A novel algebraic approach to spin symmetry for Dirac equation with scalar and vector second Pöschl-Teller potentials, EPJA 43, 185 (2010).

133. M. G. Miranda, Guo-Hua Sun and Shi-Hai Dong,
The solution of the second Pöschl-Teller like potential by Nikiforov-Uvarov Method, Int. J. Mod. Phys. E. 19, 123 (2010).

134. Gao-Feng Wei and Shi-Hai Dong,
Spin symmetry in the relativistic symmetrical well potential including a proper approximation to spin-orbit coupling term, Physica Scripta 81, 035009(2010).

135. Wen-Chao Qiang, Shi-Hai Dong,
The Rotation-Vibration Spectrum for Scarf II Potential, Int. J. Quan. Chem. 110 (13), 2342 (2010).

136. Gao-Feng Wei, Shi-Hai Dong,
Pseudospin symmetry in the relativistic Manning-Rosen potential including a Pekeris-type approximation to the pseudo-centrifugal term, Physics Letters B 686, 288 (2010).

137. F. A. Serrano, X. Y. Gu and Shi-Hai Dong,
Qiang-Dong proper quantization rule and its applications to exactly solvable quantum systems, J. Math. Phys. 51, 082103(2010).

138. Guo-Hua Sun and Shi-Hai Dong,
Exact solutions of Dirac equation for a new spherically asymmetrical singular oscillator, Mod. Phys. Lett. A Vol. 25 (33), 2849(2010).

139. Guo-Hua Sun and Shi-Hai Dong,
A new type of shift operators for circular well in two dimensions, Phys. Lett. A 374, 4112(2010).

140. Gao-Feng Wei and Shi-Hai Dong.
Pseudospin symmetry for modified Rosen-Morse potential including a Pekeris
type approximation to the pseudo-centrifugal term, European Physical Journal A 46, 207 (2010).

141. Shishan Dong, Shi-Hai Dong, H. Bahlouli, and V. B. Bezerra,
Algebraic approach to the Klein-Gordon equation with hyperbolic Scarf potential, Int. J. Mod. Phys. E 20(1), 55(2011).

142. Guo-Hua Sun and Shi-Hai Dong,
New type shift operators for three-dimensional infinite well potential, Mod. Phys. Lett. A 26, 351 (2011).

143. Shi-Hai Dong,
Relativistic treatment of spinless particles subject to a rotating Deng-Fan oscillator, Commu. Theor. Phys. 55, 969(2011).

144. Wen-Chao Qiang, Lei Zhang, Ai-Ping Zhang and Shi-Hai Dong,
Scheme for telepotation of entangled states without Bell-state measurement by using one atom, Physica Scripta 84, 015403 (2011).

145. Xiao-Yan Gu and Shi-Hai Dong,
Energy spectrum of the Manning-Rosen potential including centrifugal term solved by exact and proper quantization rules, J. Math. Chem. 49, 2053(2011).

146. F. A. Serrano, M. Cruz-Irisson, and Shi-Hai Dong,
Proper quantization rule as a good candidate to semiclassical quantization rules, Ann. Phys. (Berlin) **523,** 771(2011).

147. Gao-Feng Wei and Shi-Hai Dong,
Algebraic approach to energy spectra of the Scarf type and generalized Pöschl-Teller Potentials, Can. J. Phys. **89**(12), 1225(2011).

148. Shi-Hai Dong and M. Cruz-Irisson,
Energy spectrum for a modified Rosen-Morse potential solved by proper quantization rule and its thermodynamic properties, J. Math. Chem. **50**, 881(2012).

149. Shi-Hai Dong,
Interbasis expansions for isotropic harmonic oscillator, Phys. Lett. A 376, 1262(2012).

150. Wen-Chao Qiang, Guo-Hua Sun and Shi-Hai Dong,
Real exact solutions to the relativistic spinless particle with modified Rosen-Morse potential and its PT symmetry, Annalen del Physik 524, 360(2012).

151. Gao-Feng Wei, Guo-Hua Sun and Shi-Hai Dong,
Application of the Sturm-Liouville theorem and shape invariance formalism to Dirac equation with hyperbolic like potential, Applied Mathematics and Computation 218, 11171(2012).

152. Guo-Hua Sun and Shi-Hai Dong,
The relativistic treatment of spinless particles subject to a Tietz-Wei oscillator,
Communications in Theoretical Physics 58 (2), 195(2012).

153. Guo-Hua Sun and Shi-Hai Dong,

The Morse potential in momentum space representation, Communications in Theoretical Physics 58 (2), 815(2012).

154. Guo-Hua Sun, Shi-Hai Dong,
Quantum information entropies of the eigenstates for a symmetrically trigonometric Rosen–Morse Potential, Physica Scripta 87, 045003(2013).

155. Chang-Yuan Chen, Yuan You, Fa Lin Lu and Shi-Hai Dong,
The position–momentum uncertainty relations for a Pöschl–Teller type potential and its squeezed phenomena, Phys. Lett. A 377, 1070(2013).

156. Guo-Hua Sun, M. Avila Aoki and Shi-Hai Dong,
Quantum information entropies of the eigenstates for the Pöschl-Teller like potential, Chin. Phys. B. 22, 050302(2013).

157. C. Y. Chen, Y. You, X. H. Wang and S. H. Dong,
Exact Solutions of the Schrödinger Equation with Double Ring-Shaped Oscillator, Phys. Lett. A. 377, 1521(2013).

158. Shishan Dong, Guo-Hua Sun and Shi-Hai Dong,
Arbitrary l-wave solutions of the Schrödinger equation for the Screen Coulomb potential, Int. J. Mod. Phys. E 22 (6), 1350036(2013).

159. David Brandon, Nasser Saad, and Shi-Hai Dong，
On some polynomial potentials in d-dimensions, J. Math. Phys. 54, 082106 (2013).

160. C. Y. Chen, F. L. Lu, D. S. Sun and S. H. Dong,
Analytic Solutions of the Double Ring-Shaped Coulomb Potential in Quantum Mechanics, Chinese Physics B 22(10), 100302(2013).

161. F. A. Serrano and Shi-Hai Dong,
Proper quantization rule approach to three-dimensional quantum dots, Int. J. Quan. Chem. 113, 2282 (2013).

162. Guo-Hua Sun, Shi-Hai Dong and N. Saad,
Quantum information entropies for an asymmetric trigonometric Rosen-Morse potential, Ann. Phys. 525(12), 934(2013).

163. Yuan You, Fa-Lin Lu, Dong-Sheng Sun, Chang-Yuan Chen, and Shi-Hai Dong
Solutions of the second Pöschl-Teller potential solved by an improved scheme to centrifugal term，Few Body System 54, 2125(2013).

164. Geusa de A. Marques, V. B. Bezerra, Shi-Hai Dong,
Solution of the Dirac equation with position-dependent mass in a Coulomb and scalar fields in a conical space-time, Mod. Phys. Lett. A 28(31), 1350137 (2013).

165. D. Popov, S. H. Dong, N. Pop, V. Sajfert, S. Şimon，
Construction of the Barut-Girardello quasi coherent states for the Morse potential, Annals of Physics 339, 122 (2013).

166. M. Avila Aoki, G. H. Sun and S. H. Dong,
Bounds on the quantity of entanglement in parallel quantum computing of a single ensemble quantum computer, Can. J. Phys. 92(2), 159 (2014).

167. Shishan Dong, Guo-Hua Sun, Shi-Hai Dong and J. P. Draager,
Quantum information entropy for a squared tangent potential well, Phys. Lett. A. 378, 124(2014).

168. Dong-Sheng Sun, Yuan You, Fa-Lin Lu, Chang-Yuan Chen, Shi-Hai Dong
Quantum characteristic of a class of complicated double ring-shaped non-central potential, Physica Scripta **89** (2014) 045002.

169. Guo-Hua Sun, K. D. Launey, T. Dytrych, Shi-Hai Dong, J. P. Draayer
A new kind of shift operators for infinite circular and spherical wells, Advances in Mathematical Physics Volume 2014, Article ID 987376, 7 pages.

170. G. Yanez-Navarro, G. H. Sun, T. Dytrich, K. D. Launey, S. H. Dong and J. P. Draayer,
Quantum information entropies for position-dependent mass Schrodinger problem, Ann. Phys. 348 (2014) 153-160.

171. Gao-Feng Wei, Wen-Li Chen, Shi-Hai Dong,
The arbitrary *l* continuum states of the hyperbolic molecular potential, Phys. Lett. A 378, 2367 (2014).

172. Chang-Yuan Chen, Yuan You, Fa-Lin Lu, Dong-Sheng Sun, Shi-Hai Dong
The origin and mathematical characteristics of the super-universal associated-Legendre Polynomials, Commu. Theor. Phys. 62, 331 (2014).

173. Chang-Yuan Chen, Fa-Lin Lu, Dong-Sheng Sun, Yuan You, Shi-Hai Dong
Exact solutions to a class of differential equation and some new mathematical properties for the universal associated-Legendre polynomials, Applied Mathematics Letters 40, 90 (2015).

174. R. Valencia-Torres, Guo-Hua Sun, and Shi-Hai Dong,
Quantum information entropy for a hyperbolical potential function, Physica Scripta 90, 035205 (2015).

175. Guo-Hua Sun and Shi-Hai Dong,
Explicit relations of physical potentials through generalized hypervirial and Kramers' Recurrence relations, Comm. Theor. Phys. 63, 682 (2015).

176. Xu-Dong Song, Guo-Hua Sun and Shi-Hai Dong,
Shannon information entropy for an infinite circular well, Phys. Lett. A 379, 1402 (2015).

177. K. D. Launey, J. P. Draayer, T. Dytrych, Guo-Hua Sun and Shi-Hai Dong,
Approximate symmetries in atomic nuclei, Int. I. Mod. Phys. E 24(5), 1530005 (2015).

178. Guo-Hua Sun, Shi-Hai Dong, T. Dytrych, K. D. Launey, J. P. Draayer,
Shannon information entropy for a hyperbolic double-well potential, Int. Journal of Quantum Chemistry 115, 891 (2015).

179. Guo-Hua Sun, Dusan Popov, O. Camacho-Nieto, Shi-Hai Dong,
Shannon information entropies for position-dependent mass Schrodinger problem with a hyperbolic well, Chin. Phys. B 24 (10), 100303 (2015).

180. Carlos Ortega Laurel, Shi-Hai Dong and M. Cruz-Irisson,
Equivalence of a Bit Pixel Image to a Quantum Pixel Image, Commu. Theore. Phys. 64, 501 (2015).

181. Dušan Popov, Shi-Hai Dong and Miodrag Popov,
Diagonal ordering operation technique applied to Morse oscillator, Annals of Physics 362, 449 (2015).

182. Dong-Sheng Sun, Fa-Lin Lu, Yuan You, Chang-Yuan Chen and Shi-Hai Dong
Parity inversion property of the double ring-shaped oscillator in cylindrical coordinates，Mod. Phys. Lett. A 30, 1550200 (2015).

183. B. J. Falaye, Shi-Hai Dong, K. J. Oyewumi, K. F. Ilaiwi and S. M. Ikhdair
Massive fermions interacting via a harmonic oscillator in the presence of a minimal length uncertainty relation, Int. J. Mod. Phys. E 24 (11), 1550087 (11 pages) (2015).

184. B. J. Falaye, Shi-Hai Dong, K. J. Oyewumi, O. A. Falaiye, E. S. Joshua, J. Omojola, O. J. Abimbola, O. Kalu and S. M. Ikhdair,
Triangular libration points in the R3BP under combined efects of oblateness, radiation and power-law profile, Advances in Space Research 57 (1), 189 (2016).

185. F. A. Serrano, B. J. Falaye, Shi-Hai Dong,
Information-theoretic measures for a solitonic profile mass Schrödinger equation with a squared hyperbolic cosecant potential, Physica A 446, 152 (2016).

186. Shishan Dong, Qin Fang, B. J. Falaye, Guo-Hua Sun, C. Yáñez-Márquez, Shi-Hai Dong
Exact solutions to solitonic profile mass Schrödinger problem with a modified Pöschl-Teller Potential, Mod. Phys. Lett. A 31 (4), 1650017 (2016).

187. B. J. Falaye, F. A. Serrano, S. H. Dong,
Fisher's information for the position-dependent mass Schrodinger system, Phys. Lett. A 380 (1), 267 (2016).

188. Xu-Dong Song, Yu Zhang, and Shi-Hai Dong

Quantum information entropy for one-dimensional system undergoing quantum phase Transition, Chin. Phys. B 25 (5) (2016) 050302.

189. Babatunde J. Falaye, Guo-Hua Sun, Silva-Ortigoza Ramón, Shi-Hai Dong,
Hydrogen atom in a quantum plasma environment under the influences of Aharonov-Bohm Flux and electric and magnetic fields, Physical Review E **93**, 053201 (2016).

190. Chang-Yuan Chen, Fa-Lin Lu, Dong-Sheng Sun, Yuan You and Shi-Hai Dong,
Spin-orbit interaction for the double ring-shaped oscillator, Annals of Physics **371**, 183(2016).

191. Shishan Dong, Guo-Hua Sun, B. J. Falaye, and Shi-Hai Dong,
Semi-exact solutions to PDM Schrödinger problem with a hyperbolic potential V_0Tanh(ax), European Physics Journal Plus 131, 176 (2016).

192. Chang-Yuan Chen, Yuan You, Fa-Lin Lu, Dong-Sheng Sun and Shi-Hai Dong
The universal associated Legendre polynomials and some useful definite integrals，
Communication in Theoretical Physics 66, 158 (2016).

193. Carlos Oltega Laurel, Shi-Hai Dong and M. Cruz-Irrison,
Steganography on quantum pixel images using Shannon entropy, International Journal of Quantum Information 1650021 (2016).

194. Gao-Feng Wei, Shi-Hai Dong, Xin-Wei Cao, and Yun-Liang Zhang
Effects of induced electric field on π^-/π^+ ratio in heavy-ion collisions, Phys. Rev. C. 94 (1), 014605 (2016).

195. Dong-Sheng Sun, Yuan You, Fa-Lin Lu, Chang-Yuan Chen and Shi-Hai Dong,
On integrals involving universal associated Legendre polynomials and powers of the factor $(1-x^2)$ and their byproducts, Commu. Theor. Phys. 66**,** 369 (2016).

196. B. J. Falaye, Guo-Hua Sun, O. Camacho-Nieto, Shi-Hai Dong,
JRSP of three-particle state via three tripartite GHZ class in quantum noisy channels, Int. J. Quan. Info. 14 (7), 1650034 (2016).

197. B. J. Falaye, Guo-Hua Sun, M. S. Liman, K. J. Oyewumi, Shi-Hai Dong,
Hydrogen atom in a laser-plasam, Laser Physics Letters 13 (11), 116003 (2016).

198. Eduardo Hernández-Márquez, Ramon Silva-Ortigoza, Shi-Hai Dong, V. H. García-Rodríguez, G. Saldaña-González, M. Marcelino-Aranda,
A new DC/DC buck-boost converter-DC motor system: modeling and simulation, 2016 International Conference on Mechatronics, Electronics and Automotive Engineering 101 (2016).

199. Adenike Grace Adepoju, Babatunde James Falaye, Guo-Hua Sun, Oscar Camacho-Nieto, Shi-Hai Dong,
Joint remote state preparation (JRSP) of two-qubit equatorial state in quantum noisy channels, Phys. Lett. A 381 (6), 581 (2017).

200. A. G. Adepoju, B J Falaye, G-H Sun, O Camacho-Nieto and S-H Dong,
Teleportation with two-dimensional electron gas formed at the interface of a GaAs heterostructure, Laser Physics 27, 035201 (2017).

201. Babatunde James Falayea, Guo-Hua Sun, Adenike Grace Adepojud, Muhammed S. Limanb, K. J. Oyewumie, and Shi-Hai Dong，
An electron of helium atom under a high-intensity laser field, Laser Physics 27(2), 026004 (2017).

202. Shishan Dong, B. J. Falaye, A. M. Guerrero M. , Shi-Hai Dong,
Ladder operators depending on all variables for a charged particle moving in a two-dimensional uniform magnetic field, Journal of Advanced Physics 6, 456 (2017).

203. Wei Li, Chang-Yuan Chen and Shi-Hai Dong,
Ring-shaped potential and a class of relevant integrals involved universal associated Legendre polynomials with complicated arguments, Advances in High Energy Physics Volume 2017, Article ID 7374256, 4 pages (2017).

204. M. D. González Ramírez, B. J. Falaye, G. H. Sun, M. Cruz-Irisson, S. H. Dong,
Quantum teleportation and information splitting via four-qubit cluster state and a Bell state, Frontier of Physics 12 (5), 120306 (2017).

205. G. Yañez-Navarro, G. H. Sun, D. S. Sun, C. Y. Chen, S. H. Dong,
Evaluate more general integrals involving universal associated Legendre polynomials via Taylor's theorem, Communication in Theoretical Physics 68, 177 (2017).

206. Y. You, C. Y. Chen, Farida Tahir, S. H. Dong,
Evaluation of more general integrals involving universal associated Legendre polynomials, J. Math. Phys. 58 (5), 052105 (2017).

207. Yuan You, Fa-Lin Lu, Dong-Sheng Sun, Chang-Yuan Chen, and Shi-Hai Dong，
The visualization of the space probability distribution for a moving particle in a single ring-shaped Coulomb potential, Advances in High Energy Physics Volume 2017, Article ID 7937980, 19 pages (2017).

208. Jian Jing, Yu-Fei Zhang, Kang Wang, Zheng-Wen Long and Shi-Hai Dong,
On the time-dependent Aharonov-Bohm effect, Physics Letters B 774, 87 (2017).

209. R. Castro López, Guo-HuaSun, O. Camacho-Nieto, C. Yáñez-Márquez, Shi-Hai Dong，
Analytical traveling-wave solutions to a generalized Gross–Pitaevskii equation with some new time and space varying nonlinearity coefficients and external fields, Phys. Lett. A 381, 2978 (2017).

210. Y. J. Shi, G. H. Sun, J. Jing and S. H. Dong,
Shannon and Fisher entropy measures for a parity-restricted harmonic oscillator, Laser Physics 27 (12), 125201 (2017).

211. Carlos Ortega Laurel, Miguel Cruz Irisson, Shi-Hai Dong, Silvia Viera,
La dualidad de la información: Clasica versus Cuántica, Ciencías 124, 22 (2017).

212. Eduardo Hernández-Márquez, Ramón Silva-Ortigoza, Carlos Alejandro Avila-Rea, José Rafael García-Sánchez, Mayra Antonio-Cruz, Hind Taud, Shihai Dong, Mariana Marcelino-Aranda,
Regulation of the DC/DC Buck-Boost converter-inverter-DC motor system: Sensorless passivity based control, 2017 International Conference on Mechatronics, Electronics and Automotive Engineering (ICMEAE) 88-92 (2017).

213. Wen-Chao Qiang, Guo-Hua Sun, Qian Dong, Oscar Camacho-Nieto and Shi-Hai Dong,
Concurrence of three Jaynes-Cummings systems, Quantum Information Processing 17, 90 (2018).

214. M. Solaimani, Guo-Hua Sun, Shi-Hai Dong,
Shannon Information Entropies for Rectangular Multiple Quantum Well Systems with Constant Total Lengths, Chinese Physics B Vol. 27, No. 4, 040301 (2018).

215. Yuan You, Fa-Lin Lu, Dong-Sheng Sun, Chang-Yuan Chen, and Shi-Hai Dong，
The visualization of the space probability distribution for a moving particle in a double ring-shaped Coulomb potential, Advances in High Energy Physics Vol. 2018, Article ID 8307486 (2018).

216. Azeem Mir, Farida Tahir, Shakeel Mahmood and Shi-Hai Dong,
Study of rare mesonic decays involving di-neutrinos in their final state, Advances in High Energy Physics Vol. 2018, Article ID 4176840 (2018).

217. J. Torres-Arenas, Qian Dong, Guo-Hua Sun, and Shi-Hai Dong,
Radial position-momentum uncertainties for the infinite circular well and Fisher entropy, Phys. Lett. A 382 (26), 1752 (2018).

218. Y. J. Shi, Guo-Hua Sun, Farida Tahir, A. I. Ahmadov, Bing He and Shi-Hai Dong
Quantum information measures of infinite spherical well，Modern Physics Letters A 33, 1850088 (2018).

219. Shishan Dong, G. Yañez-Navarro, M. A. Mercado Sanchez, C. Mejia Garcia, Guo-Hua Sun, and Shi-Hai Dong
Constructions of the soluble potentials for the non-relativistic quantum system by means of the Heun functions, Advances in High Energy Physics Volume 2018, Article ID 9824538, 8 pages (2018).

220. Qian Dong, Fernando Serrano, Guo Hua Sun, Jian Jing and Shi-Hai Dong
Semi-exact solutions of the Razavy potential, Advances in High Energy Physics Article ID 9105825, 7 pages (2018).

221. Wen-Chao Qiang, Guo-Hua Sun, Qian Dong, Shi-Hai Dong,

Genuine multipartite concurrence for entanglement of Dirac fields in noninertial frames, Physical Review A 98, 022320 (2018).

222. Chang-Yuan Chen, Yuan You, Fa-Lin Lu, Dong-Sheng Sun, Shi-Hai Dong,
Study of spin-orbit interaction for the Makarov potential, International Journal of Quantum Chemistry 118 (23), e25774 (2018).

223. Shishan Dong, Qian Dong, Guo-Hua Sun, S. Femmam and Shi-Hai Dong,
Exact solutions of the Razavy cosine type potential, Advanes in High Energy Physics 2018， ID 5824271 (2018).

224. Q. Dong, Ariadna J. Torres-Arenas, Guo-Hua Sun, Shi-Hai Dong,
Radial position-momentum uncertainties for the infinite spherical well and the Fisher entropy, Laser Physics Letters **15,** 115202 (2018).

225. Q. Dong, Guo-Hua Sun, Jian Jing, Shi-Hai Dong,
New findings for two new type sine hyperbolic potentials, Physics Letter A 383 (2-3), 270 (2019).

226. Qian Dong, Shishan Dong, Eduardo Hernández-Márquez, Ramón Silva-Ortigoza, Guo-Hua Sun, and Shi-Hai Dong
Semi-exact solutions of Konwent potential, Communication in Theoretical Physics 71, 231 (2019).

227. Qian Dong, Ariadna J. Torres-Arenas, Guo-Hua Sun, Wen-Chao Qiang, and Shi-Hai Dong
Entanglement measures of a new type pseudo-pure state in accelerated frames, Frotiers of Physics 14(2), 21603 (2019).

228. Ariadna J. Torres-Arenas, Qian Dong，Guo-Hua Sun, Wen-Chao Qiang, and Shi-Hai Dong,
Entanglement measures of W-state in noninertial frames, Physics Letters B 789, 93 (2019).

229. Jian Jing, Qiu-Yue Zhang, Qing Wang, Zheng-Wen Long, Shi-Hai Dong,
The fractional angular momentum realized by a neutral cold atom, European Physical Journal C 79(1), 1 (2019).

230. Qian Dong, Guo-Hua Sun, M. Avila Aoki, Chang-Yuan Chen, and Shi-Hai Dong,
Exact solutions of a quartic potential, Modern Physics Letters Vol. 34, 1950208 (2019).

231. Ariadna J. Torres-Arenas, Edgar O. López-Zuniga, J. Antonio Saldana-Herrera, Qian Dong, Guo-Hua Sun, Shi-Hai Dong,
Tetrapartite entanglement measures of W-Class in noninertial frames, Chinese Physics B 28 (7), 070301 (2019).

232. Qian Dong, A. Alejandra Sanchez Manilla, I. Lopez Yañez, Guo-Hua Sun; Shi-Hai Dong, Tetrapartite entanglement measures of GHZ state with uniform acceleration, Physica Scripta 94, 105101 (2019).

233. Qian Dong, Ariadna J. Torres-Arenas, Guo-Hua Sun, O. Camacho-Nieto, Smain Femmam Shi-Hai Dong,
Exact solutions of the sine hyperbolic type potential, Journal of Mathematical Chemistry (in press).

234. A. I. Ahmadov, S. M. Aslanova, M. Sh. Orujova, S.V. Badalov, and Shi-Hai Dong
Approximate Bound State Solutions of the Klein-Gordon Equation with the Linear Combination of Hulthén and Yukawa Potentials, Physics Letters A 383 (24), 3010-3017 (2019).

235. Jian Jing, Qiu-Yue Zhang, Qing Wang, Zheng-Wen Long, and Shi-Hai Dong,
Fractional angular momentum of an atom on a noncommutative plane, accepted by Communication in Theoretical Physics.

236. M. A. Mercado Sanchez, Guo-Hua Sun, and Shi-Hai Dong
Correlation Property of Multipartite Quantum Image, accepted by International Journal of Theoretical Physics.

237. Wen-Chao Qiang, Qian Dong, M. A. Mercado Sanchez, Guo-Hua Sun and Shi-Hai Dong
Entanglement property of the Werner state in accelerated frames, accepted by Quantum Information Proceeding.

238. Qian Dong, M. A. Mercado Sanchez, Guo-Hua Sun, Mohamad Toutounji, and Shi-Hai Dong,
Tripartite entanglement measures of generalized GHZ state in uniform acceleration, accepted by Chinese Physics Letters.

Book Chapter

Author**: Xiao-Yan Gu and Shi-Hai Dong**
Book: **Horizons in Physics World**, Volume 272.
Chapter Name: **From Bohr-Sommerfeld semiclassical quantization rule to Qiang-Dong proper quantization rule**, ISBN: 978-1-61122-906-6, Nova Science Publishers, Inc. (2012).

Books

1. Author: **Shi-Hai Dong**
Name: **Factorization Method in Quantum Mechanics**, ISBN: 140-20-5795-4, Springer, Netherlands, 2007.

2. Author: Shi-Hai Dong
Name: **Wave Equations in High Dimensions**, ISBN 978-94-007-1916-3, Springer, Netherlands, 2011.

3. Authors: X. Y. Gu, F. Gatti, **Shi-Hai Dong** and J. Q. Sun

Special Issue: Symmetry and Group Theory and Its Application to Few-Body Physics in Advances in Mathematical Physics, Hindawi Publishing Corporation 2013.

Citations

More than 6700 citations including self-citations (Google Scholar)
http://scholar. google. com/citations?user=KTBLE3AAAAAJ&hl=en&oi=ao