RESUME

DR. FARHAN SAIF

Google scholar	https://scholar.google.com.pk/citations?user=5p8hDq0AAAAJ&hl=en
ORCID	http://orcid.org/0000-0003-1479-1547
H-index	22
Total citation	1740
Skills/expertise	Quantum Information and Entanglement, Quantum Computation and Machine Learning Quantum Optics, Nano Electro-Opto-mechanics, , Ultracold atoms in optical fields, Nonlinear Dynamics Health Sciences
Present Address:	Department of Electronics, Quaid-i-Azam University, 45320, Islamabad, Pakistan.
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E-mail:	farhan.saif@uec.ac.jp, farhan.saif@fulbrightmail.org
Personal web page:	https://farhansaif.com
Marital status:	Married, two daughters and a son
Date of birth:	16-09-1969
Place of birth:	Lahore, Pakistan
Nationalility	Pakistani

ACADEMIC QUALIFICATION

Sabbatical		UEC, Tokyo, Japan	2022-23
Sabbatical		UNESP, Rio di Claro, Brazil	2010-11
Sabbatical		University of Arizona, USA	2005-06
Post-doctorate		Ulm University, Germany	1999
Doctorate rer. nat.		Ulm University, Germany	1994-98
M. Phil.	(World Lab Fellow)	Quaid-i-Azam University	1991-93
M.Sc.	(Physics with Gold Medal)	Quaid-i-Azam University	1989-90

MEMBERSHIPS

- Member, Optical Society of America
- Member, Pakistan Academy of Sciences
- Associate Member, Abdus Salam International Center for Theoretical Physics, Trieste, Italy, (2002-2009).
- Life membership of Pakistan Education Forum
- Founding Member of `Dynamical Days Central Asia forum'
- Life membership of the Pakistan Physical Society

AWARDS & DISTINCTIONS

INTERNATIONAL

- Abdus-Salam Prize for Physics 2001
- The World Academy of Scientists Prize, Physics 2003
- Fulbright Fellowship, 2005-06
- Japan Society for Promotion of Science Fellowship, 2022-23
- World Lab Scholarship, 1992

NATIONAL

- `Sitara e Imtiaz', highest national civil award from the President of Pakistan 2021
- Pride of Performance, highest national civil award from the President of Pakistan 2008
- Gold Medal from Pakistan Academy of Sciences 2014
- Higher Education Commission of Pakistan Postdoctoral Fellowship, 2004-05
- Pakistan Education Forum, National Education Award, 2003. (Outstanding services to Science and Technology Education)
- Ministry of Science and Technology Scholarship, Pakistan, during Ph.D, 1994-97.
- Quaid i Azam University merit scholarship, during M.Sc., 1989-90
- Bank of Credit Commerce and Investment (BCCI) Award, 1991.
- Chancellor Medal, Quaid-i-Azam University, Islamabad,
- Role of Honor, for securing First Position in M.Sc. Physics.
- General Secretary, Pakistan Physical Society, for World Year of Physics 2005

Editor, Organizer and Focal Person

- Principle Organizer of International Conference and Workshop on Nano Science and Technology, October 1-5, 2012, Islamabad, Pakistan
- Principle Organizer of Conference on Applications and Methods of Physics, November 21-22, 2011, Islamabad, Pakistan
- Member Technical Committee of Conference on Ultra cold atoms, July 1-6, 2013, NathiaGali, Pakistan.

- Member, Board of Studies, Department of Bio Sciences, COMSATS Institute of Information Sciences, Islamabad, Pakistan
- External Examiner, Government College University, Lahore, Pakistan
- External Ph.D Supervisor, Pakistan Institute of Engineering and Applied Sciences, Islamabad.
- Organizer, 10th National Symposium on Frontiers in Physics, 2004
- Contributor, National Talent Hunt Scheme, Higher Education Commission, Islamabad
- Founder and organizer of the registered non-profit scientific organization in Pakistan 'Enchanting Horizons of Science' launched in December 2000.
- Founding editor of the free-for-all, web-based, international science journal 'International Journal of Science Echoes' (www.ScienceEchoes.org, www.PhysicsReviews.org/se/) launched in December 2005.
- Founder and editor of the free-for-all, web-based, international science journal 'Physics Reviews' (www.PhysicsReviews.org) to be launched.
- Editorial board member of the international Journal of Applied Mathematics and Information Sciences launched in December 2006.
- Editorial Board member, PCST Journal of Science, Technology and Development, Islamabad
- Editorial Board member for special issue of 'Engineering' entitled 'Micro-Electro-Mechanical Systems Research and Application'
- Recipient of research productivity allowance (every year) by PCST, Pakistan.
- Focal person and reviewer of Higher Education Commission's National Research Projects

Publication Reviewer

- Scientific publication reviewer, Physics Review Letters
- Scientific publication reviewer, Physics Review A
- Scientific publication reviewer, Physical Review E
- Scientific publication reviewer, Physics Letters A
- Scientific publication reviewer, International Journal of Theoretical Physics
- Scientific publication reviewer, Journal of Optics B
- Scientific publication reviewer, Journal of Physics A
- Scientific publication reviewer, Journal of Physics B
- Scientific publication reviewer, International Journal of Modern Physics D
- Scientific publication reviewer, Acta Physica Slovaca
- Scientific publication reviewer, Russian Journal of Laser Research
- Scientific publication reviewer, Indian Journal of Physics
- Scientific publication reviewer, Bifurcation and Chaos
- Scientific publication reviewer, Physica A
- Scientific publication reviewer, Quantum Information Processing
- Scientific publication reviewer, Quantum Chemistry

CONFERENCE PRESENTATIONS IN LAST TWO YEARS

1. 'Rotating Molecules in the presence of Ultra-Short Intense Lasers Pulses' 21st International Chemistry Conference, QAU (October 23-25, 2023)
2. 'Opto-mechanically controlled quantum memory efficiency and optical transistor' 10th international petra school of physics quantum computing: theory and applications (October 9-13, 2023)
3. 'Time-Crystals and Recurrence Tracking Microscope', *48th International Nathiagali Conference*, (July 17-22, 2023)
4. Quantum Entanglement in Hybrid Opto-mechanics' *at Conference on Quantum Information Science and Technology*, National Institute of Lasers and Optronics, Islamabad (May 03, 2023)
5. 'Quantum Revivals in Rotational Dynamics of Molecules in Presence of Intense Laser Pulses' *International Workshop on Theory for Atto-Second Quantum Dynamics*, University of Electro-Communications, Tokyo, Japan (March 29, 2023)
6. 'Tools for Quantum Computation & Quantum Communication' *One Day Summit on Quantum Computing* held at Electrical and Mechanical Engineering College, NUST, Rawalpindi (March 18, 2023)
7. Quantum Entanglement in Discrete and Continuous Variable Systems' at *First UEC-SAARC Symposium on Emerging Technologies* held at University of Electro-Communications, Tokyo, Japan (December 13-14, 2022)
8. 'Dynamical Characteristics of Hybrid Opto-Mechanical Systems' invited seminar at *School of Science and Technology, Meiji University, Tokyo, Japan* (November 08, 2022)
9. 'Quantum Recurrences in higher dimensional systems' at *Department of Physics, University of Tokyo, Tokyo, Japan* (September 1, 2022)
10. 'Emerging Horizons of Physics' invited seminar at the *Department of Physics, Quaid-i-Azam University,* Islamabad (June 2, 2022)
11. 'Quantum Satellite Communication via Quantum Channels' at *Conference on Fundamentals of Quantum computers'* Department of Electronics, Quaid-i-Azam University, Islamabad (May 22, 2022)
12. 'Quantum Computers based on Bose-Einstein Condensates in Modulated EM Fields' invited seminar at *Higher Education Commission*, Islamabad (April 14, 2022)

PUBLICATIONS

BOOKS, REPORTS & THESES:

BOOK:

Farhan Saif and Shinichi Watanabe,
`Optical Forces on Atoms'
(IOP Publisher, London, 2023)

Review Article

Farhan Saif,
'Classical and Quantum Chaos in Atom Optics',
Physics Reports 419, 207 (2005).

Farhan Saif
M. Phil Thesis on 'Bandwidth of Semiconductor Lasers',
Quaid-i-Azam University, Islamabad, Pakistan, (1993).

Farhan Saif
Ph.D Thesis on 'Dynamical Localization and Quantum Revivals
in Driven Systems' Universitaet Ulm, Ulm, Germany, (1998).

PUBLICATIONS FROM 2018-23

Q1 --- 7
Q2 --- 6
Q3 --- 4
The number of publications in non-indexed journals --- 5
The number of published books --- 1
The number of published chapter of books --- 4

RESEARCH PROJECTS FROM 2018-23

National Research Project for Universities (NRPU # 16427) entitled 'Optical Switching and Opto-Mechanically-Induced- Transparency by controlling speed of light' Principle Investigator: Dr. Farhan Saif, Co-PI: Dr. Zeeshan Akbar and Dr. Umer Shami.
Rs. 7.11 Million, 2022

National Research Project for Universities (NRPU # 15335) entitled 'Quantum Transport in the Presence of Disorder and Topology in Magnetic Quantum Walks' Principle Investigator: Dr. M. Sajid, Co-Principle Investigator: Dr. Farhan Saif
Rs. 3.234 Million, 2021

COMPLETE LIST OF PUBLICATIONS

Quantum Information, Computation and Entanglement:

1. Hassana Kokab, Imran A. Qureshi, Zeeshan A. Awan, Fazal Ghafoor, Farhan Saif, 'Opto-mechanically controlled quantum memory efficiency and optical transistor', Quantum Information Processing 22, 88 (2023).

2. Khadija el Anouz, Abderrahim el Allati, Farhan Saif 'Study different quantum teleportation amounts by solving Lindblad master equation' Physica Scripta 97, 035102 (2022).

3. Khadija EL Anouz, Abderrahim El Allati, A. Salah, and Farhan Saif, "Quantum Fisher Information: Probe to measure Fractional evolution", International J. of Theoretical Physics 59, 1460-1474 (2020). Impact factor: 1.347 (Q3) https://link.springer.com/article/10.1007/s10773-020-04415-2

4. Shakir Ullah, Haleema Sadia Qureshi, Gul Tiaz, Fazal Ghafoor, Farhan Saif, "Coherence control of entanglement dynamics of two-mode Gaussian state via Raman driven quantum beat laser using Simon's criterion", Applied Optics 58, 197 (2019). Impact Factor: 1.961 (Q1)

5. M. Abdul, U Farooq, Jehan Akbar, Farhan Saif, "Discrete dynamical laser equation for the critical onset of bistability, entanglement and disappearance", Laser Physics 28(6), 065203 (2018). Impact Factor: 1.231 (Q2)

6. Abderrahim El Allati, Khadija EL Anouz, Farhan Saif "Engineering entanglement and teleportation via solving Lindblad master equation" accepted for publication in 'The European Physical Journal Plus' 2019. arXiv:2009.05677

7. Sami ul Haq, and F. Saif, 'Remote entanglement for quantum networks' Optik: International journal of light and electron optics 125(22), 6616-6619 (2014). Impact factor 2.187

8. A. H. Khosa, Rameez ul Islam, Farhan Saif and Janos Bergou, 'Generation of atomic cluster and graph states via cavity QED', Quantum Information Processing 12(1) 129-148 (2013). Impact Factor: 2.085

9. Sami ul Haq, and F. Saif, 'Extended entanglement to quantum networks', Optik – International journal of light and electron optic 124(23), 5914-5917 (2013). Impact factor 2.187

10. Farhan Saif, 'Quantum Computation` in 'Quantum Mechanics' by Fayyazuddin and Riazuddin, (World Scientific, London, 2012).

11. Shahid Iqbal, Farhan Saif, "Comment on 'Generalized Heisenberg algebra coherent states for power-law potentials'", Physics Letters A 376, 1531-1533

(2012). Impact Factor: 2.278

12. A. El Allati, Y. Hassouni, F. Saif, "Deterministic secure communication via atomic momentum state", Optik: International Journal for Light and Electron Optics 122, 1965 (2011). Impact Factor: 2.187

13. A. El Allati, M. El Baz, Y. Hassouni, A. Kassou Ou Ali and F. Saif, "Loss of Atom Interference by Random Phase", Journal of Russian Lasers Research' 32, 177 (2011). Impact Factor: 0.993

14. Ashfaq H. Khosa, Rameez ul Islam, and Farhan Saif, 'Remote preparation of atomic and field Cluster states from a pair of tri-partite GHZ states', Chinese Physics B 19, 040309 (2010). Impact Factor: 1.63

15. Muhammad Aqil, Aarouj, Fauzia Bano and Farhan Saif, "Engineering NOON states in cavity QED", Journal of Russian Lasers Research' 31, 343 (2010). Impact Factor: 0.993

16. Farhan Saif, Rameez-ul-Islam and Ashfaq H. Khosa, "Engineering two-mode field NOON state in cavity QED", Journal of Physics B: At. Mol. Opt. Phys. 43 015501 (2010). Impact Factor: 1.902

17. Rameez ul Islam, M. Ikram, R. Ahmed, A. H. Khosa and Farhan Saif, "Atomic State Teleportation: From internal to external degrees of freedom", Journal of Modern Optics 56 (7), 875-880 (2009). Impact Factor: 0.988

18. Tasawar Abbas, Rameez ul Islam, Ashfaq H. Khosa, and Farhan Saif, "Generation of cavity field cluster and GHZ states using Bragg regime atom interferometer", Journal of Russian Laser Research 30, 267 (2009).Impact Factor: 0.993

19. Rameez ul Islam, Ashfaq H. Khosa, and Farhan Saif, "Atomic Cluster and Graph States: An engineering proposal", Journal of Physical Society of Japan 78, 114401 (2009). Impact Factor: 2.905

20. Muhammad Ayub, Khalid Naseer, Manzoor Ali, and Farhan Saif, "Atom Optics Quantum Pendulum", Journal of Russian Laser Research 30, 205 (2009). Impact Factor: 0.993

21. Rameez ul Islam, Manzoor Ikram, Ashfaq H. Khosa, and Farhan Saif, "Remote Field and Atomic State Preparation", International Journal of Quantum Information 6, 393-402 (2008). Impact Factor: 0.643

22. Rameez ul Islam, Ashfaq H. Khosa, and Farhan Saif, "Generation of Bell, NOON and W-states via atom Interferometer", Journal of Physics B: At. Mol. Opt. Phys. 41, 035505 (2008). Impact Factor: 1.902

23. Rameez ul Islam, Ashfaq H. Khosa, Hai-Woong Lee, and Farhan Saif,"Generation of field cluster states through collective operation of cavity QED disentanglement eraser", European Physics Journal D 48, 271-277 (2008). Impact Factor: 1.513

24. Javed Akram and Farhan Saif, Engineering CNOT gate in a cavity QED scenario", Journal of Russian Laser Research 29, 538-543 (2008). Impact Factor: 0.993

25. Shahid Iqbal and Farhan Saif, "Quantum Computing with particle in a driven square well", Journal of Russian Laser Research 29, 587-592 (2008). Impact Factor: 0.993

26. Rameez ul Islam, Manzoor Ikram, and Farhan Saif, "Engineering Maximally Entangled N-Photon NOON field States using an Atom Interferometer based on Bragg regime cavity QED" Journal of Physics B: Atomic Molecular and Optical Physics 40,1359-1368 (2007). Impact Factor: 1.902

27. Farhan Saif, Rameez ul Islam and Mazhar Javed, "Engineering Quantum Universal Logic Gates in Electromagnetic Field Modes", Journal of Russian Laser Research 28, 529-534 (2007). Impact Factor: 0.993

28. Farhan Saif, M Abdel Aty, M. Javed, and Rameez ul Islam, "Generation of Maximally Entangled states of two cavity field modes", Applied Mathematics and Information Science 1, 323-332 (2007).Impact Factor: 0.642

29. Farhan Saif, R. ul Islam, M. Aqil, and A. Khosa, "Engineering entangled NOON states in cavity QED", Proceedings of International Conference on Mathematics: Trends and Developments 2007, Cairo Egypt, Ed. A. S. Obada, Vol. 1, Pp. 247-270 (2007). Impact Factor: 0.0

30. M. Abdel-Aty, Farhan Saif, "Quantum information of a three-level atom in one-dimensional photonic bandgap", Laser Physics Letters, Vol. 3, No. 12, 599-604 (2006). Impact Factor: 6.01

31. Mazhar Javed and Farhan Saif, "Engineering Quantum Computers and Channels in Quantum Electro- dynamical systems" Islamabad Journal of Science 14, 62 (2004). Impact Factor: 0.0

32. Manzoor Ikram, and Farhan Saif "Erratum: Engineering entanglement between two modes of cavity field" Physical Review A 67, 069901(E) (2003). Impact Factor: 3.11

33. Aeysha Khalique, and Farhan Saif "Engineering Entanglement between external degrees of freedom of atoms via Bragg scattering", Physics Letters A 314, 37 (2003). Impact Factor: 2.278

34. Aeysha Khalique, and Farhan Saif "Quantum non-demolition state measurement via atomic scattering in Bragg regime" Journal of Physical Society of Japan, 71(11) 1L (2002). Impact Factor: 2.905

35. Manzoor Ikram, and Farhan Saif "Engineering entanglement between two modes of cavity field" Physical Review A 66, 014304 (2002). Impact Factor: 3.11

36. Farhan Saif
"Quantum cryptography and entanglement"
Published in the proceedings of "International conference on Physics in Industry Eds. Anwar-ul-Haq, Mushtaq Ahmad, Karachi (2001).

Nano Electro-Opto-mechanics:

37. Farhan Saif and Hiroki Saito, Entanglement in opto-mechanics, submitted for publication in Physical Review A 2023.

38. Khadija el Anouz, Abderrahim el Allati, Farhan Saif, `Quantum correlations in coupled hybrid optomechanical cavities', submitted for publication

39. Sohail Ahmad, Asma Javed, Hui Jing, and Farhan Saif, `Controlling bi-stability via driven oscillators in nano-electro-opto mechanics', submitted for publication

40. Fazal Ghafoor, Javed Akram, Ayaz Khan, Hassana Kokab, Farhan Saif, `Coherent control on multiple color mechanically induced switching via atom-assisted cavity opto-mechanics', Journal of Physics B 55, 205402 (2022).

41. Asma Javed, Sohail Ahmad, Fazal Ghafoor, Tomotake Yamakoshi, Farhan Saif, 'Controlled Four-Wave Mixing in a Nano-Transducer' Journal of Russian Lasers Research 42, 196 (2021). Impact Factor 0.993

42. Muhib Ullah, Farhan Saif, Li-Gang Wang, "Four-Wave Mixing Response via Hybrid Coulomb-Coupled Cavity Optomechanics", Advanced Quantum Technologies 3, 2000061(2020)

43. T Lu, Y. Jiao, H. Zhang, Farhan Saif and Hui Jing, 'Selective and switchable optical amplification with mechanical driven oscillators', Phys. Rev. A 100, 013813 (2019). Impact Factor: 2.777

44. Hui Jing, Farhan Saif, "Multiple electro-mechanically induced transparency windows and Fano resonances in hybrid nano-electro optomechanics system", Physical Review A 97, 033812 (2018).Impact Factor: 2.777

45. Farhan Saif, Normal mode splitting in quantum degenerate Fermi gas, European Physical Journal D 72, 204 (2018) Impact Factor: 1.393 (Q3)

46. H.L. Zhang, Farhan Saif, Y. Jiao, H. Jing, Loss induced transparency in opto-mechanics', Optics Express 26(19), 25199-25210 (2018). Impact Factor: 3.669 (Q1)

47. M. Javed Akram, Fazal Ghafoor, M. M. Khan and Farhan Saif, "Control of Fano resonances and slow light using Bose-Einstein condensates in a nanocavity" Phys. Rev. A 95, 023810 (2017)*. Impact Factor: 2.777 APS Members, KALEIDOSCOPE , M. Javed Akram, Fazal Ghafoor, M. Miskeen Khan, and Farhan Saif.

48. Farhan Saif, Shinichi Watanabe, "Optical Mechanical Switch via Enhanced Luminance Control", Proceedings of American Institute of Physics 2067, 020002 (2019). Impact Factor: 0.19

49. Hui Jing, Farhan Saif, "Realizable electro-opto mechanical switch based on bistability and Four wave mixing", accepted for publication

50. M. Javed Akram, Miskeen Khan and Farhan Saif, "Tunable Fast and Slow Light in a Hybrid Opto Mechanical system" Phys. Rev. A 92, 023846 (2015). Impact Factor: 2.777

51. M. Javed Akram, Fazal Ghafoor and Farhan Saif, "Electromagnetically Induced Transparency and Tunable Fano Resonances in Hybrid Optomechanics" published in Journal of Phys. B: Atm. Mol. Opt. Phys. 48, 065502 (2015). Impact factor (2.03)

52. F. Saif and M. Asjad, 'Normal mode splitting in Hybrid BEC-cavity opto-mechanical system' Optik: International journal of light and electron optics 125(19), 5455-5460 (2014). Impact factor 2.187

53. M. Asjad, M.A. Shahzad, and Farhan Saif, 'Quantum degenerate Fermi Gas Entanglement in Opto-mechanics', European Phys. J. D 67; 198 (2013). Impact Factor: 1.5

54. M. Asjad and Farhan Saif, 'Engineering Entanglement mechanically', Physics Letters A 376, 2608-2612 (2012). Impact Factor: 2.278

55. M. Asjad and Farhan Saif, "Steady-state entanglement of a Bose-Einstein condensate and a nano-mechanical resonator" Physical Review A 84, 033606 (2011).
    Impact factor: 2.777

Ultracold atoms and BEC in optical fields

56. Abid Ali, Farhan Saif, Hiroki Saito, Phase separation and optical multistability of two-component Bose--Einstein condensation in an optical cavity, Physical Review A, 105, 063318 (2022).

57. Sara Medhet, Tomotake Yamakoshi, M. Ayub, Farhan Saif, and Shinichi Watanabe, “Signatures of inter-band transitions on dynamical localization”, European Physical Journal D 74, 175 (2020). Impact factor: 1.393 (Q3)

58. Jameel Hussian, Mohammad Nouman, Farhan Saif, and Javed Akram, ‘PT-Symmetric potential impact on the scattering of Bose-Einstein condensates from a Gaussian obstacle’, Physica B 587, 412152 (2020). Impact factor: 1.902. (Q2)

59. M. Ayub, K. Ammar and Farhan Saif, 'Dynamical Localization of Matter Waves in Optomechanics' International Journal of Laser Physics 24(11), 115503 (2014). Impact factor (1.03)

60. Farhan Saif, K. Naseer, M. Ayub, 'Atomic Bullets: Non-Dispersive, Accelerated Matter-Waves' Euro. Phys. J. D 68(4), 75 (2014). DOI: 10.1140/epjd/e2014-40415-2, Impact factor 1.51

61. K. A. Yasir, M. Ayub, and Farhan Saif, 'Exponential Localization of moving-end mirror in Optomechanics' J. of Modern Optics 61(16), 1318-1323 (2014). Impact factor 1.17

62. Farhan Saif, I. Rehman, 'Acceleration Modes in Fermi Accelerator', Journal of Russian Laser Research 34(6), 515-522 (2013). Impact Factor: 0.993

63. Muhammad Ayub, Farhan Saif, "Delicate and robust dynamical recurrences of matter waves in driven optical crystals', Physical Review A 85, 023634 (2012). Impact Factor: 2.861

64. Farhan Saif
Atomic Bullets: Non Dispersive, Accelerated Atoms
Published in Proceedings of 'International Conference and Workshop on Nano Science and Technology' Ed. F. Saif (2012). Impact Factor 0.0

65. Muhammad Ayub, Khalid Naseer, and Farhan Saif, "Robust Dynamical Recurrences based on Floquet spectrum", European Physical Journal D 64, 491-498 (2011). Impact Factor: 1.513

66. Farhan Saif, Pierre Meystre
Coherent Acceleration of Material Wavepackets
Published in 'From Quantum to Cosmos: Fundamental Physics Research in Space', Ed. Slava G. Turyshev, p. 727-732 (World Scientific, London, 2009)

67. Akram, Khalid Naseer, Inam ur Rehman and Farhan Saif, "Acceleration of material waves in Fermi accelerator" ‘Mathematical Problems in Engineering: Theory Methods and Applications’ volume 2009, Article ID 246438 (2009). Impact Factor: 0.689

68. Javed Akram, Khalid Naseer, and Farhan Saif
Nano-Bullets: Accelerated and Localized Material Waves
Published in the proceedings of the 12th national symposium on
Frontiers in Physics, Ed. G. Murtaza (2009). Impact Factor 0.0

69. Farhan Saif, and Pierre Meystre, "Coherent acceleration of material wave packets" NASA Workshop on Quantum to Cosmos: Fundamental Physics Research in Space. International Journal of Modern Physics D 16, 2593-2598 (2007). Impact Factor: 1.109

70. Farhan Saif, and Inam ur Rehman, "Coherent acceleration of material wave packet by modulated optical fields", Physical Review A 75, 043610 (2007). Impact Factor: 2.861

71. Farhan Saif "Atomic dynamics in driven gravitational cavity" Chinese Journal of Physics 39, 311 (2001). Impact Factor: 0.444

72. Farhan Saif "Dynamical localization and signatures of phase space" Physics Letters A, 274, 98 (2000). Impact Factor: 2.278

73. Farhan Saif, "Quantum Revivals in Fermi Accelerator", Journal of Physical Society of Japan, 69(8) 2363L (2000). Impact Factor: 2.905

74. Farhan Saif, Karl Riedel, Wolfgang P. Schleich and Bruno Mirbach
Dynamical Localization and Decoherence
Published in: 'Lecture Notes in Physics, Decoherence: Theoretical, Experimental,and Conceptual Problems,
Eds.: Ph. Blanchard, D. Giulini E. Joos C. Kiefer and I.-O. Stamatescu,
p. 179-189 (Springer, Heidelberg, 2000). Impact Factor 0.0

75. F. Saif, G. Alber, V. Savichev, and W.P. Schleich, "Quantum Revivals in Dynamical Systems", Journal of Optics B 2, 668 (2000) (the Special Issue). Impact Factor: 1.902

76. Farhan Saif, 'Dynamical Localization and Quantum Revivals in Driven Systems' (Hyperthesis Physik, Lehmanns Press, Berlin 1999).

77. F. Saif, I. Bialynicki-Birula, M. Fortunato, and W.P. Schleich, "Fermi Accelerator in Atom Optics" Physical Review A 58, 4779 (1998). Impact Factor: 2.861

Classical/Quantum Complex dynamics

78. Jameel Hussian, Javed Akram and Farhan Saif, "Gray/dark soliton behavior and population under a symmetric and asymmetric potential trap", Journal of Low Temperature Physics 195, 429-436 (Springer 2019). (Q2)Impact Factor: 1.09

79. Tomotake Yamakoshi, Farhan Saif, and Shinichi Watanabe, “Significantly stable mode of the ultracold atomic wave packet in amplitude-modulated parabolic optical lattices”, Physical Review A 97, 023620 (2018) Impact Factor: 2.777

80. M. Javed Akram, and F. Saif, 'Complex Dynamics of Nano-Mechanical Membrane in Cavity Optomechanics' Nonlinear Dynamics, 83, 963 (2016) Impact factor 2.42 (Q1)

81. Tasawar Abbas, Farhan Saif, ‘Information Entropy to Probe Revivals in Dynamical Systems’, International Journal of Theoretical Physics 53, 1961-70 (2014). Impact Factor: 0.73

82. Muhammad Abdul, Jehan Akbar, and Farhan Saif, Synchronized Attractors and phase entrained chaos, published in ‘Fractional Dynamics and Anomalous Transport in Plasma Science’ (Springer Verlag 2018)

83. M. Abdul and Farhan Saif, “Synchronized Attractors and entrained Chaos” in Proceedings of International Multi-Conference of Engineers and Computer Scientists, 11-14 June, Page No. 90 (2013). Impact Factor 0.0

84. M. Abdul, Y. F. Zubairy, F. Saif, 'Complexity Beyond Steady State in Coupled Two-mode Lasers' Journal of Basic and Applied Physics 2(3), 173 (2013). Impact factor 0.71

85. M. Abdul and F. Saif, ’Synchronized Chaotic Attractor and Spatio Temporal Chaos in Two mode Lasers’, Applied Mathematics and Information Science 6, 35 (2012). Impact Factor: 0.643

86. M. Abdul and Farhan Saif “Two-mode ring laser as stable, instable and irregular behaviors in coupled lasers logistic equations”, Appl. Math. Inf. Sci. 6, 29-33 (2012). Impact Fcator: 1.07

87. Tasawar Abbas, and Farhan Saif, 'Dynamics Quantum Revivals in Phase Space' Journal of Russian Laser Research, 33(5), 448 (2012).Impact Factor: 0.993

88. Edson D. Leonel, Juliano A. de Oliveira, Farhan Saif, “Critical exponents for transition from integrability to non-integrability via localization of invariant tori in Hamiltonian systems” Journal of Physics A: Mathematical and Theoretical 44(30), 302001 (2011). Impact Factor: 1.641

89. M. Abdul and Farhan Saif
Phase entrained chaos and Synchronized Attractors
Published in Proceedings of 'NUST Conference on Applications and Methods of Physics 2011', Ed. F. Saif and A. Qadir. (2011).

90. Tasawar Abbas and Farhan Saif, “Dynamical Revivals in Spatio-temporal Evolution of Driven one Dimensional Box”, Journal of Mathematical Physics

51, 102107 (2010). Impact Factor: 1.291

91. Javed Akram, Khalid Naseer and Farhan Saif, "Controlled accelerated dynamics of quantum bouncer", Journal of Russian Laser Research 30 (2), 157-163 (2009). Impact Factor: 0.993

92. Farhan Saif, “Nature of quantum recurrence in higher dimensional systems”, European Physical Journal D 39, 87 (2006). Impact Factor: 1.513

93. Shahid Iqbal, Qurat ul Ann and Farhan Saif, “Quantum Recurrences in Periodically Driven Power Law Potentials”, Physics Letters A 356, 231 (2006). Impact Factor: 2.278

94. Farhan Saif, “Dynamical Recurrences in Periodically Driven Systems”, Journal of Optics B: Quantum Semiclss. Optics 7, S116-S119 (2005). (Special Issue on the Nonstationary Casimir effect and Quantum Systems with Moving Boundaries). Impact Factor: 1.902

95. Farhan Saif,
‘Classical and Quantum Chaos in Atom Optics’,
Physics Reports 419, 207 (2005).
Impact Factor: 28.295

96. Sadaf Saeed and Farhan Saif
“Classical and Quantum Chaos in Delta Kicked Rotor”
Published in the Proceedings of the ninth national symposium on Frontiers in Physics,
Ed. G. Murtaza, N. A. D. Khatak, H. A. Shah, Lahore (2003).

97. Sadaf Saeed and Farhan Saif, “Quantum Recurrences in Delta Kicked Rotor” Islamabad Journal of Science 13, 36 (2003). Impact Factor: 0.0

98. Farhan Saif, and Mauro Fortunato, "Quantum Revivals in Periodically Driven Systems Close to Nonlinear Resonances" Physical Review A 65, 013401 (2002). Impact Factor: 3.11

99. Seiichi Tanabe, Shinichi Watanabe, Farhan Saif, and Michio Matsuzawa “Survival Probability of a Truncated Radial Oscillator Subject to Periodic Kicks” Physical Review A 65, 033420 (2002). Impact Factor: 3.11

100. Farhan Saif "Quantum Recurrences: A probe to study Quantum Chaos" Physical Review E 62, 6308 (2000). Impact Factor: 2.35

Health Sciences

101. “Rising above the gathering storm: Risk Management of COVID-19”, Farhan Saif, the Daily Times, June 20, 2020.

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