

URBASI SINHA

Senior Professor, Raman Research Institute | Experimental quantum science

CURRICULUM VITAE
OCTOBER 2026

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49

PEER-REVIEWED RESEARCH PAPERS

4

GRANTED PATENTS (INDIA AND US)

6

COMPLETED DOCTORAL RESEARCHERS

RESEARCH SIGNATURE

A foundations-to-technology experimental programme built in India.

Experimental quantum physicist working at the interface of quantum foundations and quantum technologies. She established and leads the QuIC laboratory at RRI, one of India's early dedicated experimental photonic quantum-information laboratories. Her group uses indigenous single-photon and entangled-photon platforms to test superposition, macrorealism and temporal quantum correlations, then converts the same physical capability into certified randomness, efficient state estimation, high-dimensional information processing and secure free-space communication. The same experimental platforms carry foundational results through to auditable protocols, deployable systems and patented technologies.

RESEARCH DOMAINS

Quantum foundations

Photonic quantum information

Quantum communication

Quantum measurement

Open-system control

CURRENT APPOINTMENTS

Raman Research Institute	Senior Professor; Head, Quantum Information and Computing (QuIC) Laboratory (August 2025–present).
University of Calgary	Canada Excellence Research Chair in Photonic Quantum Science and Technologies (August 2024–present).
Shiv Nadar Institution of Eminence	Distinguished Visiting Faculty, Department of Physics (September 2026–present).
Institute for Quantum Computing	Affiliate Faculty, University of Waterloo (2012–present).

ACADEMIC APPOINTMENTS AND CAREER PROGRESSION

2025–present	Senior Professor, Raman Research Institute, Bengaluru.
2020–2025	Professor, Raman Research Institute, Bengaluru.
2015–2020	Associate Professor, Raman Research Institute, Bengaluru.
2012–2014	Assistant Professor, Raman Research Institute, Bengaluru.
2007–2012	Postdoctoral Research Fellow, Institute for Quantum Computing, Waterloo.
2006–2007	Postdoctoral Research Fellow, Cavendish Laboratory, University of Cambridge.

EDUCATION

2002–2006	PhD, Physics and Materials Science, University of Cambridge.
2000–2002	BA/MA, Natural Sciences Tripos, first class, University of Cambridge.
1997–2000	BSc Physics (Honours), first class with distinction, Jadavpur University.

SELECTED SCIENTIFIC CONTRIBUTIONS

Loophole-free tests of macrorealism Conceived and led heralded-single-photon Leggett–Garg and Wigner-form experiments that addressed the clumsiness, detection, multiphoton, coincidence and preparation-state loopholes. The measured violations were eight and five times their respective errors, with non-invasiveness experimentally bounded at 10^{-2} (PRX Quantum, 2022).	Certified quantum randomness Converted temporal quantum correlations into a semi-device-independent generator producing 919,118 certified bits at $3,865 \text{ bits s}^{-1}$ (Physical Review Letters, 2024), then transferred the architecture to noisy IBM quantum processors using shallow circuits (2025).
Quantum State Interferography Introduced and experimentally realised a measurement method that reads state parameters directly from fringe shifts and contrasts rather than exhaustive tomography (Physical Review Letters, 2020), opening an experimentally economical route to quantum-state estimation.	Higher-order interference Established how non-classical Feynman paths modify realistic multi-path interference and the naïve application of the superposition principle (Physical Review Letters, 2014), extending the triple-slit test of multi-order interference (Science, 2010) into a sustained experimental and theoretical programme.
High-dimensional photonic information Developed spatial-bin qudit encoding, directly accessible statistical correlators for quantifying entanglement, and protocols for protecting high-dimensional entangled resources against noise—linking foundations, measurement efficiency and information processing.	Secure free-space and satellite quantum communication Led indigenous photon-source, simulation and communication work spanning qkdSim, passive polarisation compensation without active feedback, moving-receiver demonstrations and quantitative satellite-uplink link budgets. This programme underpins the RRI–ISRO QuEST effort and has produced granted patents.
Temporal steering of decoherence Demonstrated that one optimally timed local operation can avoid, delay or hasten entanglement sudden death within the same photonic platform (Physical Review A, 2026), reframing decoherence control as the steering of an entire dissipative trajectory.	Quantum repeater networks Leads QuEPAN, a multi-institution programme under India’s National Quantum Mission building entanglement-distribution-based quantum repeater networks, including interfaces between heralded photon sources and NV-centre spin memories in diamond.

RESEARCH GRANTS AND TECHNOLOGY TRANSLATION

Ongoing

2024–2032	Canada Excellence Research Chair in Photonic Quantum Science and Technologies. Canada Excellence Research Chairs Program, Government of Canada. Principal Investigator.
2024–2031	QuEPAN, a multi-institution entanglement distribution based quantum repeater network programme. National Quantum Mission (Technology Group), Government of India. Lead Principal Investigator.
2024–2027	Distinguished International Associate award. Royal Academy of Engineering, UK.

Completed

2017–2025	“Quantum Experiments using Satellite Technology”. Indian Space Research Organisation, Department of Space, Government of India. Principal Investigator.
2020–2024	“Centre for Excellence for Quantum Technology”. Ministry of Electronics and Information Technology, Government of India. Principal Investigator.
2019–2023	“Quantum Information Technologies with Photonic Devices”. Quantum-Enabled Science and Technology (QuEST) Network Programme, Department of Science and Technology, Government of India. Principal Investigator.
2019–2023	“A cheap, light, compact source for QKD based on intraparticle entanglement in an integrated photonic circuit”. India–Trento Programme for Advanced Research (Indo-Italian bilateral programme), Department of Science and Technology, Government of India. Principal Investigator.
2018–2023	“Long distance quantum communications: Repeater and Relay technologies”. VAJRA Fellowship, Science and Engineering Research Board, Department of Science and Technology, Government of India.
2015–2018	Research grant. John Templeton Foundation, USA, Indian Principal Investigator.

Technology translation

QuSyn Technologies	Co-founder, translating foundational quantum research into deployable systems.
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EXPERIMENTAL CAPABILITY ESTABLISHED AT RRI

PHOTONIC HARDWARE

Indigenous heralded and entangled photon sources; phase-stable multi-path interferometers; spatial-bin qubit and qudit platforms.

MEASUREMENT & CERTIFICATION

Single-photon detection and coincidence electronics; loophole analysis; state estimation; finite-data randomness certification.

COMMUNICATION TESTBEDS

qkdSim; free-space links; passive polarisation compensation; moving receivers; atmospheric and satellite-uplink modelling.

SELECTED HONOURS AND DISTINCTIONS

- 2025** Quantum 100 honouree, International Year of Quantum Science and Technology.
- 2025** Lakshmipat Singhania–IIM Lucknow National Leadership Award.
- 2025** Gates Cambridge Impact Prize.
- 2024** Rashtriya Vigyan Puraskar: Vigyan Yuva–Shanti Swarup Bhatnagar Award for Physics.
- 2024** Distinguished International Associate, Royal Academy of Engineering, UK.
- 2023** Canada Excellence Research Chair in Photonic Quantum Science and Technologies.
- 2023** SIES National Eminence Award in Science and Technology.
- 2020–23** Simons Emmy Noether Fellowship, Perimeter Institute.
- 2021** ASSOCHAM Women in Cyber: Making a Difference—Leading from the Front.
- 2020** Winner, BRICS Future Skills Challenge in Quantum Technology.
- 2019** Asian Scientist 100.
- 2018** ICTP–ICO Gallieno Denardo Award in Optics.
- 2017** Homi Bhabha Fellowship.
- 2002–05** Gates Cambridge Scholarship and Overseas Research Students Award.
- 2000** Chevening–Nehru Cambridge Scholarship—the only physics recipient that year.

EDITORIAL LEADERSHIP

REVIEWS OF MODERN PHYSICS

Associate Editor · 2025–

OPTICA

Associate Editor · 2023–26

QUANTUM

Steering Committee · 2016–

NEW JOURNAL OF PHYSICS

Editorial Board · 2018–23

NATIONAL AND INTERNATIONAL SCIENTIFIC LEADERSHIP

- 2026–** Member, Karnataka Quantum Task Force.
- 2026–** Member, Indo–Swiss Joint Scientific Board, DST.
- 2026** Chair, Leonard Mandel Quantum Optics Award Selection Committee, Optica.
- 2025–** Member, Karnataka Quantum Roadmap Advisory Committee.
- 2025–** Member, ITU Academic Advisory Body for Emerging Technology.
- 2025–** Steering Committee, Workshop for Quantum Repeaters and Networks.
- 2025** NITI Aayog Frontier Tech Hub Expert Council—quantum computing workstream.
- 2024–** Indian National Quantum Mission nodal point, Open Quantum Institute.
- 2024–** Asian representative, World Quantum Day coordination team.
- 2023–** Indian representative, IUPAP Quantum Information Focus Group.
- 2023–** OECD Global Forum on Technology expert focus group on quantum technologies.
- 2022–** Inter-Ministerial Committee on Quantum Communications, Government of India.
- 2021–** GESDA Open Quantum Initiative core task force.
- 2021–27** Indian representative, IUPAP C15 Commission.
- 2020** Draft Project Report Committee, National Mission on Quantum Technologies.
- 2020** ITU Focus Group on Quantum Information Technologies for Networks.

SELECTED PROFESSIONAL RECOGNITION

- 2025** Woxsen University Academic Ace Award, International Day of Women and Girls in Science.
- 2024** Featured interview in Communications Physics: Women in Physics.
- 2021** Outstanding Referee recognition, Communications Physics.
- 2020** RRI quantum-state estimation and QKD work highlighted among DST's major success stories.
- 2020** Only Indian physics/mathematics work highlighted in the Asian Scientist five-year research white paper.

PATENTS

- 2026** Method and System for Random Number Generation From Loophole-Free Leggett–Garg Architecture. Indian Patent 594506; US and Canadian applications pending.
- 2026** Methods and a System for Optimizing Performance of a Quantum Key Distribution Protocol. Indian Patent 587808; US Patent 12,621,135 (2026).
- 2023** Method and System for Generating Cryptographic Keys. Indian Patent 458753.

SELECTED REVIEWS, CHAPTERS AND PUBLIC-FACING WRITING

- 2025** Interference in Quantum Mechanics, Journal of the Indian Institute of Science.
- 2023** Photon sources and their applications in quantum science and technologies, Progress in Optics.
- 2023** Photon sources for quantum technologies, Encyclopaedia of Materials: Electronics.
- 2020** Quantum Slits Open New Doors, invited article, Scientific American.
- 2019** Single photon sources: ubiquitous tools in quantum information processing, Optics & Photonics News.

RESEARCH GROUP, MENTORSHIP AND TEACHING

Current group	Five postdoctoral researchers, eight doctoral researchers (five at RRI, three at the University of Calgary), two project staff, and six project students and junior research fellows.
Doctoral researchers	Fourteen in total: six PhDs completed at RRI (Simanraj Sadana, Ashutosh Singh, Kaushik Joarder, Surya Narayan Sahoo, Sanchari Chakraborti and Saumya Ranjan Behera) and eight in progress.
Postdoctoral researchers	Nine postdoctoral fellows and research associates mentored, five of them current.
Master's theses	Eight supervised at RRI and the University of Calgary, seven completed; six of the graduates have gone on to PhD programmes.
Project students	More than 40 undergraduate, Master's and internship project students.
Where trainees are now	PhD graduates: Faculty Fellow, NISER Bhubaneswar; Senior Photonics Engineer, Xanadu; Universal Quantum; postdoctoral researchers at the Indian Institute of Science, in Jena and at RRI. Former postdoctoral and research staff: University of Hong Kong, IFW Dresden, TCS Innovation Labs and Pramatra Space. Master's graduate Sreekuttan L. S. is co-founder and CEO of Bloq Quantum.
Trainee recognition	Winning two-member team with research associate Sourav Chatterjee, WorldSkills International Competition in Quantum Technology, BRICS Future Skills Challenge (2020); PhD student Mehak Layal on the winning team, NYU Abu Dhabi Quantum Hackathon for Social Good (2024); PhD student Saumya Ranjan Behera, poster prize, QCMC 2024.
Graduate teaching	Quantum Information and Computing and Quantum Optics at RRI, regularly from 2013 to 2025; Photonic Quantum Information Processing (2026).
Doctoral governance	Member, RRI Doctoral Programme Management Committee, 2023–present.
Community building	Founder-organizer of the Quantum Frontiers and Fundamentals meetings.
Women in science	Organizer of the inaugural Women in Optics and Photonics in India conference.

SELECTED RECENT INVITED, KEYNOTE AND PLENARY LECTURES

- 2026** Quantum Horizons Alberta Annual Symposium, Banff—invited speaker.
- 2026** Canadian Association of Physicists Annual Congress, Ottawa—invited speaker.
- 2026** Workshop for Quantum Repeaters and Networks (WQRN), Singapore—session chair; programme and steering committees.
- 2026** Annual Quantum Conclave, IIT Bombay—invited speaker.
- 2026** CIFAR Quantum Information Science Workshop, Banff—invited speaker.
- 2026** Quantum Days, Victoria—keynote speaker.
- 2025** Quantum 2025, Turin—invited speaker.
- 2025** CAFQA Workshop, Grenoble—invited speaker.
- 2025** Q-Expo, Amsterdam—invited speaker.
- 2025** International Quantum Communications Conclave, DoT, New Delhi—invited speaker.
- 2025** Japan Fintech Festival, Tokyo—keynote speaker.
- 2024** QCMC, international plenary lecture.
- 2024** CLEO—invited speaker and panellist.
- 2024** NYU Abu Dhabi Quantum Hackathon for Social Good—keynote speaker.
- 2024** Bristol Quantum Information Technology Workshop—invited speaker.
- 2024** Quantum Alberta Workshop—keynote speaker.

SCIENTIFIC COMMUNICATION AND BROADER IMPACT

National visibility	QuIC laboratory research featured in the 2025 DREAM 2047 special issue on pioneering National Quantum Mission initiatives.
Science policy	Author of a Nature India commentary on India's National Quantum Mission.
Public scholarship	Invited Scientific American article on multi-path interference and the foundations of quantum mechanics.
Public engagement	Laboratory research featured by the Office of the Principal Scientific Adviser and on national DD News.

PUBLICATIONS

Complete list, most recent first.

1. Measuring a Quantum Measure Exceeding Unity, S. Chakraborti, R. D. Sorkin, and **U. Sinha**, Quantum, 10, 2215, 2026.
2. White paper: 1-10 Hz matter-wave interferometer to test the spin entanglement witness for quantum gravity, S. Bose.....**U.Sinha**....et al, arXiv:2610.07422, 2026.
3. Higher-Dimensional Embedding of Time-Series Data for Machine Learning, K. Singh, P. P. Nath, **U. Sinha** and A. Sinha, Frontiers in Artificial Intelligence, 9, 2026.
4. Statistical Correlators and Tripartite Entanglement, S.Khan, D.Home, **U.Sinha**, S. Jain, Quantum Information Processing, 25, 297 (2026).
5. Spatial qubit entanglement witness for quantum natured gravity, Bin Yi, **Urbasi Sinha**, Dipankar Home, Anupam Mazumdar and Sougato Bose, Physica Scripta, 101 345403, 2026.
6. Round-the-clock QKD over a free-space-fiber channel with passive polarization-basis compensation, S.R.Behera, Melvee George, **U. Sinha**, Frontiers in Quantum Science and Technology, 5, 1865541, 2026.
7. Temporal steering of entanglement decay with single-shot control, Saumya Ranjan Behera, Kallol Sen, Animesh Sinha Roy, Snigdha Ray, Ashutosh Singh, ARP Rau, **U.Sinha**, Physical Review A, 114, 012416, 2026.
8. Certified random number generation using quantum computers, P.P. Nath, A.Sinha, **U.Sinha**, Frontiers in Quantum Science and Technology, Vol.4, 2025, <https://doi.org/10.3389/frqst.2025.1661544>
9. Interference in Quantum Mechanics, Sinha, U., Ghosh, D. J Indian Inst Sci (2025). <https://doi.org/10.1007/s41745-025-00477-5>
10. Intraparticle entanglement in noisy quantum channels: degradation and revival through amplitude damping, Sinha Roy A, C.V. Namitha, Mukerjee S, Panigrahi PK and **U.Sinha** (2025) Front. Quantum Sci. Technol. 4:1592872. Doi: 10.3389/frqst.2025.1592872
11. Estimating the link budget of satellite-based Quantum Key Distribution (QKD) for uplink transmission through the atmosphere, Satya Ranjan Behera, **U. Sinha**, EPJ Quantum Technology 11 Article no. 66, 2024.
12. Single system based generation of certified randomness using Leggett-Garg inequality, P.P.Nath, Debashis Saha, Dipankar Home, **U.Sinha**, Physical Review Letters, 133, 020802, 2024.
13. Relating an entanglement measure with statistical correlators for two-qudit mixed states using only a pair of complementary observables, S. Sadana, S. Kanjilal, D.Home and **U.Sinha**, Quantum Information Processing 23, 138 (2024).
14. Revealing incommensurability between device-independent randomness, nonlocality, and entanglement using Hardy and Hardy-type relations, S. Sasmal, S.Gangopadhyay, A.Rai, D.Home, **U.Sinha**, Physica Scripta, 99, 035012, 2024.
15. Massive Spatial Qubits for Testing Macroscopic Nonclassicality and Casimir Induced Entanglement, B.Yi, **U.Sinha**, D.Home, A.Majumdar, S.Bose, Physical Review Research 5 033202 (2023).
16. Noise analysis for the Sorkin and Peres tests performed on a quantum computer, S. Sadana, L. Maccone and **U. Sinha**, Quantum Information Processing 22, 317 (2023).
17. Unambiguous joint detection of spatially separated properties of a single photon in the two arms of an interferometer, S.N. Sahoo, S. Chakraborti, S. Kanjilal, S.R. Behera, D. Home, A. Matzkin and **U. Sinha**, Communications Physics 6, Article number: 203 (2023).
18. Polarization correction towards satellite-based QKD without an active feedback, S. Chatterjee, K. Goswami, R. Chatterjee and **U.Sinha**, Communications Physics 6, Article number: 116 (2023).
19. Entanglement protection in higher dimensions, A. Singh and **U.Sinha**, Physica Scripta, 97, 085104, 2022.
20. Direct determination of entanglement monotones for arbitrary dimensional bipartite states using statistical correlators and one set of complementary measurements, D. Ghosh, T.Jennewein, **U.Sinha**, Quantum Science and Technology, 7 045037, 2022.
21. Testing quantum foundations with quantum computers, S. Sadana, L. Maccone, **U.Sinha**, Physical Review Research 4 L022001, 2022.
22. Loophole free interferometric test of macrorealism using heralded single photons, K.Joarder, D.Saha, D.Home, **U.Sinha**, PRX Quantum, 3, 010307, 2022.
23. Quantum State Interferography, S.Sahoo, S. Chakraborti, A.K.Pati, **U.Sinha**, Phys. Rev. Lett. 125 123601, 2020.
24. qkdSim: An experimenter's simulation toolkit for QKD with imperfections, and its performance analysis with a demonstration of the B92 protocol using heralded photon, R. Chatterjee, K. Joarder, S. Chatterjee, B.C. Sanders, **Urbasi Sinha**, Phys. Rev. Applied 14, 024036 (2020).
25. Pearson Correlation Coefficient as a measure for Certifying and Quantifying High Dimensional Entanglement, C.Jebarathinam, D.Home, **U.Sinha**, Physical Review A 101, 022112, 2020.
26. Revisiting comparison between entanglement measures for two-qubit pure states, A.Singh, I.Ahmed, D.Home, **U.Sinha**, Journal of Optical Society of America B, 37(1), 157-166, 2020.
27. Double slit interferometry as a lossy beam splitter, S.Sadana, B.C.Sanders and **U.Sinha**, New Journal of Physics 21 113022, 2019.
28. Near-100 % two-photon-like coincidence-visibility dip with classical light and the role of complementarity, S.Sadana, D. Ghosh, K. Joarder, A. Nagalakshmi, B.C.Sanders and **U.Sinha**, Physical Review A 100 013839, 2019.
29. Measuring average of non-Hermitian operator with weak value in a Mach-Zehnder interferometer, G.Nirala, S.N.Sahoo, A.K.Pati and **U.Sinha**, Physical Review A 99 022111, 2019.
30. Correlated photonic qutrit pairs for quantum information and communication, D.Ghosh, T.Jennewein, P.Kolenderski and **U.Sinha**, OSA Continuum 1 (3), 2018.
31. Measuring the Deviation from the Superposition Principle in Interference Experiments, G.Rengaraj, U.Prathwiraj, S.N.Sahoo, R.Somashekhar and **U.Sinha**, New Journal of Physics, 20 063049, 2018.

32. The Quantum Cheshire Cat effect: Theoretical basis and observational implications, Q.Duprey, S.Kanjilal, **U.Sinha**, D.Home and A.Matzkin, *Annals of Physics*, 391 1-15, 2018.
33. Manipulation of entanglement sudden death in an all optical set-up, A.Singh, S.Pradyumna, A.R.P Rau and **U.Sinha**, *Journal of Optical Society of America B*, 34 (3) 681-690, 2017.
34. Violation of no signaling in higher order quantum measure theories, K.S.Joshi, R.Srikanth and **U.Sinha**, *International Journal of Quantum Information* 14 1650024, 2016.
35. Measuring Non-Hermitian operators via weak values, A.Pati, U.Singh and **U.Sinha**, *Physical Review A* 92 052120, 2015.
36. On the superposition principle in interference experiments, A.Sinha, A.H.Vijay and **U.Sinha**, *Scientific Reports*, 5 10304, 2015.
37. An Experimental test of Envariance, L.Vermeyden, X.Ma, J.Lavoie, M.Bonsma, **U.Sinha**, R.Laflamme and K.Resch, *Physical Review A*, 91 012120, 2015.
38. Non-classical paths in quantum interference experiments, R.Sawant, J.Samuel, A.Sinha, S.Sinha and **U.Sinha**, *Physical Review Letters*, 113 120406, 2014, selected as Focus article in *Physics*.
39. Playing a quantum game with a qutrit, **U.Sinha**, P.Kolenderski, L.Youning, T.Zhao, M.Volpini, A.Cabello, R.Laflamme and T.Jennewein, *American Institute of Physics Conference Proceedings* (refereed) Vol.1633, 38 (2014).
40. Effect of environmental coupling on tunneling of quasiparticles in Josephson junctions, M.H.Ansari, F.K.Wilhelm, **U.Sinha** and A.Sinha, *Superconductor Science and Technology* 26(12) 125013, 2013.
41. Temperature-dependent electron mobility in InAs nanowires, N.Gupta, Y.Song, G.W.Holloway, **U.Sinha**, C.Haapamaki, R. R.LaPierre and J.Baugh, arXiv: 1210.3665v1, *Nanotechnology* 24 225202, 2013.
42. Playing the AharonVaidman Quantum Game using a Young type photonic qutrit, P.Kolenderski, **U.Sinha**, L.Youning, T.Zhao, M.Volpini, A.Cabello, R.Laflamme and T.Jennewein, *Phys.Rev.A* 86 012321, 2012.
43. Triple Photons and Triple Slits: A new frontier in Quantum mechanics tests, T.Jennewein, H.Hubel, D.Hamel, A.Fedrizzi, S.Ramelov, K.Resch, **U.Sinha**, C.Couteau, R.Laflamme and G.Weihs in *Quantum Electronics and Laser Science Conference* (refereed), 2011.
44. Born Rules, **U.Sinha**, in *75 Years of Quantum Entanglement: Foundation and Information Theoretic Applications*, D.Home, G.Kar and A.S.Majumdar (Eds), *American Institute of Physics Conference Proceedings*, Vol.1384, pp 254-261, New York, 2011.
45. Ruling out Multi-order interference in Quantum Mechanics, **U.Sinha**, C.Couteau, T.Jennewein, R.Laflamme and G.Weihs, *Science* 329 418-421, 2010.
46. A Triple slit test for Quantum Mechanics, **U.Sinha**, C.Couteau, F.Dowker, T.Jennewein, G.Weihs and R.Laflamme, *Physics in Canada*, 66 No.2, April-June 2010 (invited paper).
47. Improving high Tc dc-SQUID performance by junction asymmetry, **U.Sinha**, A.Sinha and F.K.Wilhelm, *Superconductor Science and Technology* 22, (2009), 055002.
48. Testing Born's rule in Quantum mechanics with a triple slit experiment, **U.Sinha**, C.Couteau, Z. Medendorp, I. Sollner, R. Laflamme, R. Sorkin, G. Weihs, arXiv: 0811.2068. in *Foundations of Probability and Physics-5*, L. Accardi, G. Adenier, C. Fuchs, G. Jaeger, A. Yu. Khrennikov, J.-Å. Larsson, S. Stenholm (Eds.), *American Institute of Physics Conference Proceedings*, Vol. 1101, pp. 200-207, New-York (2009).
49. On transmission line resonances in high Tc dc SQUIDS, **U.Sinha**, A. Sinha and E.J. Tarte, *Superconductor Science and Technology* 21, (2008), 085021.
50. Dielectric characterization of strontium titanate thin films using Josephson junction based on-chip resonators, **U.Sinha**, G.Burnell, M.G.Blamire and E.J.Tarte, *Superconductor Science and Technology* 19, 427-432, 2006.
51. Investigation of YBCO SQUIDS with gold damping resistors, D.S.Pinker, L.K.Sahoo, D.A.Ansell, **U.Sinha**, S.H.Menema, G.Burnell and E.J.Tarte, *IEEE Transactions in Applied Superconductivity* 15 (2), 789-792, Part 1, 2005.
52. Device fabrication and Optimization for Josephson Broadband Spectroscopy of Ferroelectric thin films, **U.Sinha**, P.F.McBrien, S.H.Menemma, D.Zhang, D.S.Pinker, G.Burnell, Z.H.Barber and E.J.Tarte, *Ferroelectrics* 329, 1029-1034, 2005.
53. Investigation of gold/YBCO contacts for use with resistively shunted SQUIDS; D.S.Pinker, G.Burnell, **U.Sinha**, D.A.Ansell and E.J.Tarte; published in *Conference Proceedings, European Conference in Applied Superconductivity (EUCAS)*, September 2003.
54. Studies of transport properties of MgB₂ superconductor; A.Poddar, B.Bandyopadhyay, P.Mandal, D.Bhattacharya, P.Choudhury, **U.Sinha** and B.Ghosh, *Physica C* 390, 191-196, 2003.
55. Emerging superconducting materials: Electrical resistivity, Thermoelectric power and thermal conductivity of Magnesium diboride, MgB₂; A.Poddar, B.Bandyopadhyay, P.Mandal, D.Bhattacharya, P.Choudhury, **U.Sinha** and B.Ghosh, published in refereed Conference proceedings DAE Symposium, India, 2002.