

Manzoor A. Malik, Ph. D.

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🌐 <http://phy.uok.edu.in/Main/ProfilePage.aspx?Profile=0233>



Employment History

- 2023 - 📌 **Dean, School of Physical and Mathematical Sciences, KU**
- 2022 - 2023 📌 **Dean Academic Affairs, IUST (On deputation)**
- 2013 - 📌 **Professor, Department of Physics, University of Kashmir, Srinagar**
- 2010 - 2013 📌 **Associate Professor, Department of Physics, University of Kashmir, Srinagar**
- 2007 - 2010 📌 **Reader, Department of Physics, University of Kashmir, Srinagar**
- 1997 - 2007 📌 **Assistant Professor (Sr. AP), Department of Physics, University of Kashmir, Srinagar**

Associateship

- 2008 - 📌 **Visiting Associate IUCAA, Pune**

Education

- 2005 📌 **Ph. D., Physics** University of Kashmir, Srinagar
Thesis title: *Statistical Mechanics of the Gravitational Galaxy Clustering in the Expanding Universe*
- 1995 📌 **M. Phil., Physics** University of Kashmir, Srinagar | **Grade A**
Dissertation title: *Pairing Mechanism in High Temperature Oxide Superconductors*
- 1990 📌 **M. Sc., Physics** University of Kashmir, Srinagar | **First Div.**
- 1988 📌 **B. Sc., Physics+** University of Kashmir, Srinagar | **First Div.**
- 1983 📌 **Matriculation** JK Board, Srinagar | **First Div.**

Research projects (As Principal Investigator)

- 2022 📌 *Radio and X-ray studies of non-thermal processes in galaxy clusters and galaxy groups*
Funding Agency: **SERB (DST), New Delhi** (Rs. 36.57 Lacs including JRF)
- 2018 📌 *Studies on Atmospheric, Ionospheric and Space Sciences*
KU-NARL Collaborative project funded by **ISRO (NARL), B'loru** (Rs. 9.5 Lac excluding JRF + Imager (1 crore) on Loan from NARL)
- 2017 📌 *X-ray Study of Galaxy Clusters*
Funding Agency: **SERB (DST), New Delhi** (Rs. 16.75 Lacs including JRF)
- 2012 📌 *Constraining the Cosmological Parameters and the Underlying Theoretical Models with CMB Anisotropy and Polarization Measurements*
Funding Agency: **ISRO (RESPOND), B'loru** (Rs. 23.5 Lacs including JRF)
- 2011 📌 *Effect of SHI irradiation on some physical properties of Superconducting/Non-superconducting thin films*
Funding Agency: **IUAC (UGC), New Delhi** (Rs. 6.05 Lacs including JRF + Travel, Local hospitality for JRF and PI)

Corporate Life/Administration

- Dean, School of Physical and Mathematical Sciences, University of Kashmir, Srinagar (Presently)
- Peer Team member (Assessor) of the National Assessment and Accreditation Council (NAAC)
- Dean Academic Affairs, IUST (2022-23 On deputation)
- Dean, School of Architecture and Planning, IUST (2022-23)
- Head, Department of Physics, University of Kashmir on three occasions (2012; 2013-14; 2014-2018)
- Member, Governing Board of J & K Board of School Education
- Member, Syndicate, University of Kashmir
- Member, Academic Council, University of Kashmir
- Member Academic Council, Cluster University, Srinagar
- Member, Academic Council, University of Jammu
- Member, Academic Council, IUST
- Member, University Syndicate, University of Jammu
- Member, Research Statutes Committee, University of Kashmir
- Co-ordinator; NAAC preparations, IUST
- Chairperson, Design Your Degree Committee, IUST
- Chairperson, Central Purchase Committee, IUST
- Chairperson, Academic Reforms Committee, IUST
- Chairperson, Admission Advisory Committee, IUST
- Chairperson, Students Grievance Redressal Committee, IUST
- Chairperson, Committee for the evaluation and Absorption of Ramanujan, Ramalingaswami and Welcome Trust fellows
- Authorized signatory; MOUs of IUST with National and International Institutions/Universities
- Coordinator IUCAA Centre for Astronomy Research and Development
- Member POEC (Public Outreach and Education Committee), Astronomical Society of India (ASI)
- Member of the National Panel for selection of IAU NameExoWorlds 2022
- Member of the University's 'Research Ethics Committee'
- Member of the University's 'Comprehensive Development and Strategic Committee'
- Member, Advisory Council for the Kalam Academy of Skill Development and Training
- Chaired sessions in various National and International Conferences
- Worked as Nodal Officer for DIQA (Directorate of Internal Quality Assurance)
- Teacher In-Charge for all Admission related issues
- Member of the Monitoring/Implementation Committee for DST Sp. programme
- Member selection committees for various appointments
- Participated in drafting the new courses for Post-graduate, Under graduate studies and 10+2, from time to time, as member of BOUGS, BOPGS and BOSE.
- Have been actively involved in the departmental and University affairs including the UGC team visit and XI th. and XII th. plan preparations.
- Observer, UGC NET
- Observer, NEET/IIT-JEE

Research Interests

- 📌 **Astronomy and Astrophysics:** Cosmology; Large Scale Structure of the Universe, Galaxy Clusters, Cosmic Microwave Background Radiation (CMBR) and S-Z effect, Gravitational Wave Astronomy
- 📌 **Superconductivity:** Hi T_C Superconductivity; Materials and Mechanisms
- 📌 **Space Sciences:** Physics of the Atmosphere, Gravity Waves

Research Collaborations

- 📌 Name and affiliation: **Professor Tarun Souradeep, IUCAA, Pune (Now Director, RRI)**
Area of Research: *Cosmic Microwave Background*
Name of the research student(s)/JRF: Mussadiq Qureshi and Asif Iqbal
- 📌 Name and affiliation: **Professor Subha Majumdar, TIFR, Mumbai**
Area of Research: *Secondary Anisotropies and Sunyaev Zeldovich Effect*
Name of the research student(s)/JRF: Asif Iqbal, Shahnawaz Malik
- 📌 Name and affiliation: **Professor Asokan Kandasami, IUAC, New Delhi**
Area of Research: *Superconductivity*
Name of the research student/JRF: Bilal Malik
- 📌 Name and affiliation: **Dr. T. K. Ramkumar, Scientist G, NARL, Department of Space**
Area of Research: *Atmospheric Physics*
Name of the research student/JRF: Bilal Ganaie, Aashaq Hussain (Inspire fellow), Rafeeq Ahmad
- 📌 Name and affiliation: **Dr. Ruta Prabhakar Kale, Scientist G, NCRA (TIFR)**
Area of Research: *Radio Astronomy*
Name of the research student/JRF: Humaira Lone

Research Supervision




Ph. D.

- 1 📌 Name of the research student: **Asif Iqbal Ahangar**
Title: *Astrophysics and Cosmology with Sunyaev-Zel'dovich Effect in Galaxies, Groups and Cluster of Galaxies*
Status: Awarded
- 2 📌 Name of the research student: **Bilal Ahmad Malik**
Title: Effect of SHI irradiation on some physical properties of Superconducting/Nonsuperconducting thin films
Status: Awarded
- 3 📌 Name of the research student: **Mohd. Maqbool Bhat** (Co-supervisor)
Title: Power Spectral Density Analysis and Statistical Mechanics of Cosmological Many Body Problem
Status: Awarded
- 4 📌 Name of the research student: **Ajaz Ahmad Dar**
Title: CCD and Photoelectric Photometry of RS CVn and W Uma Binary Stars
Status: Awarded
- 5 📌 Name of the research student: **Qudsia Gani** (Co-supervisor)
Title: Measurement of Neutrino-Nucleus Interaction Cross-Section
Status: Awarded
- 6 📌 Name of the research student: **Farooq Hussain Bhat**
Title: Electric and Magnetic Properties of Transition Metal Doped Perovskites
Status: Awarded





Research Supervision (continued)

- 7  Name of the research student: **Muzaffar Qadir Lone**
Title: Study of Bipartite Entanglement and Decoherence in some Interacting Spin Systems
Status: Awarded
- 8  Name of the research student: **Aashaq Hussain**,Sr. Inspire fellow
Title: Traveling Ionospheric Disturbances Induced by Atmospheric Gravity Waves
Status: Awarded
- 9  Name of the research student: **Raja Nisar Ali** (Co-supervisor)
Title: Energy Density Functional Approach to Nuclear Many-body Problem
Status: Awarded
- 10  Name of the research student: **Bilal Ahmad Ganaie**, JRF
Title: Air glow observations of Atmospheric Gravity Waves in the Mesosphere- Lower Thermosphere and Ionospheric Plasma Depletions over Srinagar, Kashmir
Status: Submitted
- 11  Name of the research student: **Junaid Yousuf**, Inspire fellow
Title: Search for the Stochastic Gravitational Wave Background in Advanced LIGO Data
Status: Registered
- 12  Name of the research student: **Humaira Lone**, JRF
Title: Radio and X-ray Study of Galaxy Clusters and Galaxy Groups
Status: Registered
- 13  Name of the research student: **Rafeeq Ahmad**
Title: Detection, evolution and propagation of Atmospheric Gravity Waves
Status: Approved by Department Research Committee (DRC)
- 14  Name of the research student: **Shahnawaz Malik**, JRF
Title: X-ray Study of Galaxy Clusters
Status: Registered
- 15  Name of the research student: **Mussadiq Hussain Qureshi**
Title: Analyzing the features in the primordial CMB power spectrum combining the temperature and polarization data from WMAP and Planck
Status: Registered
- 16  Name of the research student: **Zakir Wani**, JRF
Area: Gravity waves
Status: Admitted by DRC
- 17  Name of the research student: **Suhail Sarwar**,
Area: Astronomy and Astrophysics
Status: Admitted by DRC

M. Phil.

- 1  Name of the research student: **Raja Nisar Ali**
Title: Correlation functions and Distribution Functions as Descriptions of the Cosmological Many-body Problem
Year of Award: 2011
- 2  Name of the research student: **Waheed Ahmad Dar** (Co-supervisor)
Title: Design, Development and Characterization of Glass Resistive Plate Chambers for Muon Detection
Year of Award: 2011
- 3  Name of the research student: **Asif Iqbal Ahangar**
Title: The Sunyaev-Zel'dovich Effect as a Probe of the Large Scale Structure of the Universe
Year of Award: 2012




Research Supervision (continued)

- 4  Name of the research student: **Shaja Rasool Wani**
Title: Constraining the Cosmological Parameters and the Underlying Theoretical Models with CMB Anisotropy and Polarization Measurements
Year of Award: 2012
- 5  Name of the research student: **Bilal Ahmad Malik**
Title: The Role of Electron-Phonon Interaction and Spin Fluctuations in the Mechanism of High TC Superconductivity
Year of Award: 2012
- 6  Name of the research student: **Sajad Hussain Bhat**
Title: Studies on the Composition, Distribution and Detection of Dark Matter in the Universe
Year of Award: 2013
- 7  Name of the research student: **Mussadiq Qureshi**
Title: Correlation of Cosmic Microwave Background with the Large Scale Structure of the Universe
Year of Award: 2014











Academic Visits Abroad

-  **Japan** (Project May and November, 2015); **Thailand** (Conference, April 2015); **Vietnam** (Conference, December 2011); **Iran** (2010, ICTP School); **Italy** (2009, ICTP School); **Malaysia** (2009, Conference)



Skills

- Computers  Working Knowledge of LINUX, LaTeX, GnuPlot, C, Fortran
- Languages  Strong reading, writing, speaking and communication competencies in English, Urdu. Working communication skills in Hindi and Kashmiri
- Miscellaneous  Teaching and Research, Training, Organization and academic Administration

Teaching Experience

-  **25 years at Post-Graduate level, 1 year at Under-Graduate level**
-  **Consistently rated "Excellent" in student evaluation conducted by DIQA**
- Courses Taught:  Mathematical Physics - I (Ist. St.)
 Mathematical Physics - II (IInd. St.)
 Quantum Mechanics - I (Ist. St.)
 Quantum Mechanics - II (IInd. St.)
 Superconductivity (IIIrd. St.)
 Condensed Matter Physics (IIIrd. St.)
- Projects (M.Sc.)  > 30 completed under my supervision
- Lab. Work  Teacher incharge (Labs.) for 6 years

Membership of Academic Bodies

-  American Physical Society (Membership No. 61178136)
-  Indian Physics Association (Membership No. AM/42)

Membership of Academic Bodies (continued)

- The Indian Science Congress Association (Membership No. A22)
- Astronomical Society of India (Membership No. L-2196)

Conferences/Workshops/Seminars Organized

- Organized a 3-day (IUCAA sponsored) Workshop on High Performance Computing during May 22-24, 2024 at University of Kashmir, Srinagar.
- Chair of the Local Organizing Committee of the Resonance Science Outreach Program Jointly organized by the Indian Academy of Sciences, B'loru and University of Kashmir, Srinagar held at University of Kashmir, Srinagar, October 10-14, 2023. (Funded by Indian Academy of Sciences, Amount 10 Lacs)
- Conference Chair of the International Conference on Culture, Heritage and Spirituality of Kashmir held at IUST, October 18-20, 2022.
- Chair of the Local Organizing Committee of the 34th meeting of the Astronomical Society of India (ASI) held at University of Kashmir, Srinagar, May 9-13, 2016. (Funding 35 Lacs generated from various sources)
- Organized 4-day (IUCAA sponsored) Workshop on Astronomical Techniques and Science with Virtual Observatories held at University of Kashmir, Srinagar, from September 23-26, 2013.
- Coordinated the Refresher Course in Sciences held at ASC, University of Kashmir, Srinagar, during January 16 to February 8, 2012.
- Organized 4-day (IUCAA sponsored) Workshop on Advances in Astronomy and Astrophysics held at University of Kashmir, Srinagar, from November 3-6, 2009
- Organized International Year of Astronomy-2009: 2-day Telescope/Spectroscope making workshop held at University of Kashmir, Srinagar, from October 7-8, 2009.
- Coordinated the Special Lecture series by Professor Naresh Dadhich (Director, IUCAA, Pune) on the occasion of the International Year of Physics (2005) organized by the department of Physics, University of Kashmir, Srinagar, Oct. 15-27, 2005

Conferences/Workshops/Schools Attended

International

- 1. Visited Japan twice (in June 2015 and November 2015) alongwith my research student and performed our experiment under project No. 2015-IB-19 titled Determination of structural anomalies in YBCO and the composites of YBCO:Ag and YBCO:BAZrO₃ below and above superconducting temperatures using Synchrotron radiation based XRD at Photon Factory, KEK, Tokyo, Japan
- 2. Presented a paper (oral) titled Some Recent Developments in Statistical Mechanical Description of Galaxy Clustering in SIAM Physics Congress organized by Chulalongkorn University together with the Thai Physics Society, Thailand, from 20-05-2015 to 22-05-2015
- 3. Presented a paper (oral) titled Current Status of High Temperature Superconductivity in the International Conference on Material Sciences organized by Department of Physics, Tripura University, Tripura during February 21-23, 2013.
- 4. Presented a paper (oral) titled Gravitational Galaxy Clustering in an Expanding Universe in the International Conference on Gravitation, Astrophysics and Cosmology Jointly organized by Centre for theoretical Physics, Marseille University, France and Rencontres du Vietnam, held at Quy Nhon, Vietnam during December 17-22, 2011.

Conferences/Workshops/Schools Attended (continued)

- 5. Indo-UK Scientific Seminar: Confronting particle-cosmology with Planck and LHC jointly organized by the Royal Society, UK and IUCAA, Pune, India held at IUCAA, Pune, India during 10-12 August, 2011.
- 6. Advance Regional Workshop on High Performance and Grid Computing jointly organized by ICTP, Trieste, Italy and IPM, Tehran, Iran held at IPM, Tehran during Oct. 25 –Nov. 9, 2010.
- 7. The 3rd IIA - PennState Astrostatistics School jointly organized by Penn State University, USA and Indian Institute of Astrophysics, Bangalore held at IIA, Bangalore, India during 19th - 27th July, 2010.
- 8. International Conference on High Performance Computing in Observational Astronomy: Requirements and Challenges held at IUCAA, Pune, India during 12-16 October, 2009
- 9. School and Symposium on Astrophysical Turbulence and dynamos organized by the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy , April 20-30, 2009.
- 10. Presented a paper titled Statistical Mechanics of the Cosmological Many-body Problem in the International meeting on the Frontiers of Physics (IMFP 2009) jointly organized by Malaysian Institute of Physics and University of Malaya, Kuala Lumpur, Malaysia, Jan. 12-16, 2009.
- 11. Indo-French Training School in Optical Astronomical Observations sponsored by the Indo-French centre for the promotion of Advanced Research held at IUCAA, Pune from Feb. 12-26, 2007.
- 12. Advanced (International) School on the Physics of Galaxy Formation Organized by HRI, Allahabad, India from Dec. 16-28, 2003.

National

- Delivered an invited talk "Science for Sustainable Future" on the occasion of National Science Day (Feb. 28 2024) organized by School of Sciences and Interdisciplinary Science and Technology Research Program, IUST.
- Presented a paper titled "Design Your Degree: Digging a Little Deeper" in the National Conference on National Education Policy on Higher education organized by University of Kashmir, Srinagar, November 22-23, 2023.
- Presented a paper titled "Blending Professional Education with Academic Disciplines" in the National Conference on Implementation of NEP-2020 in Higher Education Institutions organized by Higher Education Department, J & K, March 2-3, 2023.
- Delivered a talk titled "Renewable Energy for Sustainable Development" as invited speaker in the INSPIRE program organised by the Department of Physics, IUST, March 2022.
- Delivered a series of lectures as invited speaker in the Summer School on Quantum Mechanics organised by the Department of Physics, IUST, July 29 - September 4, 2019.
- Served as panelist in the IUCAA Associates meet held at IUCAA, Pune during September 27-28, 2018
- Gave a talk as invited speaker on Gravitational Galaxy Clustering at TIFR, Mumbai in May 2018.
- Presented a paper (poster) in "JKSC-2018", titled "On the pre-heating of Intra Cluster Medium", organized by University of Kashmir, Srinagar, from 2-04-2018 to 4-04-2018
- Gave a talk as invited speaker on Science and Society in the Orientation Course conducted by Academic Staff College, University of Kashmir, Srinagar on March 8, 2017.
- Invited talk titled "Greatest Feat of Organized Science" in the SERC School on Modern Microscopic Approaches in Nuclear Physics organized by the department of Physics, University of Kashmir, Srinagar held at University of Kashmir in May, 2016.
- Presented a paper (oral) in "JKSC-2015", titled "Technological Challenges in High Temperature Superconductors", organized by University of Kashmir, Srinagar, from 12-10-2015 to 14-10-2015
- Invited talk titled "Learn LaTeX in an Hour" in the workshop on "Mathematics and its applications" organized by the department of Mathematics, University of Kashmir, Srinagar in collaboration with the National Board of Higher Mathematics, Department of Atomic Energy, GoI, October 5-11, 2015.

Conferences/Workshops/Schools Attended (continued)

- ▶ Astronomy of Transients with Small Telescopes Organized by IUCAA, Pune, India from January 30 to February 2, 2014
- ▶ Attended Night Sky Photometer Workshop Organized by IUCAA, Pune from September 8-12, 2014
- ▶ Attended IUCAA Associates meet at IUCAA, Pune on June 25, 2014
- ▶ Gave two talks as invited speaker on i) Our Solar System and ii) Our Place in the Universe in the Refresher Course in Applied Sciences conducted by Academic Staff College, University of Kashmir, Srinagar on May 5, 2014.
- ▶ Gave a talk as invited speaker on Story of the Atomic Bomb in the Orientation Course conducted by Academic Staff College, University of Kashmir, Srinagar held at University of Kashmir on February 14, 2014.
- ▶ Gave a talk as invited speaker on An Idea of Our Universe in the Refresher Course conducted by Academic Staff College, University of Kashmir, Srinagar in September 13, 2013.
- ▶ Gave a talk as invited speaker on The greatest Achievement of Organized Science in the Refresher Course conducted by Academic Staff College, University of Kashmir, Srinagar in May, 2013.
- ▶ Presented a paper titled Causes and Characteristics of Declining Interest in Science and Some Remedial Measures in the UGC sponsored National Conference on Science Education organized by GDC, Bemina on March 5, 2012.
- ▶ Gave a talk as invited speaker on Making of the Atomic Bomb and the World Thereafter in the Orientation Course conducted by Academic Staff College, University of Kashmir, Srinagar in February, 2012.
- ▶ Invited lecture titled A Journey through the Universe delivered in the 58th General Orientation organized by ASC in May 2012.
- ▶ Gave a talk on Statistical Mechanics and Galaxy Clustering in the joint KU-IUCAA workshop on Stellar Astrometry held at University of Kashmir, Srinagar during October, 2011
- ▶ Attended the 6th. J and K Science Congress organized by the University of Kashmir, Srinagar , 2010.
- ▶ National Conference on Earthquake Predictions: Recent Developments and Challenges organized by the Department of Physics, University of Kashmir in collaboration with SINP/VECC Kolkatta, August 06-07, 2008.
- ▶ Workshop on Astrophysics jointly organized by M. S. University, Udaipur and IUCAA, Pune from Dec. 20-24, 2006.
- ▶ Presented a paper titled Partition Function for a Multi-component System of Galaxies in the 2nd. Science Congress organized by the University of Kashmir, Srinagar from July 25-27, 2006.
- ▶ Attended and coordinated the Lecture series by Professor Naresh Dadhich on the occasion of the International Year of Physics (2005) organized by the department of Physics, University of Kashmir, Srinagar Oct. 15-27, 2005.
- ▶ Workshop on Large Scale Structure and CMBR organized jointly by Delhi University, Delhi and IUCAA, Pune from Nov. 16-20, 2002.
- ▶ Ph. D. Teaching Programme Signal Processing, Beam Optics and Beam Transport organized by Nuclear Science Centre, New Delhi from Jan. 21-Feb. 15, 2002.
- ▶ Gave a talk on Making of the Atomic Bomb: Hiroshima and Aftermath in the Seminar Remembering Hiroshima sponsored by Department of Science and Technology, August 6, 2001.
- ▶ Workshop on Review of Physics Curriculum at +2 Stage organized by the research wing of J and K Board of School Education from July 22-29, 1999.
- ▶ Gave a talk on Some Simple Solar Systems in the Workshop on Renewable energy Resources organized by Deptt. of Physics, University of Kashmir, Srinagar, 1997.

Conferences/Workshops/Schools Attended (continued)

- Invited lecture titled Science and Society delivered in the refresher Course organized by Human Resource Development Centre, University of Kashmir in July 2017.

Refresher/Orientation Courses attended

- Refresher Course in Computer Applications Organized by ASC, University of Kashmir, Srinagar from Mar. 04-Mar. 27, 2009.
- Refresher Course in Physical Sciences organized by the Bharthiar University, Coimbatore, Tamil Nadu from Jan. 18, 2008 to Feb. 07, 2008.
- Refresher Course in Computer Applications Organized by the University of Kashmir, Srinagar from Nov. 17-Dec. 07, 2006.
- Refresher Course on Physics of the Atmosphere organized by the Indian Academy of Science, B'lore in association with the Centre for Atmospheric and Oceanic Sciences, IISc., B'lore held at CAOS, IISc., B'lore from Nov. 14-25, 2005.
- Orientation Course organized by the University of Kashmir, Srinagar from July 15-August 11, 2004.

Research Publications (* for Corresponding Author)

Journal Articles

- Exploring the link between convectively generated gravity waves and ionospheric anomalies: Insights from observations near the low-mid latitude geomagnetic transition region*
Rafeeq Ahmad, Aashiq Hussain, T K Ramkumar, and **Manzoor A. Malik**,
Advances in Space Research, 2024 DOI No. <https://doi.org/10.1016/j.asr.2024.04.027>
(Impact factor: **2.4**).
- The Role of Convectively-Generated Gravity Waves in Poleward Propagation of MSTIDs over Srinagar (34.1° N, 74.8° E)*
Aashiq Hussain, Rafeeq Ahmad, Ramkumar T. K. and **Manzoor A. Malik**,
JGR, 2024 <https://doi.org/10.1029/2023JA032199> (Impact factor: **4.39**).
- Effects of calibration uncertainties on the detection and parameter estimation of isotropic gravitational-wave backgrounds*
Junaid Yousuf, K. Shivaraj and **Manzoor A. Malik**,
Physical Review D, 107(10), 2023 <https://arxiv.org/abs/2301.1353> (Impact factor: **5.407**).
- Unique observations and interactions over the low-mid latitude transition region: Simultaneous study of plasma blobs, MSTIDs and plasma irregularities*
Rafeeq Ahmad, Aashiq Hussain, and **Manzoor A. Malik**,
Advances in Space Research, 73(7), 3578-3594, 2023 (Impact factor: **2.4**).
- Triaxial projected shell model approach for negative parity states in even-even nuclei*
Nazira Nazir, Sheikh Javid, **Manzoor A. Malik**
Physical Review C, 108(4), 2023 (Impact factor: **3.04**).
- Imager observation of Concentric Mesospheric Gravity Waves over Srinagar, Jammu and Kashmir, India*
Bilal A. G., **Manzoor A. Malik***, Aashiq, H. B., Ramkumar T. K.,
Advances in Space Research 70(12), 427-439, 2022 DOI:
<https://doi.org/10.1016/j.asr.2022.04.035> (Impact factor: **2.611**).
- Study of superconducting fluctuations in YBCO + xAg composites*
Bilal Malik, **Manzoor A. Malik***, and K. Asokan ,

- Journal of Low Temperature Physics, 206(1-2):1-11, 2022 (Impact factor: **1.618**).
- 8 *Airglow-imager based observation of possible influences of subtropical mesospheric gravity waves on F-region ionosphere over Jammu Kashmir, India*
Ramkumar T. K., **Manzoor A. Malik**, Aashiq, H. B., Bilal A. G.,
Scientific Reports, 11(1), 2021 (Impact factor: **5.516**).
 - 9 *Study on excess conductivity in YBCO + xAg composites*
Bilal Malik, **Manzoor A. Malik***, and K. Asokan,
Applied Physics A, 127(4), 2021 (Impact factor: **2.983**).
 - 10 *Rotation, bifurcation and merging of medium-scale traveling ionospheric disturbances over a low-mid latitude transition region*
Aashiq, H. B., Bilal A. G., Ramkumar T. K., **Manzoor A. Malik***,
Journal of Atmospheric and Solar-Terrestrial Physics, 226(1), 2021 (Impact factor: **2.119**).
 - 11 *Westward Drift of Ionospheric Plasma Irregularities over a Low to Mid-latitude Transition Region in Indian Sector*
Aashiq, H. B., Bilal A. G., Ramkumar T. K., **Manzoor A. Malik***,
Annals of geophysics 64(4):437, 2021 (Impact factor: **1.314**).
 - 12 *Northward Propagation of Medium Scale Traveling Ionospheric Disturbances over Srinagar, J and K India*
Aashiq, H. B., Bilal A. G., Ramkumar T. K., **Manzoor A. Malik***,
Advances in Space Research, 68(1), 2021 (Impact factor: **2.611**).
 - 13 *Study of canonical spin glass behavior in Co doped $LaMnO_3$*
F. H. Bhat, G. Anjum, Rav iKumar, **Manzoor A. Malik**,
AIP Advances, 11(2):025122, 2021 (Impact factor: **1.697**).
 - 14 *XAS and XPS analysis of double magnetic transition, canonical spin glass behavior and magnetoresistance in $LaMn_{1-x}Co_xO_3$ ($0.1 \leq x \leq 0.5$) system*
F. H. Bhat, G. Anjum, Rav iKumar, **Manzoor A. Malik**,
Ceramics International, 47 (5) , 2020 (Impact factor: **5.532**).
 - 15 *Complex Geometry of Space Time Motivated by Gravity's Rainbow*
Faizan Bhat, Mussadiq H. Qureshi, Asif Iqbal, **Manzoor A. Malik**,
Candian Journal of Physics, 97, No. 5, 558-561, 2019 (Impact factor: **1.358**).
 - 16 *Confronting phantom inflation with Planck data*
Asif Iqbal, **Manzoor A. Malik**, Mussadiq H. Qureshi,
Astrophysics and Space Sciences, 363:222,1-8, 2018 (Impact factor: **2.401**).
 - 17 *Variable stars in M37*
Ajaz Ahmad Dar, Padmakar Parihar, Parvej Saleh, **Manzoor A. Malik***,
Research in Astronomy and Astrophysics 18(12):155, 2018 (Impact factor: **1.64**).
 - 18 *Photometry and spectroscopy of II Peg, im Peg and UX Ari*
Ajaz Ahmad Dar, Padmakar Parihar, **Manzoor A. Malik***,
Research in Astronomy and Astrophysics 18(9):112 (Impact factor: **1.64**).
 - 19 *Search for Variable Stars in the Open Cluster NGC 2509*
Ajaz Ahmad Dar, Padmakar Parihar, Parvej Saleh, **Manzoor A. Malik***
New Astronomy, 64, 34-39, 2018 (Impact factor: **1.872**).
 - 20 *Excess entropy and energy feedback from within cluster cores up to r_{200}*
Asif Iqbal, Majumdar S., Biman B. Nath, Stefano Ettori, Dominique Eckert and **Manzoor A. Malik***
MNRAS, 472, 713, 2017 (Impact factor: **5.521**).
 - 21 *Physics Potential of the ICAL Detector at the India-based Neutrino Observatory (INO)*
A. Kumar et al including **Manzoor A. Malik**

- Pramana, 88:79, issue 5, 2017 (Impact factor: **2.669**).
- 22 *Gulmarg, Kashmir, India Potential Site for Optical Astronomical Observations*
Ajaz A. Dar, **Manzoor A. Malik***
Journal of Astrophysics and Astronomy, 38, 18, 2017 (Impact factor: **1.61**).
- 23 *AGN Feedback and Cluster Cosmology with Square Kilometre Array (SKA)*
Asif Iqbal, Biman B. Nath, Subhabrata Majumdar, Prateek Sharma, Ruta Kale, Mahadev Pandge, Somak Raychaudhury and **Manzoor A. Malik**
J Astrophys Astron 38: 68, 2017 (Impact factor: **1.61**).
- 24 *Enhancement of the critical current density in YBCO/Ag composites*
Bilal Malik, **Manzoor A. Malik***, and K. Asokan
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