

CURRICULUM VITAE

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Professor

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Academic Profile:

Ph. D. in Physics (2002) from Jamia Millia Islamia (Central University), New Delhi.

M. Sc. Physics (1992) from Jamia Millia Islamia (Central University), New Delhi.

B. Ed. (1993) from Jamia Millia Islamia (Central University), New Delhi, (India).

B. Sc. (Hons.) Physics (1990) from Jamia Millia Islamia (Central University), New Delhi.

Teaching Experience: UG: 15 Years PG: 13 Years

Research Experience: 17 Years

Field Of Specialization: Molecular and Optical Physics, **Nonlinear Optical Materials,**
Optical Spectroscopy, Computational Molecular and Nanoscience, Photonic Materials

Employment Profile:

Working as Professor in Department of Physics, Jamia Millia Islamia, New Delhi since October 02, 2019.

Worked as Associate Professor in Department of Physics, Jamia Millia Islamia, New Delhi since May 22, 2018 till October 01, 2019.

Worked as Assistant Professor in Department of Physics, Jamia Millia Islamia, New Delhi since November 21, 2006 till May 21, 2018.

Worked as Guest Lecturer at Department of Applied Sciences and Humanities, Faculty of Engineering, Jamia Millia Islamia (Central University), New Delhi for the session 2004-2005 and session 2005-2006.

Academic Work:

- Member, Departmental Committee for the design and development of Curriculum and Courses of B.Sc. (H) Physics, (Semester System- 2011-2012)
- Coordinated the design and development of Curriculum and Courses of M.Sc. Physics, (Semester System- 2009-2011)
- Redesigning the syllabus of the Course “Laser Physics and Spectroscopy” for M. Sc. Physics
- Developed the syllabi of the Courses “Photonics” for M. Sc. Physics and “Photonics” for Pre-PhD
- Redesigning the syllabus of the Course “Laser Spectroscopy” for M. Sc. Physics

Courses Taught:

- Postgraduate courses:
 - Laser Spectroscopy
 - Photonics (M. Sc. and Pre-PhD Course)
 - Laser Spectroscopy and Modern Optics
 - Laser Physics
 - Laboratory Courses (M. Sc. (P), M.Sc. (F), M. Sc. Sem -3 & 2)
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- Undergraduate courses:
 - Optics
 - Mathematical Physics
 - Mathematical Physics II
 - Nuclear and Particle Physics
 - Structure of Matter
 - Laboratory courses
 -

Research Guidance:

- No. of Ph. D. students currently working : 6+ 2* (* as Co-Supervisor)
- No. of Ph.D. Thesis submitted/under evaluation : 6+ 5* (* as Co-Supervisor)
- No. of Projects Guided at Postgraduate Level : 47 ([#Appendix_1](#))
- **Ph.D. Thesis awarded under my Supervision : 11**

| S. No. | Name of Ph. D. Scholar | Topic of Ph. D. Thesis | Year of Award |
|--------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 11. | Tahir Murtza | Synthesis, Characterization and Properties of Composite Multiferroics | 2019 |
| 10. | Shabir Ahmad Kumar* | Effect of Laser, Gamma-ray and Swift Heavy Ion Irradiation on Compound Semiconductors | 2017 |
| 9. | Munirah* | Studies of optical properties of CdS and ZnO based thin film nano structures using photo-thermal deflection and other spectroscopic techniques | 2016 |
| 8. | Cherry Dhiman | Cavity Ring Down and Laser Induced Breakdown Spectroscopic Techniques for the Study of Toxicants at Low Concentration Levels | 2016 |
| 7. | Rayees Ahmad Zargar* | Synthesis and Characterization of Iron Chalcogenide Superconductors | 2016 April |
| 6. | Stuti Joshi | Study of Spectral Properties of Partially Coherent Optical Fields and their Applications | 2015 |
| 5. | Shereena Joseph* | Light Matter Interaction in Periodic Nanostructures | 2015 |
| 4. | Sana Zafar | Structural, Electronic and Spectroscopic Studies of Non Linear Optical Conjugated Molecules and Organic Dyes | 2015 |

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|----|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|------|
| 3. | Md. Shahzad Khan | Hydrogen Storage in Carbon and Boron Nitride Nanostructures – A First Principle Computational Study | 2014 |
| 2. | Zia ul Raza Khan | Study of Spectroscopic and Optoelectronic Properties of Semiconductor Clusters and their Semiempirical and ab-initio Computations | 2012 |
| 1. | Darakhshan Qaiser* | Study of Optical Gain and Relaxation Mechanism of Fullerenes in Solution | 2012 |

* under Co-Supervision

Research Projects:

| Title of Project | Funding Agency | Duration | | Grant/Amount Mobilized (Rs. Lakhs) | Status |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------|-------------------|------------------------------------|-----------|
| | | From | To | | |
| Detection of Toxic and Explosive Traces Using Cavity Ring Down Laser Spectroscopy (CRDS) | Defence Research and Development Organization (Ministry of Defence), New Delhi | December 14, 2010 | December 13, 2013 | Rs. 14.92 Lacs | Completed |

Lectures and Talks delivered:

10. Delivered an **invited talk** on “**Nonlinear Optics and its Fascinating Applications**” in *National Seminar/Workshop on “Physics in 21st Century*” (Oct. 4-6, 2017), Abdul Ahad Azad Memorial Degree College, Cluster University, Srinagar on Oct. 4, 2017.

9. Delivered an **invited talk** on “**Organic Non-Linear Optical Materials: An Experimental and Computational Quest**” in *International Conference on New Scintillations on Materials Horizon (ICNSMH – 2016)* (Oct.21-23, 2016), Department of Applied Physics, Faculty of Engg. & Technology, MJPR University, Bareilly on Oct. 23, 2016.

8. Delivered an **invited talk** on “**Hydrogen Storage in Carbon and Boron Based Nanostructured Materials**” in *National Conference on Indian Development in Recent and Ideal Semiconductors for Novel Applications (NC IDRIS – 2012)* (Oct. 6-7, 2012) Navapur, India on Oct.7, 2012.
7. Delivered an **invited talk** on “**Designing Nanostructured Materials for Hydrogen Storage using DFT Simulations**” in *National Workshop on Advancement of Nano Materials & Its Application* (Feb 9-11, 2012) at Department of Physics, DAV College, Kanpur, India on Feb 9, 2012.
6. Delivered an **invited talk** on “**Computational Exploration of Hydrogen Storage capabilities of Nanostructured Materials using Density Functional Theory**” at in the International Conference on Advanced Materials (ICAM-2011) held at PSG College of Technology, Coimbatore, India on December 15, 2011.
5. Delivered an **invited talk** on “**Quantum Chemical Simulations for Structure and Properties of Functional Materials**” at CINVESTAV-IPN, Mexico City, Mexico on August 20, 2010.
4. Delivered a Lecture on “**Non-Linear and linear Optical Properties of electron donor – acceptor pyridine moiety: A Comparative ab initio and DFT Study**” in Symposium 5, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 18, 2010.
3. Delivered a Lecture on “**Computational Study of Hydrogen adsorption on K(poatassium)-Doped Boron-nitride nanotube**” in Symposium 2, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 17, 2010.
2. Delivered a Lecture on “**Influence of Thickness on Structural and Optical Properties of Thermally Evaporated CdTe Polycrystalline Thin Films**” in Symposium 9, of XIX International Material Research Congress (XIX IMRC), Cancun, Mexico on August 17, 2010.
1. Delivered Lectures on “Activity Based Science Learning” in the Workshop on “Train the Trainer- Innovative Teaching Methodologies and Best Practices”, at Jodhpur and Jhalawar on Dec.1 and Dec.4, 2007, respectively.

Foreign Visits:

- Visited **Mexico** to participate in the XIX International Material Research Congress (XIX IMRC) held at Cancun, Mexico during August 15-19, 2010 and delivered three Oral Presentations.
- Visited **USA** to participate as **Citizen Exchange Fellow** in the SOUTH ASIA SCHOOL COLLABORATION PROJECT (SASCP) of Department of State, USA, funded and supervised by Bureau of Educational and Cultural Affairs, USA held at *Nova Southeastern University, Florida, USA* during October 10 - November 5, 2005 and in **Washington DC** during November 5 – November 11, 2005. Interacted with the educator participants from Bangladesh, India, Pakistan, Sri Lanka and United States and completed 200 hours of studies.

- **Research Publications:** [\(Appendix 2A\)](#)
- **Publications in Refereed Journals:** 66
- **Publications in Proceedings of Conferences/ A: (with ISSN/ISBN numbers):** 14
- **Publications in Proceedings of Conferences: B: National Laser Symposia:** 7
- **Chapters in Books:** 4
- **Books:** 3

Participation in Conference / workshop / seminar / project:

30. **Chaired** a Session at International Conference on Advanced Materials (ICAM-2019) organized by Centre for Nanoscience & Nanotechnology, Jamia Millia Islamia, New Delhi (March 6-7, 2019), on March 7, 2019.
29. Attended the International Conference on Advanced Materials (ICAM-2019) organized by Centre for Nanoscience & Nanotechnology, Jamia Millia Islamia, New Delhi held during March 6-7, 2019, and Presented a research paper entitled "First-principles characterization of Stanene/MoS₂ Composite as anode for Lithium-ion Batteries" in on March 6, 2019.
28. Participated in the DAE-BRNS National Laser Symposium (NLS-27), held at RRCAT, Indore during December 3 – 6, 2019 and presented One Paper (4171)
27. **Presented a research paper (Poster)** entitled" DFT based study of Adsorption of CO on Cu-doped MoS₂ Sheet" in the International Conference on Sustainable Development through Research in engineering and Management (SDREM-16) held at YMCA University of Science and Technology, Faridabad (December26-27, 2016) on Dec 26, 2016.
26. Attended National Seminar on Photonics and Optical Materials organized by Department of Physics, JMI, New Delhi on January 21, 2016. (+1)
25. Attended National Conference on Nanotechnology and Renewable Energy (NCNRE-14) organized by Department of Applied Sciences & Humanities, Jamia Millia Islamia, New Delhi-110025 (April 28-29, 2014).
24. Attended the 17th International Workshop on the Physics of Semiconductor Devices (IWPSD-2013) held at Amity University, Noida during December 10-13, 2013. (**Two Poster presentations**)(1+1)
23. Attended First National Conference on Trends and Applications in Laser Technology and Optoelectronics (TALTO-1) held at Amity University, Gurgaon, India on April 4, 2013. (**One paper**)
22. Attended National Conference on Advanced Trends in Nanoscience and Nanotechnology (ATTN-2013) held at JMI on February 25, 2013.

21. Attended National Seminar on Developments in Materials, Theoretical and High Energy Physics held at JMI on February 3, 2012.
20. Attended the International Conference on Advanced Materials (ICAM-2011) held at PSG College of Technology, Coimbatore, India during December 12-16, 2011 and delivered an **invited talk** and **chaired** a session on Theory and Computer Simulation of Advanced Materials on December 15, 2011.
19. Participated in the 2nd **International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011)** held at IIT Guwahati, Guwahati during December 8-10, 2011 and **presented a research paper (Poster)**.
18. Attended the Three Day Joint Academies Lecture Workshop on “Frontiers in Physics”, at University of Delhi South Campus, New Delhi January 21-23, 2011.
17. Participated in the **XIX International Material Research Congress (XIX IMRC)** held at Cancun, Mexico during August 15-19, 2010 and delivered **three Oral Presentations**.
16. Attended National Seminar on Advances in Materials and Devices held at ITM University, Gurgaon, on May 15, 2010.
15. Attended National Seminar on Developments in Materials, Theoretical and High Energy Physics held at JMI during February 19-20, 2010.
14. Participated in the Ninth DAE-BRNS National Laser Symposium (NLS-09), held at BARC, Mumbai during January 13 – 16, 2010. (One Poster (CP-11-04))
13. Attended a short course on “ Laser Beam Diagnostics” conducted by Indian Laser Association at BARC, Mumbai, during January 11-12, 2010.
12. Participated in the XV International Workshop on the Physics of Semiconductor Devices (IWPSD-2009) held at JMI, New Delhi during December 15-19, 2009. (*Two Poster presentations*)
11. Attended the National Workshop on FIBER OPTICS & APPLICATIONS held at South Campus, Delhi University, New Delhi during November 28-29, 2009.
10. Participated in the Workshop on Right To Information Act 2005 held at JMI, New Delhi on October 10, 2009.
9. Attended “National Seminar on Condensed Matter, High Energy and Nuclear Physics”, Department of Physics, JMI, New Delhi-25, March 23-24, 2009.

8. Participated in the “ Workshop on Web 2.0 in Education” organized by FTK-CIT, Jamia Millia Islamia, New Delhi on November 4, 2008.
7. Participated in the Workshop on “Laser Spectroscopy and Nanophotonics” at IIT Delhi, during March 14-15, 2008.
6. Participated in “ **International Conference on Luminescence and its Applications**” at NPL, New Delhi-, during Feb.13, 16, 2008. (*Poster entitled* “The study of Energy Transfer Dye Characteristics using Fullerene C60 with Coumarine – 440”)
5. Attended the National Seminar on Nano-Materials & Devices, held at JMI on January 30, 2008.
4. Participated in the Workshop on “ IT for all”, at JMI, New Delhi, during Oct.31-Nov.1, 2007.
3. Participated in the SOUTH ASIA SCHOOL COLLABORATION PROJECT (SASCP) held at *Nova Southeastern University, Florida, USA* during October10- November 5, 2005 and in **Washington DC** during November 5 – November 11, 2005.
2. Participated in “International Conference on Spectroscopy: Perspectives and Frontiers (INCONS) held at BARC, Mumbai, during January 3-5, 1996.
1. Attended the Symposium on Molecular Spectroscopy and Laser held at BHU, Varansi during November 26-28, 1994, and **presented a poster** (No.: P/2/48) entitled “A Theoretical Study of Electronic Spectra of Radical Cations of some Anthraquinones”.

Participation in Orientation Programme / Refresher Course:

3. Attended the 4 Week Refresher Course in Physics at the UGC-HRDC, JNU, New Delhi during October 5-30, 2015.
2. Attended the 1st 3-Week Refresher Course in Basic Sciences (Interdisciplinary) at the Academic Staff College, Jamia Millia Islamia, New Delhi during May 6-27, 2011.
1. Attended the 94th 4-Week Orientation Programme at the Academic Staff College, Jamia Millia Islamia, New Delhi during October 18, 2010 to November 16, 2010.

Seminars & Conferences Organised:

- **Organizing Secretary:** National Seminar on Photonics and Optical Materials organized by Department of Physics, JMI, New Delhi on January 21, 2016.
- **Joint Secretary:** National Seminar on Nanomaterials: |Synthesis, Characterization and Applications organized by Centre for Nanoscience and Nanotechnology, JMI, New Delhi on 14th March, 2015.
- **Organizing Committee Member** of the 17th International Workshop on the Physics of Semiconductor Devices (IWPSD-2013) held at Amity University, Noida during December 10-13, 2013.
- **Joint Secretary:** National Seminar on Condensed Matter, Nuclear and High Energy Physics, organized by Department of Physics, JMI, New Delhi during February 18-19, 2011.
- **Co-ordinated the Parallel session at one venue (Hall 2) and Member Local Organizing Committee of:** International Workshop on **Physics of Semiconductor Devices**, IWPSD-2009 Jamia Millia Islamia, (Dec. 15-19, 2009)
- **Joint Secretary:** National Seminar on Condensed Matter, High Energy and Nuclear Physics, Department of Physics, JMI, New Delhi-25 (March 23-24, 2009)

Outreach Activities:

- Delivered a Talk on “ Chand ki taraf Hinustan ka safar” on Urdu Service, All India Radio, New Delhi, telecast on October 14, 2008.
- **Program Co-ordinator:** Workshop on “Innovative Teaching Methodologies and Best Practices”, on Dec. 1, 2007 at Jodhpur and Dec. 4, 2007 at Jhalawar, Rajasthan, in collaboration with American Centre, New Delhi, and Ritinjali, an NGO, and funded by US Department of State.
- Participated in three Five day Workshops and Vetted/Reviewed the Manuscripts of Physics Textbooks for Class XI and XII (Urdu Version), organized by Department of Education in Science and Mathematics (DESM), National Council for Educational Research and Training (NCERT), New Delhi during May 9-13, 2005, May 27-31, 2005, and August 22-26, 2005.

- Participated in a Five day Workshop and Vetted/Reviewed the Manuscripts of Science Textbooks for Class IX (Urdu Version), organized by Department of Education in Science and Mathematics (DESM), National Council for Educational Research and Training (NCERT), New Delhi during December 20-24, 2004.

Contribution to Corporate Life:

- Advisor Security, Jamia Millia Islamia wef July 26, 2019 to till date
- Deputy Proctor, Jamia Millia Islamia wef July 25, 2019 to till date
- Senior Warden, FRK Hostel wef Feb. 21, 2017 to May 31, 2019.
- Member Academic Audit Team for Session 2015-2016.
- Senior Warden (Mess), Dr. B.R. Ambedkar Hostel from August 27, 2015 Feb. 20, 2017.
- Advisor, Jamia Physics Association for the Session 2015-2016, 2016-2017, 2017-2018 and 2018-2019.
- Time Table In-charge of Department of Physics
- Assistant Superintendent of Entrance Examinations, MCRC Centre June 2015
- Warden (Mess), Sir Abdul Majeed Khawaja Hostel & Dr. B.R. Ambedkar Hostel from October, 2012 to August 2015.
- Nodal Officer of NAAC Team – for Department of Physics 2014-2015
- Member Central Admission Coordination and Monitoring Committee (CACMC) for the Academic Session 2013-2014.
- Member, Sub-Purchase Committee for the Department of Physics
- Member, NAAC verification Team, July 2013
- Member Central Admission Coordination and Monitoring Committee (CACMC) for the Academic Session 2012-2013.
- Assistant Superintendent of Examinations, UG Compartmental Examinations – December 2011.
- Warden, Sir Abdul Majeed Khawaja Hostel from October 5, 2011-October 2012.
- Member Central Admission Coordination and Monitoring Committee (CACMC) for the Academic Session 2011-2012.

- Assistant Superintendent, Entrance Test of Centres of JMI-2011.
- Assistant Superintendent of Examinations, Pre-Ph. D. Examinations of Department of Physics –January 2011.
- Assistant Superintendent of Examinations, Post Graduate Examinations of Department of Physics -2011.
- Assistant Superintendent of Examinations, UG Compartmental Examinations – December 27, 2010 – January 6, 2011.
- Assistant Superintendent, Entrance Test of Centres of JMI-2010.
- Assistant Superintendent of Examinations, Post Graduate Examinations of Department of Physics -2010.
- Time-Table In-charge, Department of Physics.
- Assistant Superintendent, Entrance Test of Centres of JMI-2009.
- Member, Co-ordination Committee for developing Instrumentation Maintenance Centre, JMI (2008-2010).
- Co-ordinated the Infrastructure Grant of Rs. 40 lacs from UGC to the Department of Physics.
- Member, Book Purchase Committee for the Departmental Library 2007-2008.
- Placement Coordinator, Department of Physics, 2007-2011.
- Deputy Proctor (Schools) August 2002 – February 2007.
- Assistant Proctor September 2001 – July 2002.
- Deputy Proctor (Schools) September 2000 – August 2001.
- Warden Shafeeque Manzil Hostel, January 1998 – October 1998.

Membership of Academic and Professional Bodies:

1. Life Member of Indian Laser Association, (Membership No. 917)
2. Affiliate Member of Institute of Physics, UK for the Year 2010-2011, (Membership No. 80029285)

Computational Skills:

Hyperchem and Chemplus Package, Hypercube Inc. USA. Gaussian 2003 Package, AMPAC and AMSOL packages

General Atomic and Molecular Electronic Structure System (GAMESS) Program
 Programming in Fortran, Windows, Unix/Linux, Microcal Origin

Appendix_1

List of Projects guided at PG level:

| S. NO. | NAME OF STUDENT | CLASS & SESSION | TITLE OF PROJECT | IN -HOUSE/ IN COLLABORA TION WITH |
|--------|-----------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 47 | ZEESHAN KHAN | M.SC. PHYSICS (SEM-IV) 2018-2019 | SYNTHESIS, CHARACTERIZATION AND NONLINEAR ABSORPTION OF ZINC OXIDE DOPED PMMA FILMS | IN-HOUSE |
| 46 | FARIDA PARVEEN | M.SC. PHYSICS (SEM-IV) 2018-2019 | NONLINEAR OPTICAL PROPERTIES OF 1,2-BENZANTHRAQUINONE | IN-HOUSE |
| 45 | HIMANSHU KUMAR | M.SC. PHYSICS (SEM-IV) 2018-2019 | STUDY OF OPTICAL GAIN OF RHODAMINE B | IN-HOUSE |
| 44. | ZAHID IQUBAL | M.SC. PHYSICS (SEM-IV) 2018-2019 | FLUORESCENCE RESONANCE ENERGY TRANSFER IN NAPHTHAZARIN AND MYOGLOBIN SYSTEM | IN-HOUSE |
| 43. | MUZASIR HUSSAIN | M.SC. PHYSICS (SEM-IV) 2017-2018 | NONLINEAR OPTICAL PROPERTIES OF BISMUTH FERRITE | IN-HOUSE |
| 42. | SHAHIN PARVEEN | M.SC. PHYSICS (SEM-IV) 2016-2017 | NONLINEAR ABSORPTION OF 2-HYDROXY-1,4-NAPHTHOQUINONE USING OPEN APERTURE Z-SCAN TECHNIQUE | IN-HOUSE |
| 41. | MADHVI JHA | M.SC. PHYSICS (SEM-IV) 2016-2017 | STRUCTURAL AND OPTICAL STUDY OF PURE AND Mo – DOPED BISMUTH FERRITE | IN-HOUSE |
| 40. | SHABANA ARIF | M.SC. PHYSICS (SEM-IV) 2016-2017 | CONDUCTANCE AND CHARGE STABILTY ANALYSIS OF BENZENE AND NAPHTHALENE BASED MOLECULAR SINGLE ELECTRON TRANSISTOR | IN-HOUSE |
| 39. | KANCHJAN | M.SC. PHYSICS (SEM-IV) 2016-2017 | STUDY OF MOLECULAR JUNCTION BASED ON THIOL ENDED THIOPHENE DIMER | IN-HOUSE |
| 38. | MOHD ANAS | M.SC. PHYSICS (SEM-IV) | SIMULATION OF LASER RATE EQUATIONS FOR DYE LASER | IN-HOUSE |

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| | | 2015-2016 | | |
| 37. | MOHMAD JUNAID UL HAQ | M.SC. PHYSICS (SEM-IV) 2015-2016 | STUDIES ON PULSED DYE LASER RESONANTOR | IN-HOUSE |
| 36. | SOBIA HAMID BHAT | M.SC. PHYSICS (SEM-IV) 2015-2016 | ELECTRONIC ABSORPTION SPECTRA OF 1,4-BENZOQUINONE AND ITS HYDROXY DERIVATIVES USING DENSITY FUNCTIONAL THEORY | IN-HOUSE |
| 35. | HANA KHAN | M.TECH. (NANOTECH) SEM-IV 2014-2015 | INVESTIGATION OF STRUCTURAL AND NONLINEAR OPTICAL PROPERTIES OF TELLURIUM DOPED ZINC OXIDE | CNSNT |
| 34. | MD. ZUNUN RABA ANSARI | M.TECH. (NANOTECH) SEM-IV 2014-2015 | STUDY OF ADSORPTION OF TOXIC GAS ON TITANIUM DIOXIDE SURFACE BY DFT METHOD | CNSNT |
| 33. | AMIR MANSORI | M.TECH. (NANOTECH) SEM-IV 2014-2015 | SYNTHESIS OF CADMIUM SULPHIDE NANO PARTICLES AND THEIR FLUORESCENCE RESONANCE ENERGY TRANSFER (FRET) STUDIES | CNSNT |
| 32. | ASHISH CHAUDHARY | M.SC. PHYSICS (SEM-IV) 2014-2015 | ANALYTICAL STUDY OF DARK - HOLLOW LIGHT BEAMS | IN-HOUSE |
| 31. | NEELAM SHEORAN | M.SC. PHYSICS (SEM-IV) 2014-2015 | ANALYSIS OF RAMAN SPECTRA OF ORGANIC SOLVENTS | IN-HOUSE |
| 30. | UMER MUSHTAQ | M.SC. PHYSICS (SEM-IV) 2014-2015 | STUDY OF NONLINEAR REFRACTION AND ABSORPTION FOR 1,5-DIHYDROXY ANTHRAQUINONE | IN-HOUSE |
| 29. | GARIMA | M.SC. PHYSICS (SEM-IV) 2014-2015 | PROPAGATION CHARACTERISTICS OF FIBRE LP MODES | IN-HOUSE |
| 28. | MOHINI FATIMA | M.TECH. (NANOTECH) SEM-IV 2013-2014 | COMPUTATIONAL STUDY OF HYDROGEN STORAGE ON CALCIUM-DECORATED CARBON NANOTUBES | CNSNT |
| 27. | AMIR MUSHTAQ | M.TECH. (NANOTECH) SEM-IV 2013-2014 | FUNCTIONALIZATION OF CARBON NANOTUBES WITH DYE AND STUDY OF THEIR NONLINEAR OPTICAL PROPERTIES | CNSNT |
| 26. | JYOTI SHARMA | M.SC. PHYSICS (SEM-IV) 2013-2014 | NONLINEAR ABSORPTION IN PHENOXAZONE-660 DYE-DOPED POLYMER FILM UNDER CW LASER EXCITATION | IN-HOUSE |

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| 25. | NAVJYOTI BORA | M.SC. PHYSICS (SEM-IV) 2013-2014 | CONCENTRATION EFFECT ON NON LINEAR PROPERTIES OF 1,4-DIHYDROXY 9,10 ANTHRAQUINONE BY Z-SCAN TECHNIQUE | IN-HOUSE |
| 24. | TANVI KOHLI | M.SC. PHYSICS (SEM-IV) 2013-2014 | STUDY OF DECAY TIME OF 200 PPM OF NITROGEN DIOXIDE GAS AT 50MILLIBAR AND 100MILLIBAR PRESSURES USING PHASE SHIFT CRDS TECHNIQUE | DRDO |
| 23. | ZIYAD S. KHIDIR | M.SC. PHYSICS (SEM-IV) 2013-2014 | EFFECT OF SOLVENT ON THE OPTICAL GAIN OF 1,4-DIAMINO-9,10- ANTHRAQUINONE | IN-HOUSE |
| 22. | AAS MOHAMMAD | M.SC. PHYSICS (SEM-IV) 2012-2013 | STUDY OF DECAY TIME FOR VACCUM AND NO2 AT 590 PPM USING PHASE SHIFT CRDS TECHNIQUE | DRDO |
| 21. | HANA KHAN | M.SC. PHYSICS (SEM-IV) 2012-2013 | NONLINEAR OPTICAL PROPERTIES OF DYE DOPED POLYMER FILM | IN-HOUSE |
| 20. | SAMI AHMAD | M.TECH. (NANOTECH) SEM-IV 2011-2012 | FOSTER'S RESONANCE ENERGY TRANSFER BETWEEN RHODAMINE B AND CARBON NANOTUBES | CNSNT, JMI |
| 19. | ALI JAN ADIL | M.SC. PHYSICS (SEM-IV) 2011-2012 | NONLINEAR OPTICAL PROPERTIES OF 1,2-DIAMINO-9,10- ANTHRAQUINONE | IN-HOUSE |
| 18. | AMIR MUSHTAQ | M.SC. PHYSICS (SEM-IV) 2011-2012 | OPTICAL GAIN OF PHENOXAZONE 660 | IN-HOUSE |
| 17. | YOGESH | M.SC. PHYSICS (FINAL) 2011-2012 | CAVITY RING-DOWN TECHNIQUE FOR MEASUREMENT OF REFLECTIVITY OF HIGH REFLECTIVITY MIRRORS WITH HIGH ACCURACY | DRDO |
| 16. | ARSHI JAMAL | M.SC. PHYSICS (FINAL) 2010-2011 | REVERSE SATURABLE ABSORPTION OF RHODAMINE B AT LOW INTENSITIES USING CW LASER AT 532 NM | IN-HOUSE |
| 15. | JENU JOHN | M.SC. PHYSICS (FINAL) 2010-2011 | STORAGE OF HYDROGEN ON SILICON NANOTUBE- A COMPUTATIONAL STUDY | IN-HOUSE |
| 14. | SANGEETA | M.SC. PHYSICS (FINAL) 2010-2011 | OPTICAL GAIN OF RHODAMINE-B USING LASER INDUCED FLUORESCENCE METHOD | IN-HOUSE |
| 13. | PRATIBHA | M.SC. PHYSICS (FINAL) 2009-2010 | STUDY OF OPTICAL GAIN OF 1,4-DIAMINO-9,10-ANTHRAQUINONE | IN-HOUSE |
| 12. | HARDEEP KUMAR | M.SC. PHYSICS | SOLVENT EFFECT ON ABSORPTION AND LASER INDUCED | IN-HOUSE |

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| | | (FINAL) 2009-2010 | FLUORESCENCE SPECTRA OF 5,8-DI HYDROXY-1,4-NAPHTHOQUINONE | |
| 11. | SUSHMA CHAUHAN | M.SC. PHYSICS (FINAL) 2009-2010 | STUDY OF FLUORESCENCE ENERGY TRANSFER IN QUNIZARINE-C60 SYSTEM | IN-HOUSE |
| 10. | LAL KISHORE SAH | M. SC. ELECTRONICS (FINAL) 2009-2010 | FABRICATION OF ZNO THIN FILM BY SOL-GEL METHOD AND ITS CHRACTERIZATION | IN-HOUSE |
| 9. | AQUIL AHMAD | M.SC. PHYSICS (FINAL) 2008-2009 | SOLVENT EFFECT ON ABSORPTION AND LASER INDUCED FLUORESCENCE SPECTRA OF 1,4-DI AMINO-9,10-ANTHRAQUINONE | IN-HOUSE |
| 8. | ANANT KUMAR SINHA | M.SC. PHYSICS (FINAL) 2008-2009 | FLUORESCENCE QUANTUM YIELD OF RHODAMINEB IN DIMETHYL SULPHOXIDE | IN-HOUSE |
| 7. | NIKHAT ANJUM | M.SC. PHYSICS (FINAL) 2008-2009 | FLUORESCENCE RESONANCE ENERGY TRANSFER IN QUINIZARINE-C70 SYSTEM | IN-HOUSE |
| 6. | SONIA | M.SC. PHYSICS (FINAL) 2008-2009 | ELECTRONIC STRUCTURE AND SPECTROSCOPIC PROPERTIES OF FLUORANTHENE AND FLUORENE IN BORIC ACID GLASS | IN-HOUSE |
| 5. | MD. SHAHZAD KHAN | M.SC. PHYSICS (FINAL) 2007-2008 | ELECTRONIC STRUCTURE AND SPECTRSCOPIC PROPERTIES OF FLUORANTHENE AND BENZO (K) FLUORANTHENE USING EXTENDED HUCKEL THEORY | IN-HOUSE |
| 4. | M. IMRAN | M.SC. PHYSICS (FINAL) 2007-2008 | SOLVENT EFFECT ON ABSORPTION AND FLUORESCENCE SPECTRA OF 1,4-NAPHTHOQUINONE AND DETERMINATION OF DIPOLE MOMENT OF ITS FIRST EXCITED STATE | IN-HOUSE |
| 3. | MD. HASHMUDDIN | M.SC. PHYSICS (FINAL) 2007-2008 | OPTICAL SPECTROSCOPY OF 1,4-DIHYDROXY-9,10-ANTHRAQUINONE AND DETERMINATION OF ITS FLUORESCENCE QUANTUM YIELD | IN-HOUSE |
| 2. | AMBUJ BHUSN JAISWAL | M.SC. PHYSICS (FINAL) 2007-2008 | ELECTRONIC ABSORPTION SPECTRA OF RADICAL CATIONS OF ANTHRACENE AND PHENANTHEREN | IN-HOUSE |
| 1. | ROOP CHAND | M.SC. PHYSICS (FINAL) 2006-2007 | ELECTRONIC ABSORPTION SPECTRA OF NAPHTHOQUINONE AND ITS 2-HYDROXY DERIVATIVE USING EXTENDED HUCKEL THEORY | IN-HOUSE |



Research Publications:

Publications in Refereed Journals: 66

66. Adsorption of phosgene on Si-embedded MoS₂ sheet and electric field-assisted desorption: insights from DFT calculations
Archana Sharma, Anurag Srivastava, Mushahid Husain, **Mohd. Shahid Khan**, J. Material Science **54** (17) (2019) 11497–11508, ISSN: 0022-2461 (Print) 1573-4803 (Online), <https://doi.org/10.1007/s10853-019-03706-2>, [Springer Link](#), [Impact Factor: 3.442](#) , <https://link.springer.com/article/10.1007/s10853-019-03706-2>
65. Synthesis, structural and biological activity of *N*-substituted 2-methyl-4-/5-nitroimidazole derivatives
Md Mushtaque ,Fernando Avecilla ,Ashanul Haque ,Zafar Yab ,M. Moshahid AlamRizvi, **Mohd. Shahid Khan**, J. Mol. Structure **1185** (2019), 440-449, (online) ISSN: 0022-2860 [Impact Factor:](#), **2.01**, [Sciencedirect Link](#),
64. Charge stability diagram and addition energy spectrum for single-electron transistor based on Ni-dithiolene derivatives
Anu, A. Srivastava, **Mohd. Shahid Khan**, Org. Electronics **59** (2018), 125-130, (online) **August 2018** ISSN: 1566-1199 [Impact Factor:](#), **3.495**, [Sciencedirect Link](#), <https://doi.org/10.1016/j.orgel.2018.05.003>
63. Computational investigations of Cu-embedded MoS₂ sheet for CO oxidation catalysis
Archana Sharma, Anurag Srivastava, Mushahid Husain, **Mohd. Shahid Khan**, J. Material Science **53** (13) (2018) 9578–9588, (**July 2018**) ISSN: 0022-2461 (Print) 1573-4803 (Online), <https://doi.org/10.1007/s10853-018-2269-5>, [Springer Link](#), [Impact Factor: 3.442](#) , <https://link.springer.com/article/10.1007/s10853-018-2269-5>
62. Preparation and study of (1 – x)CuFe₂O₄–xBaTiO₃ (x = 0, 0.1 and 1) composite multiferroics
Tahir Murtaza, J. Ali, **Mohd. Shahid Khan**, Ind. J. Phys **92** (7) **July** (2018), 835-840 ISSN: 0973-1458 (Print) 0974-9845 (Online), <https://doi.org/10.1007/s12648-018-1166-8>, [Springer Link](#), [Impact Factor: 1.242](#)
<https://link.springer.com/article/10.1007/s12648-018-1166-8>

61. Effect of Mo Doping at the B Site on Structural and Electrical Properties of Multiferroic BiFeO₃
Tahir Murtaza, I.A. Samani, J. Ali, **Mohd. Shahid Khan**, Journal Supercond. Novel Mag. **31** (6) **June** (2018), 1955-1959 ISSN: 1557-1939 (Print) 1557-1947 (Online), <https://doi.org/10.1007/s10948-017-4443-4>, [Springer Link](#), **Impact Factor: 1.13**
60. Sensing of CO and NO on Cu-doped MoS₂ Monolayer Based Single Electron Transistor: A First Principles Study
Archana Sharma, **Mohd. Shahid Khan**, M. Husain, Md. Shahzad Khan, A. Srivastava, **IEEE Sensor Journal** **18** (7) April (2018) 2853 – 2860, Feb 2018, ISSN: 1566-1199 **Impact Factor: 3.076**, [IEEE Link](#),
59. Structural, electrical and magnetic study of multiferroic Bi_{1-x}Nd_xFeO₃
Tahir Murtaza, Imran.A. Salmani, J. Ali, **Mohd. Shahid Khan**
J. Mat. Sc.: Mat. Elect. **29** (6) (2018) 5110-5115, March (2018) ISSN: 0957-4522 (Print) 1573-482X (Online), <https://doi.org/10.1007/s10854-017-8474-1>, [Springer Link](#), **Impact Factor: 2.195**
58. First principle study of single electron transistor based on metal-organic complex of dibenzothiophene
Anu, A. Srivastava, **Mohd. Shahid Khan**, **Org. Electronics** **53** (2018), 227-234, **Feb** 2018, ISSN: 1566-1199 **Impact Factor: 3.495**, [Sciencedirect Link](#), <https://doi.org/10.1016/j.orgel.2017.11.042>
57. Structural, electrical and magnetic properties of multiferroic BiFeO₃-SrTiO₃ composites
Tahir Murtaza, J. Ali, **Mohd. Shahid Khan**, K. Asokan,
J. Mat. Sc.: Mat. Elect. **29** (3) (2018) 2110-2119, (**Feb** 2018) ISSN: 0957-4522 (Print) 1573-482X (Online), <https://doi.org/10.1007/s10854-017-8123-8> [Springer Link](#), **Impact Factor: 2.195**
56. High-Performance Single-Electron Transistor Based on Metal-Organic Complex of Thiophene: First Principle Study
Anu, A. Sharma, M.S. Khan, A. Srivastava, M. Husain, **Mohd Shahid Khan**
IEEE Transactions on Electron Devices **64** (11) (2017) **4628-4635**. ISSN: **0018-9383**
[Link](#), **Impact Factor: 2.60**

55. Influence of zinc concentration on band gap and sub-band gap absorption on ZnO nanocrystalline thin films sol-gel grown
Munirah, Z.R. Khan, Anver Aziz **Mohd Shahid Khan**, M.U. Khandaker
Materials Science-Poland **35** (1), (2017) 246-253, ISSN: 2083-134X, [Link](#), [Impact Factor: 0.533](#)
54. Synthesis, stereochemistry determination, pharmacological studies and quantum chemical analyses of bithiazolidinone derivative
M Mushtaque, Fernando Avecilla, Zubair Bin Hafeez, Meriyam Jahan, Md Shahzad Khan, M Moshahid A Rizvi, **Mohd Shahid Khan**, Anurag Srivastava, Anwesha Mallik, Saurabh Verma, J. Mol. Struct. **1127**, (2017) 99-113, ISSN: 1434-0022-2860 (print), [Science direct](#), [Impact Factor: 1.78](#)
53. Synthesis, characterization, molecular docking, DNA binding, cytotoxicity and DFT studies of 1-(4-methoxyphenyl)-3-(pyridine-3-ylmethyl) thiourea
M Mushtaque, M Jahan, M Ali, MS Khan, **Mohd. Shahid Khan**, P Sahay, A Kesarwani, J. Mol. Struct. **1122**, (2016) 164-174, ISSN: 1434-0022-2860 (print), [Science direct](#), [Impact Factor: 1.78](#)
52. Theoretical and experimental studies of 3β -acetoxy- 5α -cholestan-6-one oxime
AU Khan, F Avecillia, N Malik, MS Khan, **Mohd. Shahid Khan**, and M Mushtaque, J. Mol. Struct. **1122**, (2016) 100-110, ISSN: 1434-0022-2860 (print), [Science direct](#), [Impact Factor: 1.78](#)
51. Compression of ultra-short pulses due to cascaded second order nonlinearities in photonic bandgap structures
S. Joseph, **Mohd. Shahid Khan**, and A.K. Hafiz, The European Physical Journal D **70**(3), (2016) 1-8, ISSN: 1434-6060 (print), ISSN: 1434-6079 (electronic), [Springer Link](#), [Impact Factor: 1.228](#)
50. First Principle Analysis Of(10-Boranyl anthracene-9-Yl)Borane-Based Molecular Single-Electron Transistor For High-Speed Low-Power Electronics
Boddepalli SanthiBhushan, Mohammad Shahzad Khan, Anurag Srivastava, **Mohd. Shahid Khan**, IEEE Transactions on Electron Devices **63** (3) (2016) **1232-1238**.
ISSN: 0018-9383 [Impact Factor: 2.472](#) [IEEE Link](#)

49. Influence Of Boron Substitution On Conductance Of Pyridine and Pentane-Based Molecular Single Electron Transistors: First-Principles Analysis
Anurag Srivastava, B Santhibhushan, Vikash Sharma, Kamalpreet Kaur, Md Shahzad Khan, Madura Marathe, Abir De Sarkar, **Mohd. Shahid Khan**, J. Electronic Materials **45** (4) (2016) 2233-2241. ISSN: 0361-5235 (Print) 1543-186x (Online), [Impact Factor: 1.798](#) [SpringerLink](#)
48. Azole-based compounds as antiamebic agents: A perspective using theoretical calculations
M Mushtaq, S Ahamad, M. Jahan, K Hussain, **Mohd. Shahid Khan**, RSC Advances **6** (2016), 815-824. ISSN 2046-2069 (Online). [Impact Factor: 3.84](#) [RSC Advances](#)
47. **Effect of gamma irradiation on the structural and optical properties of thin films of a-CdSe**
S Ahmad, **Mohd. Shahid Khan**, K Asokan, M Zulfeqar **Optik 126 (23) (2015) 3501–3505**. (ISSN: 0030-4026), [Impact Factor: 0.796](#) [Science direct](#)
46. Synthesis And Characterization Of Screen Printed ZnO Films For Solar Cell Applications
RA Zargar, S Chackrabarti, S Joseph, **Mohd. Shahid Khan**, R Husain, AK Hafiz **Optik 126 (23) (2015), 4171–4174**. (ISSN: 0030-4026), [Impact Factor: 0.796](#) [Science direct](#)
45. Structural and optical analysis of 60Co gamma-irradiated thin films of polycrystalline Ga₁₀Se₈₅Sn₅
Shabir Ahmad, K. Asokan, **Mohd. Shahid Khan**, and M.Zulfeqar, [Rad.Eff. Def. Solids](#), 170 (12) (2015), 956-969, ISSN: 1042-0150 (Print), 956-969 (Online); [Taylor Fransis Link](#) DOI: 10.1080/10420150.2016.1141906.
44. Nonlinear Optical Response Of Hydroxy Substituted Anthraquinone/Pmma Thin Films Using Z-Scan Technique
Sana Zafar, Z.H. Khan, **Mohd. Shahid Khan**, Adv. Sci. Lett. **21 (9), (2015) 2772-2775**. ISSN 1936-6612 (Print) ISSN 1936-7317 (Online); [SJR: 0.24 & cites/doc \(IF\):0.31](#) [Adv Sc Lett Link](#)
43. Study Of Nonlinear Optical Properties Of Amino Substituted Organic Dye By Z-Scan Technique Using Cw Laser And DFT Calculations

- Sana Zafar, Md. Shahzad Khan, Z.H. Khan, **Mohd. Shahid Khan**, Adv. Sci. Lett. **21 (9)**, (2015) 2734-2737. ISSN 1936-6612 (Print) ISSN 1936-7317 (Online); [SJR: 0.24 & cites/doc \(IF\):0.31 Adv Sc Lett Link](#)
42. Quantum Chemical Studies For Some Thiazolidinone Derivatives Using Density Functional Theory
Md. Shahzad Khan, Md. Mushtaque, **Mohd. Shahid Khan**, Anurag Srivastava, Kakul Husain, Adv. Sci. Lett. **21 (9)**, (2015) 2717-2726. ISSN 1936-6612 (Print) ISSN 1936-7317 (Online); [SJR: 0.24 & cites/doc \(IF\):0.31 Adv Sc Lett Link](#)
41. Electronic Excitation Induced Structural, Optical And Electrical Properties Of Se₈₅S₁₀Zn₅ Thin Films And Applicability Of A Single Oscillator Model
Shabir Ahmad, Mohd Nasir, K Asokan, **Mohd. Shahid Khan**, M Zulfequar **RSC Advances** **5 (2015)**, 69400-69409. ISSN 2046-2069 (Online). [Impact Factor: 3.84 RSC Advances](#)
40. NH₃ And PH₃ Adsorption Through Single Walled ZnS Nanotube: First Principle Insight
Md Shahzad Khan, Anurag Srivastava, Rajneesh Chaurasiya, **Mohd. Shahid Khan**, Piyush Dua **Chem. Phys. Lett.** **636 (1)** (2015), 103-109. ISSN: 0009-2614, [Impact Factor: 1.897 Sciencedirect](#)
39. Effect Of ⁶⁰Co Γ -Irradiation On Structural And Optical Properties Of Thin Films Of Ga₁₀Se₈₀Hg₁₀
S Ahmad, K Asokan, **Mohd. Shahid Khan**, M Zulfequa, [Philosophical Magazine](#) **95 (22)** (2015), 2385-2402. ISSN 1478-6435 (Print), 1478-6443 (Online), [Impact Factor: 1.825 Paper Link](#)
38. Phase-shift Cavity Ring Down Spectroscopy Set-up for NO₂ Sensing : Design and Fabrication
Cherry Dhiman, **Mohd. Shahid Khan**, M.N. Reddy, Def. Sc. Journal **65 (1)** (2015) 25-30. ISSN 0011-748X (Print) ISSN 0976-464X (Online); [Impact Factor: 0.36 DSJ Link](#)
37. Effect of laser irradiation on structural and optical properties of thermally evaporated thin films of amorphous Cd₅Se_{95-x}Zn_x

- Shabir Ahmad, Mohsin Ganaie, **Mohd. Shahid Khan**, K. Asokan and M.Zulfequar, [Rad.Eff. Def. Solids](#), 170 (2015) 32-42, ISSN: 1042-0150 (Print), 1029-4953 (Online); [Taylor Fransis Link](#) <http://dx.doi.org/10.1080/10420150.2014.988621>
36. Growth of $Zn_{1-x}Cd_xO$ nanocrystalline thin films by sol-gel method and their characterization for optoelectronic applications
Munirah, Z.R. Khan, **Mohd. Shahid Khan**, A. Aziz, *Mat. Sc. -Poland* **32 (4)** (2014), 688-695, **ISSN:** 2083-1331(print), 2083-134X (online) **Impact Factor: 0.327**, [Sprniger Link](#), [10.2478/s13536-014-0248-3](http://dx.doi.org/10.2478/s13536-014-0248-3)
35. Synthesis and Characterization of Screen Printed $Zn_{0.97}Cu_{0.03}O$ Thick Film for Semiconductor Device Applications
Rayees Ahmad Zargar, Sharief Ud Din Khan, **Mohd. Shahid Khan**, Manju Arora, and Aurangzeb Khurram Hafiz, [Physics Research International](#), Article ID 464809, 5 pages (2014), ISSN:2090-2220 (Print), ISSN: 2090-2239 (Online) ; [PRI Link](#)
34. Detection of Elemental Composition of Lubricating Grease using Laser Induced Breakdown Spectrscopy
Cherry Dhiman, M.N. Reddy, Kamal Gulati, **Mohd. Shahid Khan**, *Lubricants* **2 (4)**, 223-236 (2014) (**ISSN:** 2075-4442); [Lubricants](#)
33. Effect of coherence and polarization on the polychromatic partially coherent dark hollow beam generated from axicon-lens system
S. Joshi, B.K. Yadav, **Mohd. Shahid Khan**, H.C. Kandpal, *J. Optics* **16 (7)** 075402(5p) (2014). ISSN 2040-8978 (Print) ISSN 2040-8986 (Online); **Impact Factor: 2.01**, [IOP Science Link](#)
32. Transition metal decorated borazine complex for hydrogen storage and unfavourable consequence of spin shift for hydrogen storage on Ti-decorated borazine: A DFT study
Md. Shahzad Khan, **Mohd. Shahid Khan**, *Vacuum* **101** (2014), 151-156 (**ISSN:** 0042-207X) **Impact Factor: 1.426**, [Scienedirect Link](#), <http://dx.doi.org/10.1016/j.vacuum.2013.08.007>
31. Parameters for efficient growth of second harmonic field in nonlinear photonic crystals

- S. Joseph, **Mohd. Shahid Khan**, A.K. Hafiz, Phys. Lett. A **378** (2014), 1296-1302 (ISSN: 0375-9601) [Impact Factor: 1.626](#), [Sciedirect Link](#)
30. Study of self-defocusing, reverse saturable absorption and photoluminescence in anthraquinone PMMA nanocomposite film
Sana Zafar, Zahid H. Khan, **Mohd. Shahid Khan**, Spectrochim. Acta A **118** (2014), 852-856 (ISSN: 1386-1425) [Impact Factor: 2.12](#), [Sciedirect Link](#)
29. Sub-wavelength interference in the field assisted by surface plasmons
S. Joshi, M. Verma, **Mohd. Shahid Khan**, H.C. Kandpal, Optik **125** (10) (2014), 2339–2343 (ISSN: 0030-4026) [Impact Factor: 0.796](#), [Sciedirect Link](#), <http://dx.doi.org/10.1016/j.ijleo.2013.11.010>
28. Phase-shift cavity ring-down technique for detection of NO₂ in PPM concentration
Cherry Dhiman, **Mohd. Shahid Khan**, M.N. Reddy, Def. Sc. Journal **64** (5) 426-430 (2014). ISSN 0011-748X (Print) ISSN 0976-464X (Online); [Impact Factor: 0.36](#) [DSJ Link](#)
27. Effect Of Laser And Visible Light Irradiation On Structural And Optical Properties Of Thin Films Of Amorphous Selenium And Selenium Mercury (80:20 Composition)
Shabir Ahmad, Mohsin Ganaie, **Mohd. Shahid Khan**, and M. Zulfequar, **Adv. Mat. Lett.** **5** (9) 511-519 (2014). ISSN 0976-3961 (Print) ISSN 0976-397X (Online); [SJR: 0.55 & cites/doc \(IF\):1.91](#) [Adv. Mat. Lett. Link](#) DOI: 10.5185/amlett.2014.590
26. Ti, V and Cr Decorated Porphyrin Induced Fullerenes and Their Capability to Store Hydrogen Using DFT Method
Md. Shahzad Khan, **Mohd. Shahid Khan**, Adv. Sci. Lett. **20**, 1354-1359 (2014). ISSN 1936-6612 (Print) ISSN 1936-7317 (Online); [SJR: 0.24 & cites/doc \(IF\):0.31](#) [AdvScLett Link](#)
25. Effect of Gamma Irradiation on Optical Parameters of Thermally Evaporated Thin Films of Cd₅Se₈₉Zn₆
Shabir Ahmad, Mohsin Ganaie, Shama Islam, **Mohd. Shahid Khan**, K. Asoken, and M. Zulfequar, Adv. Sci. Lett. **20**, 1430-1432 (2014). ISSN 1936-6612 (Print) ISSN 1936-7317 (Online); [SJR: 0.24 & cites/doc \(IF\):0.31](#) [AdvScLett Link](#)
24. Study of Effect of Solar Light Irradiation on Structural, Optical and Electrical Properties of CdSe Thin Films

- Shabir Ahmad, Mohsin Ganaie, Shama Islam, **Mohd. Shahid Khan**, K. Asoken, and M. Zulfeqar, International Journal of Physics and Astronomy **2** (2) 79-92 (2014). ISSN: 2372-4811 (Print), 2372-482X (Online); [IJPA Link](#)
23. Highly *c*-Axis Oriented ZnO Thin Films Grown by Sol–Gel Method for SAW Sensor Application
Munirah, **Mohd. Shahid Khan**, A. Aziz, **Material Focus** **3** (2014), 55-59 (ISSN: 2169-429X (Print) EISSN: 2169-4303 (Online)), [DOI: http://dx.doi.org/10.1166/mat.2014.1137,ingentaconnect](#)
[http://www.aspbs.com/mat/contents_mat31.htm#v3n1](#)
22. Spectroscopic studies of sol–gel grown CdS nanocrystalline thin films for optoelectronic devices
Munirah, **Mohd. Shahid Khan**, A. Aziz, S.A. Rahman, Z. R. Khan, Mat. Sc. Semicond. Process. **16** (2013), 1894-1898 (ISSN: 1369-8001) [Impact Factor: 1.76](#), [Sciencedirect Link](#), [http://dx.doi.org/10.1016/j.mssp.2013.07.010](#)
21. A DFT study of interaction of hydrogen molecules and (5, 5) carbon nanotube with bioinspired functionalization
Md. Shahzad Khan, **Mohd. Shahid Khan**, J. Th. Appl. Phys. **2013**, **7:56** (ISSN: 2251-7235) [doi:10.1186/2251-7235-7-56](#) , [Springer Link](#)
20. Experimental and Theoretical Investigations of Nonlinear Optical Properties of 1, 4-Diamino-9, 10-Anthraquinone
Sana Zafar, Zahid H. Khan, **Mohd. Shahid Khan**, Spectrochim. Acta A **114** (2013), 164-169 (ISSN: 1386-1425) [Impact Factor: 2.12](#), [Sciencedirect Link](#)
19. Time Resolved Spectroscopy and Gain Studies of Fullerenes C60 and C70
Darakhshan Qaiser, **Mohd. Shahid Khan**, RD Singh, Zahid H. Khan , Spectrochim. Acta A **113** (2013), 400-407 (ISSN: 1386-1425) [Impact Factor: 2.12](#), [Sciencedirect Link](#)
18. Effect of polarization on spectral anomalies of diffracted stochastic electromagnetic beam
Stuti Joshi, BK Yadav, Manish Verma, **Mohd. Shahid Khan**, and H C Kandpal , J. of Optics **15** (3) 035405(5p) (2013). ISSN 2040-8978 (Print) ISSN 2040-8986 (Online); [Impact Factor: 2.01](#) [IOP Science Link](#)

17. Comparative theoretical study of iron and magnesium incorporated porphyrin induced carbon nanotube and their interaction with hydrogen molecule
Md. Shahzad Khan and **Mohd. Shahid Khan**, *Physica E* **44** (9) 1857-1861 (2012)
(ISSN: 1386-9477); [Impact Factor : 1.856 Sciencedirect link](#)
16. Structural, optical, photoluminescence, dielectric and electrical studies of vacuum evaporated CdTe thin films
Ziaul Raza Khan, M. Zulfequar and **Mohd. Shahid Khan**, *Bulletin of Materials Science* **35** (2) 169-174 (2012), (Springer) (ISSN: 0250-4707 (Print); 0973-7669 (Online)); [Impact Factor: 0.87 Springer Link](#)
15. Linear and Non-Linear Optical Properties of Electron Donor and Acceptor Pyridine moiety: A Study by ab initio and DFT Methods
Sana Zafar, Zahid H. Khan and **Mohd. Shahid Khan**, in *Canadian Journal of Pure & applied Sciences* **6** (1), 1827-1835 (2012). (ISSN: 1715-9997 (Print); 1920-3853 (Online)); [PDF-Feb2012 Index Copernicus \(2010\):4.98](#)
14. Chemical synthesis of CdS nanoparticles and their optical and dielectric studies
Ziaul Raza Khan, M. Zulfequar and **Mohd. Shahid Khan**, *Journal of Materials Science* **46**, 5412-5416 (2011), [DOI: 10.1007/s10853-011-5481-0](#) (ISSN: 0022-2461 (Print); 1573-4803 (Online)); [Impact Factor: 2.3 JMS link](#)
13. Optical and structural properties of ZnO thin films fabricated by sol-gel method
Ziaul Raza Khan, Mohd. Shoeb Khan, M. Zulfequar and **Mohd. Shahid Khan**, *Material Sciences & Applications* **2**, 340-345 (2011). (ISSN Print: 2153-117X; ISSN Online: 2153-1188); [DOI: 10.4236/msa.2011.25044 MSA Link](#) .
12. Computational Study of Hydrogen Adsorption on Potassium-Decorated Boron Nitride Nanotubes
Mohd. Shahzad Khan and **Mohd. Shahid Khan**, [International Nano Letters](#) **1**, 103-110 (2011). (ISSN: 2228-5326) [International Nano Letter Vol 1. INL link](#)
<http://link.springer.com/>
11. Förster's resonance energy transfer between Fullerene C₆₀ and Coumarin C440
Darakhshan Qaiser, **Mohd. Shahid Khan**, R.D. Singh, Zahid H. Khan and Santa Chawla, , *Spectrochim. Acta A* **77**, 1065-1068 (2010), [doi:10.1016/j.saa.2010.08.074](#).
(ISSN: 1386-1425) [Impact Factor: 2.12](#)

10. Synthesis, characterization and Corrosion inhibition efficiency of N-C2 {(2E)-2-[4-(dimethylamino) benzylidene] hydrazinyl} 2-oxo ethyl benzamide on mild steel
Rinki Goel, Weqar A. Siddiqi, Bahar Ahmed, **Mohd. Shahid Khan** and V.M. Chaubey, *Desalination* **263**, 45-57 (2010), [doi:10.1016/j.desal.2010.06.033](https://doi.org/10.1016/j.desal.2010.06.033). (ISSN: 0011-9164) **Impact Factor: 3.96**
9. Optical and Structural Properties of Thermally Evaporated Cadmium Sulphide Thin films on silicon (100) wafers
Ziaul Raza Khan, M. Zulfequar and **Mohd. Shahid Khan**, *Material Science & Engineering B* **174**, 145-149 (2010), [doi:10.1016/j.mseb.2010.03.006](https://doi.org/10.1016/j.mseb.2010.03.006). (ISSN: 0921-5107) **Impact Factor: 2.12**
8. Comparative Study of Optical Parameters of Fullerene C60 film at Different Temperatures
Darakhshan Qaiser, **Mohd. Shahid Khan**, R.D. Singh, Zahid H. Khan, *Optics Communications* **283**(18), 3437-3440 (2010), [doi:10.1016/j.optcom.2010.04.058](https://doi.org/10.1016/j.optcom.2010.04.058). (ISSN: 0030-4018) **Impact Factor: 1.52**
7. Effect of Thickness on Structural and Optical Properties of Thermally Evaporated Cadmium Sulphide Polycrystalline Thin Films
Ziaul Raza Khan, M. Zulfequar, and **Mohd. Shahid Khan**, *Chalcogenide Letters* **7**, 431-438 (2010). (ISSN 1584-8663), **PDF Impact Factor: 0.835**
6. Ab initio and Semiempirical Study of Structure and Electronic Spectra of Hydroxy Substituted Naphthoquinones
Mohd. Shahid Khan and Zahid H. Khan, *Spectrochim. Acta A* **61**, 777 (2005), [doi:10.1016/j.saa.2004.04.027](https://doi.org/10.1016/j.saa.2004.04.027). (ISSN: 1386-1425) **Impact Factor: 2.12**
5. Electronic Absorption Spectra of C₆₀ and C₇₀ and their Interpretation Using ZINDO/S
Sonia, **Mohd. Shahid Khan** and Zahid H. Khan, *Cand. J. Anal. Sci. & Spectr.* **50**, 1-6 (2005). **PDF (ISSN: 1205-6685) Impact Factor: 0.5**
4. Electronic Absorption Spectra of Amino Substituted Anthraquinones and Their Interpretation Using the ZINDO/S and AM1 Methods
Mohd. Shahid Khan and Zahid. H. Khan, *Spectrochim. Acta A* **59**, 1409 (2003), [doi:10.1016/S1386-1425\(02\)00360-8](https://doi.org/10.1016/S1386-1425(02)00360-8). (ISSN: 1386-1425) **Impact Factor: 2.12**

3. Electronic Absorption Spectra of Hydroxy-Substituted Anthraquinones and Their Interpretation using the ZINDO/S and AM1 Methods
Mohd. Shahid Khan and Zahid. H. Khan, *Cand. J. Anal. Sci. & Spectr.* **47**, 146-156 (2002). (ISSN: 1205-6685) [CJASS](#) **Impact Factor** : 0.545
2. Electronic Spectra of 1-Methyl and 2-Methyl Phenanthrenes and their Radical Cations
M.M. Husain, **Mohd. Shahid Khan**, and Zahid. H. Khan, *Spectrochim. Acta A* **56**, 2741-2751 (2000), [doi:10.1016/S1386-1425\(00\)00318-8](https://doi.org/10.1016/S1386-1425(00)00318-8). (ISSN: 1386-1425) **Impact Factor: 2.1**
1. Electronic Absorption Spectra of Radical Cations of 1-Methyl, 2-Methyl, and 9-Methyl Anthracenes
Mohd. Shahid Khan, M.M. Husain, and Zahid. H. Khan, *Cand. J. Anal. Sci. & Spectr* **45**, 41 (2000). (ISSN: 1205-6685) [CJASS](#) **Impact Factor** : 0.545



Publications in Proceedings of Conferences/ A: (with ISSN/ISBN numbers)

14. Non-linear optical properties of BiFeO₃ nanoparticles
Imran Ahmad Salmani, Tahir Murtaza, Mohd. Saleem Khan, **Mohd. Shahid Khan**, [AIP Conference Proceedings](#) **2115** (1), 030191 (4p) (2019) (12 July 2019) ISSN: 0094-243X (Print) 1551-7616 (Online), <https://doi.org/10.1063/1.5113030>, [AIP Link](#)
13. Si-doped MoS₂ Sheet as Phosgene Gas Sensor: A First Principles Study
Archana Sharma, Md. Shahzad Khan, Anurag Srivastava, **Mohd. Shahid Khan**, Mushahid Husain, [AIP Conference Proceedings](#) **2115**, 030438 (4p) (2019) (12 July 2019) ISSN: 0094-243X (Print) 1551-7616 (Online), <https://doi.org/10.1063/1.5113277>, [AIP Link](#)
12. Synthesis and structural properties of multiferroic Bi_{0.95}Mg_{0.05}FeO₃
Imran Ahmad Salmani, Tahir Murtaza, Apurva Gupta, **Mohd. Shahid Khan**, Mohd. Saleem Khan, [AIP Conference Proceedings](#) **1953** (1), 030132 (3p) (2018) (May 2018) ISSN: 0094-243X (Print) 1551-7616 (Online), <https://doi.org/10.1063/1.5032467>, [AIP Link](#)

11. Anti-site defected MoS₂ sheet-based single electron transistor as a gas sensor
Archana Sharma, Mushahid Husain, Anurag Srivastava, **Mohd. Shahid Khan**, [AIP Conference Proceedings](#) **1953** (1), 140075 (4p) (2018) (May 2018) ISSN: 0094-243X (Print) 1551-7616 (Online), <https://doi.org/10.1063/1.5033250>, [AIP Link](#)
10. Anti-site Defected MoS₂ Sheet For Catalytic Application
Archana Sharma, Mushahid Husain, **Mohd. Shahid Khan**, [AIP Conference Proceedings](#) **1942** (1), 080048 (4p) (2018) (April 2018) ISSN: 0094-243X (Print) 1551-7616 (Online), <https://doi.org/10.1063/1.5028882>, [AIP Link](#)
9. **DFT Study of Ca-adsorbed MoS₂ Monolayer for Hydrogen Storage Application**
Archana Sharma, Anu, Mushahid Husain, Anurag Srivastava and **Mohd. Shahid Khan**, *Advanced Materials Proceedings* **3** (1) (2018) 25-30; VBRI Press, ISSN: **2002-4428**
8. **Effect of coherence on the polychromatic partially coherent dark hollow beam**
Stuti Joshi, B.K. Yadav, **Mohd. Shahid Khan** and H.C. Kandpal, *Proceedings of International Conference on Fibre Optics and Photonics, At Kharagpur India, Volume: Optical Communications/Networks 2 (M2C)*, ISBN: **pp. ---- (2015): ISBN: 978-1-55752-882-7.**
7. Phase-Shift Cavity Ring Down Technique for the Measurement of High Reflectivity of Mirrors
Cherry Dhiman, **Mohd. Shahid Khan** and M. N. Reddy, *Proceedings of First National Conference on Trends and Applications in Laser Technology and Optoelectronics (TALTO-1) held at Amity University, Gurgaon, India on April 4, 2013 (Allied Publishers) Edited by J.P. Dudeja, Priti Singh, and R.K. Brajpuriya* **pp. 184-191 (2013): ISBN: 978-81-8424-826-5.**
6. Optical and structural Characterization of the Nanocrystalline Thin films of Cadmium doped Zinc Oxide Grown by Sol-Gel Spin Coating Method
Munirah, A. Aziz and **Mohd. Shahid Khan**, in *Proceedings of National Conference on Indian Development in Recent and Ideal Semiconductors for Novel Applications (NC IDRIS – 2012) held at Department of Physics, M.G. Agrawal science College, Navapur, Maharashtra (Prashant Publications) during October 6-7, 2012* **pp. 81-84 (2012): ISBN: 978-93-82414-03-2.**

5. Study of Optical Gain for Fullerene C₆₀ and Fullerene C₇₀
Darakhshan Qaiser, **Mohd. Shahid Khan**, R.D. Singh, Zahid H. Khan, **AIP Conf. Proc. 1391**, 112-113 (2011) (**Print+Online:ISSN 0094-243X Online only: ISSN 1551-7616**) [doi:http://dx.doi.org/10.1063/1.3646795](http://dx.doi.org/10.1063/1.3646795)
4. Laser Induced Fluorescence Spectra of Fullerene C₇₀-Quinizarine complex and its FRET Study
Darakhshan Qaiser, Sana Zafar, **Mohd. Shahid Khan**, R.D. Singh, Zahid H. Khan, Bionano Frontier, Sp Issue: **International Conference on Lasers and Advanced Materials (ICLAM)**, pp. 11-13 (2010). ([Bionao Frontiers](#) : ISSN: 0974-0678)
3. Synthesis and Characterization of CdS Semiconductor thin Films Having Nanometer Grain Size
Ziaul Raza Khan, M. Zulfequar **and Mohd. Shahid Khan**, Proceedings of XV International Workshop on the Physics of Semiconductor Devices (IWPSD-2009) ; New Delhi ; Dec 15-19; 2009, pp. 258-261, **ISBN: 978-90-80043-58-6**.
2. Comparative Study of Optical Parameters of Fullerene C₆₀ film at Different Temperatures
Darakhshan Qaiser, Mohd. Shahid Khan, R.D. Singh, Zahid H. Khan, Proceedings of XV International Workshop on the Physics of Semiconductor Devices (IWPSD-2009); New Delhi ; Dec 15-19 ; 2009; pp. 864-867, **ISBN: 978-90-80043-59-3**.
1. Molecular Modeling for Generation of Structural and Molecular Electronic Descriptors for QSAR using Quantum Mechanical Semiempirical and ab initio methods.
Mohd. Shahid Khan and Zahid H. Khan, [Genome Informatics 14](#), 486-487 (2003). (ISSN:0919-9454, ONLINE ISSN: 2185-842X; OCLC: 775234320) [PDF doi:http://dx.doi.org/10.11234/gi1990.14.486](#)

Publications in Proceedings of Conferences: B: National Laser Symposia

7. Development of Cavity Ring Down Spectrometer

Cherry Dhiman and **Mohd. Shahid Khan**, **Proceedings of DAE-BRNS National Laser Symposium (NLS-20), Jan. 9-12, 2012**, Anna University, Chennai; Paper No. CP-10-008; pp 980-983.

6. Optical Limiting and Thermal Induced Diffraction behavior of 1,4-Diamino-9,10-Anthraquinone

Sana Zafar and **Mohd. Shahid Khan**, **Proceedings of DAE-BRNS National Laser Symposium (NLS-20), Jan. 9-12, 2012**, Anna University, Chennai; Paper No. CP-02-067; pp 434-436.

5. Study of Optical Gain for Fullerene C60 and Fullerene C70

Darakhshan Qaiser, Mohd. Shahid Khan, **R.D. Singh, Zahid H. Khan**, Proceedings of DAE-BRNS National Laser Symposium (NLS-20), Jan. 9-12, 2012, **Anna University, Chennai; Paper No. CP-02-041; pp 334-336.**

4. Study of Optical Gain of 1,4-diamino-9,10-Anthraquinone by Laser Induced Fluorescence Technique

Darakhshan Qaiser, **Mohd. Shahid Khan**, Sana Zafar, R.D. Singh, Zahid H. Khan, Proceedings of DAE-BRNS National Laser Symposium (NLS-19); RRCAT, Indore; December 1-4, 2010; Paper No. 5.14-manu3225; pp1-4.

3. Laser Induced Fluorescence Spectra of 5,8-Dihydroxy-1,4-Naphthoquinone in different solvents and Determination of its Excited state Dipole moment from Solvent Effect

Sana Zafar, Darakhshan Qaiser, Ziaul Raza Khan, Zahid H. Khan, **Mohd. Shahid Khan**, Proceedings of DAE-BRNS National Laser Symposium (NLS-19); RRCAT, Indore; December 1-4, 2010; Paper No. 5.15-manu3006; pp1-4.

2. Laser Induced Fluorescence Spectra of 1,4-Diamino-9,10-Anthraquinone in different solvents and Determination of Excited state Dipole moment from Solvent Effect

Sana Zafar, Darakhshan Qaiser, Ziaul Raza Khan, Zahid H. Khan, **Mohd. Shahid Khan**, Proceedings of Ninth DAE-BRNS National Laser Symposium (NLS-09); BARC, Mumbai; Jan 13-16, 2010; Paper No. CP-11-04; pp1-5.

1. Laser Enhanced Mobility in Lead Iodide

Darakhshan Qaiser, R.D. Singh, **Mohd. Shahid Khan**, Z.H. Khan, D. S. Ahlawat,
Proceedings of Seventh DAE-BRNS National Laser Symposium, 2007, pp 253-254.

Abstract Papers in Conferences:

3. Effect of Thickness on Structural and Optical Properties of thermally evaporated cadmium sulphide nanocrystalline thin films
Ziaul Raza Khan, M. Zulfequar and **Mohd. Shahid Khan**, Book of Abstracts of National Seminar on Advances in Materials, ITM University, Gurgaon; May15, 2010; pp49.
2. Semi-empirical Study of Hydrogen adsorption on Potassium-Doped Boron Nitride nanotubes
Shahzad Khan and **Mohd. Shahid Khan**, Book of Abstracts of National Seminar on Advances in Materials, ITM University, Gurgaon; May15, 2010; pp39.
1. Semi-empirical study of Ca-decoration on carbon nanotube for hydrogen storage
Shahzad Khan and **Mohd. Shahid Khan**, Book of Abstracts of National Conference on Materials for Energy Storage and Conversion (NCMESC2010), Tirupati,; Jan. 23-24, 2010; pp 44.

Chapters in Books:

4. Study of Forster's Resonance Energy Transfer Between MWCNT and Phenoxazone
660
Mohd. Shahid Khan, J. Ali, A. Kumar and M. Husain in Physics of Semiconductor Devices, (Springer) Edited by Jain, V. K., Verma, Abhishek, **pp. 521-522 (2014).**:
ISBN: 978-3-319-03001-2 (Print), 978-3-319-03002-9 (online)),
http://link.springer.com/chapter/10.1007/978-3-319-03002-9_130
3. Study of Optical Parameters of the Thin Films of Se_{100-x} Hg_x with Laser Irradiation
S. Ahmad, M. Ganaie, Nasir, Neetu, **Mohd. Shahid Khan**, M. Zulfequar in Physics of Semiconductor Devices (Springer) Edited by Jain, V. K., Verma, Abhishek, pp. 849-853 (2014).: ISBN: 978-3-319-03001-2 (Print), 978-3-319-03002-9 (online)),
http://link.springer.com/chapter/10.1007/978-3-319-03002-9_219

2. Theoretical Study of Fe Incorporated Porphyrin-induced Carbon Nanotube and its Interaction with Hydrogen Molecule

Md. Shahzad Khan and **Mohd. Shahid Khan**, in Energy and Eco-Friendly Materials, (Macmillan) Edited by S. Jaya Kumar, P. Ravindaran, M.D. Kanan, R. Balasundaraprabhu and K. Vaideki, pp. 215-221 (2011).: ISBN: 978-935-059-047-8).

1. Theoretical Study of Electronic Structure and Non Linear Optical Properties of Donor-Acceptor Molecule by Density Functional Theory

Sana Zafar, Zahid H. Khan, and **Mohd. Shahid Khan**, in Crystal Growth and Computational Material Science, (Macmillan) Edited by S. Jaya Kumar, P. Ravindaran, R. Arun Kumar and C. Sudarshan, pp. 282-287 (2011).: ISBN: 978-935-059-048-5)

Books:

| S. No | Title | Author(s) | Publisher | ISBN No. | Year |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------|------|
| 3 | Electronic Spectroscopy of Amino and Hydroxy Anthraquinones: Absorption Spectra, Theoretical Interpretation and Solvent Effect on Absorption Spectra | Mohd. Shahid Khan | LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbruecken, Germany | ISBN-10: 3659134937 - ISBN-13: 978-3-659-13493-7 | 2012 |
| 2 | Semiconductor Clusters: Thin films, Spectroscopic & Optoelectronic Properties and ab-initio Computations | Z.R. Khan, Mohd. Shahid Khan , M. Zulfequar | LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbruecken, Germany | ISBN-10: 3659131148 - ISBN-13: 978-3-659-13114-1 | 2012 |
| 1 | Spectroscopy of Fullerenes in Solutions: Optical Gain and Relaxation Mechanism | D. Qaiser, Mohd. Shahid Khan , Zahid H. Khan | LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbruecken, Germany | ISBN-10: 3659112631 ; ISBN-13: 978-3659112638 | 2012 |

