1. **Basic Information:**



|  |  |
| --- | --- |
| Full name | Dr. Irfan Hussain Lone |
| First names | Irfan |
| Family name | Lone |
| Date of birth | 01-03-1985 |
| Place of birth | Srinagar Kashmir India |
| Nationality | Indian |
| Postal address | Kupwara Campus, Department of Chemistry, University of Kashmir Srinagar |
| Administrative task | **Academic Co-ordinator**, Kupwara Campus, University of Kashmir |
| Telephone | +91- 6006582730, WhatsApp @+91- 6006582730  |
| E-mail | irfanchem486@gmail.com, irfan123nano@gmail.com |
| Permanent address | Zaloora, Sopore, Baramulla (J & K) 193201 India |
|  |  |
| Current Address:  | Kupwara Campus, Department of Chemistry, University of Kashmir |
| Google scholar: | <https://scholar.google.com/citations?user=wPBnXOsAAAAJ&hl=en> |
| Research Gate: | <https://www.researchgate.net/profile/Dr_Irfan_Lone> |
| Scopus website  | <https://orcid.org/0000-0001-8361-8786> |

1. **Academic Qualification/ Acheivemets :**

|  |  |  |
| --- | --- | --- |
| Degree | Institute  | Year |
| M.Sc | Department of Chemistry, University of Kashmir Srinagar  | 2006-2008 |
| GATE | IIT | 2009 |
| NET-JRF | UGC-CSIR | 2010 |
| Ph.D. | Jamia Millia Islamia University Delhi | 2011-2016 |
| SERB-NPDF | NIT Srinagar | 2017 |

1. **Instrumental Skills**: Bruker D8-Advance Powder X-ray Diffractometer, Photocatalytic Water Splitting Set-up, Gas Sensing Set-up, Perkin-Elmer TGA/DTA, GC, Nicolet FTIR, Malvern instruments Particle sizer and zeta potential analyzer (DLS), High temperature programmable furnaces, HF-LCR meter, UV-visible spectrophotometer, Probe sonicator, Hydrothermal Autoclave Synthesis Assembly and BET Surface Area Analyzer.
2. **Research Interest**: Nanomaterials, Nanocatalysis, Photocatalysis, Electrocatalysis, Photoelectrocatalysis, Water Splitting, H2 Energy and Gas Sensing Applications.
3. **Profile: Enthusiastic**, Responsible, Able to work independently using initiative as well as part of a team with a positive attitude. Proficient in teaching with innovative and inspiring ideas.
4. **List of Publications:**
5. Multiferroic and photocatalytic properties of DyFeO3 nanoparticles stabilized by citrate precursor route **Irfan H Lone**, Mohd Fazil, Jahangeer Ahmed, Kandalam V Ramanujachary, Tokeer Ahmad, Bulletin of Materials Science, 47, 1-10. 2024 <https://doi.org/10.1007/s12034-023-03117-9>
6. Exploiting multiferroicity of TbFeO3 nanoparticles for hydrogen generation through photo/electro/photoelectro-catalytic water splitting, HumaKhan, **Irfan HussainLone**, Samuel Edward Lofland, Kandalam Venkata Ramanujachary, TokeerAhmad, Available online 1 December 2022, [International Journal of Hydrogen Energy](https://www.sciencedirect.com/journal/international-journal-of-hydrogen-energy), <https://doi.org/10.1016/j.ijhydene.2022.11.143>
7. Metal Organic Precursor Synthesis, Structural Characterization and Multiferroic Properties of GdFeO3 Nanoparticles" Author(s): **Irfan H. Lone**; Khan, Huma; Jain, Arvind; Ahmed, Jahangeer; Ahmad, Tokeer, **ACS Omega, Accepted, 07, 08, 2022**

<https://pubs.acs.org/doi/full/10.1021/acsomega.2c02809>**..**

1. Magnetic, Electrical and Humidity Sensing Properties of Multiferroic GdCrO3 Nanoparticles Fabricated by Metal Organic Precursor Method, Manuscript number: slct.202202547R2 , **ChemistrySelect,** Author(s): **Lone, Irfan**; Khan, Huma; Jain, Arvind; Ahmed, Jahangeer; Ahmad, TokeerAccepted, 15 july 2022.

<https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/slct.202202547>

1. [Molecular binding interaction of pyridinium based gemini surfactants with bovine serum albumin: Insights from physicochemical, multispectroscopic, and computational analysis](https://www.sciencedirect.com/science/article/pii/S1386142520313299), Jeenat Aslam, Irfan Hussain Lone, Farah Ansari, Afroz Aslam, Ruby Aslam, Mohd Akram, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, [Volume 250](https://www.sciencedirect.com/science/journal/13861425/250/supp/C), 5 April 2021, 119350

<https://www.sciencedirect.com/science/article/abs/pii/S1386142520313299>..

1. [Quenching Assisted Reverse Micellar Synthesis and Electrical Properties of High Surface Area BiFeO3 Nanoparticles](https://www.ingentaconnect.com/contentone/asp/jnn/2020/00000020/00000006/art00059), Irfan H Lone, Abul Kalam, Jahangeer Ahmed, Norah Alhokbany, Saad M Alshehri, Tokeer Ahmad, **Journal of nanoscience and nanotechnology**, Volume 20, Number 6, June 2020, pp. 3823-3831(9), <https://doi.org/10.1166/jnn.2020.17527>
2. Review on Polymeric Citrate Precursor and Sono-chemical Methods for the Synthesis of Nanomaterials. Irfan Hussain Lone, Jeenat Aslam, Nagi R. E. Radwan, Arifa Akhter, Rayees Ahmad Sheikh, **Current Analytical Chemistry**.2020 Nov 1;16(7):826-32, <https://doi.org/10.2174/1573411015666191203102837>
3. [Inhibitory effect of 2-Nitroacridone on corrosion of low carbon steel in 1 M HCl solution: An experimental and theoretical approach](https://www.sciencedirect.com/science/article/pii/S2238785419304831), Jeenat Aslam, Ruby Aslam, Irfan Hussain Lone, Nagi RE Radwan, Mohammad Mobin, Afroz Aslam, Mehtab Parveen, Ajab Abdullah Al-Freedi, Alaa Awad Alzulaibani, **Journal of Materials Research and Technology**, [Volume 9, Issue 3](https://www.sciencedirect.com/science/journal/22387854/9/3), May–June 2020, Pages 4061-4075, <https://doi.org/10.1016/j.jmrt.2020.02.033>
4. Molecular Interaction of Amino Acid-Based Gemini Surfactant with Human Serum Albumin: Tensiometric, Spectroscopic, and Molecular Docking Study Jeenat Aslam, Irfan Hussain Lone, Nagi R. E. Radwan, Mohd Faizan Siddiqui, Shazia Parveen, Rua B. Alnoman and Ruby Aslam, **ACS Omega** 2019, 4, 26, 22152–22160, <https://pubs.acs.org/doi/full/10.1021/acsomega.9b03315>
5. Multiferroic ABO3 Transition Metal Oxides: a Rare Interaction of Ferroelectricity and Magnetism, Irfan Hussain Lone, Jeenat Aslam, Nagi R. E. Radwan, Ali Habib Bashal, Amin F. A. Ajlouni & Arifa Akhter, **Nanoscale Research Letters**, volume 14, 142 (2019).<https://nanoscalereslett.springeropen.com/articles/10.1186/s11671-019-2961-7>
6. Concept of Reverse Micelle Method For the Synthesis of Nano-Structured Materials Irfan Hussain Lone, Nagi R.E. Radwan, Jeenat Aslam and Arifa Akhter, **Current Nanoscience,** 2018, 14, 1-8. https://www.eurekaselect.com/node/162948/article
7. Reverse Micellar Synthesis, Characterization, Magnetic and Ferroelectric Properties of YFeO3 Nanoparticles, Irfan H. Lone, Jahangeer Ahmad, Tokeer Ahmad,

**Materials Today: Proceedings**, Vol.5,07,15303-15310.2018 https://www.sciencedirect.com/science/article/pii/S2214785318308812

1. Structural characterization and properties of YCrO3 nanoparticles prepared by reverse micellar method, Irfan H. Lone, Tokeer Ahmad, Bulletin of Materials Science, 41, 1 ,25, 2018. https://link.springer.com/article/10.1007/s12034-017-1527-5
2. Development of multifunctional lutetium ferrite nanoparticles: Structural characterization and properties, [Tokeer Ahmad](https://www.sciencedirect.com/science/article/pii/S0254058417306910#!), [Irfan H. Lone](https://www.sciencedirect.com/science/article/pii/S0254058417306910#!), [Materials Chemistry and Physics](https://www.sciencedirect.com/science/journal/02540584%22%20%5Co%20%22Go%20to%20Materials%20Chemistry%20and%20Physics%20on%20ScienceDirect), [Volume 202](https://www.sciencedirect.com/science/journal/02540584/202/supp/C)1 December 2017, Pages 50-55 (IF= 2.28). <https://www.sciencedirect.com/science/article/pii/S0254058417306910>
3. Citrate precursor synthesis and multifunctional properties of YCrO3 nanoparticles, Irfan H. Lone and Tokeer Ahmad\* **New J. Chem.** 40, 3216-3224**,** 2016. (IF = 3.78). <http://pubs.rsc.org/-/content/articlelanding/2016/nj/c5nj02763b#!divAbstract>
4. Yttrium Iron Oxide as Multifunctional Nanomaterial: Properties and Application, Irfan H. Lone, Abdullah M. Asiri, S.G. Ansari, Z.A. Ansari and Tokeer Ahmad\*, Volume 126, 15 July 2017, Pages 331–338, **Material & Design** (IF = 4.3) <http://www.sciencedirect.com/science/article/pii/S0264127517303878>
5. Structural Characterization and Multiferroic Properties of Hexagonal Nano-sized YMnO3 Developed by Low Temperature Precursor Route, Irfan H. Lone, Mohd Ubaidullah, Tokeer Ahmad\* **RSC Advances**, 5, 58065-58071, 2015. (IF = 3.25 ). <http://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra09038e#!divAbstract>
6. Dielectric, optical and enhanced photocatalytic Properties of CuCrO2 nanoparticles, Tokeer Ahmad, Ruby Phul, Parvez Alam, Irfan H. Lone, Mohd. Shahazad Jahangeer Ahmed, Tansir Ahamad and Saad M. Alshehri, **RSC Advances**, 2017, 7, 27549 (IF = 3.25 ). <http://pubs.rsc.org/en/content/articlehtml/2017/ra/c6ra26888a>
7. Microemulsion synthesis, structural characterization and dielectric properties of Ba1-xPbxZrO3 (0.05≤ x≤ 0.20) nanoparticles, Tokeer Ahmad, Mohd Ubaidullah, Irfan H Lone, Dinesh Kumar, Omar A Al-Hartomy, **Materials Research Bulletin**, 89, 185-192, 2017. (IF = 2.65 ). <http://www.sciencedirect.com/science/article/pii/S0025540817304208>
8. Metal Organic Precursor Route for Pb-substituted BaZrO3 Nanoceramics: Structural Characterization and Properties. Mohd Ubaidullah, Irfan H. Lone, Omar A. Al-Hartomy, Dinesh Kumar, and Tokeer Ahmad, Advance Science Letter, 20, 1354-1359, 2014. (IF = 1.25 ) <http://www.ingentaconnect.com/content/asp/asl/2014/00000020/F0030007/art00019>
9. Low-Temperature Synthesis, Structural and Magnetic Properties of Self-dopant LaMnO3+δ Nanoparticles from a Metal-organic Polymeric Precursor, Irfan H. Lone, Mohd. Ubaidullah, Kelsey Coolhan and Tokeer Ahmad\*, **Materials Research Bulletin**, 48, 4723-4728, 2013. (IF = 2.65 ). <http://www.sciencedirect.com/science/article/pii/S0025540813006727>
10. Antifungal Activity of Gold Nanoparticles Prepared by Solvothermal Method.Tokeer Ahmad, Irshad A. Wani , Irfan H. Lone, Aparna Ganguly, Nikhat Manzoor, Aijaz Ahmad, Jahangeer Ahmed, Ayed S. Al-Shihri, **Materials Research Bulletin**, 48, 12-20, 2013. (IF = 2.65 ) <http://www.sciencedirect.com/science/article/pii/S002554081200757X>
11. **List of Conferences:**
12. Three day National Conference attended on “Nano mission” at IIT-Delhi- 2011
13. One day seminar attended on “Recent Advances in Chemistry (RAC)” 2011 at Department of Chemistry, Jamia Millia Islamia New Delhi India.
14. One day seminar attended on “International Year of Chemistry” 2011 at Department of Chemistry, Jamia Millia Islamia New Delhi India.
15. Volunteer organizer scholar of 7th National Symposium and Conference on Solid State Chemistry and Allied Areas (ISCAS-2011) at Department of Chemistry, Jamia Millia Islamia New Delhi India.
16. Participation in the five day workshop on Solid State Chemistry and Allied Areas (ISCAS-2012) at ISCAS-Institute Jammu India.
17. Poster presentation entitled “Structural Characterization and Magnetic Properties of Nanocrystalline LaMnO3” presented in the five day conference ISMC-2012 at BARC-Mumbai India.
18. Best poster presentation award entitled “Dielectric and Magnetic Properties of Nanocrystalline YFeO3 Prepared by Facile Metal Organic Polymeric Citrate Precursor Method” presented in the ISCAS-2013 conference at Dr. Hari Singh Gour Sagar Central University (MP) India
19. Poster presentation entitled “Structural Characterization and Properties of Nanocrystalline Multiferroic Phases (YFeO3 & YMnO3) Developed by Polymeric Precursor Method” presented in the international conference of nanoscience and technology ICONSAT-2014 at Punjab University India.
20. Best oral presentation in one-day seminar entitled “RECENT ADVANCES IN CHEMISTRY (RAC-2014)” at Department of Chemistry, Jamia Millia Islamia (New Delhi) India.
21. Poster presentation in two-day conference on “National Conference on Nanotechnology and Renewable Energy (April 28-29, 2014)” at Department of Applied Science and Humanities, Faculty of Engineering and Technology; Jamia Millia Islamia, New Delhi,
22. Presented a paper as Invited talk at the “Fourth International Conference on Nanostructured Materials and Nanocomposites (ICNM-2017)” held at Mahatma Gandhi University Kottayam Kerala India from 10-12 February 2017.
23. Chaired a Session at the “Fourth International Conference on Nanostructured Materials and Nanocomposites (ICNM-2017)” held at Mahatma Gandhi University Kottayam Kerala India from 10-12 February 2017.
24. Participated One-week MHRD GIAN course on “Recent Developments in Nano Materials for Energy and Health Care Applications” at Department of Chemistry, JMI from 19-12-2016 to 24-12-2016.
25. Oral Presentation in one-day Seminar at Department of Chemistry, Science College Yanbu, Taibah University Medina, Saudi Arabia, April 2018
26. **BOOK/MONOGRAPH**
27. Fabrication, Characterization and Properties of Multiferroic Compounds: Ferrite, Chromite and Magnate Based Ternary Oxide Nano-particles. [Irfan Hussain Lone](https://www.amazon.co.uk/s/ref%3Ddp_byline_sr_book_1?ie=UTF8&field-author=Irfan+Lone&text=Irfan+Lone&sort=relevancerank&search-alias=books-uk)  Publisher : LAP LAMBERT Academic Publishing (19 Aug. 2016), Paperback : 320 pages, ISBN-10 : 9783659888366, ISBN-13 : 978-3659888366,
28. **University Education:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name of Faculty | Subject | degree | From Year | To Year |
| Govt Degree College Sopore India | English, Chemistry, Botany, Zoology | B.Sc. | 2003 | 2005 |
| Department of Chemistry University of Kashmir, Srinagar, India | Chemistry | M.Sc. | 2006 | 2008 |
| Department of Chemistry, Jamia Millia Islamia, Delhi India | Chemistry | Ph.D. | 2010 | 2016 |
| Department of Chemistry, National Institute of Technology Srinagar India | Chemistry | Post Doc. | 2017 | 2017 |

1. **Employment/ Experience :**

|  |  |  |
| --- | --- | --- |
| Employer | Institution | Year |
| Before PhD |
| Teaching Assistant | Govt. Degree College Kupwara Kashmir India,<http://www.gdckupwara.com/> | 1 Year2009-2010 |
| Lecturer | National Institute of Technology, Srinagar (NIT) Srinagar, <http://www.nitsri.net/> | 0.6 yearJune 2010-Jan 2011 |
| Teaching Assistant | Govt. Degree College Sopore Kashmir India<http://gdcsopore.ac.in/> | 1 YearSept-2015 - Sept2016 |
| **After Ph.D.** |
| Assistant Professor | SGT University Gurgoan Haryana. India<http://sgtuniversity.ac.in/> | 1 YearSept 2016- Sept 2017 |
| Assistant Professor | College of Science, Yanbu, Taibah University, Al-Madinah, Saudi Arabiahttps://www.taibahu.edu.sa | 2.5 YearNov 2017-June 2020 |
| Contractual Lecturer | Department of Chemistry, University of Kashmir Srinagar India Indiahttps://www.kashmiruniversity.net |  2.9 years March 19 2021 to December 2023 |
| Contractual Lecturer | Kupwara Campus, University of Kashmir Srinagar India https://www.kashmiruniversity.net | March 05 2024 to Till Date**Currently Working** |
| Total Experience | 1. Years
 |

**13. Main Subjects Research:**

* Nanochemistry, Synthesis, Charaterization and Applications
* Dielectric and Magnetic Nano oxide Materials
* Meta oxide Nanoparticles, Biological Applications
* Gas and Moisture Sensing Nanoparticles
* Physical Chemistry, Surfactant, Micelles, Reverse Micelle