

Dr. Jahangeer Ahmed

(Listed in Stanford's University list of Top 2% Scientists-2021, 2022, 2023, 2024, 2025)

Present Address:

Associate Professor
Department of Chemistry
College of Sciences,
King Saud University
Riyadh - 11451, Saudi Arabia
Email: jahmed@ksu.edu.sa; jahanphy@gmail.com



Phone Number: +966-581466291, Passport: T1916166

Research Links:

Publons Homepage: <https://publons.com/researcher/1773944/jahangeer-ahmed/>

ORCID: <https://orcid.org/0000-0003-2331-6406>

Web of Science Researcher ID: F-1242-2019

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=23092735100>

Website: <https://faculty.ksu.edu.sa/en/jahmed>

Google Scholar:

https://scholar.google.com/citations?hl=en&user=4Kh8VyAAAAAJ&view_op=list_works

Research Citations: (From Google Scholar)

Citations: 6000+
H-index: 45
Publications: 200; Patents: 2; Book Chapter: 3

(From Web of Science)

Citations: 5000+
H-index: 40

Research Interest:

- Cost Effective and Eco-Friendly Methods for Preparation of Homogeneous and Heterogeneous Catalysts and their Characterization
- Metal and Intermetallic Nanocrystals, Functional Nanomaterials, Nanocomposites
- Selective Hydrogenation and Oxidation Reactions
- Heterogeneous Catalysts for Electro-catalytic and Photocatalytic Hydrogen Evolution Reactions
- Electro-Catalysis for Oxygen Evolution and Reduction Reactions
- Energy Storage

- Homo and Heterogeneous Catalysts for Wastewater Treatment

Post-PhD Experience (Research and Teaching): (~13 Years)

- ✚ Associate Professor, Chemistry, King Saud University, KSA (09/2021 – Present)
- ✚ Assistant Professor, Chemistry, King Saud University, KSA (03/2016 – 09/2021)
- ✚ Assistant Professor, Chemistry, Glocal University, India (09/2014 – 03/2016)
- ✚ Postdoctoral Researcher at **University of Texas, USA** (04/2013–07/2014).
- ✚ Postdoctoral Researcher at **Michigan State University, USA** (04/2011–04/2013).

Educational Details:

- ✚ Ph.D. (Chemistry): **Indian Institute of Technology (IIT)** Delhi, India

Date of Thesis Submission: December 10, 2010

Date of Degree Award: August 14, 2011

Title of PhD Thesis: “Microemulsion Based Synthesis of Bimetallic Nanoparticles: Magnetic and Electro-Catalytic Properties”.

- ✚ M.Sc Chemistry (2003): **Indian Institute of Technology (IIT)** Roorkee, India

- ✚ B.Sc (2001): Choudhary Charan Singh University Meerut, India.

Administrative experience:

- ✚ Head, Department of Natural and Applied Sciences, Glocal University, India (07/2015 – 03/2016)
- ✚ Chief Proctor, Glocal University, India (11/2014 – 07/2015)
- ✚ Chair of Anti – Ragging Committee, Glocal University (11/2014 – 07/2015)
- ✚ Committee Member of Library, Glocal University (11/2014 – 07/2015)
- ✚ Member of Examination Committee, Glocal University (11/2014 – 07/2015)

Courses Taught:

- ✚ General Chemistry (Chem-101), Chemistry of Transition Elements, Coordination Chemistry

Students Guided:

- Mr. Phil Aguirre (06/2013 – 08/2013): High School Student for Summer Project at the University of Texas – Pan American, USA.
- Ms. Mary Guerra: Undergraduate Student assigned by Dr. Mao, The University of Texas – Pan American, USA (07/2013 – 05/2014).
- Mr. Kaled Diab: Undergraduate Student assigned by Dr. Mao, The University of Texas – Pan American, USA (12/2013 – 05/2014).
- Ms. Daniella Concha: Undergraduate Student assigned by Dr. Mao, The University of Texas – Pan American, USA (12/2013 – 05/2014).

- Mr. Rodrigo: Undergraduate Student assigned by Dr. Mao, The University of Texas – Pan American, USA (12/2013 – 05/2014).

Awards and Honors:

- Listed in Stanford's University List of **Top 2% Scientists** of the World (2021, 2022)
- CSIR Senior Research Fellow, Indian Institute of Technology Delhi, (2009).
- Best Poster Prize on Poster entitled "Stabilization of high temperature form of orthorhombic CaCO_3 using reverse micelles: source of calcium oxide nanoparticles" was awarded in 17th AGM of Materials Research Society of India (MRSI) organized by University of Lucknow, Lucknow, India during February 13-15, 2006.
- High Impact Factor Journal Award by The Chemical Society, Department of Chemistry, IIT Delhi for the academic year of 2009.
- High Cumulative Impact Factor of the Publications Award by The Chemical Society, Department of Chemistry, IIT Delhi for the academic year of 2010.
- Activity Contribution Award towards the Chemical Society, Department of Chemistry, IIT Delhi, India.
- Potential Reviewer of various journals including: Materials Letters, Bulletin of Material Science, RSC Advances, Dalton Transactions, Arabian Journal of Chemistry, Materials Chemistry & Physics, etc.
- **Member of Journal's Editorial Board:** The Open Materials Science Journal

Selected Conferences in person:

- ❖ National conference on "Advanced characterization techniques on nanomaterials" held at Institute Instrumentation Centre, IIT Roorkee, Roorkee during **August 24-26, 2005**.
- ❖ XIth symposium on Modern Trends in Inorganic Chemistry (MTIC) organized by Department of Chemistry, Indian Institute of Technology, Delhi, India during **December 8-10, 2005** (presented a poster titled: "SnO₂ nanoparticles synthesized using the reverse micellar route").
- ❖ MRSI, 17th Annual General Meeting organized by Materials Research Society of India-Lucknow Chapter & University of Lucknow during **February 13-15, 2006** (presented a poster titled: "Stabilization of high temperature form of orthorhombic CaCO_3 using reverse micelles: source of calcium oxide nanoparticles"). Poster was awarded **first prize**.
- ❖ **International Conference** on Nanoscience and Technology (ICONSAT 2006) organized by Indian Institute of Technology, Delhi and Department of Science and Technology, India held at India Habitat Centre, New Delhi during **March 16-18, 2006** (presented a poster titled: "Size and Morphological control of calcium oxalate nanoparticles using leaves as natural templates").
- ❖ **International Workshop** on Advanced Materials and Technologies for Nano and Oxide Electronics organized by Indian Institute of Technology, Delhi

- held at India Habitate Centre, New Delhi during **Feb 19-22, 2007** (presented a poster titled: “Tin dioxide nanomaterials: Reverse micellar synthesis and gas sensing properties”).
- ❖ Workshop on “Nanotechnology Current Status and Challenges” held at IIT Delhi under the aegis of the Foundation for Innovation and Technology Transfer during **March 17-18, 2007**
 - ❖ I² Tech. **April 21, 2007**, Indian Institute of Technology, Delhi (Presented a poster titled: “Synthesis of Nanomaterials using surfactant aggregates”).
 - ❖ **International Conference** on Nanoscience and Technology (ICONSAT 2008) organized by IGCAR, Kalpakkam, Tamilnadu, during **Feb 27-29, 2008** (presented a poster titled: Synthesis and characterization of metal and bimetallic nanoparticles using reverse micelles).
 - ❖ National conference on “Future Directions in Advanced Materials Research” organized by IIT Delhi, held at Shimla during **April 16-19, 2008**
 - ❖ **India – Brazil – South Africa (IBSA) Nanotechnology School** on Advanced Materials, organized by Indira Gandhi Centre for Atomic Research, Kalpakkam, India, **February 22 – 26, 2010** (presented a poster titled: Role of concentration in controlling the shape of vaterite nanoparticles).
 - ❖ **6th International Chemistry Conference** organized by Saudi Chemical Society and Chemistry Department, College of Sciences, King Saud University, Riyadh – Saudi Arabia, **November 08 – 10, 2016**.

Virtual Conferences:

- ❖ **Indo – US webinar and Lecture Series** organized by Department of Chemistry, Jamia Millia Islamia, New Delhi, under the aegis of Ministry of Education, Government of India, **June 1 – 9, 2021**.
- ❖ **Virtual International Conference on Multifunctional Advanced Materials (VICMAM-2021)** organized by Department of Chemistry, JVM’s Degree College, Mumbai, India in collaboration with Association of Chemistry Teachers (ACT), **August 9 – 10, 2021**.
- ❖ An International Hybrid Meeting on “**Physics and Chemistry of Advanced Materials (PCAM-2021)**” organized at IIT Delhi, **October 24-27, 2021**.
- ❖ One Day Virtual Seminar on “**Intellectual Property Rights**” organized by Central Instrumentation Facility (CIF), Jamia Millia Islamia, New Delhi on National Science Day, February 28, 2022.

Invited Lectures:

- ❖ An invited lecture on “Synthesis and Recycling of Nanostructured Materials: An Approach for Sustainable Nanotechnology” delivered on International Hybrid Meeting on “**Physics and Chemistry of Advanced Materials (PCAM-2021)**” at IIT Delhi, **October 24-27, 2021**.
- ❖ An invited lecture on “Fabrication of Nanostructures For Diverse Applications” delivered at the workshop on “**Nanostructures For Biomedical Applications**” at King Saud University, KSA, **February 09, 2022**.

Regular Reviewers:

- ACS Applied Energy Materials
- Advanced Energy and Sustainability Research
- ACS Omega
- ACS Sustainable Chemistry & Engineering
- ChemElectroChem
- Scientific Reports
- Materials Letters
- Journal of Nanoparticle Research;
- Dalton Transactions;
- RSC Advances;
- International Journal of Hydrogen Energy;
- Bulletin of Materials Science;
- Research on Chemical Intermediates
- Journal of Nanostructure in Chemistry
- Catalysts

Editor:

(1) **Molecules**, MDPI (Guest Editor, Special Issue on Emerging Materials for Catalysis and Energy)

https://www.mdpi.com/journal/molecules/special_issues/Emerging_Materials_Catalysis

(2) **Environmental Science and Pollution Research**, Springer (Guest Editor, Special Issue on Innovative magnetic nanomaterials and their composites for the detoxification of emerging water pollutants (DEWP-2023))

<https://www.springer.com/journal/11356/updates/23749794>

(3) **Journal of Molecular Structure**, Elsevier (Guest Editor, Special Issue on Magnetic Nanomaterials & their Hybrids for Wastewater Treatment)

<https://www.sciencedirect.com/journal/journal-of-molecular-structure/about/call-for-papers>

Research Productivity

Patents:

1. US Patent on “Method of making a metal-N/S-doped carbon electrocatalyst” by Tansir Ahamad, Rahaf Mansour Alotaibi, Faten Abdullah Alsamhan, Saad Mohammed Alshehri, **Jahangeer Ahmed**, Osamah Mohammad Alduhaish. United State Patent # US12410530B1 (2025). <http://www.>
2. US Patent on “Method for preparing adsorbent for removing organic pollutants from water” by Saad M. Alshehri, Tansir Ahamad, Mu. Naushad, **Jahangeer Ahmed**, Zeid A. Al-Othman. United State Patent # 9624114 (2017). <http://www.freepatentsonline.com/9624114.html>
3. US Patent on “Method for preparing an adsorbent for removing organic dyes from aqueous solution” by Saad M. Alshehri, Tansir Ahamad, Mu. Naushad, **Jahangeer Ahmed**, Zeid A. Al-Othman. United State Patent # 9643861 (2017). <http://www.freepatentsonline.com/9643861.html>

Book Chapters:

4. **Jahangeer Ahmed** and Yuanbing Mao (2015): “Delafossite CuAlO₂ Nanoparticles with Electrocatalytic Activity toward Oxygen and Hydrogen Evolution Reactions”. **Nanomaterials for Sustainable Energy**, ACS Symposium Series, Chapter 4, Vol. 1213, pp 57–72
5. M. A. Majeed Khan Wasi Khan Maqsood Ahamed **Jahangeer Ahmed** (2022): “Electrochemical and Photocatalytic Applications of Silver-doped Cobalt Ferrite Anchored on Graphene Sheets”. **Recent Trends in Chemical and Material Sciences**. Vol. 7, pages 73–88
6. Shilpa Pande, Bidhan Pandit, Shoyebmohamad F. Shaikh, and **Jahangeer Ahmed** (2024): “Pseudocapacitance: Fundamentals to Advanced Applications”. **Pseudocapacitors: Fundamentals to High Performance Energy Storage Devices**, 19-37, Springer, Cham. https://doi.org/10.1007/978-3-031-45430-1_2

Research Publications:

2025

7. Yi Wu, Shenghong Li, **Jahangeer Ahmed**, Wei Tian, and Liang Li (2025), Synergistic Treatments of Bulk and Buried Surface in Tin-Lead Binary Perovskite for Efficient Near-Infrared Photodetectors. **Advanced Functional Materials**, Volume 33, Page 2501020 (1 to 9)

2024

8. Guoyi Li, Shenghong Li, **Jahangeer Ahmed**, Wei Tian, Liang Li (2024): Flexible perovskite photodetector with room-temperature self-healing capability without external trigger. **InfoMat**, Page e12594
9. Zhaoxia Ma, Yongqi Li, Kongyuan Sun, **Jahangeer Ahmed**, Wei Tian and Jinjia Xu (2024): Insights into the roles of superficial lattice oxygen in formaldehyde oxidation on birnessite. **Nanoscale**, Vol 16, Page 12541-12549
10. Amir Mehtab, Pravin P Ingole, **Jahangeer Ahmed**, Yuanbing Mao, Tokeer Ahmad (2024): Unraveling Quantum Mysteries: Probing the Interplay of CdS Quantum Dots and g-C3N4 Nanosheets for Enhanced Photo/Electrocatalytic Hydrogen Evolution. **Journal of Physical Chemistry C**, Volume 128, Page 85
11. Fangrong Qin, Muhammad Amin Padhiar, Shusheng Pan, Noor Zamin Khan, Yongqiang Ji, Sayed Ali Khan, **Jahangeer Ahmed**, and Shaolin Zhang (2024): Mn²⁺-Doped CsPbCl₃ Nanocrystals for Ammonia Gas Sensing. **ACS Applied Nanomaterials**, Vol 7, Page 10614.
12. Huma Khan, Samuel E. Lofland, **Jahangeer Ahmed**, Kandam V. Ramanujachary, Tokeer Ahmad (2024): Energy-efficient hydrogen generation using multiferroic TbCrO₃ nanoparticles via electrocatalysis coupled with hydrazine oxidation and photocatalysis. **International Journal of Hydrogen Energy**, Vol 58, page 717–725
13. Yang Guo, Yixuan Wang, Mengjin Zhang, Shuheng Jiang, Yi Wu, Bo Chen, Run Zhao, **Jahangeer Ahmed**, Hao Lu, Wei Tian (2024): Solution-Induced surface modification

and secondary grains growth for high-performance and stable perovskite solar cells. *Materials Today Chemistry*, Vol 40, Page 102231.

14. Huma Khan, Samuel E. Lofland, **Jahangeer Ahmed**, Kandalam V. Ramanujachary, Tokeer Ahmad (2024): Emerging rare earth perovskite nanostructures for efficient electrochemical energy conversion and storage. *International Journal of Hydrogen Energy*, Vol 58, page 954–963.
15. Muhammad Amin Padhiar, Shaolin Zhang, Fangrong Qin, Minqiang Wang, Yongqiang Ji, Noor Zamin Khan, Nisar Muhammad, Sayed Ali Khan, **Jahangeer Ahmed**, Shusheng Pan (2024): Lead-free $\text{Cs}_2\text{NaInCl}_6\text{:Bi}^{3+}/\text{Mn}^{2+}$ double perovskite nanocrystals to nanosheets with improved photoluminescence quantum yield for anti-counterfeit marks and LED applications. *Ceramics International*, Vol 50, Page 19552
16. Jit Chakraborty, Kalachand Mahali, A.M.A. Henaish, **Jahangeer Ahmed**, Saad M. Alshehri, Sanjay Roy (2024): Probing pharmaceutically important amino acids L-isoleucine and L-tyrosine Solubilities: Unraveling the solvation thermodynamics in diverse mixed solvent systems. *Biophysical Chemistry* Vol. 309, Page 107229
17. Anand Sharma, Rohit Jasrotia, Nisha Kumari, **Jahangeer Ahmed**, Saad M. Alshehri, Naveen Thakur, Virat Khanna, and Rajesh Kumar (2024): Comparative Study of Rare Earth Nd and Sm Doping on the Structural, Morphological, Optical, Magnetic, and Electromagnetic Traits of Mg-Zn-Cu Spinel Nanoferrites. *ECS Journal of Solid State Science and Technology*, Vol. 13, Page 037008.
18. Sanjay Kumar, Rohit Jasrotia, Ankit Verma, Abhishek Kandwal, **Jahangeer Ahmed**, Saad M. Alshehri, Swati Kumari, Sachin Kumar Godara, Pankaj Sharma (2024): Superparamagnetic Dy modified ZnFe_2O_4 magnetic nanophotocatalysts for the photocatalytic degradation of crystal violet pollutant. *Applied Physics A* Vol. 130 Page 258.
19. Gaurav Katoch, Rohit Jasrotia, Anant Vidya Nidhi, Ankit Verma, Sachin Kumar Godara, Pradip K. Maji, Afzal Hussain, Saad M. Alshehri, **Jahangeer Ahmed**, Abhishek Kandwal, Gagan Kumar (2024): Impact of Cu and La on the structural, morphological, magnetic, photocatalytic, and antibacterial traits of cobalt spinel nanoferrites. *Ionics* Vol 30, Page 5093–5110
20. Sanjay Kumar, Rohit Jasrotia, Pooja Puri, **Jahangeer Ahmed**, Saad M. Alshehri, Natrayan Lakshmaiy, Mika Sillanpää, Vaseem Raja, Ankit Verma, and Swati Kumari (2024): A New Class of Multifunctional $\text{CoDy}_z\text{Fe}_{2-z}\text{O}_4$ Magnetic Nanomaterials: Influence of Structural, Morphological, Optical, Magnetic, Antibacterial, and Photocatalytic Traits. *ECS Journal of Solid State Science and Technology*, Vol. 13, Page 077004.

21. Rohit Jasrotia, Ankit Verma, Anant Vidya Nidhi, **Jahangeer Ahmed**, Mohd Fazil, Virat Khanna, Swati Kumari, Tokeer Ahmad, Saad M Alshehri, Abhishek Kandwal (2024): Nanocrystalline Co/Ga substituted CuFe_2O_4 magnetic nanoferrites for green hydrogen generation. **International Journal of Hydrogen Energy**, Volume 52, Page 1194 [IF = 7.2]. Q-1
22. Rohit Jasrotia, Ankit Verma, **Jahangeer Ahmed**, Virat Khanna, Sachin Kumar Godara, Mohd Fazil, Tokeer Ahmad, Saad M Alshehri, Swati Kumari, Abhishek Kandwal (2024): Photocatalytic and electrocatalytic hydrogen production promoted by Nd/La substituted cobalt–nickel magnetic nanomaterials. **International Journal of Hydrogen Energy**, Volume 52, Pages 1217 [IF = 7.2]. Q-1
23. Rohit Jasrotia, Ankit Verma, **Jahangeer Ahmed**, Virat Khanna, Mohd Fazil, Saad M Alshehri, Swati Kumari, Pawan Kumar, Tokeer Ahmad, Abhishek Kandwal (2024): $\text{Mg}_{1-x}\text{Ni}_x\text{Ga}_y\text{Fe}_{2-y}\text{O}_4$ nano catalysts for green hydrogen generation with highly efficient photo/electro catalytic water splitting applications. **International Journal of Hydrogen Energy**, Volume 52, Pages 1228 [IF = 7.2]. Q-1
24. Swati Verma, Anupinder Singh, Sachin Kumar Godara, Surinder Singh, **Jahangeer Ahmed**, Saad M Alshehri, Sajjad Hussain, Mandeep Singh (2024): Zn-Zr induced structural and magnetic changes in strontium hexaferrite system. **Journal of Alloys and Compounds**, Volume 976, Pages 173162 [IF = 6.2]. Q-1
25. Yiwang Dong, Asma Noor, Muneerah Alomar, Qaisar Hayat, **Jahangeer Ahmed**, MAK Yousaf Shah, Yuzheng Lu, Muhammad Yousaf (2024): Demonstration of high performance and enhanced electrochemical investigations of $\text{MnFe}_2\text{O}_4\text{-ZnO}$ fuel cell device for fast ionic transport. **Materials Today Communications**, Volume 38, Pages 10772 [IF = 3.8]. Q-2
26. Pinki Kotwal, Rohit Jasrotia, Anant Vidya Nidhi, **Jahangeer Ahmed**, Sanchit Thakur, Abhishek Kandwal, Mohd Fazil, Saad M Alshehri, Tokeer Ahmad, Ankit Verma, Naresh Sharma, Rajesh Kumar (2024): Photo/electro catalytic green hydrogen production promoted by Ga modified $\text{Co}_0.6\text{Cu}_{0.4}\text{Fe}_2\text{O}_4$ nanocatalysts. **Environmental Research**, Volume 241, Pages 117669 [IF = 8.3]. Q-1
27. Athar Hussain, Jaya Maitra, Aslam Saifi, Salman Ahmed, **Jahangeer Ahmed**, Nabeen K Shrestha, Fazil Qureshi, Hesam Kamyab, Shreeshivadasan Chelliapan, Mohammad Yusuf (2024): A sustainable approach for fluoride treatment using coconut fiber cellulose as an adsorbent. **Environmental Research**, Volume 244, Pages 117952 [IF = 8.3]. Q-1
28. Venuka Bhasin, Karuna Sharma, Rohit Jasrotia, **Jahangeer Ahmed**, Sukhmanbir Kaur, Mandeep Singh, Ashwini kumar Sood, Swati Kumari, Sajjad Hussain, Jayesh C Chaudhari, Sachin kumar Godara (2024): Effect of Cr substitution in nickel spinel ferrite

on the surface morphology, structure, antibacterial activity and magnetic properties. *Inorganic Chemistry Communications*, Volume 160, Pages 111764 [IF = 3.8]. Q-1

29. Nilam Sing, Kalachand Mahali, Pratima Mondal, Jit Chakraborty, AMA Henaish, **Jahangeer Ahmed**, Afzal Hussain, Sanjay Roy (2024): Exploring solubility and energetics: Dissolution of biologically important l-threonine in diverse aqueous organic mixtures across the temperature range of 288.15 K to 308.15 K. *Biophysical Chemistry*, Volume 306, Pages 107154 [IF = 3.8]. Q-2
30. Sintu Ganai, Puspall Mukherjee, Kalachand Mahali, Bidyut Saha, AMA Henaish, Simanta Kundu, **Jahangeer Ahmed**, Afzal Hussain, Sanjay Roy (2024): Probing coumarin solubility and solvation energetics in diverse aqueous–organic solutions across a temperature range: A debut exploration. *Journal of Molecular Liquids*, Volume 395, Pages 123832 [IF = 6]. Q-1
31. Swati Verma, Anupinder Singh, Sachin Kumar Godara, **Jahangeer Ahmed**, Saad M Alshehri, Supriya A Patil, Mandeep Singh (2024): Synthesis and tailoring the structural and magnetic characteristics of Zn–Zr substituted Sr-hexaferrite targeting diverse applications. *Materials Chemistry and Physics*, Volume 311, Pages 128560 [IF = 4.6]. Q-2
32. Noor Zamin Khan, Sayed Ali Khan, Nisar Muhammad, Muhammad Amin Padhiar, Muhammad Tahir Abbas, **Jahangeer Ahmed**, Marcin Runowski, Ren Kui Zheng, Xin Xu (2024): Photoluminescence properties of Sb³⁺-activated Ca₂YTaO₆ dual color emitting phosphors for plant growth LEDs applications. *Journal of Solid State Chemistry*, Volume 329, Pages 124394 [IF = 3.3]. Q-2
33. Bibi Shaguftah Khatoon, Md Abrar Siddiquee, Masood Nadeem, Sana Tanweer, **Jahangeer Ahmed**, Rajan Patel, M Moshahid A Rizvi, Gyandshwar K Rao, Kamal N Sharma, Nasimul Hoda, Kamalakanta Behera (2024): Synthesis, Characterization, and Anticancer Activity of 4, 6-Dichloropyrimidine Chalcone Hybrids and Their Mechanistic Interaction Studies with HSA: In-Silico and Spectroscopic Investigations. *Journal of Molecular Structure*, Pages 137532 [IF = 3.8]. Q-2
34. Swati Verma, Anupinder Singh, Sachin Kumar Godara, Surinder Singh, Paramjit Kaur, Sandeep Sharma, **Jahangeer Ahmed**, Saad M. Alshehri, Sajjad Hussain, and Mandeep Singh (2024): Structural and magnetic property modification of strontium hexaferrite system using A-site Ca doping. *J Mater Sci: Mater Electron*, Vol 35, Page 516
35. Jit Chakraborty, Kalachand Mahali, A.M.A. Henaish, **Jahangeer Ahmed**, Saad M. Alshehri, Aslam Hossain, Sanjay Roy (2024): Exploring the solubility and intermolecular interactions of biologically significant amino acids L-serine and L-cysteine in binary

mixtures of H₂O + DMF, H₂O + DMSO and H₂O + ACN in temperature range from T = 288.15 K to 308.15 K. **Biophysical Chemistry**, Volume 311, Pages 107272.

36. Saloni, Preeti Kasana, **Jahangeer Ahmed**, and Vinod Kumar (2024): Ionic Liquid Induced Aggregation and Precipitation Behavior of Pinacyanol. **ChemistrySelect**, Vol 9, Page e202402320
37. Rohit Jasrotia, Anand Sharma, **Jahangeer Ahmed**, Ritesh Verma, Saad M. Alshehri, Natrayan Lakshmaiya, Mika Sillanpää, Rajinder Kumar, and Virat Khanna (2024): Lanthanum Substituted Mg-Zn Ferrite Nanostructures: A Comprehensive Study of Cation Distribution, Structural, Morphological, Optical, Magnetic, Dielectric, and Electromagnetic Traits. **ECS Journal of Solid State Science and Technology**, Vol 13, Page 073001
38. Siyu Ma, Yiyang Qin, Kongyuan Sun, **Jahangeer Ahmed**, Wei Tian and Zhaoxia Ma (2024): Round-the-Clock Adsorption–Degradation of Tetracycline Hydrochloride by Ag/Ni-TiO₂. **Materials**, Vol 17, Page 2930
39. Rohit Jasrotia, Chan Choon Kit, Mohd Fazil, **Jahangeer Ahmed**, Tokeer Ahmad, Norah Alhokbany, Mika Sillanpää, Natrayan Lakshmaiya, Vaseem Raja (2024): High performance Sm substituted Ni-Zn catalysts for green hydrogen generation via Photo/Electro catalytic water splitting processes. **Journal of King Saud University – Science**, Volume 36, Pages 103426,
40. Surinder Kumar, Shilpa Kumari, Asha Kumari, **Jahangeer Ahmed**, Rohit Jasrotia, Abhishek Kandwal, Rahul Sharma (2024): Sustainable and Green Production of Biodiesel from Calotropis procera Seed Oil Using CuO Nanocatalyst. **Journal of Inorganic and Organometallic Polymers and Materials**, (In Print)
41. Shilpa Kumari, Asha Kumari, **Jahangeer Ahmed**, Rohit Jasrotia, Mika Sillanpää, Natrayan Lakshmaiya, Neha Kondal, Abhishek Kandwal, Rahul Sharma (2024): Enhancing UV Protection and Antimicrobial Properties in Food Packaging Through the Use of Copper Nanoparticles and κ-Carrageenan Based Nanocomposite Film. **Journal of Inorganic and Organometallic Polymers and Materials**, (In Print)
42. Seema Kumari, Asha Kumari, Kashama Sharma, **Jahangeer Ahmed**, Rohit Jasrotia, Abhishek Kandwal, Natrayan Lakshmaiya, Mika Sillanpää, Rahul Sharma (2024): Enhanced Photocatalytic and Antimicrobial Performance of Divalent Metal Substituted Nickel Nanostructures for Wastewater Treatment and Biological Applications. **Journal of Inorganic and Organometallic Polymers and Materials**, (In Print)
43. Yuzheng Lu, Asma Noor, **Jahangeer Ahmed**, Najah Alwadie, Majid Niaz Akhtar, Sara Abid, Muhammad Yousaf, Mustafa Mahmoud, Muhammad Aslam (2024): Synergistic

effects and electrocatalytic insight of single-phase hexagonal structure as low-temperature solid oxide fuel cell cathode. *Journal of Rare Earths*, (In Print).

44. Monika Chandel, Rohit Jasrotia, **Jahangeer Ahmed**, Saad M. Alshehri, Kirti Singha, Virender Pratap Singh (2024): Effect of Ni and Dy co-doping on the structural, electrical, and dielectric properties of Strontium Y-type hexaferrite. *Journal of Sol-Gel Science and Technology*
45. Anand Sharma, Rohit Jasrotia, Nisha Kumari, **Jahangeer Ahmed**, Saad M. Alshehri, Rajesh Kumar (2024): A comparative study of Nd and Sm doping on the structural, magnetic, and electromagnetic traits of Mg-Zn spinel nanoferrites. *Journal of Sol-Gel Science and Technology*, Volume 112, Pages 715-727.
46. Fouzia Mashkoor, Mohd Shoeb, Syed Afzal Ahmad, **Jahangeer Ahmed**, Changyoon Jeong (2024): Development of carbon nanotube decorated Gd₂O₃-MoS₂ nanocomposite for the electrochemical detection and adsorption of cadmium metal ions from simulated wastewater. *Microchemical Journal*, Volume 207, Pages 112082

2023

47. **Jahangeer Ahmed***, Tansir Ahamad, Norah Alhokbany, MA Majeed Khan, Prabhakarn Arunachalam, Mabrook S Amer, Rahaf M Alotaibi, Saad M Alshehri (2023): Reduced graphene oxide encapsulated perovskite-type lanthanum cobalt oxide nanoparticles for efficient electrolysis of water to oxygen reactions (OER/ORR). *Journal of Industrial and Engineering Chemistry*, Volume 121, Pages 100 - 106. [IF = 6.76]. Q-1
48. **Jahangeer Ahmed***, Tansir Ahamad, Rahaf M. Alotaibi, Norah Alhokbany, Saad M Alshehri (2023): Double perovskite La₂MnCoO₆ nanoparticles as promising catalysts for electro-chemical hydrogen evolution reactions. *Ceramics International*, Volume 49, Pages 18818- 18824 [IF = 5.53]. Q-1
49. Aslam Hossain, M.S. Meera, E.A. Mukhanova, A.V. Soldatov, A.M.A. Henaish, **Jahangeer Ahmed**, Yuanbing Mao, and S.M.A. Shibli (2023): Influences of partial destruction of Ti-MOFs on photo(electro)catalytic H₂ evolution by dominating role of charge carrier trapping over surface area. *Small*, Volume 19, Page 2300492, [IF = 15.15]. Q-1
50. **Jahangeer Ahmed***, Tansir Ahamad and Saad M Alshehri (2023): rGO supported CuMoO₄ nanoparticles: synthesis, characterization, and electrocatalytic oxygen evolution reaction. *New Journal of Chemistry*, Volume 47, Page 13903 [IF = 3.92]. Q-2

51. Norah Alhokbany, Hebah Althagafi, **Jahangeer Ahmed**, Saad M. Alshehri (2023): Synthesis and characterization of carbon dots nanoparticles for detection of ascorbic acid. **Materials Letters** Volume 351, Page 134992 [IF = 3.0]. Q-2
52. M.A. Majeed Khan, Anees A. Ansari, Parul Choudhary, **Jahangeer Ahmed**, Sushil Kumar, Sajjad Hussain (2023): Reduced graphene oxide supported Ag-loaded brookite TiO₂ nanowires: Enhanced photocatalytic degradation performance and electrochemical energy storage applications. **Diamond & Related Materials** 139 (2023) 110397 [IF = 4.1] Q-1
53. Seema Kumari, Asha Kumari, Abhishek Kandwal, **Jahangeer Ahmed**, Saad M Alshehri, Rohit Jasrotia, Rahul Sharma (2023): Activation of nanoparticles of nickel ferrite by divalent metal ions co-doping for the methyl orange dye's photocatalytic degradation: a kinetic and adsorption isotherm study. **Clean Technologies and Environmental Policy**, <https://doi.org/10.1007/s10098-023-02667-0> [IF = 4.3]. Q-1
54. Nisha Yadav, Shivani Shiva, Chandra Mohan Srivastava, Preeti Patyal, Arun Kumar, Ajai Kumar Singh, Bidhan Pandit, **Jahangeer Ahmed**, Gyaneshwar Kumar Rao (2023): Highly Stable and Uniform Colloidal Silver Quantum Dots Stabilized with (N,S,O) Donor Ligand: Selective Sensing of Hg (II)/Cu (II) and I⁻ Ions and Reduction of Nitro-aromatics in Water. **Journal of Molecular Liquids**, Volume 377, Pages 121531 [IF = 6] Q-1.
55. Sanjay Kumar, Jyoti Prakash, Ankit Verma, Rohit Jasrotia, Abhishek Kandwal, Ritesh Verma, Sachin Kumar Godara, MA Khan, Saad M Alshehri, **Jahangeer Ahmed*** (2023): A Review on Properties and Environmental Applications of Graphene and Its Derivative-Based Composites. **Catalysts**, Volume 13, Pages 111 [IF = 4.5]. Q-2
56. M.S. Darris, Aslam Hossain, A.M. Asha, Rajesh Kumar Manavalan, **Jahangeer Ahmed**, S.M.A. Shibli (2022): Enhancement of tribological performance in Li₂TiO₃/ZrO₂ composite coating prepared by industrial hot-dip galvanization process. **Ceramics International**, Volume 49, Pages 6816-6824 [IF = 5.53]. Q-1
57. Pargam Vashishtha, Manoj Kumar, Pukhraj Prajapat, **Jahangeer Ahmed**, Vidya Nand Singh, Govind Gupta (2023): Highly responsive SnSe/GaN heterostructure-based UVC-SWIR broadband photodetector. **Materials Science in Semiconductor Processing**, Volume 156, page 107277. [IF = 4.1]. Q-1
58. Swati Verma, Anupinder Singh, Sandeep Sharma, Paramjit Kaur, Sachin Kumar Godara, Parambir Singh Malhi, **Jahangeer Ahmed**, PD Babu, Mandeep Singh (2023): Magnetic and Structural Analysis of BaZn_xZr_xFe_{12-2x}O₁₉ (x= 0.1-0.7) Hexaferrite Samples for Magnetic Applications. **Journal of Alloys and Compounds**, Volume 930, Pages 167410 [IF = 6.377]. Q-1

59. Sayed Ali Khan, Noor Zamin Khan, Nisar Muhammad, Fang Lin, Marcin Runowski, **Jahangeer Ahmed**, Simeon Agathopoulos, Jing Li (2023): Highly efficient and tunable broadband UV excitable Ba₉Lu₂Si₆O₂₄: Eu²⁺, Mn²⁺ single-phase white-light-emitting phosphors. **Journal of Alloys and Compounds**, Volume 938, Pages 168650 [IF = 6.377]. Q-1
60. MA Majeed Khan, Anees A. Ansari, Wasi Khan, Maqsood Ahamed, **Jahangeer Ahmed**, Avshish Kumar Sushil Kumar (2022): Synthesis of nanosized MnO₂ decorated SWCNTs and their photocatalytic improved activity as well as enhanced electrode performance. **Optics & Laser Technology**, Volume 164, Pages 109518 [IF = 4.94]. Q-1
61. Sachin K. Godara, Himanshi, Rohit Jasrotia, Varinder Kaur, Parambir S. Malhi, **Jahangeer Ahmed**, Abhishek Kandwal, Swati Verma, Mandeep Singh, Paramjit Kaur, Rahul K. Dhaka, Kirti Chuchra, A. H. S. Rana, Ashwani K. Sood, Karuna Sharma, Sarita Dhaka, Ankit Verma (2023): A sustainable approach for the synthesis of PbFe₁₂O₁₉ materials using tomato pulp as a fuel: Structural, morphological, optical, magnetic, and dielectric traits. **Journal of Magnetism and Magnetic Materials**, Volume 573 (2023) Page 170643. (IF= 3.09, Q-2)
62. SK Godara, SS Meena, R Jasrotia, J Prakash, A Verma, R Singh, A. K. Srivastava, M. Singh, P. K. Maji, A. Jain, A. K. Sood, **Jahangeer Ahmed**, S M. Alshehri, A Mehtab, T Ahmad, A Hossain, and A Kandwal (2023): Effect of Zn²⁺-Zr⁴⁺ co-substitution on structural, magnetic and dielectric properties of Ba_{0.5}Ca_{0.5}Zn_xZr_xFe_{12-2x}O₁₉ hexaferrite. **Journal of Materials Science: Materials in Electronics**, volume 34, page 1195. (IF= 2.40, Q-3)
63. Gaurav Katoch, Jyoti Prakash, Rohit Jasrotia, Ankit Verma, Ritesh Verma, Swati Kumari, Tokeer Ahmad, Sachin K Godara, **Jahangeer Ahmed**, Abhishek Kandwal, Mohd Fazil, Pradip K. Maji, Sumit Kumar, Gagan Kumar (2023): Sol-gel auto-combustion developed Nd and Dy co-doped Mg nanoferrites for photocatalytic water treatment, electrocatalytic water splitting and biological applications. **Journal of Water Process Engineering**, Volume 53, Page 103726 (IF= 7.34, Q-1)
64. Huma Khan, Amir Mehta, **Jahangeer Ahmed**, Samuel E. Lofland, Kandalam V. Ramanujachary and Tokeer Ahmad (2023): Harvesting Green Hydrogen by Self Propelling Built-in Electric Field Photo/Electrocatalytic Performance of DyCrO₃ Nanoparticles Developed by Reverse Microemulsion Route. **ChemNanoMat**, Volume 9, page e202300091 (IF= 3.8, Q-2)
65. P Kotwal, R Jasrotia, J Prakash, **Jahangeer Ahmed**, A Verma, R Verma, A Kandwal et al. (2023): Magnetically recoverable sol-gel auto-combustion developed Ni_{1-x}Cu_xDy_yFe_{2-y}O₄ magnetic nanoparticles for photocatalytic, electrocatalytic, and

antibacterial applications. *Environmental Research*, Volume 231, Page 116103 (IF= 8.43, Q-1)

66. Nilam Sing, Pratima Mondal, Mrinmay Mondal, Kalachand Mahali, A.M.A. Henaish, Bidyut Saha, **Jahangeer Ahmed**, Afzal Hussain, Sanjay Roy (2023): Exploring the solubility and solvation energetics of L-phenylalanine across diverse aqueous organic solutions at five equidistant temperatures (288.15 K to 308.15 K). *Chemical Physics Letters*, Volume, Page 140847 (IF; 2.8, Q-2)
67. Sintu Ganai, Puspall Mukherjee, Kalachand Mahali, Avishek Saha, Aslam Hossain, AV Soldatov, AMA Henaish, **Jahangeer Ahmed**, Sanjay Roy (2023): Exploring the solubility and solvation thermodynamics of coumarin in a range of aqua-organic solvents. *New Journal of Chemistry*, Volume 47, Pages 13547 [IF = 3.92]. Q-2
68. Rohit Jasrotia, Nisha Kumari, Ritesh Verma, Suman, Sachin Kumar Godara, **Jahangeer Ahmed**, Saad M. Alshehri, Bidhan Pandit, Sanjay Thakur, Himanshi, Shubham Sharma, Kirti, Pradip K. Maji (2023): Effect of rare earth (Nd³⁺) metal doping on structural, morphological, optical and magnetic traits of Zn–Mg nano-ferrites. *Journal of Rare Earths*, Volume 41, Page 1763-1770. [IF = 4.63]. Q-2
69. M. A. Majeed Khan, Saruchi Rani, Anees A. Ansari, Maqsood Ahamed, **Jahangeer Ahmed**, Sushil Kumar, Abu ul Hassan S. Rana (2023): Anchoring Ceria Nanoparticles on Reduced Graphene Oxide and Their Enhanced Photocatalytic and Electrochemical Activity for Environmental Remediation. *Journal of Electronic Materials*, Volume 53, Page 930. [IF = 2.1] Q-2
70. S Verma, A Singh, S K Godara, **J Ahmed**, SM Alshehri and M Singh (2023): Ca-induced changes in the crystal structure and magnetic properties of barium hexaferrite. *Bulletin of Materials Science*, Volume 46, Page 196 [IF = 1.8] Q-4
71. Avishek Saha, Kalachand Mahali, Sintu Ganai, Puspall Mukherjee, Nabeen K Shrestha, AMA Henaish, **Jahangeer Ahmed**, Simanta Kundu, Sanjay Roy (2023): Solubility and the solution thermodynamics of L-proline in the aqueous binary mixture of NaCl and KCl solution. *Journal of Molecular Liquids*, Volume 391, Pages 123352 [IF = 6] Q-1.
72. Avishek Saha, Kalachand Mahali, Simanta Kundu, AMA Henaish, **Jahangeer Ahmed**, AHS Rana, Sanjay Roy (2023): Solubility and solvation energetics of L-histidine in aqueous NaCl/KCl electrolyte media. *Journal of Molecular Liquids*, Volume 391, Pages 123240 [IF = 6] Q-1.
73. Rajinder Kumar, Rohit Jasrotia, **Jahangeer Ahmed**, Anant Vidya Nidhi, Saad M Alshehri, Louis WY Liu, Supriya A Patil, Ridhima Aggarwal, Sachin Kumar Godara, PB Barman, Ragini Raj Singh, Abhishek Kandwal (2023): A new hybrid non-aqueous

approach for the development of Co doped Ni-Zn ferrite nanoparticles for practical applications: Cation distribution, magnetic and antibacterial studies. *Inorganic Chemistry Communications*, Volume 157, Pages 111355 [IF = 3.8]. Q-1

74. Avishek Saha, Kalachand Mahali, Puspall Mukherjee, Suntu Ganai, Aslam Hossain, AMA Henaish, Simanta Kundu, **Jahangeer Ahmed**, Sanjay Roy (2023): Solubility and dissolution thermodynamics of L-histidine and L-tryptophan in aqueous ethanol solution at five equidistant temperatures. *Journal of Molecular Liquids*, Volume 389, Pages 122852 [IF = 6] Q-1.
75. Biplab Ghosh, Saroj Chowdhury, Nilam Sing, Pratima Mondal, Mrinmay Mondal, Bharat Chandra Hansda, Sanjay Roy, AMA Henaish, **Jahangeer Ahmed**, Kalachand Mahali (2024): Effect of uni-divalent electrolyte in the interaction associated with solubility for the predominant form of L-isoleucine and L-serine in aqueous media. *Journal of Molecular Liquids*, Volume 385, Pages 122432 [IF = 6] Q-1.
76. Junsheng Ye, Takudzwa Keith Banda, Zeeshan Ajmal, **Jahangeer Ahmed**, Saleem Raza, Ehsan Ghasali, Asif Hayat, Yasin Orooji (2023): Organic conjugation of graphitic carbon nitride nanocomposites for boosted photocatalytic water splitting. *Materials Science in Semiconductor Processing*, Volume 166, Pages 107742 [IF = 4.1] Q-1.
77. Nisha Kumari, Rohit Jasrotia, Louis WY Liu, **Jahangeer Ahmed**, Aslam Hossain, AMA Henaish, Sourbh Thakur, Virender Pratap Singh, Sachin Kumar Godara, Ridhima Aggarwal, Abhishek Kandwal, Pankaj Sharma (2023): Silver and nickel modified cobalt-zinc nanostructured ferrites for potential applications. *Physica Scripta*, Volume 98, Pages 115936 [IF = 2.9] Q-2.
78. Huma Khan, **Jahangeer Ahmed**, Samuel E Lofland, Kandam V Ramanujachary, Tokeer Ahmad (2023): Synergistic effect of multiferroicity in GdFeO₃ nanoparticles for significant hydrogen production through photo/electrocatalysis. *Materials Today Chemistry*, Volume 33, Pages 101713 [IF = 7.3] Q-1.
79. Poonam Kaswan, Nisha Yadav, Divya Choudhary, Chandra Mohan Srivastava, Bharat Kumar, **Jahangeer Ahmed**, Gyandshwar Kumar Rao (2023): Pd (II)-complexes of telluro-substituted Schiff base ligands: Effect of the pendant alkyl group on Suzuki and Heck coupling through in situ generated palladium nanoparticles. *Inorganica Chimica Acta*, Volume 556, Pages 121671 [IF = 2.8] Q-3.
80. Syed Asim Ali, **Jahangeer Ahmed**, Yuanbing Mao, Tokeer Ahmad (2023): Symbiotic MoO₃-SrTiO₃ Heterostructured Nanocatalysts for Sustainable Hydrogen Energy: Combined Experimental and Theoretical Simulations. *Langmuir*, Volume 39, Pages 12692 [IF = 3.9] Q-2.

81. Sachin Kumar Godara, Jyoti Prakash, Rohit Jasrotia, **Jahangeer Ahmed**, Asiya M Tamboli, Aslam Hossain, Suman, Ankit Verma, Pawan Kumar, Mandeep Singh, Swati Verma, Rahul Kumar Dhaka, Abhishek Kandwal (2023): Green synthesis of magnetic nanoparticles of BaFe₁₂O₁₉ hexaferrites using tomato pulp: structural, morphological, optical, magnetic and dielectric traits. *Journal of Materials Science: Materials in Electronics*, Volume 34, Pages 1516 (IF= 2.40, Q-3)

2022

82. **Jahangeer Ahmed***, Norah Alhokbany, Tansir Ahamad and Saad M. Alshehri (2022): *Investigation of enhanced electro-catalytic HER/OER performances of copper tungsten oxide@reduced graphene oxide nanocomposites in alkaline and acidic media*. *New Journal of Chemistry*, volume 46, page 1267 [IF = 3.92]. Q-2
83. Aslam Hossain, P. Bandyopadhyay, A. Karmakar, A.K.M. Atique Ullah, Rajesh K. Manavalan, K. Sakthipandi, N. Alhokbany, Saad M. Alshehri, **Jahangeer Ahmed*** (2022): *The hybrid halide perovskite: synthesis strategies, fabrications, and modern applications*. *Ceramics International*, volume 48, page 7325 [IF = 5.53]. Q-1
84. Norah Alhokbany, Tansir Ahamad, Saad M. Alshehri, **Jahangeer Ahmed*** (2022): *Reduced graphene oxide supported zinc tungstate nanoparticles as proficient electro-catalysts for hydrogen evolution reactions*. *Catalysts*, Volume 12, page 530 [IF = 4.5]. Q-2
85. Norah Alhokbany, Tansir Ahamad, **Jahangeer Ahmed ***, Saad M Alshehri (2022) *SrTiO₃/Ag₂O embedded in N-doped carbon nanocomposite for advanced photocatalytic degradation of dichlorodiphenyltrichloroethane (DDT)*. *Materials Letters*, Volume 319, Page 132271. [IF = 3.57]. Q-2
86. Sachin K. Godara, sneh, V. Kaur, Parambir S. Malhi, **Jahangeer Ahmed***, Saad M Alshehri, M. Singh, S. Verma, C. Singh, Pradip K. Maji, P. Kumar, Asiya M. Tamboli, Ashwani K. Sood (2022): *Sol-gel auto-combustion synthesis of double metal-doped barium hexaferrite nanoparticles for data storage applications*. *Journal of Solid State Chemistry*, Volume 312, page 123215. [IF = 3.65]. Q-2
87. Sachin Kumar Godara, Mankamal Preet kaur, Varinder Kaur, Parambir Singh Malhi, Mandeep Singh, Swati Verma, Rohit Jasrotia, **Jahangeer Ahmed***, Mohaseen S. Tamboli, Ashwani Kumar Sood (2022): *Investigation of microstructural and magnetic properties of Ca²⁺ doped strontium hexaferrite nanoparticles*. *Journal of King Saud University – Science*, volume 34, page 101963 [IF = 3.82]. Q-2
88. Basheer M. Al-Maswari, Nabil Al-Zaqri, **Jahangeer Ahmed**, Tansir Ahamad, Ahmed Boshala, S. Ananda, B.M.Venkatesha (2022): Nanomagnetic strontium ferrite nitrogen

doped carbon (SrFe₂O₄-NC): Synthesis, characterization and excellent supercapacitor performance. **Journal of Energy Storage**, Volume 52, page 104821. (IF= 8.9, Q-1)

89. R. Jasrotia, A. Verma, R. Verma, S. Kumar, **Jahangeer Ahmed**, G. Kumar, S. Thakur, A. M. Tamboli, Susheel Kalia (2022): *Nickel ions modified Co–Mg nanophotocatalysts for solar light-driven degradation of antimicrobial pharmaceutical effluents*. **Journal of Water Process Engineering**, Volume 47, Page 102785 (IF= 7.34, Q-1)
90. S. K. Jain, M. Fazil, N. Ahmad Pandit, S. Asim Ali, F. Naaz, H. Khan, A. Mehtab, **Jahangeer Ahmed**, and Tokeer Ahmad (2022): *Modified, Solvothermally Derived Cr-doped SnO₂ Nanostructures for Enhanced Photocatalytic and Electrochemical Water-Splitting Applications*. **ACS Omega**, volume 7, page 14138–14147 [IF = 4.13]. Q-2
91. P. Jineesh, Aslam Hossain, **Jahangeer Ahmed**, Saad M. Alshehri, Yuanbing Mao, and S.M.A. Shibli (2022): *External influences of cactus type composite for hydrogen evolution reaction*. **Journal of Alloys and Compound**, volume 903, page 163813 [IF = 6.37]. Q-1
92. P. Jineesh, A. Hossain, R. Remya, J.N. Sebeelamol, R. K. Manavalan, **Jahangeer Ahmed**, M. S. Tamboli, S.M.A. Shibli (2022): *Iron-based composite nanomaterials for eco-friendly photocatalytic hydrogen generation*. **Ceramics International**, vol. 48, pp 15026 [IF = 5.53]. Q-1
93. S. K. Jain, M. Fazil, F. Naaz, N. A. Pandit, **Jahangeer Ahmed**, S. M. Alshehri, Y. Mao and Tokeer Ahmad (2022): *Silver doped SnO₂ Nanostructures for Photocatalytic Water Splitting and Catalytic Nitrophenol Reduction*. **New Journal of Chemistry**, volume 46, page 2846 [IF = 3.92]. Q-2
94. X. Yao, J. Zhao, J. Liu, F. Wang, L. Wu, F. Meng, D. Zhang, R. Wang, **Jahangeer Ahmed**, K. Ojha (2022): *H₂S sensing material Pt-WO₃ nanorods with excellent comprehensive performance*. **Journal of Alloys and Compound**, volume 900, page 163398 [IF = 6.37]. Q-1
95. A. Mehtab, **Jahangeer Ahmed**, S. M Alshehri, Y. Mao, Tokeer Ahmad (2022): *Rare Earth Doped Metal Oxide Nanoparticles for Photocatalysis: A Perspective*. **Nanotechnology**, vol. 33, pp 142001 [IF = 3.95]. Q-2
96. SA Khan, NZ Khan, Y. Xie, M. Rauf, I. Mehmood, **Jahangeer Ahmed**, S. M. Alshehri, M.A. Majeed Khan, J. Zhu, S. Agathopoulos (2022): *Development of narrow band emitting phosphors for backlighting displays and solid state lighting using a clean and green energy technology*. **Journal of Luminescence**, vol. 243, pp 118650 [IF= 4.17]. Q-1.

97. S. Kumar, Bhawna, S. K. Yadav, A. Gupta, R. Kumar, **Jahangeer Ahmed**, M. Chaudhary, Suhas, V. Kumar (2022): *B doped SnO₂ nanoparticles: A new insight in to the photocatalytic hydrogen generation by water splitting and degradation of dyes.* **Environmental Science and Pollution Research**, Vol 29, page 47448 - 47461. [IF = 5.19]. Q-2
98. S. K. Godara, M. Singh, V. Kaur, S.B.Narang, **Jahangeer Ahmed**, A. K. Sood (2022): *Effect of calcium solubility on structural, microstructure and magnetic properties of SrFe₁₂O₁₉.* **Physica B: Condensed Matter**, vol. 628, pp 413560 [IF = 2.43]. Q-3
99. Sukhendu Maity, Vinod Kumar Lokku, Akash Lata, K. Sarkar, **Jahangeer Ahmed**, M. A. Majeed Khan, and Praveen Kumar (2022): *MAPbI₃ based Efficient, Transparent and Air-Stable Broadband Photodetectors.* **Indian Journal of Physics**, vol 96, page 903-908 [IF = 1.94]. Q-3
100. U. Farooq, **Jahangeer Ahmed**, S. M. Alshehri, Y. Mao, Tokeer Ahmad (2022): *Self-assembled Interwoven Nano-hierarchitectures of NaNbO₃ and NaNb_{1-x}TaxO₃ (0.05 ≤ x ≤ 0.20): Synthesis, Structural Characterization, Photocatalytic Application and Dielectric Properties.* **ACS Omega**, vol 7, page 16952–16967. [IF = 4.13]. Q-2
101. R. Jasrotia, Suman, A. Verma, R. Verma, Sachin K. Godara, **Jahangeer Ahmed**, A. Mehtab, T. Ahmad, P. Puri, S. Kalia (2022): *Photocatalytic degradation of malachite green pollutant using novel dysprosium modified Zn-Mg photocatalysts for wastewater remediation.* **Ceramics International**, Vol 48, page 29111 - 29120 [IF = 5.53]. Q-1
102. R. Jasrotia, A. Verma, R. Verma, Suman, **Jahangeer Ahmed**, Sachin K. Godara, G. Kumar, A. Mehtab, T.Ahmad, S. Kalia (2022): *Photocatalytic dye degradation efficiency and reusability of Cu-substituted Zn-Mg spinel nanoferrites for wastewater remediation.* **Journal of Water Process Engineering**, Volume 48, page 102785 (IF= 7.34, Q-1)
103. Sachin Kumar Godara, Nomita, Varinder Kaur, A.K.Srivastava, Deepak Basandrai, **Jahangeer Ahmed**, J.Mohammed, Mandeep Singh, Paramjit Kaur, Amir Mehtab, Tokeer Ahmad, Rahul Kumar Dhaka, Pradip K.Maji, Ashwani Kumar Sood (2022): *Effect on Magnetic, morphological and structural properties of Zn²⁺-Zr⁴⁺ substituted SrM for permanent magnet based appliances.* **Journal of Magnetism and Magnetic Materials**, Volume 560, Page 169626. (IF= 3.09, Q-2)
104. Sapan K Jain, Nayeem Ahmad Pandit, Mohd Fazil1, Syed Asim Ali, **Jahangeer Ahmed**, Saad M Alshehri, Yuanbing Mao and Tokeer Ahmad (2022): *Chemical fabrication, structural characterization and photocatalytic water splitting application of Sr-doped SnO₂ nanoparticles.* **Nanotechnology**, vol. 33, pp 355706 [IF = 3.95]. Q-2

105. Muhammad Tahir Abbas, Sayed Ali Khan, Jiashan Mao, Noor Zamin Khan, Liting Qiu, **Jahangeer Ahmed**, Xiantao Wei, Yonghu Chen, Saad M Alshehri, Simeon Agathopoulos (2022). *Optical thermometry based on the luminescence intensity ratio of Dy³⁺-doped GdPO₄ phosphors*. ***Journal of Thermal Analysis and Calorimetry***, Vol 147, Page 11769 -- 11775 [IF = 4.626]. Q-1
106. Md Abdur Rashid Mia, Qamar Uddin Ahmed, Abul Bashar Mohammed Helaluddin, Sahena Ferdosh, Monowarul Mobin Siddique, Syed Najmul Hejaz Azmi, **Jahangeer Ahmed**, Md Zaidul Islam Sarker (2022): *Acute and subacute toxicity assessment of liquid CO₂ extract of Phaleria macrocarpa fruits flesh in mice model*. ***Journal of King Saud University-Science***, Volume 34, Page 101912 [IF = 3.82]. Q-2
107. Sarita Kushwaha, Monika Chaudhary, Inderjeet Tyagi, Rakesh Bhutiani, Joanna Goscianska, **Jahangeer Ahmed**, Shubham Chaudhary (2022): *Utilization of Phyllanthus emblica fruit stone as a Potential Biomaterial for Sustainable Remediation of Lead and Cadmium Ions from Aqueous Solutions*. ***Molecules***, Volume 27, Pages 3355 [IF = 4.41]. Q-2
108. MA Majeed Khan, Poonam Nain, **Jahangeer Ahmed**, Maqsood Ahamed, Sushil Kumar (2022): Characterization and photocatalytic performance of hydrothermally synthesized Cu-doped TiO₂ NPs. ***Optical Materials***, Volume 133, Pages 112983 [IF = 3.75]. Q-2
109. Sukhmanbir Kaur, Vishal Kumar Chalotra, Rohit Jasrotia, Venuka Bhasin, Swati Kumari, Sanjay Thakur, **Jahangeer Ahmed**, Amir Mehtab, Tokeer Ahmad, Ranjit Singh, Sachin kumar Godara (2022): Spinel nanoferrite (CoFe₂O₄): The impact of Cr doping on its structural, surface morphology, magnetic, and antibacterial activity traits. ***Optical Materials***, Volume 133, Pages 113026 [IF = 3.75]. Q-2
110. Sarita Kushwaha, Inderjeet Tyagi, **Jahangeer Ahmed**, Shubham Chaudhary, Monika Chaudhary, Baskaran Stephen Inbaraj, Joanna Goscianska, Rama Rao Karri, Kandi Sridhar (2022): Adsorptive Analysis of Azo Dyes on Activated Carbon Prepared from Phyllanthus emblica Fruit Stone Sequentially via Hydrothermal Treatment. ***Agronomy***, Volume 12, Pages 2134 [IF = 3.94]. Q-2
111. Irfan H Lone, Huma Khan, Arvind K Jain, **Jahangeer Ahmed**, Kandalam V Ramanujachary, Tokeer Ahmad (2022): Metal–Organic Precursor Synthesis, Structural Characterization, and Multiferroic Properties of GdFeO₃ Nanoparticles. ***ACS Omega***, volume 7, Pages 33908 [IF = 4.13]. Q-2
112. Sachin Kumar Godara, Varinder Kaur, Rohit Jasrotia, Sourbh Thakur, Virender Pratap Singh, **Jahangeer Ahmed**, Saad M Alshehri, Bidhan Pandit, Mandeep Singh, Paramjit Kaur, Jibrim Mohammed, Mankamal Preet Kaur, Ashwani Kumar Sood (2022):

Effect of Ca^{2+} exchange at Ba^{2+} site on the structural, dielectric, morphological and magnetic traits of BaM nanohexaferrites. *Journal of Magnetism and Magnetic Materials*, Volume 564, Pages 170049 (IF= 3.09, Q-2)

2021

113. Norah Alhokbany, Saad M. Alshehri, **Jahangeer Ahmed*** (2021): *Synthesis, Characterization and Enhanced visible light photocatalytic performance of ZnWO_4 -NPs@rGO nanocomposites*. *Catalysts*, vol 11, pp 1536 [IF = 4.5]. Q-2
114. Basheer M. Al-Maswari, **Jahangeer Ahmed**, Nabil Alzaqri, Tansir Ahamad, Yuanbing Mao, Abdo Hezam, and B.M. Venkatesh (2021): *Synthesis of Perovskite Bismuth Ferrite Embedded Nitrogen-doped Carbon (BiFeO_3 -NC) Nanocomposite for Energy Storage Application*. *Journal of Energy Storage*, vol. 44, pp 103515 [IF = 8.9]. Q-1
115. **Jahangeer Ahmed***, Mohd Ubiadullah, M.A. Majeed Khan, Norah Alhokbany, Saad M Alshehri (2021): *Significant Recycled Efficiency of Multifunctional Nickel Molybdenum Oxide Nanorods in Photo-catalysis, Electrochemical Glucose Sensing and Asymmetric Supercapacitors*. *Materials Characterization* , vol. 171, pp 110741 [IF = 4.53]. Q-1
116. **Jahangeer Ahmed***, M.A. Majeed Khan, Saad M Alshehri (2021): *Zinc molybdenum oxide sub-micron plates as electro-catalysts for hydrogen evolution reactions in acidic medium*. *Materials Letters*, vol. 284, pp 128996 [IF = 3.57]. Q-2
117. **Jahangeer Ahmed***, Manawwer Alam, M.A. Majeed Khan, Saad M Alshehri (2021): *Bifunctional electro-catalytic performances of NiMoO_4 -NRs@RGO nanocomposites for oxygen evolution and oxygen reduction reactions*. *Journal of King Saud University – Science* , vol 33, pp 101317 [IF = 3.82]. Q-2
118. Norah Alhokbany, Sultanah Almotairi, **Jahangeer Ahmed***, Sameerah I. Al-Saeedi, Tansir Ahamad, Saad M. Alshehri (2021): *Investigation of Structural and Electrical Properties of synthesized Sr-Doped Lanthanum Cobaltite ($\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$) Perovskite Oxide*. *Journal of King Saud University – Science*, Vol. 33, pp 101419
119. S. A. Khan, N. Z. Khan, M. Sohail , **Jahangeer Ahmed**, N. Alhokbany, S. M. Alshehri, X. Xu, J. Zhu, S. Agathopoulos (2021): *Modern Aspects on Strategies for Developing Single-Phase Broadly Tunable White Light-Emitting Phosphors* . *Journal of Materials Chemistry C*, Vol. 9, pp 13041-13071
120. Monika Chaudhary; Suhas; Randhir Singh; Inderjeet Tyagi; **Jahangeer Ahmed**; Shubham Chaudhary; Sarita Kushwaha (2021): *Microporous activated carbon as adsorbent for the removal of noxious anthraquinone acid dyes: Role of adsorbate functionalization*. *Journal of Environmental Chemical Engineering*, Vol. 9, pp 106308.

121. Sayed Ali Khan, Noor Zamin Khan, Ikhtisham Mehmood, Muhammad Rauf, Binbin Dong, Maryam Kiani, **Jahangeer Ahmed**, Saad M Alshehri, Jinfeng Zhu, Simeon Agathopoulos (2021): *Broad Band White-Light-Emitting $Y_5Si_3O_{12}N:Ce^{3+}/Dy^{3+}$ Oxonitridosilicate Phosphors for Solid State Lighting Applications.* **Journal of Luminescence**, vol. 229, pp117687
122. Sayed A. Khan, Noor Z. Khan, Abdul Jalil, Cheng Li, Xu Xi, **Jahangeer Ahmed**, MA Majeed Khan, Binbin Dong, Jinfeng Zhu, Simeon Agathopoulos (2021): *Development of Structure and Tuning Ability of Luminescence of Lead-Free Halide Perovskite Nanocrystals (NCs).* **Chemical Engineering Journal**, vol. 420, pp127603
123. Mu. Naushad, Tansir Ahamad, Mohd Ubaidullah, **Jahangeer Ahmed**, Ayman A. Ghafar, Khalid M. Al-Sheetan, Prabhakarn Arunachalam (2021): *Nitrogen-doped carbon quantum dots (N-CQDs)/Co₃O₄ nanocomposite for high performance supercapacitor.* **Journal of King Saud University – Science**, vol 33, pp 101252
124. M.A. Majeed Khan; Sushil Kumar; **Jahangeer Ahmed**; Maqsood Ahamed; Avshish Kumar (2021): *Influence of silver doping on the structure, optical and photocatalytic properties of Ag-doped BaTiO₃ ceramics.* **Materials Chemistry and Physics**, vol. 259, pp. 124058
125. Syed Mansoor Ali, MS AlGarawi, MA Majeed Khan, SS AlGamdi, **Jahangeer Ahmed**, Manawwer Alam (2021): *Cu-doping effects on nanostructural, electrical and optical properties of Cu x Pd 1– x S/p-Si heterojunction.* **Applied Physics A** vol. 127, pp. 52
126. Rishabh Jain; Vinod Kumar Lokku; **Jahangeer Ahmed**; M. A. Majeed Khan; Praveen Kumar; Pooja Devi (2021): *Activated InN Nanocolumns as Sensitive Halogen Sensor.* **Journal of Materials Science: Materials in Electronics**, Vol 32, pp 1759
127. Syed Mansoor Ali, MS AlGarawi, SS AlGamdi, MA Majeed Khan, Tauriq Uzzaman, Khalid Saeed, **Jahangeer Ahmed** (2021): *Effects of Cu doping on the structural, photoluminescence and impedance spectroscopy of CoS₂ thin films.* **Journal of Materials Science: Materials in Electronics**, Vol 32, pp 3948
128. Mohd Abdul Majeed Khan; Sushil Kumar; Maqsood Ahamed; **Jahangeer Ahmed**; Avshish Kumar; Muhammad Ali Shar (2021): *BaTiO₃@rGO nanocomposite: Enhanced photocatalytic activity as well as improved electrode performance.* **Journal of Materials Science: Materials in Electronics**, Vol 32, pp 12911
129. M. Sohail, N.Z. Khan, Tenghui Chen, **Jahangeer Ahmed**, S. M. Alshehri, F. Ahmad, S.A. Khan (2021): *1.3 kW Continuous Wave Output Power of Ytterbium-Doped Large-Core Fiber Laser,* **ECS Journal of Solid State Science and Technology**, vol 10, pp 026005
130. N.Z. Khan, S.A. Khan, Li Zhan, A. Jalil, **Jahangeer Ahmed**, M.A. Majeed Khan, M.T. Abbas, Feihong Wang, Xin Xu (2021): *Synthesis, Structure and Photoluminescence Properties of Ca₂YTaO₆:Bi³⁺/Eu³⁺ Double Perovskite White Light Emitting Phosphors.* **Journal of Alloys and Compounds**, vol 868, pp 159257.
131. Lalit Goswami, Neha Aggarwal, Pargam Vashishtha, Shubhendra Jain, Shurti Nirantar, **Jahangeer Ahmed**, MA Majeed Khan, Rajeshwary Pandey, Govind Gupta (2021): *Fabrication of GaN Nano-Towers based Self-Powered UV Photodetector,* **Scientific Reports**, vol.11, pp 10859.

132. Noor, Sayed, Sohail, Majeed, **Jahangeer Ahmed**, Lizhan, wang, Tahira, XuXin (2021): Single Phase Multi Color Emitting $\text{Ca}_2\text{LuTaO}_6$: $\text{Dy}^{3+}/\text{Eu}^{3+}$ Double Perovskite Oxide Phosphors. *Journal of the American Ceramic Society*, Vol. 104, pp 4911
133. Milena Horvat, Raghuraj Singh, **Jahangeer Ahmed**, Norah Alhokbany, Saad M Alshehri, Sonu Gandhi (2021): Iron oxide nanoparticles - a potential multifunctional agent for diagnosis and therapy. *Cancers*, Vol. 13, pp 2213
134. Deepshikha Shahdeo, Veerbhan Kesarwani, Deepa Suhag, **Jahangeer Ahmed**, Saad M. Alshehri, Sonu Gandhi (2021): Self-assembled chitosan polymer intercalating peptide functionalized gold nanoparticles as nanoprobe for efficient imaging of urokinase plasminogen activator receptor in cancer diagnostics. *Carbohydrate Polymers*, Vol. 266, pp 118138
135. MA Majeed Khan, Rahul Siwach, Sushil Kumar, Maqsood Ahamed, **Jahangeer Ahmed** (2021): Frequency and temperature dependence of dielectric permittivity/electric modulus, and efficient photocatalytic action of Fe-doped CeO_2 NPs. *Journal of Alloys and Compounds*, vol 856, pp 158127.

2020

136. **Jahangeer Ahmed***, Norah Alhokbany, Mohd Ubaidullah, Sultana Mutehri, MA Majeed Khan, Saad M Alshehri (2020): Synthesis of double perovskite $\text{La}_2\text{MnNiO}_6$ nanoparticles as highly efficient oxygen evolution electro-catalysts. *Ceramics International*, vol 46, pp 20038
137. **Jahangeer Ahmed***, Norah Alhokbany, Afzal Husain, Tokeer Ahmad, M.A. Majeed Khan, Saad M. Alshehri (2020). Synthesis, Characterization and Significant Photochemical Performances of Delafossite AgFeO_2 Nanoparticles. *Journal of Sol-Gel Science and Technology*, vol 94, pp 493
138. Mohd Abdul Khan, Wasi Khan, Maqsood Ahamed, **Jahangeer Ahmed**, M. A. Al-Gawati, Abdulaziz N. Alhazaa (2020): Silver decorated cobalt ferrite nanoparticles anchored onto the graphene sheets as electrode materials for electrochemical and photocatalytic applications. *ACS Omega*, vol 5, pp 31076
139. Norah Alhokbany, Mohd Ubaidullah, Sultana Mutehri, **Jahangeer Ahmed***, MA Majeed Khan, Tansir Ahamad, Saad M Alshehri (2020): Cost effective synthesis of NiCo_2O_4 @nitrogen doped carbon nanocomposite using waste PET plastics for high performance supercapacitor. *Journal of Materials Science: Materials in Electronics*, vol 31, pp 16701-16707
140. Norah S Alhokbany, Naimah Mohammed Qadri, **Jahangeer Ahmed***, Tansir Ahamad, Saad M Alshehri (2020). Flux Synthesis, Crystal Structure and Electrochemical properties of $\text{Na}_2\text{La}_2\text{P}_4\text{O}_{12}$ Material for Supercapacitors. *Materials Letters*, vol 272, pp 127803
141. Ruby Phul, Mohd A Majeed Khan, Meryam Sardar, **Jahangeer Ahmed***, Tokeer Ahmad (2020): Multifunctional Electrochemical Properties of Synthesized Non-Precious Iron Oxide Nanostructures. *Crystals*, vol 10, pp 751
142. Abdullah M Al-Enizi; Mohd Ubaidullah; **Jahangeer Ahmed**; Hussein Alrobei; Saad M Alshehri (2020): Copper nickel@ reduced graphene oxide nanocomposite as bifunctional electro-catalyst for excellent oxygen evolution and oxygen reduction reactions. *Materials Letters*, vol 260, pp 126969

143. Ruby Phul, Mohammad Perwez, **Jahangeer Ahmed**, Meryam Sardar, Saad M Alshehri, Norah Alhokbany, Mohd A Majeed Khan, Tokeer Ahmad (2020): Efficient Multifunctional Catalytic and Sensing Properties of Synthesized Ruthenium Oxide Nanoparticles. *Catalysts*, vol. 10, pp 780
144. Mohd Ubaidullah, **Jahangeer Ahmed**, Tansir Ahmed, Shoyebmohamad F. Shaikh and Saad M Alshehri, Abdullah M Al-Enizi (2020): Hydrothermal synthesis of novel nickel oxide@nitrogenous mesoporous carbon nanocomposite using costless smoked cigarette filter for high performance supercapacitor. *Materials Letters*, vol 266, pp 127492
145. Abdullah M. Al-Enizi; **Jahangeer Ahmed**; Mohd Ubaidullah; Shoyeb Mohamad F. Shaikh; Tansir Ahamad; Mu Naushad; Gengfeng Zheng (2020): Utilization of waste polyethylene terephthalate bottles to develop metal-organic frameworks for energy applications: A clean and feasible approach. *Journal of Cleaner Production*; vol 248, pp 119251
146. Abdullah M Al-Enizi, Mohd Ubaidullah, **Jahangeer Ahmed**, Tansir Ahama, Tokeer Ahmad, Shoyebmohamad Shaik, Mu Naushad (2020): Synthesis of NiOx@ NPC composite for high-performance supercapacitor via waste PET plastic-derived Ni-MOF. *Composites Part B: Engineering*, vol 183, pp 107655
147. Mohd Ubaidullah, **Jahangeer Ahmed**, Abdullah M. Al-Enizi, Akshi Tyagi, Shoyeb mohamed F. Shaikh, Nazia Tarannum, Tokeer Ahmad (2020): Metal organic precursor derived Ba_{1-x}CaxZrO₃ (0.05 ≤ x ≤ 0.20) nanoceramics for excellent capacitor applications. *Journal of King Saud University - Science*, vol 32, pp 1937
148. Mohd Abdul Majeed Khan, Rahul Siwach, Sushil Kumar, **Jahangeer Ahmed**, Maqusood Ahamed (2020): Hydrothermal preparation of Zn-doped In₂O₃ nanostructure and its microstructural, optical, magnetic, photocatalytic and dielectric behavior. *Journal of Alloys and Compounds*, vol 846, pp 156479.
149. Mohd Abdul Majeed Khan, Rahul Siwach, Sushil Kumar, Maqusood Ahmed, **Jahangeer Ahmed** (2020). Investigations on Microstructure, optical, magnetic, photocatalytic and dielectric behaviour of pure and Co-doped ZnO NPs. *Journal of Materials Science: Materials in Electronics*, vol 31, pp 6360
150. Tokeer Ahmad, Arsalan Nazim, Umar Farooq, Huma Khan, Sapan K Jain, Mohd Ubaidullah, **Jahangeer Ahmed*** (2020): Biosynthesis, characterization and photocatalytic degradation of methylene blue using silver nanoparticles. *Materials Today: Proceedings*, Vol 29, Pages 1039-1043.
151. Irfan H. Lone¹, Abul Kalam, **Jahangeer Ahmed**, Norah Alhokbany, Saad M. Alshehri and Tokeer Ahmad (2020): Quenching Assisted Reverse Micellar Synthesis and Electrical Properties of High Surface Area BiFeO₃ Nanoparticles. *Journal of Nanoscience and Nanotechnology*, vol 20, pp 3823-3831.

2019

152. **Jahangeer Ahmed ***; Mohd Ubaidullah; Norah Alhokbany; Saad M Alshehri (2019): Synthesis of Ultrafine NiMoO₄ Nano-Rods for Excellent Electro-catalytic Performance in Hydrogen Evolution Reactions. *Materials Letters*, vol. 257, pp 116696.

153. **Jahangeer Ahmed ***; Ubaidullah, M.; Ahmad, T.; Alhokbany, N.; Alshehri, SM (2019) Synthesis of Graphite oxide/cobalt molybdenum oxide hybrid nanosheets for enhanced electrochemical performances in supercapacitors and OER, *ChemElectroChem*, vol 6. Pp 2524-2530
154. **Jahangeer Ahmed ***; Ahamad, T.; Ubaidullah, M.; Al-Enizi, AM; Alhabarah, AN; Alhokbany, N.; Alshehri, SM (2019): rGO Supported NiWO₄ Nanocomposites for Hydrogen Evolution Reactions. *Materials Letters*, vol 240, pp 51-54.
155. Osamah Alduhaish, Mohd Ubaidullah, Abdullah M Al-Enizi, Norah Alhokbany, Saad M. Alshehri, **Jahangeer Ahmed *** (2019): Facile Synthesis of Mesoporous α -Fe₂O₃@g-C₃N₄-NCs for Efficient Bifunctional Electro-catalytic Activity (OER/ORR). *Scientific Reports*, vol. 9, pp 14139.
156. Tokeer Ahmad; Ruby Phul; U. Farooq; **Jahangeer Ahmed**; SM Alshehri (2019): Electrocatalytic and Enhanced Photocatalytic Applications of Sodium Niobate Nanoparticles Developed by Citrate Precursor Route. *Scientific Reports*, vol 9, pp 4488.
157. Gaurav Sharma, Alberto García-Peñas, Amit Kumar, Mu Naushad, Genene Tessema Mola, Saad M Alshehri, **Jahangeer Ahmed**, Norah Alhokbany, Florian J Stadler (2019): Fe/La/Zn nanocomposite with graphene oxide for photodegradation of phenylhydrazine. *Journal of Molecular Liquids*, vol. 285, pp 362-374.
158. Afzal Hussain, Mohammad Oves, Mohamed F. Alajmi, Iqbal Hussain, Samira Amir, **Jahangeer Ahmed**, Md Tabish Rehman, Hesham R. El-Seedi and Imran Ali (2019): Biogenesis of ZnO nanoparticles using Pandanus odorifer leaf extract: anticancer and antimicrobial activities. *RSC Advances*, vol 9, pp 15357-15369
159. Saad M. Alshehri, Mu. Naushad, Tansir Ahamad, Norah Alhokbany, Tokeer Ahmad, **Jahangeer Ahmed*** (2019): Polymeric Metal Complex-Derived Nitrogen-doped Carbon-Encapsulated α -Fe₂O₃ (NCF) Nanocomposites as Highly Efficient Adsorbent for the Removal of Cd²⁺ ion from aqueous Medium. *Desalination and Water Treatment*, vol. 162, pp 303-312
160. **Jahangeer Ahmed ***; A. Husaain; Mohd Ubaidullah, Hussein Alrobei; N. Alhokbany; Saad M Alshehri (2019): Excellent Stability, Recyclable Nature and High Photocatalytic Performance of Graphite Oxide/Fe₃O₄ Nanocomposites. *Desalination and Water Treatment*, vol 168, pp 291-297
161. Umar Farooq, **Jahangeer Ahmed**, Saad M. Alshehri and Tokeer Ahmad (2019): High Surface Area Sodium Tantalate Nanoparticles with Enhanced Photocatalytic and Electrical Properties Prepared through Polymeric Citrate Precursor Route. *ACS Omega*, vol. 4, pp 19408-19419

2018

162. **Jahangeer Ahmed ***; Ahamad, T; Alhokbany, N; Ahmad, T; Hussain, A; Al-Farraj, ES; Alshehri, SM (2018): Molten Salts Derived Copper Tungstate Nanoparticles as Bifunctional Electro-catalysts for Electrolysis of Water and Supercapacitors. *ChemElectroChem*, vol. 5, pp. 3938-3945.
163. Alajmi, M.F.; **Jahangeer Ahmed ***; Husain, A.; Alhokbany, N.; Amir, S.; Ahmad, T.; Alshehri, S.M. (2018): Green synthesis of Fe₃O₄ nanoparticles using aqueous

extracts of *Pandanus odoratissimus* leaves for efficient bifunctional electro-catalytic activity. *Applied Nanoscience*, vol 8, pp. 1427-1435

164. Al-Farraj, ES; Alhabarah, AN; **Jahangeer Ahmed**; Al-Enizi, AM; Naushad, M; Ubaidullah, M; Alshehri, SM; Ahamad, T (2018): Fabrication of hybrid nanocomposite derived from chitosan as efficient electrode materials for supercapacitor. *International Journal of Biological Macromolecules*, vol 120, pp 2271-2278.
165. Alshehri, S.M.; **Jahangeer Ahmed**; Naushad, M.; Khan, A.; and Ahamad, T. (2018): Bifunctional electrocatalysts (Co₉S₈@NSC) derived from polymer-metal complex- for oxygen reduction and oxygen evolution reactions. *ChemElectroChem*, vol 5, pp 355-361.
166. Ahamad, T.; Al-hajjia, A. B.; **Jahangeer Ahmed**, Chaudhary, A. A.; Alshehri, S. M. (2018): Cellulose gum and copper nanoparticles based hydrogel as antimicrobial agents against urinary tract infection (UTI) pathogens. *International Journal of Biological Macromolecules*, vol 109, pp 803-809.
167. Alshehri, S.M.; Alhabaraha, AN; **Jahangeer Ahmed**; Naushad, M.; Ahmad, T. (2018): An efficient and cost-effective tri-functional electrocatalyst based on cobalt ferrite embedded nitrogen doped carbon. *Journal of Colloid and Interface Science*, vol 514, pp. 1-9.
168. Alshehri, S.M.; **Jahangeer Ahmed** *; Ahamad, T.; Alhokbany, N.; Arunachalam, P.; Al-Mayouf, A.M.; Ahmad, T. (2018): Synthesis, Characterization, Multifunctional Electrochemical (OGR/ORR/SCs) and Photodegradable Activities of ZnWO₄ Nanobricks, *Journal of Sol Gel Science and Technology*, vol 87, pp 137–146
169. Lone, I.H.; **Jahangeer Ahmed**; Ahmad, T. (2018): Reverse Micellar Synthesis, Characterization, Magnetic and Ferroelectric Properties of YFeO₃ Nanoparticles, *Materials Today: Proceedings*, vol 5, pp 15303-15310.
170. Ahmad, T.; Shahazad, M.; Ubaidullah, M; **Jahangeer Ahmed** (2018): Synthesis, characterization and dielectric properties of TiO₂–CeO₂ ceramic nanocomposites at low titania concentration, *Bulletin of Materials Science*, vol. 41, pp. 99.

2017

171. **Jahangeer Ahmed** *, Ahamad, T., and Alshehri, S.M. (2017): Iron - Nickel Nanoparticles as Bifunctional Catalysts in Electrolysis of Water. *ChemElectroChem*, vol. 4, pp. 1222.
172. Alshehri, S.M., **Jahangeer Ahmed** *, Ameen, Ahamad, T., Ahmad, T. (2017): Nitrogen doped Cobalt Ferrite/Carbon (NCFC) Nanocomposites for Supercapacitor Application. *ChemElectroChem*, vol 4, pp. 2952.
173. Alshehri, S.M., **Jahangeer Ahmed** *, Ahamad, T., Arunanchal, P., Ahmad, T., Khan, A. (2017): Bifunctional Electrocatalytic Performance of CoWO₄ Nanocubes for Water Oxidation Reaction (OER/ORR). *RSC Advances*, vol 7, pp. 45615.
174. Alshehri, S.M. **Jahangeer Ahmed** *, Abdulaziz, Ahamad, T. (2017): Synthesis, Characterization and Enhanced Photo-Catalytic Properties of NiWO₄ Nanobricks. *New Journal of Chemistry*, vol 41, pp. 8178.
175. Ahmad, T., P., Phul, Alam, R., Lone, I. H., Shahazad, M., **Jahangeer Ahmed** *, Ahamad, T., and Alshehri, S.M. (2017): Optical and Enhanced Photo-catalytic Properties of CuCrO₂ Nanoparticles. *RSC Advances*, vol. 7, pp. 27549.

176. Ahamad, T., Naushad, M., **Jahangeer Ahmed**, Almaswari, B.M., Alothman, Z., Alshehri, S.M., and Alqadami, A.A. (2017); Synthesis of a recyclable mesoporous nanocomposite for efficient removal of toxic Hg²⁺ from aqueous medium. **Journal of Industrial and Engineering Chemistry**, vol. 53, pp. 268.
177. Ahmad, T., Lone, I. H., Ansari, S.G., **Jahangeer Ahmed**, Ahamad, T., and Alshehri, S.M. (2017): Multifunctional Properties and Applications of Yttrium Ferrite Nanoparticles Prepared by Citrate Precursor Route, **Materials & Design**, vol. 126, pp. 331.
178. Alshehri, S.M., **Jahangeer Ahmed ***, Ahamad, T., Almaswari, B.M., Khan, A. (2017): Efficient photodegradation of methylthioninium chloride dye in aqueous using barium tungstate nanoparticles. **Journal of Nanoparticle Research**, vol. 19, pp. 289
179. Ahamd, T., Shahazad, M., Ubaidullah, M., **Jahangeer Ahmed**, Khan, A., and El-Toni, A. (2017): Structural Characterization and Dielectric Properties of Ceria-Titania Nanocomposites in Low Ceria Region. **Materials Research Express**, vol 4, pp. 125016.

2016

180. **Jahangeer Ahmed**, and Yuanbing Mao (2016): Ultrafine Nano-Rods (NRs) of Iridium Oxides for Enhanced Electro-Catalytic Properties. **Electrochimica Acta**, vol. 212, pp. 686. [IF =
181. **Jahangeer Ahmed ***, Poltavets, V. V., Prakash, J., Alshehri, S.M., and Ahamad, T. (2016): Sol – Gel Synthesis, Structural Characterization and Bifunctional Catalytic Activity of Nanocrystalline Delafossite CuGaO₂ Particles. **Journal of Alloys and Compounds**, vol. 688, pp. 1157.
182. **Jahangeer Ahmed**, and Yuanbing Mao (2016): Synthesis, characterization and electrocatalytic properties of Delafossite CuGaO₂. **Journal of Solid State Chemistry**, vol. 242, pp. 77.

2014

183. **Jahangeer Ahmed**, Blakely, C. K., Prakash, J., Bruno, S. R., Yu, M., Wu, Y., Poltavets, V. V. (2014). Scalable Synthesis of Delafossite CuAlO₂ Nanoparticles for P-type Dye-Sensitized Solar Cells Applications, **Journal of Alloys and Compounds**, vol.591, pp.275
184. Ahmad, T., Wani, I. A., Manzoor, N., **Jahangeer Ahmed**, Kalam, A., Asiri, A. M. (2014): Structural Characterization, Antifungal Activity and Optical Properties of Gold Nanoparticles Prepared by Reverse Micelles. **Advanced Science Letters**, vol. 20, pp. 1631
185. Ahmad, T., Wani, I. A., **Jahangeer Ahmed**, Al-Hartomy, O. A. (2014): Effect of Gold ion Concentration on Size and Properties of Gold Nanoparticles in TritonX-100 based Inverse Microemulsions. **Applied Nanoscience**, vol. 4, pp. 491.

2013

186. Khatoon, S., Wani, I. A., Ganguly, A., **Jahangeer Ahmed**, Magdaleno, T., Al-Hartomy, O. A., Ahmad, T. (2013): Effect of High Manganese Substitution at ZnO Host Lattice using Solvothermal Method: Structural Characterization and Properties. **Materials Chemistry and Physics**, vol. 138, pp. 519

187. Ahmad, T., Wani, I. A., Manzoor, N., **Jahangeer Ahmed**, Asiri, A. M. (2013): Biosynthesis, structural characterization and antimicrobial activity of gold and silver nanoparticles, **Colloids and Surfaces B**, Vol. 107, pp. 227
188. Wani, I. A., Khatoon, S., Ganguly, A., **Jahangeer Ahmed**, Ahmad, T. (2013). Structural Characterization and Antimicrobial Properties of Silver Nanoparticles Prepared by Inverse Microemulsion Method, **Colloid and Surface B**, vol. 101, pp. 243
189. Ahmad, T. Wani, I. A., Lone, I. H., Ganguly, A., Manzoor, N., Ahmad, A., **Jahangeer Ahmed**, Al-shihri, A. S. (2013). Antifungal Activity of Gold Nanoparticles Prepared by Solvothermal Method. **Materials Research Bulletin**, vol. 48, pp. 12

2012

190. **Jahangeer Ahmed**, Blakely, C. K., Bruno, S. R., Poltavets, V. V. (2012). Synthesis of MSnO_3 (M = Ba, Sr) nanoparticles by reverse micelle method and particle size distribution analysis by whole powder pattern modeling. **Materials Research Bulletin**, vol. 47, pp. 2282
191. **Jahangeer Ahmed**, Ojha, K., Vaidya, S., Ganguli, J., Ganguli, A. K. (2012). Formation of calcium oxalate nanoparticles in leaves: Significant role of water content and age of leaves. **Current Science**, vol. 103, pp. 293

2011

192. **Jahangeer Ahmed**, Ganguly A., Saha S., Govind, Trinh P., Mugweru A. M., Ramanujachary K. V., Lofland S. E., Ganguli A. K. (2011). Enhanced electrochemical activity of Cu – Co nanostructures. **Journal of Physical Chemistry C**, vol. 115, pp. 14523
193. **Jahangeer Ahmed**, Trinh, P., Mugweru, A. M., Ganguli, A. K. (2011). Self – assembly of copper nanoparticles (cubes, rods and spherical nanostructures): Significant role of morphology on HER and OER efficiency, **Solid State Sciences**, vol. 13, pp. 855
194. Wani, I. A., Ganguly, A., **Jahangeer Ahmed**, Ahmad, T. (2011). Silver Nanoparticles: Ultrasonic Wave Assisted Synthesis, Optical Characterization and Surface Area Studies, **Materials Letters**, Vol. 65, pp. 520
195. Ahmad, T., Ganguly, A., **Jahangeer Ahmed**, Ganguli, A. K. (2011). “Nanorods of Transition Metal Oxalates: A Versatile Route to the Oxide Nanoparticles”. **Arabian Journal of Chemistry**, vol. 4, pp. 125

2010

196. **Jahangeer Ahmed**, Kumar B., Trinh P., Mugweru A. M., Ramanujachary K. V., Lofland S. E., Ganguli A. K. (2010). Binary Fe–Co Alloy Nanoparticles Showing Significant Enhancement in Electrocatalytic Activity Compared with Bulk Alloys. **Journal of Physical Chemistry C**, vol. 114, pp. 18779
197. Rao, G. K., Kumar, A., **Jahangeer Ahmed**, Singh, A. K. (2010). Palladacycle containing nitrogen and selenium; highly active pre-catalyst for Suzuki - Miyaura coupling reaction converted to $\text{Pd}_{17}\text{Se}_{15}$. **Chemical Communications**, vol. 46, pp. 5954
198. Wani, I. A., Khatoon, S., Ganguly, A., **Jahangeer Ahmed**, Ganguli, Ak. K., Ahmad, T. (2010). Silver Nanoparticles: Large Scale Solvothermal Synthesis and Optical Properties. **Material Research Bulletin**, Vol. 45, pp. 1033

2009

199. **Jahangeer Ahmed**, Sharma S., Ramanujachary K. V., Lofland S. E., Ganguli A. K. (2009): Microemulsion – mediated synthesis of cobalt (pure fcc and hexagonal phases) and cobalt – nickel alloy nanoparticles. ***Journal of Colloid Interface Science***, vol. 336, pp. 814
200. **Jahangeer Ahmed**, Menka, Ganguli, A. K. (2009). Controlled growth of nanocrystalline rods, hexagonal plates and spherical particles of the vaterite form of calcium carbonate. ***CrystEngComm***, vol. 11, pp. 927
201. Ranjan, R., Vaidya, S., Thaplyal, P., Azmi, Q., **Jahangeer Ahmed**, Ganguli, A. K. (2009). Controlling the size, morphology and aspect ratio of nanostructures using reverse micelles: A case study of copper oxalate monohydrate. ***Langmuir***, vol. 25, pp. 6469
202. Prakash, J., Singh, S. J., **Jahangeer Ahmed**, Patnaik, S., Ganguli, A.K. (2009). Compositionally controlled semimetal to superconducting transition in NaF doped LaOFeAs: Enhancement in T_c due to Na-doping. ***Physica C***, vol. 469, pp. 300

2008

203. **Jahangeer Ahmed**, Ramanujachary K. V., Lofland S. E., Govind, Shivaprasad, S. M., Ganguli A. K. (2008). Bimetallic Cu-Ni nanoparticles of varying compositions (CuNi₃, CuNi, and Cu₃Ni). ***Colloids and Surfaces A***, vol. 331, pp. 206
204. **Jahangeer Ahmed**, Ahmad, T., Ramanujachary, K. V., Lofland, S. E., Ganguli, A. K. (2008). Development of microemulsion-based process for pure cobalt (Co) and cobalt oxide (Co₃O₄) nanoparticles from sub-micron rods of cobalt oxalate. ***Journal of Colloids and Interface Science***, vol. 321, pp. 434
205. **Jahangeer Ahmed**, Vaidya, S., Ahmad T., Ganguli, A. K. (2008). Tin dioxide nanoparticles: Reverse micellar synthesis and gas sensing properties. ***Materials Research Bulletin***, vol. 43, pp. 264
206. Ganguli, A. K., Ahmad, T., Vaidya, S., **Jahangeer Ahmed** (2008). Microemulsion route to the synthesis of nanoparticles, ***Pure and Applied Chemistry***, vol. 80, pp. 2451
207. Vaidya, S., **Jahangeer Ahmed**, Ganguli, A. K. (2008). Controlled synthesis of nanomaterials using reverse micelles. ***Defence Science Journal***, vol. 58, pp. 531
208. Ahmad, T., Ganguli, A. K., Ganguly, A., **Jahangeer Ahmed**, Wani, I. A., Khatoon, S. (2008). Chemistry of Reverse Micelles: A Versatile Route to the Synthesis of Nanorods and Nanoparticles. ***Materials Research Society Symposium proceeding*** Vol. 1142, pp. 75-88.

2007

209. Ganguli, A. K., **Jahangeer Ahmed**, Vaidya, S., Ahmad, T. (2007). Mimicking the biomineralization of aragonite (calcium carbonate) using reverse-micelles under ambient conditions. ***Journal of Nanosciences and Nanotechnology***, vol. 7, pp. 1760

2004

210. Ali, S. R., **Jahangeer Ahmed**, Kamaluddin (2004). Interaction of ribose nucleotides with metal ferrocyanides and its relevance in chemical evolution. ***Colloids and Surfaces A***, vol. 236, pp. 165

