Dr. Ghulam Yasin

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Publications: **42** | *h*-index: >**12** | i10-index: > **13** | Citations: >**406** Source: Google Scholar: <u>https://scholar.google.com/citations?user=Q4TrHFsAAAAJ&hl=en</u>

Summary Statement

7 years working experience in the field of Nanoscale Functional Materials (Low Dimensional, Nano and 2D Materials): preparation of Carbon Materials including Graphene, Graphene Nanoribbons (GNRs), Carbon Nanotubes (CNTs) and Advanced Carbon-Based Nanoarchitectured Materials for Energy Storage and Conversion Devices/Technologies. Designing and preparation of Multifunctional Nanocomposites for various Engineering Applications.

Education

2016 - 2020 Ph. D., Materials Science and EngineeringCollege of Materials Science and Engineering, Beijing University of Chemical TechnologyBeijing, China

2013 - 2016 M. S., Materials Science and Engineering College of Materials Science and Engineering, Beijing University of Chemical Technology Beijing, China

2008 - 2012 Bachelor of Engineering, Metallurgy and Materials Institute of Advanced Materials, Bahauddin Zakariya University, Multan, Pakistan

Professional Experience

- 2019-To date: Research Associate, BUCT-CWRU International Joint Laboratory, State Key Laboratory of Chemical Resource Engineering, College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing 100029, China.
- **2013-2016:** Research Assistant, State Key Laboratory of Electrochemical Process and Technology for Materials, College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing 100029, China.
- **2012-2013:** Worked as Visiting Lecturer at College of Engineering and Technology Multan, Punjab, Pakistan.
- **2012:** Four Weeks Internship at Pakistan Foundry Association, Chicago Group of Industries Multan, Pakistan.

Honors and Awards

- **First Prize** in **Science and Technology Innovation** Award of the Year from Beijing University of Chemical Technology, Beijing, China 2019
- **Outstanding Academic Achievement Award** of the year from The Embassy of Pakistan, Beijing, China 2019
- Outstanding Reviewer Award from Journal of Alloys and Compounds, Elsevier, Amsterdam, The Netherlands 2018
- Awarded Research Star of the Year from Beijing University of Chemical Technology, Beijing, China 2018
- Awarded Certificate of Appreciation from **Global Competence Forum for Young Elites 2019**, held at Xidian University, Xian, China 2019
- **Excellent Doctoral Candidate** from International Doctoral Students Forum, Study in China, China Scholarship Council (CSC), Ministry of Education, China 2018
- Excellent Presentation and Poster Award from Global Young Talent Forum & the 2nd Sino-Foreign Postgraduate Exchange Forum, Beijing University of Chemical Technology, Beijing, China – 2018
- Excellent Graduate Award from Beijing University of Chemical Technology, Beijing, China 2016
- International Talent Award, Promoted from Master to PhD, CSC Scholarship 2016
- International **Ambassador** of Beijing University of Chemical Technology, for promoting the Chinese Culture and Exchange of Chinese and Foreign Education 2016
- **Outstanding Academic Achievement Award** of the year from The Embassy of Pakistan, Beijing, China 2015
- Excellent Student Award "**Star of Science**" from Beijing University of Chemical Technology, Beijing, China 2015

• Provincial Government Honorary Award and Laptop prize "Youth Punjab Talent Award" to excellent students from Chief Minister of Punjab, Pakistan – 2011

Selected Publications

- 19. <u>G. Yasin</u>, M. Arif, T. Mehtab, M. Shakeel, M.A. Mushtaq, A. Kumar, T.A. Nguyen, Y. Slimani, M.T. Nazir, H. Song, "A Novel Strategy for the Synthesis of Hard Carbon Spheres Encapsulated with Graphene Networks as a Low-Cost and Large-Scalable Anode Material for Fast Sodium Storage with an Ultralong Cycle Life", Inorganic Chemistry Frontiers, 7 (2020) 402-410. (RSC Publishing, Impact Factor: **5.934**).
- 18. <u>G. Yasin</u>, M. Arif, T. Mehtab, X. Lu, D. Yu, N. Muhammad, M.T. Nazir, H. Song, "Understanding and suppression strategies toward stable Li metal anode for safe lithium batteries", Energy Storage Materials, 25 (2020) 644-678 (Elsevier Publishing, Cite Score: 15.9+).
- G. Yasin, M.A. Khan, W.Q. Khan, T. Mehtab, R.M. Korai, X. Lu, M.T. Nazir, M.N. Zahid, "Facile and large-scalable synthesis of low cost hard carbon anode for sodium-ion batteries", Results in Physics, 14 (2019) 102404. (Elsevier Publishing, Impact Factor: 3.042).
- 16. T. Mehtab, <u>G. Yasin</u>*, M. Arif, M. Shakeel, R.M. Korai, M. Nadeem, N. Muhammad, X. Lu, "Metal-organic frameworks for energy storage devices: Batteries and supercapacitors", Journal of Energy Storage, 21 (2019) 632-646. (Elsevier Publishing, Impact Factor: 3.517). *Corresponding Author.
- 15. S. Ullah, <u>G. Yasin</u>**, A. Ahmad, Q. Yuan, A.U. Khan, U.A. Khan, A. Rahman, "Construction of well-designed 1D Selenium-Tellurium nanorods anchored on graphene sheets as high storage capacity anode material in Lithium-ion battery" Inorganic Chemistry Frontiers, (2020), https://doi.org/10.1039/C9QI01701A (RSC Publishing, Impact Factor: **5.934**). **Equal to first author.
- 14. M. Nadeem, <u>G. Yasin</u>**, M. Arif, M.H. Bhatti, K. Sayin, M. Mehmood, U. Yunus, S. Mehboob, I. Ahmed, U. Flörke, "Pt-Ni@PC900 Hybrid derived from layered structure Cd-MOF for fuel cell ORR activity" ACS Omega, 5 (2020) 2123-2132. (ACS Publishing, Impact Factor: 2.584). **Equal to first author.

- 13. M. Nadeem, <u>G. Yasin</u>, M.H. Bhatti, M. Mehmood, M. Arif, L. Dai, "Pt-M bimetallic nanoparticles (M = Ni, Cu, Er) supported on metal organic framework-derived N-doped nanostructured carbon for hydrogen evolution and oxygen evolution reaction" Journal of Power Sources, 402 (2018) 34-42. (Elsevier Publishing, Impact Factor: 7.467).
- 12. M. Arif, <u>G. Yasin</u>, L. Luo, W. Ye, M. A. Mushtaq, X. Fang, X. Xiang, S. Ji, D. Yan, "Hierarchical hollow nanotubes of NiFeV-layered double hydroxides@CoVP heterostructures towards efficient, pH-universal electrocatalytical nitrogen reduction reaction to ammonia", Applied Catalysis B: Environmental, 265 (2020) 118559. (Elsevier Publishing, Impact Factor: 14.229).
- 11. M. Arif, <u>G. Yasin</u>, M. Shakeel, M.A. Mushtaq, W. Ye, X. Fang, S. Ji, D. Yan, "Hierarchical CoFe-layered double hydroxide and g-C3N4 heterostructures with enhanced bifunctional photo/electrocatalytic activity towards overall water splitting", Materials Chemistry Frontiers, 3 (2019) 520-531. (RSC Publishing, Cite Score: 8.0+).
- M. Arif, <u>G. Yasin</u>, M. Shakeel, X. Fang, R. Gao, S. Ji, D. Yan, "Coupling of Bifunctional CoMn-Layered Double Hydroxide@Graphitic C₃N₄ Nanohybrids towards Efficient Photoelectrochemical Overall Water Splitting", Chemistry - An Asian Journal, 13 (2018) 1045-1052. (Wiley Publishing, Impact Factor: **3.698**).
- M. Shakeel, M. Arif, <u>G. Yasin</u>, B. Li, H.D. Khan, "Layered by layered Ni-Mn-LDH/g-C₃N₄ nanohybrid for multi-purpose photo/electrocatalysis: Morphology controlled strategy for effective charge carriers separation", Applied Catalysis B: Environmental, 242 (2019) 485-498. (Elsevier Publishing, Impact Factor: 14.229).
- M. Shakeel, <u>G. Yasin</u>, M. Arif, X. Zhang, Z. Abbas, S. Khan, W. Rehman, U. Zaman, Z. Ul Haq Khan, B. Li, "A facile band alignment with sharp edge morphology accelerating the charge transportation for visible light photocatalytic degradation: A multiplex synergy", Journal of Water Process Engineering, 32 (2019) 100985. (Elsevier Publishing, Impact Factor: 3.173).
- M. Shakeel, M. Arif, <u>G. Yasin</u>, B. Li, A.U. Khan, F.U. Khan, M.K. Baloch, "Hollow mesoporous architecture: A high performance Bi-functional photoelectrocatalyst for overall water splitting', Electrochimica Acta, 268 (2018) 163-172. (Elsevier Publishing, Impact Factor: 5.383).

- M. Shakeel, B. Li, <u>G. Yasin</u>, M. Arif, W. Rehman, H.D. Khan, "In Situ Fabrication of Foamed Titania Carbon Nitride Nanocomposite and Its Synergetic Visible-Light Photocatalytic Performance", Industrial & Engineering Chemistry Research, 57 (2018) 8152-8159. (ACS Publishing, Impact Factor: 3.375).
- M. Shakeel, B. Li, M. Arif, <u>G. Yasin</u>, W. Rehman, A.U. Khan, S. Khan, A. Khan, J. Ali, "Controlled Synthesis of highly proficient and durable hollow hierarchical heterostructured (Ag-AgBr/HHST): A UV and Visible light active photocatalyst in degradation of organic pollutants", Applied Catalysis B: Environmental, 227 (2018) 433-445. (Elsevier Publishing, Impact Factor: 14.229).
- 4. G. Yasin, M.J. Anjum, M.U. Malik, M.A. Khan, W. Q. Khan, M. Arif, T. Mehtab, T. A. Nguyen, Y. Slimani, M. Tabish, D. Ali, Y. Zuo, "Revealing the erosion-corrosion performance of sphere-shaped morphology of nickel matrix nanocomposite strengthened with reduced graphene oxide nanoplatelets", Diamond and Related Materials, 104 (2020) 107763. (Elsevier Publishing, Impact Factor: 2.29).
- <u>G. Yasin</u>, M.A. Khan, M. Arif, M. Shakeel, T.M. Hassan, W.Q. Khan, R.M. Korai, Z. Abbas, Y. Zuo, "Synthesis of spheres-like Ni/graphene nanocomposite as an efficient anti-corrosive coating; effect of graphene content on its morphology and mechanical properties", Journal of Alloys and Compounds, 755 (2018) 79-88. (Elsevier Publishing, Impact Factor: 4.175).
- <u>G. Yasin</u>, M. Arif, M. Shakeel, Y. Dun, Y. Zuo, W.Q. Khan, Y. Tang, A. Khan, M. Nadeem, "Exploring the Nickel-Graphene Nanocomposite Coatings for Superior Corrosion Resistance: Manipulating the Effect of Deposition Current Density on its Morphology, Mechanical Properties, and Erosion-Corrosion Performance", Advanced Engineering Materials, 20 (2018) 1701166. (Wiley Publishing, Impact Factor: 2.906).
- 22. <u>G. Yasin</u>, M. Arif, M.N. Nizam, M. Shakeel, M.A. Khan, W.Q. Khan, T.M. Hassan, Z. Abbas, I. Farahbakhsh, Y. Zuo, "Effect of surfactant concentration in electrolyte on the fabrication and properties of nickel-graphene nanocomposite coating synthesized by electrochemical co-deposition", RSC Advances, 8 (2018) 20039-20047. (RSC Publishing, Impact Factor: **3.049**).

Book Chapters

- <u>G. Yasin</u>, et al., Nanostructured anode materials in rechargeable batteries, in book titled "Nanobatteries and Nanogenerators: Fundamentals and Applications" (Accepted), Elsevier: USA, Publication Date: September 2020.
- <u>G. Yasin</u>, et al., Nanostructured cathode materials in rechargeable batteries, in book titled "Nanobatteries and Nanogenerators: Fundamentals and Applications" (Accepted), Elsevier: USA, Publication Date: September 2020.
- <u>G. Yasin</u>, M. Arif, et al. Metallic Nanocomposite Coatings, In Book "Corrosion Protection at the Nanoscale", (2020), Pages 245-274, Elsevier, USA, (ISBN: 978-0-12-819359-4). <u>https://doi.org/10.1016/B978-0-12-819359-4.00014-3</u>
- M.J. Anjum, <u>G. Yasin</u> *, et al. Metal/Metal Oxide Nanoparticles as Corrosion Inhibitors, In Book "Corrosion Protection at the Nanoscale", (2020), Pages 181-201, Elsevier, USA (ISBN: 978-0-12-819359-4). <u>https://doi.org/10.1016/B978-0-12-819359-4.00011-8</u> (*Corresponding author).
- M. Irfan, <u>G. Yasin</u> *, et al. Corrosion Resistance of Nanostructured Metals and Alloys, In Book "Corrosion Protection at the Nanoscale", (2020), Pages 63-87, Elsevier: USA (ISBN: 978-0-12-819359-4). <u>https://doi.org/10.1016/B978-0-12-819359-4.00005-2</u> (*Corresponding author).

Professional Services

- Assistant Editor of the Journal "*Materials International*", AMG Transcend Association, 2019 – To date <u>https://materials.international/?page_id=20</u>
- Member of the Editorial Board of the SCIREA *Journal of Materials*, 2018 To date (<u>http://www.scirea.org/journal/EditorialBoard?JournalID=43000</u>)
- Regular Reviewer for *Small*, 2020 To date
- Regular Reviewer for ACS Applied Nano Materials, 2020 To date
- Regular Reviewer for *Advanced Materials Interfaces*, 2019 To date
- Regular Reviewer for Journal of Alloys and Compounds, 2018 To date
- Regular Reviewer for more than 10 Scientific Journals, including Advanced Engineering Materials, Philosophical Magazine, Materials Research Express, Science of Advanced Materials, International Journal of Materials Research, *World Journal of Engineering*, *IEEE Access*, etc.

Memberships and Affiliations

- Awarded Executive Board Membership of BUCT Alumni 2019
- International Representative of Beijing University of Chemical Technology to Beijing Municipal Government.
- Representative for curriculum and extra curriculum activities of Beijing University of Chemical Technology.
- International Member of Cultural Society of Peking University, "Chinese Economy and Ancient Culture".
- Membership of Pakistan Engineering Council (PEC).