Ibrahim Khan
CBI Green Chemicals and Energy Centre
Advanced Energy and Environmental Materials & Technologies Research Group
**Type of address: Postal address.**
No.211, Xingguang Road, Yinzhou District
CBI
315100
Ningbo,
China
**Email:** Ibrahim.Khan@nottingham.edu.cn, ebraheem.chemist@gmail.com
**Phone:** +86 (0) 574 8818 0000 ext: 6716
**Web address:** https://scholar.google.com/citations?user=3ZxOgLgAAAAJ&hl=en,
https://orcid.org/my-orcid?orcid=0000-0003-2893-1467,
https://www.linkedin.com/in/dr-ibrahim-khan/

## Qualifications

PhD, Hybrid Metal Oxide Nanoarrays: Fabrication, Properties and Energy Conversion Applications, Chemistry
Department of King Fahd University of Petroleum and Minerals
Jan 2014 → Aug 2018
Award Date: 17 May 2018

## Employment

**Assistant Professor**
CBI Green Chemicals and Energy Centre
China Beacons Institute
1 Feb 2024 → present

**Advanced Energy and Environmental Materials &Technologies Research Group**
27 May 2024 → present

## Research outputs

**Green synthesis of activated carbon from biomass waste of date palm seeds: A sustainable solution for energy storage and environmental impact**
Ayaz, M., Shah, S. S., Younas, M., Safder, U., Khan, I., Aziz, M. A., Adnan, Oyama, M., Rice, J. H., Tahir, M. N. & Ashraf, M., 28 Feb 2025, In: Journal of Energy Storage. 110, 115291.

**Strategically coupled tungsten oxide-zinc oxide photosystems for solar-driven nerve agent simulant degradation and hydrogen evolution**
Khan, I., Rizwan Tariq, M., Ahmad, M., Khan, I. & Zhang, B., 19 Feb 2025, In: Separation and Purification Technology. 354, 129078.

**T-2 mycotoxin: From occurrence and toxicokinetics to recent advances in aptasensor-based detection strategies and future perspectives for enhanced food safety**
Raza, A., Niazi, S., Shoaib, M., Khan, I. M., Haq, F. U., Ali, K., Khan, I., Zhang, Y. & Wang, Z., Feb 2025, In: Trends in Food Science and Technology. 156, 104784.

**Highly selective sensing of toxic $NO_x$ gases for environmental monitoring using Ru-doped single walled $TiO_2$ nanotube: A density functional theory study**
Ragab, A. H., Al-Mhyawi, S. R., Kamran, A. W., Khan, I. & Khan, I., 1 Oct 2024, In: Sensors and Actuators A: Physical. 376, 115632.

**Materials advancements in solid-state inorganic electrolytes for highly anticipated all solid Li-ion batteries**
Sarfraz, N., Kanwal, N., Ali, M., Ali, K., Hasnain, A., Ashraf, M., Ayaz, M., Ifthikar, J., Ali, S., Hendi, A., Baig, N., Ehsan, M. F., Shah, S. S., Khan, R. & Khan, I., Aug 2024, In: Energy Storage Materials. 71, 103619.

**Nanomaterial-based probes for iodide sensing: synthesis strategies, applications, challenges, and solutions**
Mansha, M., Abbas, N., Altaf, F., Khan, S. A., Khan, I. & Ali, S., 4 Mar 2024, In: Journal of Materials Chemistry C. 12, 14, p. 4919-4947 29 p.

Shape-Controlled First-Row Transition Metal Vanadates for Electrochemical and Photoelectrochemical Water Splitting
Khan, I., Gu, Y. & Wooh, S., Jan 2024, In: Chemical Record. 24, 1, e202300127.

Tailoring performance of hybrid supercapacitors by fluorine-rich block copolymer-derived carbon coated mixed-phase $TiO_2$ nanoparticles
Khan, I., Shah, S. S., Hendi, A. H., Ashraf, M., Cho, Y., Ali, S. & Wooh, S., 15 Dec 2023, In: Journal of Alloys and Compounds. 968, 172175.

Carbon nitride ($C_3N_3$) decorated with non-noble metal $Ni_2P$ Co-catalyst based nanocomposites for photocatalytic water splitting
Ashraf, M., Ullah, N., Raziq, F., Khan, I., Alhooshani, K. R., Ganiyu, S. A. & Tahir, M. N., 1 Dec 2023, In: Electrochimica Acta. 470, 143296.

Magnetism-driven iron oxide nanocomposites for energy and environmental solutions: harnessing magnetism
Sarfraz, N., Ashraf, M., Ali, S. & Khan, I., Dec 2023, In: Materials Today Sustainability. 24, 100589.

Bandgap Engineering of Melon using Highly Reduced Graphene Oxide for Enhanced Photoelectrochemical Hydrogen Evolution
Ashraf, M., Ali, R., Khan, I., Ullah, N., Ahmad, M. S., Kida, T., Wooh, S., Tremel, W., Schwingenschlögl, U. & Tahir, M. N., 23 Nov 2023, In: Advanced Materials. 35, 47, 2301342.

Robust electrocatalysts decorated three-dimensional laser-induced graphene for selective alkaline OER and HER
Khan, I., Baig, N., Bake, A., Haroon, M., Ashraf, M., Al-Saadi, A., Tahir, M. N. & Wooh, S., Sept 2023, In: Carbon. 213, 118292.

Biomass-derived graphene-based supercapacitors
Sarfraz, N., Khan, I. & Hendi, A. H., 20 Jul 2023, *Biomass-Based Supercapacitors: Design, Fabrication and Sustainability*. wiley, p. 269-287 19 p.

Photodegradation of orange II dye using p-n junction $NiO/TiO_2$ composite, and assessment of its biological activities
Gul, T., Ahmad, S., Khan, I., Khan, I., Almehmadi, M., Amer Alsaiari, A., Allahyani, M. & Saeed, K., Jul 2023, In: Journal of Saudi Chemical Society. 27, 4, 101654.

Efficient photodegradation of methyl red dye by kaolin clay supported zinc oxide nanoparticles with their antibacterial and antioxidant activities
Gul, T., Khan, I., Ahmad, B., Ahmad, S., Alsaiari, A. A., Almehmadi, M., Abdulaziz, O., Alsharif, A., Khan, I. & Saeed, K., Jun 2023, In: Heliyon. 9, 6, e16738.

Photoreforming of Waste Polymers for Sustainable Hydrogen Fuel and Chemicals Feedstock: Waste to Energy
Ashraf, M., Ullah, N., Khan, I., Tremel, W., Ahmad, S. & Tahir, M. N., 26 Apr 2023, In: Chemical Reviews. 123, 8, p. 4443-4509 67 p.

Pluronic-123 Assisted Synthesis of Cobalt Vanadate Microparticles (μ-CoV MPs) for Durable Electrochemical Oxygen Evolution Reaction in Seawater and Connate Water
Khan, I., Mar 2023, In: Catalysts. 13, 3, 636.

Scavenging of Organic Pollutant and Fuel Generation through Cost-Effective and Abundantly Accessible Rust: A Theoretical Support with DFT Simulations
Khan, N., Gul, T., Khan, I., Alabbad, E. A., Ali, S., Saeed, K. & Khan, I., Jan 2023, In: Materials. 16, 1, 142.

Nano/micro-structural engineering of Nafion membranes for advanced electrochemical applications
Khan, I., Lee, J. H., Park, J. & Wooh, S., Jul 2022, In: Journal of Saudi Chemical Society. 26, 4, 101511.

Photocatalytic Water-Splitting by Organic Conjugated Polymers: Opportunities and Challenges
Mansha, M., Ahmad, T., Ullah, N., Akram Khan, S., Ashraf, M., Ali, S., Tan, B. & Khan, I., Jul 2022, In: Chemical Record. 22, 7, e202100336.

A sustainable molybdenum oxysulphide-cobalt phosphate photocatalyst for effectual solar-driven water splitting
Iqbal, N., Khan, I., Ali, A. & Qurashi, A., Feb 2022, In: Journal of Advanced Research. 36, p. 15-26 12 p.

Graphene and carbon nanotubes-based polymer nanocomposites
Saeed, K., Khan, I., Khan, I., Ali, N., Bilal, M. & Akhter, M. S., 1 Jan 2022, *Smart Polymer Nanocomposites: Design, Synthesis, Functionalization, Properties, and Applications.* Elsevier, p. 205-218 14 p.

Magnetic iron oxide nanocomposites: types and biomedical applications
Sarfraz, N., Khan, I., Khan, I., Ashraf, M., Ayaz, M., Saeed, K., Ali, N. & Bilal, M., 1 Jan 2022, *Smart Polymer Nanocomposites: Design, Synthesis, Functionalization, Properties, and Applications.* Elsevier, p. 185-204 20 p.

Polymer nanocomposites: an overview
Khan, I., Khan, I., Saeed, K., Ali, N., Zada, N., Khan, A., Ali, F., Bilal, M. & Akhter, M. S., 1 Jan 2022, *Smart Polymer Nanocomposites: Design, Synthesis, Functionalization, Properties, and Applications.* Elsevier, p. 167-184 18 p.

Review on Methylene Blue: Its Properties, Uses, Toxicity and Photodegradation
Khan, I., Saeed, K., Zekker, I., Zhang, B., Hendi, A. H., Ahmad, A., Ahmad, S., Zada, N., Ahmad, H., Shah, L. A., Shah, T. & Khan, I., 1 Jan 2022, In: Water (Switzerland). 14, 2, 242.

Strategies for Improved Electrochemical $CO_2$ Reduction to Value-Added Products by Highly Anticipated Copper-Based Nanoarchitectures
Khan, I., Jan 2022, In: Chemical Record. 22, 1, e202100219.

Molybdenum impregnated g-$C_3N_4$ nanotubes as potentially active photocatalyst for renewable energy applications
Iqbal, N., Afzal, A., Khan, I., Khan, M. S. & Qurashi, A., Dec 2021, In: Scientific Reports. 11, 1, 16886.

**Scavenging of organic pollutant and fuel generation through cost-effective and abundantly accessible rust: an economical approach for waste management and energy generation**
Khan, N., Khan, I., Gul, T., Khan, I., Ali, S. & Saeed, K., 13 Sept 2021, Research Square Platform LLC.

Activation of $Ni_2V_2O_7$ to nonstoichiometric $NiV_3O_8$ for solar-driven photoelectrochemical water oxidation
Khan, A. Z., Khan, I., Sufyan, A., Anjum, D. & Qurashi, A., Aug 2021, In: Journal of Environmental Chemical Engineering. 9, 4, 105526.

Sulfone-containing Conjugated Polyimide 2D Nanosheets for Efficient Water Oxidation
Khan, M. Y., Khan, I., Zeama, M. & Khan, A., 19 Jul 2021, In: Chemistry - An Asian Journal. 16, 14, p. 1979-1987 9 p.

A Bifunctional 2D Interlayered β-$Cu_2V_2O_7$/$Zn_2V_2O_6$ (CZVO) Heterojunction for Solar-Driven Nonsacrificial Dye Degradation and Water Oxidation
Ashraf, M., Khan, I., Baig, N., Hendi, A. H., Ehsan, M. F. & Sarfraz, N., Jul 2021, In: Energy Technology. 9, 7, 2100034.

Porous graphene-based electrodes: Advances in electrochemical sensing of environmental contaminants
Baig, N., Waheed, A., Sajid, M., Khan, I., Kawde, A. N. & Sohail, M., Jun 2021, In: Trends in Environmental Analytical Chemistry. 30, e00120.

High-speed solid state fluorination of $Nb_2O_5$ yields $NbO_2F$ and $Nb_3O_7F$ with photocatalytic activity for oxygen evolution from water

Lange, M. A., Khan, I., Dören, R., Ashraf, M., Qurashi, A., Prädel, L., Panthöfer, M., Von Der Au, M., Cossmer, A., Pfeifer, J., Meermann, B., Mondeshki, M., Tahir, M. N. & Tremel, W., 21 May 2021, In: Dalton Transactions. 50, 19, p. 6528-6538 11 p.

A Generalized Method for High-Speed Fluorination of Metal Oxides by Spark Plasma Sintering Yields $Ta_3O_7F$ and $TaO_2F$ with High Photocatalytic Activity for Oxygen Evolution from Water
Lange, M. A., Khan, I., Opitz, P., Hartmann, J., Ashraf, M., Qurashi, A., Prädel, L., Panthöfer, M., Cossmer, A., Pfeifer, J., Simon, F., von der Au, M., Meermann, B., Mondeshki, M., Tahir, M. N. & Tremel, W., 20 May 2021, In: Advanced Materials. 33, 20, 2007434.

Advances in carbon nanostructures and nanocellulose as additives for efficient drilling fluids: Trends and future perspective-A review
Rana, A., Khan, I. & Saleh, T. A., 6 May 2021, In: Energy and Fuels. 35, 9, p. 7319-7339 21 p.

A High-Performance Asymmetric Supercapacitor Based on Tungsten Oxide Nanoplates and Highly Reduced Graphene Oxide Electrodes
Ashraf, M., Shah, S. S., Khan, I., Aziz, M. A., Ullah, N., Khan, M., Adil, S. F., Liaqat, Z., Usman, M., Tremel, W. & Tahir, M. N., 21 Apr 2021, In: Chemistry - A European Journal. 27, 23, p. 6973-6984 12 p.

Plasmonic Gold Nanoparticles (AuNPs): Properties, Synthesis and their Advanced Energy, Environmental and Biomedical Applications
Sarfraz, N. & Khan, I., 1 Apr 2021, In: Chemistry - An Asian Journal. 16, 7, p. 720-742 23 p.

Quasi-1D Aligned Nanostructures for Solar-Driven Water Splitting Applications: Challenges, Promises, and Perspectives
Khan, I., Jalilov, A., Fujii, K. & Qurashi, A., Apr 2021, In: Solar RRL. 5, 4, 2000741.

Progress in layered cathode and anode nanoarchitectures for charge storage devices: Challenges and future perspective
Khan, I., Baig, N., Ali, S., Usman, M., Khan, S. A. & Saeed, K., Mar 2021, In: Energy Storage Materials. 35, p. 443-469 27 p.

Visible Light-Driven Photoelectrocatalytic Water Splitting Using Z-Scheme Ag-Decorated $MoS_2$/RGO/$NiWO_4$ Heterostructure
Hendi, A. H., Osman, A. M., Khan, I., Saleh, T. A., Kandiel, T. A., Qahtan, T. F. & Hossain, M. K., 15 Dec 2020, In: ACS Omega. 5, 49, p. 31644-31656 13 p.

Reactive oxygen species: New insights into photocatalytic pollutant degradation over g-$C_3N_4$/ZnSe nanocomposite
Ehsan, M. F., Shafiq, M., Hamid, S., Shafiee, A., Usman, M., Khan, I., Ashiq, M. N. & Arfan, M., 1 Dec 2020, In: Applied Surface Science. 532, 147418.

$CoFe_2O_4$ decorated g-$C_3N_4$ nanosheets: New insights into superoxide anion mediated photomineralization of methylene blue
Ehsan, M. F., Fazal, A., Hamid, S., Arfan, M., Khan, I., Usman, M., Shafiee, A. & Ashiq, M. N., Dec 2020, In: Journal of Environmental Chemical Engineering. 8, 6, 104556.

Enhancement of photocatalytic potential and recoverability of $Fe_3O_4$ nanoparticles by decorating over monoclinic zirconia
Khan, I., Zada, N., Khan, I., Sadiq, M. & Saeed, K., Dec 2020, In: Journal of Environmental Health Science and Engineering. 18, 2, p. 1473-1489 17 p.

Selective synthesis of monodisperse CoO nanooctahedra as catalysts for electrochemical water oxidation
Sarif, M., Hilgert, J., Khan, I., Harris, R. A., Plana-Ruiz, S., Ashraf, M., Pütz, E., Schemberg, J., Panthöfer, M., Kolb, U., Nawaz Tahir, M. & Tremel, W., 24 Nov 2020, In: Langmuir. 36, 46, p. 13804-13816 13 p.

Ultrasonically controlled growth of monodispersed octahedral $BiVO_4$ microcrystals for improved photoelectrochemical water oxidation
Khan, I., Khan, A. Z., Sufyan, A., Khan, M. Y., Inayath Basha, S. & Khan, A., Nov 2020, In: Ultrasonics Sonochemistry. 68 , 105233.

Heterogeneous photodegradation of industrial dyes: An insight to different mechanisms and rate affecting parameters
Khan, I., Saeed, K., Ali, N., Khan, I., Zhang, B. & Sadiq, M., Oct 2020, In: Journal of Environmental Chemical Engineering. 8, 5, 104364.

Facile synthesis of 1T-$WS_2$/graphite nanocomposite for efficient solar-driven oxygen evolution reaction
Khan, A., Khan, I., Khan, M. Y., Dafallah, H. & Qurashi, A., 14 Sept 2020, In: International Journal of Hydrogen Energy. 45 , 45, p. 24045-24053 9 p.

Investigation of the photocatalytic potential enhancement of silica monolith decorated tin oxide nanoparticles through experimental and theoretical studies
Khan, I., Khan, A. A., Khan, I., Usman, M., Sadiq, M., Ali, F. & Saeed, K., 21 Aug 2020, In: New Journal of Chemistry. 44, 31, p. 13330-13343 14 p.

Controlling shale swelling and fluid loss properties of water-based drilling Mud via ultrasonic impregnated SWCNTs/PVP nanocomposites
Rana, A., Khan, I., Ali, S., Saleh, T. A. & Khan, S. A., 20 Aug 2020, In: Energy and Fuels. 34, 8, p. 9515-9523 9 p.

Synthesis, photoinduced amination and topological indices of novel porphyrin dyads
Yaseen, M., Rashid, M. A., Iqbal, M. A., Farooq, Z., Idrees, M., Qayyum, M. A., Intisar, A., Mahmood, M. H. R., Khan, I. & Latif, M., 1 Aug 2020, In: Journal of Porphyrins and Phthalocyanines. 24, 8, p. 1054-1065 12 p.

Hematite and Magnetite Nanostructures for Green and Sustainable Energy Harnessing and Environmental Pollution Control: A Review
Ashraf, M., Khan, I., Usman, M., Khan, A., Shah, S. S., Khan, A. Z., Saeed, K., Yaseen, M., Ehsan, M. F., Tahir, M. N. & Ullah, N., 15 Jun 2020, In: Chemical Research in Toxicology. 33, 6, p. 1292-1311 20 p.

Nanoclay-mediated photocatalytic activity enhancement of copper oxide nanoparticles for enhanced methyl orange photodegradation
Khan, I., Khan, I., Usman, M., Imran, M. & Saeed, K., 1 Jun 2020, In: Journal of Materials Science: Materials in Electronics. 31, 11, p. 8971-8985 15 p.

Nanoparticles: Properties, applications and toxicities
Khan, I., Saeed, K. & Khan, I., Nov 2019, In: Arabian Journal of Chemistry. 12, 7, p. 908-931 24 p.

Propene adsorption-chemisorption behaviors on H-SAPO-34 Zeolite catalysts at different temperatures
Usman, M., Zhu, J., Chuiyang, K., Arslan, M. T., Khan, A., Galadima, A., Muraza, O., Khan, I., Helal, A., Al-Maythalony, B. A. & Yamani, Z. H., Nov 2019, In: Catalysts. 9, 11, 919.

Sulfur doped ceria-titania (S-$CeTiO_{4-x}$) nanocomposites for enhanced solar-driven water splitting
Qamaruddin, M., Khan, I., Ajumobi, O. O., Ganiyu, S. A. & Qurashi, A., Aug 2019, In: Solar Energy. 188, p. 890-897 8 p.

**Polymer Blends**
Khan, I., Mansha, M. & Mazumder, M. A. J., 8 Jun 2019, *Functional Polymers.* Mazumder, M. A. J., Sheardown, H. & Al-Ahmed, A. (eds.). 1 ed. Springer, Cham, Vol. 1. p. 513-549 (Polymers and Polymeric Composites: A Reference Series).

Au/$Ga_2O_3$/ZnO heterostructure nanorods arrays for effective photoelectrochemical water splitting
Abdalla, A., Khan, I., Sohail, M. & Qurashi, A., 15 Mar 2019, In: Solar Energy. 181, p. 333-338 6 p.

Manganese dioxide nanoparticles/activated carbon composite as efficient UV and visible-light photocatalyst
Khan, I., Sadiq, M., Khan, I. & Saeed, K., 20 Feb 2019, In: Environmental Science and Pollution Research. 26, 5, p. 5140-5154 15 p.

Graphitic carbon nitride impregnated niobium oxide (g-$C_3N_4$/$Nb_2O_5$) type (II) heterojunctions and its synergetic solar-driven hydrogen generation
Khan, I., Baig, N. & Qurashi, A., 28 Jan 2019, In: ACS Applied Energy Materials. 2, 1, p. 607-615 9 p.

Advanced cathode materials and efficient electrolytes for rechargeable batteries: Practical challenges and future perspectives
Khan, S. A., Ali, S., Saeed, K., Usman, M. & Khan, I., 2019, In: Journal of Materials Chemistry A. 7, 17, p. 10159-10173 15 p.

Single-walled carbon nanotubes/poly vinyl chloride nanocomposites and its properties
Saeed, K. & Khan, I., 2019, In: Revista Materia. 24, 4, e-12493.

Solvothermal Synthesis of Molybdenum-Tungsten Oxides and Their Application for Photoelectrochemical Water Splitting
Spetter, D., Tahir, M. N., Hilgert, J., Khan, I., Qurashi, A., Lu, H., Weidner, T. & Tremel, W., 1 Oct 2018, In: ACS Sustainable Chemistry and Engineering. 6, 10, p. 12641-12649 9 p.

Corrigendum to “Plasmon aided $(BiVO_4)_x$–$(TiO_2)_{1-x}$ ternary nanocomposites for efficient solar water splitting” (Solar Energy (2017) 155 (770–780), (S0038092X17306163) (10.1016/j.solener.2017.07.031))
Ali, S., Khan, I., Khan, S. A., Sohail, M., Yamani, Z. H., Morsy, M. A. & Qamaruddin, M., Oct 2018, In: Solar Energy. p. 1323 1 p.

Sonochemical-Assisted in Situ Electrochemical Synthesis of Ag/α-$Fe_2O_3$/$TiO_2$ Nanoarrays to Harness Energy from Photoelectrochemical Water Splitting
Khan, I. & Qurashi, A., 4 Sept 2018, In: ACS Sustainable Chemistry and Engineering. 6, 9, p. 11235-11245 11 p.

Nanomaterial-based optical chemical sensors for the detection of heavy metals in water: Recent advances and challenges
Ullah, N., Mansha, M., Khan, I. & Qurashi, A., Mar 2018, In: TrAC - Trends in Analytical Chemistry. 100, p. 155-166 12 p.

Single-step strategy for the fabrication of GaON/ZnO nanoarchitectured photoanode their experimental and computational photoelectrochemical water splitting
Khan, I., Qurashi, A., Berdiyorov, G., Iqbal, N., Fuji, K. & Yamani, Z. H., Feb 2018, In: Nano Energy. 44, p. 23-33 11 p.

Corrigendum to “A facile one-step strategy for in-situ fabrication of $WO_3$-$BiVO_4$ nanoarrays for solar-driven photoelectrochemical water splitting applications” [Solar Energy 144 (2017) 604–611] (S0038092X17300762) (10.1016/j.solener.2017.01.057))
Iqbal, N., Khan, I., Yamani, Z. H. A. & Qurashi, A., 15 Jan 2018, In: Solar Energy. 160, p. 297 1 p.

Synthesis, Characterization and Applications of Magnetic Iron Oxide Nanostructures
Khan, I., Khalil, A., Khanday, F., Shemsi, A. M., Qurashi, A. & Siddiqui, K. S., 1 Jan 2018, In: Arabian Journal for Science and Engineering. 43, 1, p. 43-61 19 p.

Shape Controlled Synthesis of Copper Vanadate Platelet Nanostructures, Their Optical Band Edges, and Solar-Driven Water Splitting Properties
Khan, I. & Qurashi, A., 1 Dec 2017, In: Scientific Reports. 7, 1, 14370.

Tunable visible light absorption of $MoO_3$-CdTe composite thin films
Hendi, A. H. Y., Al-Kuhaili, M. F., Durrani, S. M. A., Faiz, M. M., Ul-Hamid, A., Qurashi, A. & Khan, I., 31 Aug 2017, In: Thin Solid Films. 636, p. 137-143 7 p.

Visible-light driven photocatalytic oxygen evolution reaction from new poly(phenylene cyanovinylenes)
Mansha, M., Khan, I., Ullah, N., Qurashi, A. & Sohail, M., 1 Aug 2017, In: Dyes and Pigments. 143, p. 95-102 8 p.

Surfactant-free synthesis of ellipsoidal and spherical shaped $TiO_2$ nanoparticles and their comparative photocatalytic studies
Ali, S., Khan, S. A., Khan, I., Yamani, Z. H., Sohail, M. & Morsy, M. A., Aug 2017, In: Journal of Environmental Chemical Engineering. 5, 4, p. 3956-3962 7 p.

Sonochemical assisted synthesis of RGO/ZnO nanowire arrays for photoelectrochemical water splitting
Khan, I., Ibrahim, A. A. M., Sohail, M. & Qurashi, A., 1 Jul 2017, In: Ultrasonics Sonochemistry. 37, p. 669-675 7 p.

Electrocatalytic performance of Ni@Pt core–shell nanoparticles supported on carbon nanotubes for methanol oxidation reaction
Ali, S., Khan, I., Khan, S. A., Sohail, M., Ahmed, R., Rehman, A. U., Ansari, M. S. & Morsy, M. A., 15 Jun 2017, In: Journal of Electroanalytical Chemistry. 795, p. 17-25 9 p.

Sonochemical assisted hydrothermal synthesis of pseudo-flower shaped Bismuth vanadate ($BiVO_4$) and their solar-driven water splitting application
Khan, I., Ali, S., Mansha, M. & Qurashi, A., 1 May 2017, In: Ultrasonics Sonochemistry. 36, p. 386-392 7 p.

Synthesis, characterization and visible-light-driven photoelectrochemical hydrogen evolution reaction of carbazole-containing conjugated polymers
Mansha, M., Khan, I., Ullah, N. & Qurashi, A., 20 Apr 2017, In: International Journal of Hydrogen Energy. 42, 16, p. 10952-10961 10 p.

Modulation of the band gap of tungsten oxide thin films through mixing with cadmium telluride towards photovoltaic applications
Hendi, A. H. Y., Al-Kuhaili, M. F., Durrani, S. M. A., Faiz, M. M., Ul-Hamid, A., Qurashi, A. & Khan, I., 1 Mar 2017, In: Materials Research Bulletin. 87, p. 148-154 7 p.

Facile synthesis of tungsten oxide – Bismuth vanadate nanoflakes as photoanode material for solar water splitting
Ibrahim, A. A. M., Khan, I., Iqbal, N. & Qurashi, A., 2 Feb 2017, In: International Journal of Hydrogen Energy. 42, 5, p. 3423-3430 8 p.

Synthesis of hierarchical $WO_3$ and $Bi_2O_3/WO_3$ nanocomposite for solar-driven water splitting applications
Khan, I., Abdalla, A. & Qurashi, A., 2 Feb 2017, In: International Journal of Hydrogen Energy. 42, 5, p. 3431-3439 9 p.

Sonochemical-driven ultrafast facile synthesis of $SnO_2$ nanoparticles: Growth mechanism structural electrical and hydrogen gas sensing properties
Ullah, H., Khan, I., Yamani, Z. H. & Qurashi, A., 1 Jan 2017, In: Ultrasonics Sonochemistry. 34, p. 484-490 7 p.

A facile one-step strategy for in-situ fabrication of $WO_3$-$BiVO_4$ nanoarrays for solar-driven photoelectrochemical water splitting applications
Iqbal, N., Khan, I., Yamani, Z. H. A. & Qurashi, A., 2017, In: Solar Energy. 144, p. 604-611 8 p.

Plasmon aided $(BiVO_4)_x$–$(TiO_2)_{1-x}$ ternary nanocomposites for efficient solar water splitting
Ali, S., Khan, I., Khan, S. A., Sohail, M., Yamani, Z. H., Morsy, M. A. & Qamaruddin, M., 2017, In: Solar Energy. 155, p. 770-780 11 p.

Sonochemical Assisted Solvothermal Synthesis of Gallium Oxynitride Nanosheets and their Solar-Driven Photoelectrochemical Water-Splitting Applications
Iqbal, N., Khan, I., Yamani, Z. H. & Qurashi, A., 26 Aug 2016, In: Scientific Reports. 6, 32319.

A study of the molecular conformations and the vibrational, $^{1}H$ and $^{13}C$ NMR spectra of the anticancer drug tamoxifen and triphenylethylene
Badawi, H. M. & Khan, I., 5 Aug 2016, In: Journal of Molecular Structure. 1117, p. 22-29 8 p.

Preparation and characterization of single-walled carbon nanotube/nylon 6, 6 nanocomposites
Saeed, K. & Khan, I., 3 Jul 2016, In: Instrumentation Science and Technology. 44, 4, p. 435-444 10 p.

Synthesis of $In_2O_3$/graphene heterostructure and their hydrogen gas sensing properties
Mansha, M., Qurashi, A., Ullah, N., Bakare, F. O., Khan, I. & Yamani, Z. H., 1 Jul 2016, In: Ceramics International. 42, 9, p. 11490-11495 6 p.

A comparative study of the vibrational spectra of the anticancer drug melphalan and its fundamental molecules 3-phenylpropionic acid and l-phenylalanine
Badawi, H. M. & Khan, I., 5 Apr 2016, In: Journal of Molecular Structure. 1109, p. 171-178 8 p.

Room-temperature synthesis of $TiO_2$ nanospheres and their solar driven photoelectrochemical hydrogen production
Avasare, V., Zhang, Z., Avasare, D., Khan, I. & Qurashi, A., 10 Oct 2015, In: International Journal of Energy Research. 39 , 12, p. 1714-1719 6 p.

Antinociceptive, muscle relaxant and sedative activities of gold nanoparticles generated by methanolic extract of Euphorbia milii
Islam, N. U., Khan, I., Rauf, A., Muhammad, N., Shahid, M. & Shah, M. R., 29 May 2015, In: BMC Complementary and Alternative Medicine. 15, 1, 160.

A Raman spectroscopy study of cerium oxide in a cerium-5 wt.% lanthanum alloy
Wheeler, D. W. & Khan, I., Jan 2014, In: Vibrational Spectroscopy. 70, p. 200-206 7 p.

Preparation and properties of single-walled carbon nanotubes/poly(butylene terephthalate) nanocomposites
Saeed, K. & Khan, I., Jan 2014, In: Iranian Polymer Journal (English Edition). 23, 1, p. 53-58 6 p.

Stability and Enzyme Inhibition Activities of Au Nanoparticles using an Aqueous Extract of Clove as a Reducing and Stabilizing Agent
Hameed, A., Khan, I., Azam, A., Naz, S. S., Khan, A., Saleem, M., Shah, M. R. & Ul Islam, N., 2014, In: Journal of Chemical Society of Pakistan. 36, 3, p. 542-547

Carbon nanotubes-properties and applications: a review
Ibrahim, K. S. & Saeed, K., 31 Jul 2013, In: Carbon Letters. 14, 3

## Press/Media

## Projects

| | |
|---|---|
| 2024 | Lorem ipsum dolor sit amet |
| 2023 | Lorem ipsum dolor sit amet |
| 2022 | Lorem ipsum dolor sit amet |
| 2021 | Lorem ipsum dolor sit amet |
| 2020 | Lorem ipsum dolor sit amet |
| 2019 | Lorem ipsum dolor sit amet |