CURRICULUM VITAE

Dr. Azhar Iqbal

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Google Citation report:
https://scholar.google.co.uk/citations?user=v8yVFJoAAAAJ&hl=en

Track Record Executive Summary:

- Twelve years of post-PhD experience in ultrafast laser spectroscopy of energy harvesting materials and bio-molecules
- 61 papers, including *Adv. Mater., J. Phys. Chem. Lett., J. Mater. Chem. C, Nano Res., J. Phys. Chem. C, PCCP, and RSC Adv.*, h-index 21 and number of citations > 1490
- Research grant income in excess of Rs 15.3 Million (*£80k)*
- Active research group consists of PhD students and MPhil students
- 5 PhD and 35 MPhil students already graduated in my supervision
- Delivered over 10 invited presentations
- Professor, tenured

Awards and Achievements:

- Associate Fellow, AdvanceHE (AFHEA) – UK Professional Standards Framework for teaching and learning support in higher education, 2022.
- Best Young Research Scholar Award 2017 – Awarded on August 7, 2019 - Higher Education Commission (HEC), Pakistan.
- Post-doctoral Fellowship Award - Nanyang Technological University, Singapore.
- Sweden Crafoordska Stiftelsen Post-doctoral Fellowship Award - Lund University, Sweden.
- Best Poster prize at the CoCoChem (Coherent Control Chemistry) summer school symposium held in University College London, United Kingdom.
- Best Poster prize in the annual symposium of the Department of Chemistry, University of Warwick, United Kingdom.
- EPSRC Doctoral Fellowship Award for PhD study in University of Warwick, United Kingdom.
- 1st position in the SSC examination. Recipient of merit scholarships during BSc and MPhil Studies.

Education:

- Post-doctorate, Chemistry, School of Physical and Mathematical Sciences (SPMS), Nanyang Technological University (NTU), Singapore, 2016-2018
  Advisor: Doctor Zhi-Heng Loh and Doctor Cesare Soci

- Post-doctorate, Chemical Physics, Lund University, Sweden, 2010-2013
  Advisor: Doctor Arkady Yartsev

- *Ph.D.*, Chemistry/Physical Chemistry, University of Warwick, United Kingdom, 2010
  Advisor: Professor Vasilios G. Stavros

- Researcher, Chemistry, Technical University of Clausthal & University of Applied Sciences Zwickau, Germany, 2006-2007,
  Advisor: Professor Lars Frormann

- MPhil, Physical Chemistry (1st-class/A), Quaid-i-Azam University, Islamabad, Pakistan, 2005
- M.Sc., Physical Chemistry (1st-class/A), Quaid-i-Azam University, Islamabad, Pakistan, 2003
- B.Sc., Chemistry & Physics & Mathematics (1st-class/A), University of Punjab, Lahore Pakistan, 2000
- FSc/HSC (Pre-engineering ((Chemistry, Physics & Mathematics))/1st-class/A (71.4 %), Board of Gujranwala, Pakistan, (1997)
- Matric/SSC (Science), Board of Gujranwala, Pakistan, (1995)/1st-class/A (79.0 %)

Appointments:

- Professor, (April 2023 - present)
  Department of Chemistry, Quaid-i-Azam University, Islamabad, Pakistan

- Associate Professor, (2019 - 2023)
  Department of Chemistry, Quaid-i-Azam University, Islamabad, Pakistan

- Assistant Professor (2013 – 2019)
  Department of Chemistry, Quaid-i-Azam University, Islamabad, Pakistan.

- Post-doctoral fellow (2016 – 2017) with Doctor Zhi-Heng Loh and Doctor Cesare Soci SPMS, NTU, Singapore
- Post-doctoral fellow (2010 – 2013) with Doctor Arkady Yartsev and Professor Villy Sündstrom, Department of Chemical Physics, Lund University, Sweden
- Researcher (2006 – 2007) with Professor Lars Frormann
  School of polymer materials and plastic engineering, Technical University of Clausthal & University of Applied Sciences Zwickau, Germany.

Expertise and Skills:

- Semiconductor solar cells characterization,
- Femtosecond Time-resolved XUV Absorption Technique,
- Femtosecond Time-resolved Transient Absorption Technique,
- Time-resolved Fluorescence (Streak-camera and Time correlated Single Photon Counting (TCSPC)),
- Femtosecond Time-resolved Spectroscopy in gas-phase,
- Velocity Map Ion Imaging (VMI),
- Molecular Beam Machine and Pulsed Valves (Even-Lavie Valve),
- Nonlinear Harmonic Mixing Methods,
- Ultra High Vacuum (UHV) Technique,
- Polymers Processing Using Injection Molding and Extrusion Machines,
- Dynamic Mechanical Analysis (DMA),
- Thermogravimetric Analysis (TGA).

Research Interests:

Ultrafast time-resolved Spectroscopy

- Ultrafast time-resolved femtosecond (fs) – nanosecond (ns) transient absorption spectroscopy and fluorescence methods – studies of ultrafast charge-carrier dynamics in semiconductor nanowires and quantum dots.

- Ultrafast charge/energy transfer dynamics in quantum dots (QDs, 0D) attached 1D, 2D and photochromic molecular systems.
- Synthesis of semiconductor binary, ternary and metal halides perovskites semiconductors QDs and their optical characterization with particular focus to applications in photovoltaics, light emitting diodes, photocatalysis and energy storage devices.
- Photochemistry and photophysics of QDs coupled artificial and natural sunscreens.

ORCID ID (Open Researcher and Contributor ID):

https://orcid.org/0000-0002-2616-3778

According to Google Scholar:

Citation indices	All	Since 2018
Citations	1486	1082
h-index	21	18
i10-index	39	35

Professional Development Courses/Certificates:

- Lasers in Chemistry and Reactions Dynamics
- Basic LabVIEW
- Advanced Chemical Kinetics Fitting Tools

Departmental Committees, Additional Duties and Services:

- Member of MPhil and PhD admission committees, Department of Chemistry, Quaid-i-Azam University (QAU) Islamabad
- In-charge of time-resolved fluorescence setup, Department of chemistry, QAU Islamabad
- In-charge XRD Laboratory, Department of chemistry, QAU Islamabad
- Member of the Board of Advance Studies, Department of chemistry, QAU Islamabad
- In-charge of chemical's store, Department of Chemistry, QAU Islamabad
- Member of Academic Council of Faculty of Natural Sciences

Professional Activities:

Reviewer and the referee of the EPSRC United Kingdom, the Higher Education Commission (HEC), Pakistan, Pak-USAID, Appl. Phys. A, J. Nanoparticle Res., Mater. Lett., Nano, ChemistrySelect, Inorg. Chem., Appl. Surf. Sci., J. Phys. Chem. Solids, RSC Advances and PCCP

Teaching Commitments:

Undergraduate Teaching; Physical Chemistry-I (Gases, thermodynamics, chemical kinetics and electrochemistry), Physical Chemistry-II (Quantum mechanical models and Molecular Spectroscopy), Mathematics for Chemists, Chemical Kinetics, Quantum Chemistry, Molecular Spectroscopy, General Chemistry

Postgraduate Teaching: Applied Mathematics for Physical Chemistry, Advanced Molecular Spectroscopy, Advanced Photochemistry and Lasers in Chemistry and Reactions Dynamics

Computer and Software Skills:

- Mathematica, LabView-8 Basics, DataView, MATLAB, Microsoft Office, Excel, Origin, ChemDraw, Chemwind, Chemaxon.

Collaborations:

Both national and international collaborations including Quaid-i-Azam University Islamabad, National University of Science & Technology, Institute of Space Technology (Pakistan), Nanyang Technological University (Singapore), Jiangsu University and Wuhan University (China), King Abdullah University of Science and Technology & King Fahd University of Petroleum and Minerals (Saudi Arabia), University of Exeter and University of Edinburgh, the UK.

Languages:

- English: Fluent
- Urdu: Fluent
- Punjabi: Fluent
- German: Basic level
- Swedish: Basic level

Research Grants Awarded:

Sr. No.	Project Title	Principal / Co-Principal Investigator	Amount Million/ PKR	Sponsoring Agency	Duration
1.	Towards a Novel and Cost Effective Approach to Fabricate Efficient Perovskite Nanocrystals-Graphene Solar Cells.	PI	3.3 (£27 k)	HEC	2018-2023 Three years (Completed)
2.	Synthesis and charge carriers dynamics in quantum-dot-sensitized semiconductor nanowires for solar cell devices	PI	11.4 (£50 k)	HEC	2015-2018 Three years (completed)
3.	To investigate semiconductor nano-structured materials for the fabrication of efficient solar cell devices	PI	0.5 (£3 k)	HEC	2013-2014 One year (completed)

List of graduated/passed PhD students in my supervision:

Sr. No.	Student's Name	Thesis title	Year of graduation
5.	Maria Mukhtar	Charge Transfer Dynamics in Perovskites Crystals-Graphene Heterostructures for Light-Harvesting Applications *(thesis submitted)*	2023
4.	Muhammad Mubeen	Towards Understanding the Charge and Energy Transfer Dynamics in Artificial Sunscreen PBSA Attached Semiconductor Quantum Dots	2022
3.	Zumaira Siddique	Synthesis and Charge Carriers Dynamics in Organometal Halide Perovskite Materials for Photovoltaic Applications	2022
2.	Shomaila Saeed	Charge Transfer Dynamics in Interfacially Engineered Metal Chalcogenide/Oxide Quantum Dots for Photoresponsive Devices	2019
1.	Nasreen Bibi	Synthesis of Nanostructured Metal Oxides and Sulfides for High Performance Energy Devices	2019

Number of graduated/passed MPhil students in my supervision: 37

Conferences:

23. Iqbal, A. "Untangling the charge and energy transfer dynamics in semiconductor quatum dots dyads". 2nd Scientific Colloquium Spring-2022. Post-graduate Colleges Jehlum, October, 28-29, **2022**. *(Invited Talk)*

22. **Iqbal, A**. "RSC Photophysics and Photochemistry Group Early Careers Members (ECM) Meeting" December 6-8, **2021.** *(Virtual participation)*

21**. Iqbal, A**. Quantum Symposium - 3rd International Symposium on "Single Photon based Quantum Technologies" September 15-17, Virtual Meeting, PicoQuant, Berlin, Germany **2020**. *(Virtual participation)*
20. **Iqbal, A**. Ultrafast charge carriers dynamics at interface of the hybrid materials. International workshop on nanomaterials for energy conversion, emerging photovoltaic and optoelectronic technologies. October, 7-9, NCP Islamabad, Pakistan **2019**. *(Invited Talk)*
19. **Iqbal, A**. Towards probing ultrafast energy/charge transfer kinetics in Ruddlesden-Popper perovskites and semiconductor II-VI QDs attached photochromic devices. International workshop on hybrid perovskite photovoltaic and optoelectronic devices, 8-10 October, NCP Islamabad, Pakistan **2018**. *(Invited Talk)*
18. **Iqbal, A**. ICON – 2DMAT 2017. The 3rd International Conference on 2D materials and Technology Singapore 11 – 14 December **2017**, Singapore. *(Participated)*
17. **Iqbal, A**. Femtochemistry: Probing Ultrafast Photo-induced Processes in Bio-molecules and Semiconductor Nano-materials. Istitute of Space Technology, 03 December, **2016**. *(Invited Talk)*
16. **Iqbal, A**. Time-resolved Spectroscopy: A Powerful Tool to Understand Ultrafast Photo-induced Processes in Bio-molecules and Semiconductor Nano-materials. National University of Science and Technology, 29 December, **2016**. *(Invited Talk)*
15. **Iqbal, A**. Time-resolved Fluorescence of Semiconductor Quantum Dots and Nanowires Based Devices. AIOU Islamabad, Pakistan, 24-25 November, **2016**. *(Invited Talk)*
14. **Iqbal A**. Dynamics of Photo-injected Charge Carriers in Semiconductor Nanostructured Materials. PINSTECH, Pakistan, 27 October, **2016**. *(Invited Talk)*
13. **Iqbal, A**. Enlightening Chemistry by Light. Recent Trends in Chemistry, AIOU, Islamabad, Pakistan, 10 October **2015**. *(Invited Talk)*
12. **Iqbal, A**. Time-resolved Spectroscopy of Bio-molecules and Semiconductor nanowires. Celebrating Light, IYL-**2015**. National Centre for Physics, QAU Campus, Islamabad, Pakistan, 3 February **2015**. *(Invited Talk)*
11. **Iqbal, A**. and Yartsev, A. Effects of Doping and Surface Modification on Charge Carriers Dynamics in As-grown InP Nanowire ensembles. Nm@LU Annual Meeting, Department of Solid State Physics Lund University, Sweden, 3rd October **2012**. (*Poster)*
10. **Iqbal, A**. and Yartsev, A. Charge Carriers Dynamics in As-grown S-doped Wurtzite InP Nanowires Ensembles. Nm@LU Annual Meeting, Department of Solid State Physics Lund University, Sweden, 3rd October **2012**. (*Poster)*
9. **Iqbal, A**. Time-resolved spectroscopy of as-grown core (InP) – shell (GaP) nanowires. 10th Nordic Femtochemistry Conference, Skåne, Sweden, May and June **2012**. (Oral *Talk)*
8. **Iqbal, A**.; and Yartsev, A. Charge carrier dynamics in semiconductor nano-wires. Nm@LU Annual Meeting, Department of Solid State Physics Lund University, Sweden, 27th September **2011**. *(Poster)*
7. **Iqbal, A**. Towards understanding the photochemistry of tyrosine. Annual Symposium of Department of Chemistry, University of Warwick, United Kingdom, 18th June **2010**. *(Talk)*
6. **Iqbal, A**. Ultrafast H-atom elimination from photoexcited tyrosine molecules driven through $^1\pi\sigma^*$ states. Midland Universities Gas-phase Dynamics Group Meeting, University of Leicester, United Kingdom, April **2010**. *(Oral Talk)*

5. **Iqbal, A**. Ultrafast H-atom elimination from photoexcited biomolecules driven through $^1\pi\sigma^*$ states. Midland Universities Gas-phase Dynamics Group Meeting, University of Nottingham, United Kingdom, April **2009**. *(Oral Talk)*
4. **Iqbal, A**.; Stavros, V, G. Unravelling the pathways for H-atom elimination from photoexcited phenol molecules. American Chemical Society National Meeting, Washington DC, United States of America, August, **2009**. *(Poster)*
3. **Iqbal, A**.; Stavros, V. G. Unravelling the pathways for H-atom elimination from photoexcited phenol molecules. CoCoChem (Coherent Control of Chemistry) summer school symposium, United Kingdom, April **2009**. *(Poster)*
2. Wells, K**.; Iqbal, A**.; Stavros, V. G. Ultrafast dynamics of N-H and O-H bond dissociation in biomolecules. SDG (Spectroscopy and dynamics group) annual meeting University of East Anglia, Norwich, UK, December **2007**, *(Poster)*
1. **Iqbal, A**. 5th National and 15th International Chemistry Conference, Department of Chemistry, Quaid-I-Azam University, Islamabad, Pakistan, December **2004**. *(Participated)*

List of selected Publications as first author and leading author:

12. Mukhtar, M.; Mubeen, M.; Ul-Hamid, A.; Ela, S. E.; **Iqbal, A*.** Tuning the Charge Transfer Efficiency by Functionalizing Ligands in $FAPbBr_3$ Nanocrystals and Graphene Heterostructures. *Phys. Chem. Chem. Phys*. **2023**, *25*, 17410–17419.
11. Mukhtar, M.; Bibi, S.; Ela, S. E.; Yavuz, C.; Mubeen, M.; Sumreen, P.; Khalid, M. A.; Ul-Hamid, A.; **Iqbal, A*.** Photon-induced Electron Transfer in Ligand Stabilized Monoclinic $CsPbBr_3$ and Alanine Functionalized Graphene Heterostructures. *J. Phys. Chem. C*, **2022**, *126*, 15298-15308.
10. Mubeen, M.; Shahrum, S.; Khalid, M. A.; Mukhtar, M.; Sumreen, P.; Tabassum, M.; Ul-Hamid, Nadeem, M. A.; **Iqbal, A***. Exploring the Photoexcited Electron Transfer Dynamics in Artificial Sunscreen PBSA Coupled Biocompatible ZnO Quantum Dots. *New J. Chem.* **2022**, *46*, 9526-9533.
9. Mubeen, M.; Khalid, M. A.; Mukhtar, M.; Sumreen, P.; Gul, T.; Ul Ain, N.; Shahrum, S.; Tabassum, M.; Ul-Hamid, **Iqbal, A***. Elucidating the Size-dependent FRET Efficiency in Interfacially Engineered Quantum Dots attached PBSA Sunscreen. *Photochem. Photobiol*. **2022**, *98*, 1017-1024.
8. Saeed, S.; Yin, J.; Khalid, M.A.; Channar, P.A.; Shabir, G.; Saeed, A.; Nadeem, M.A.; Cesare, C.; **Iqbal, A***. Photoresponsive Azobenzene Ligand as an Efficient Electron Acceptor for Luminous CdTe Quantum Dots. *J. Photochem. Photobiol. A: Chem*. **2019**, *375*, 48-53.
7. Saeed, S.; Channar, P.A.; F. A. Larik,; Saeed, A.; Nadeem, M.A.; **Iqbal, A***. Charge/energy transfer dynamics in CuO quantum dots attached to photoresponsive azobenzene ligand. *J. Photochem. Photobiol. A: Chem*. **2019**, *371*, 44-49.
6. Yantara, N.; Bruno, A.; **Iqbal, A**.; Jamaludin, N.F.; Soci, C.; Mhaisalkar, S.; Mathews, N. Designing Efficient Energy Funneling Kinetics in Ruddlesden–Popper Perovskites for High-Performance Light-Emitting Diodes. *Adv. Mater*. **2018**, *30*, 1800818/1-7.
5. **Iqbal, A***.; Beech, J. P.; Anttu, N.; Pistol, M.-E.; Samuelson, L.; Borgström, T. M.; Yartsev, A. Photoluminescence study of as-grown vertically standing wurtzite InP nanowire ensembles. *Nanotechnology* **2013**, *24*, 115706/1-8.
4. **Iqbal, A**.; Stavros, V. G. Active Participation of $^1\pi\sigma^*$ States in the Photodissociation of Tyrosine and Its Subunits. *J. Phys. Chem. Lett.* **2010**, *1*, 2274-2278.
3. **Iqbal, A**.; Stavros, V. G. Exploring the Time Scales of H-Atom Elimination from Photoexcited Indole. *J. Phys. Chem. A* **2010**, *114*, 68-72.

2. **Iqbal, A**.; Cheung, M. S. Y.; Nix, M. G. D.; Stavros, V. G. Exploring the Time-Scales of H-Atom Detachment from Photoexcited Phenol-h_6 and Phenol-d_5: Statistical vs Nonstatistical Decay. *J. Phys. Chem.* A **2009**, *113*, 8157-8164.
1. **Iqbal, A**.; Pegg, L.-J.; Stavros, V. G. Direct vs. indirect hydrogen atom elimination from photoexcited phenol molecules. *J. Phys. Chem. A* **2008**, *112*, 9531-9534.

List of All Publications:

61. Mukhtar, M.; Mubeen, M.; Khalid, M. A.; Sumreen, P.; M.; Ul-Hamid, A.; Ela, S. E.; **Iqbal, A*.** Photoexcited electron transfer in hydrophobic fluorescent $FAPbBr_3$ perovskite nanocrystals and graphene heterostructures. *J. Mater. Res.* **2023**, DOI:10.1557/s43578-023-01255-8 **(IF = 2.909)**
60. Khalid, M. A.; Mubeen, M.; Mukhtar, M.; Sumreen, P.; Naz, B.; Aydın, F.; Asil, D.; **Iqbal, A.*** Effect of Surface Ligands on the Photoinduced Electron Transfer Rate and Efficiency in ZnO Quantum Dots and Graphene Oxide Assemblies. *Photochem. Photobiol*. **2023**, DOI: 10.1111/php.1388. **(IF = 3.521)**
59. Mubeen, M.; Ain, N.; Khalid, M. A.; Mukhtar, M.; Naz, B.; Siddique, Z.; Ul-Hamid, A.; **Iqbal, A.*** Enhancing the FRET by Tuning the Bandgap of Acceptor Ternary ZnCdS Quantum Dots. *RSC Adv*. **2023**, *13*, 19096-19105. **(IF = 4.036)**
58. Mukhtar, M.; Mubeen, M.; Ul-Hamid, A.; Ela, S. E.; **Iqbal, A***. Tuning the Charge Transfer Efficiency by Functionalizing Ligands in $FAPbBr_3$ Nanocrystals and Graphene Heterostructures. *Phys. Chem. Chem. Phys*. **2023**, *25*, 17410–17419. **(IF = 3.945).**
57. Khalid, M. A.; Mubeen, M.; Mukhtar, M.; Siddique, Z.; Sumreen, P.; Aydın, F.; Asil, D.; **Iqbal, A.*** Probing the Förster Resonance Energy Transfer Dynamics in Colloidal Donor-Acceptor Quantum Dots Assemblies. *J. Fluoresc*. **2023**, https://doi.org/10.1007/s10895-023-03301-4. **(IF = 2.525)**
56. Bashir, A.; Inayat, A.; Bashir, R.; Abbas, S. M.; Sultan, M.; **Iqbal, A**.; Akhter, Z. Design of Porous Ni and Rare Earth Metals (Ce, Ho, and Eu) Co-doped TiO_2 Nanoarchitectures for Energy Conversion and Storage Applications. *New J. Chem.* **2023**, *47*, 3560-3571. **(IF = 3.925)**
55. Siddique, Z.; Payne, J. L*,; Sajjad, M. T.; Mica, N.; Codes, D. B.; Slawin, A. M. Z.; Samuel, I. D. W.; **Iqbal, A***.; Irvine, J. T. S*. Synthesis and Optical Characterization of Lead-Free Phenylenediammonium Bismuth Halide Perovskites: A Long Charge Carrier Lifetime in Phenylenediammonium Bismuth Iodide. *J. Mater. Chem. C*, **2023**, *11*, 223-234. **(IF = 8.067)**
54. Mehmood, M.; Ud-Din, I.; Zafer, A.; **Iqbal. A**.; Mukhtar, M.; Tahir, M. N. Molecular architecture, characterization and applications of homoleptic heteronuclear 3d/4f metals' complexes derived from bi-compartmental Schiff-base. *J. Mol. Str*. **2023**, *1274*, 134547/1-8. **(IF = 3.845)**
53. Mubeen, M.; Khalid, M. A.; Gul, T.; Mukhtar, M.; Ul-Hamid, A.; **Iqbal, A***. Cu-Enhanced Efficient Förster Resonance Energy Transfer in PBSA Sunscreen Associated Ternary $Cu_xCd_{1-x}S$ Quantum Dots. *ACS Omega*, **2022** *7*, 35014-35022. **(IF = 4.132)**
52. Mukhtar, M.; Bibi, S.; Ela, S. E.; Yavuz, C.; Mubeen, M.; Sumreen, P.; Khalid, M. A.; Ul-Hamid, A.; **Iqbal, A***. Photon-induced Electron Transfer in Ligand Stabilized Monoclinic $CsPbBr_3$ and Alanine Functionalized Graphene Heterostructures. *J. Phys. Chem. C*, **2022**, *126*, 15298-15308. **(IF = 4.177)**
51. Azhar, M.; Mubeen, M.; Mukhtar, M.; Bibi, S.; Khalid, M. A.; Sumreen, P.; Ul-Hamid, A.; **Iqbal, A***. Damping the Phase Segregation in Mixed Halide Perovskites: Influence of X-site Anion. *Mater. Chem. Phys*. **2022**, *287*, 126335/1-8. **(IF = 4.778)**
50. Mubeen, M.; Shahrum, S.; Khalid, M. A.; Mukhtar, M.; Sumreen, P.; Tabassum, M.; Ul-Hamid, Nadeem, M. A.; **A.; Iqbal***. Exploring the Photoexcited Electron Transfer Dynamics in Artificial Sunscreen PBSA Coupled Biocompatible ZnO Quantum Dots. *New J. Chem.* **2022**, 46, 9526-9533. **(IF = 3.926)**

49. Mubeen, M.; Khalid, M. A.; Mukhtar, M.; Sumreen, P.; Gul, T.; Ul Ain, N.; Shahrum, S.; Tabassum, M.; Ul-Hamid, **A.; Iqbal***. Elucidating the Size-dependent FRET Efficiency in Interfacially Engineered Quantum Dots attached PBSA Sunscreen. *Photochem. Photobiol.* **2022**, *98*, 1017-1024. **(IF = 3.521)**
48. Bashir, A.; Rafique, U.; Bashir, R.; Jamil, S.; Bashir,F.; Sultan, M.; Mubeen, M.; Mehmood, Z.; **Iqbal, A**.; Akhter, Z. Synthesis and comparative evaluation of optical and electrochemical properties of Ni^{+2} and Pr^{+3} ions co-doped mesoporous TiO_2 nanoparticles with undoped Titania. *Appl. Nanosci*. **2021**, *11*, 1297-2413. **(IF = 3.64)**
47. Sadaf, J.; Naila, J.; Amna, B.; Naveed, J.; Messaoud, H.; Latif, K.; Manzar, S.; Ahmad, S.; **Iqbal, A**.; Nazish, Q.; Akhter, Z. Synthesis and Comparative Evaluation of Optical and Electrochemical Properties of Efficacious Heterostructured-Nanocatalysts of ZnSe with Commercial and Reduced Titania. *J. Alloys Compd*. **2021**, *879*, 160449/1-10. **(IF = 5.318)**
46. Sitara, E.; Nasir, H.; Mumtaz, A.; Ehsan, M. F.; Sohail, M.; Iram, S.; Bukhari, S.A.B.; Ullah, S.; Akhtar, T.; **Iqbal, A**. Enhanced Photoelectrochemical Water Splitting using Zinc Selenide/Graphitic Carbon Nitride Type-II Heterojunction Interface. *Int. J. Hydrog. Energy* **2021**, *46*, 25424-25435. **(IF = 5.816)**
45. Mubeen, M.; Khalid, M. A.; Mukhtar, M.; Shahrum, S.; Zahra, S.; Shabbir, S.; **Iqbal, A**.* Elucidating the Photoluminescence Quenching in Ensulizole: An Artificial Water Soluble Sunscreen. *J. Fluoresc*. **2021**, *31*, 1055-1063. **(IF = 2.217)**
44. Kausar, H.; Razzaque, S.; **Iqbal, A**.; Shabbir, S. Stoichiometric modulation of triazine based polyurea frameworks for carbon dioxide capture. *Polymer* **2021**, *224*, 123762/1-8. **(IF = 4.430)**
43. Bibi, N.; Ahmad, I.; Ashiq, M. N.; Ahmed, A.; Zhang, S.; **Iqbal, A***. A Novel Binder Free High Performance Supercapacitor Electrode of $Y_2Zr_2O_7$/MnS Nanocomposite. *J. Energy Storage* **2021**, *37*, 102505/1-9. **(IF = 8.907)**
42. Asjad, M.; Arshad, M.; Khan, M. A.; Zafar, N. A.; **Iqbal, A.**; Saleem, A.; Aldawsari, A. An intriguing case of morphology control and phase transitions in TiO_2 nanostructures with enhanced photocatalytic activity. *Mater. Chem. Phys*. **2021**, *265*, 124416/1-9. **(IF = 4.094)**
41. Kausar, H.; Razzaque, S.; **Iqbal, A**.; Shabbir, S. One pot benign synthesis of silica embedded hierarchically porous polyurea hybrid: Probing the morphology and porosity. *Mater. Lett.* **2021**, *286*, 129217/1-4. **(IF = 3.423)**
40. Siddique, Z.; Payne, J. L.; Irvine, J. T. S.; Jagadamma, L. K.; Akhter, Z.; Samuel, I. D. W.; **Iqbal, A***. Effect of Halide-mixing on Tolerance Factor and Charge-carrier Dynamics in ($CH_3NH_3PbBr_{3-x}Cl_x$) Perovskites Powders. *J. Mater. Sci.: Mater. Electron*. **2020**, *31*, 19415-19428. **(IF = 2.779)**
39. Saeed, S.; Iqbal, A. **Iqbal, A***. Photoinduced Charge Carriers Dynamics in ZnSe Quantum Dots Attached CdTe System. *Proc. R. Soc. A* **2020**, *476*, 20190616/1-13. **(IF = 3.213)**
38. Bashir, A.; Bashir, F.; Satti, M. S.; Mubeen, M.; **Iqbal, A**.; Zareen, A. Influence of Nickle and Lanthanum ions co-doping on photocatalytic properties of TiO2 for effective degradation of Reactive yellow 145 in visible region. *J. Sol-Gel Sci. Tech*. **2020**, *93*, 438-451. **(IF = 2.326)**
37. Hussain, S.; Javed, M. S.; Asim, S.; Shaheen, S.; Khan, A. J.; Abbas, Y.; **Iqbal, A.**; Wang, M.; Qiao, G.; Yun, S. Novel Gravel-like Nanoparticles on Carbon Cloth for Outstanding Supercapacitor Applications. *Ceram. Int*. **2020**, *46*, 6406-6412. **(IF = 4.527)**
36. Aamir, M.; Butt, A. F.; Khan, M. D.; Sher, M.; **Iqbal, A**.; Malik, M. A.; Jabeen, U.; Akhtar, J. Green emitter and thermally stable layered tetraethyl ammonium lead bromoiodide perovskite. *Optik* **2020**, *207*, 163828/1-7 **(IF = 2.840)**

35. Kokab, T.; Siddique, Z.; Hussain, S.; **Iqbal, A***. Doped Quaternary Metal Chalcogenides Cu_2ZnSnS_4 Nanocrystals as Efficient Light Harvesters for Solar Cell Devices. *J. Mater. Sci.: Mater. Electron.* **2019**, *30*, 20860-20869. **(IF = 2.779)**
34. Bibi, N.; Hussain, M. Z.; Hussain, S.; Ahmad, I.; Ahmed, S.; Zhang, S.; **Iqbal, A***. Excellent Electrochemical Performance of $SrZrO_3$ Nanorods as Supercapacitor Electrode in Aqueous Electrolytes. *Appl. Surf. Sci*. **2019,** *495***,** 143587/1-8. **(IF = 7.392)**
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