Dr. Kazi Hasibur Rahman

International Journal Publications:

1. **"**Titanium-di-oxide (TiO_2) concentration-dependent optical and morphological properties of PAni-TiO_2 nanocomposite" by **Kazi Hasibur Rahman** and Asit Kumar Kar. (2019). *Materials Science in Semiconductor Processing*, *105*, 104745. (https://doi.org/10.1016/j.mssp.2019.104745) **(I.F.-4.644), Elsevier, Q2, H index: 68**

2. " Effect of precursor concentration of microstructured titanium-di-oxide (TiO2) thin films and their photocatalytic activity" by **Kazi Hasibur Rahman** and Asit Kumar Kar. (2019). *Materials Research Express*, *6*(9), 096436. (https://doi.org /10.1088/2053-1591/ab3240/meta) **(I.F.-1.941), IOP publishing, Q2, H index: 43**

3. "Effect of band gap variation and sensitization process of polyaniline (PANI)-TiO2 p-n heterojunction photocatalysts on the enhancement of photocatalytic degradation of toxic Methylene blue with UV irradiation" by **Kazi Hasibur Rahman** and Asit Kumar Kar, *Journal of Environmental Chemical Engineering*, *8*(5), 2020 104181 https://doi.org/10.1016/j.jece.2020.104181 **(I.F.-7.968), Elsevier, Q1, H index: 90**

4. "Oxygen Vacancy and Adsorbed Superoxides Dependent Photocatalytic Activity of TiO2 Quantum Dot Thin Films for Degradation of Methylene Blue with Variation of Precursor Concentration" by **Kazi Hasibur Rahman** and Asit Kumar Kar, *ECS Journal of Solid State science and Technology*, https://doi.org/10.1149/2162-8777/ac1d25, 2021 **(I.F.-2.070), IOP publishing, Q2, H index: 56**

5. "A Review on the Pathways of the Improved Structural Characteristics and Photocatalytic Performance of Titanium Dioxide (TiO_2) Thin Films Fabricated by the Magnetron-Sputtering Technique" by Kuan-Chung Chen, **Kazi Hasibur Rahman**, Yu-Hsiang Wang , Chih-Chao Wu and *Catalysts* 2020, *10*(6),598; https://doi.org/10.3390/catal10060598, **(I.F.-4.39), MDPI, Q2, H index:53**

6. "Role of bridging oxygen vacancy on reduced anatase TiO_2 (101) for photodegradation of Rhodamine-B" by **Kazi Hasibur Rahman** and Asit Kumar Kar, *ECS Journal of Solid State science and Technology*, 2021, *10*(11), 116004, doi: 10.1149/2162-8777/ac33f1/meta: **(I.F.-2.070), IOP publishing, Q2, H index: 56**

7. **"**Hydroxylation induced defect states and formation of bidentate acetate adstructure of TiO2 catalysts with acetic acid variation for catalytic application" by **Kazi Hasibur Rahman** and Asit Kumar Kar, Semiconductor Science and Technology, https://doi.org/10.1088/1361-6641/ac48dc **(I.F.-2.654), IOP publishing, Q2, H index: 117**

8. "Oxidation-induced catalytic performance of heterostructured Ni-TiO_2 nanoparticles and formation of Leuco-Methylene blue" by **Kazi Hasibur Rahman**, Asit Kumar Kar and Kuan-Chung Chen, *Research on Chemical Intermediates*, volume 48, pages 4475–4501 (2022), https://doi.org/10.1007/s11164-022-04838-y (**I.F.-3.134), Springer,Q2, H index:54**

9. "Highly effective Fe-doped TiO_2 nanoparticles for removal of toxic organic dyes under visible light illumination", by **Kazi Hasibur Rahman**, Asit Kumar Kar, Kuan-chung Chen and Ching-Jung Chen, Nanotechnology, *34*(24) , 245707,2023 doi: 10.1088/1361-6528/acc407 **(I.F.-3.953), IOP Publishing, Q1, H index-211**

10. "Synergic effect of polyaniline and ZnO to enhance the photocatalytic activity of their nanocomposite" by Keya Sahu, **Kazi Hasibur Rahman** and Asit Kumar Kar. (2019)*Materials Research Express*, *6*(9), 095304. https://iopscience.iop.org/article/10.1088/2053-1591/ab2c5f/meta **(I.F.-1.941), IOP Publishing, Q2, H index: 35**

11. Chen, C. J., Wu, C. C., Rahman, K. H., & Chen, K. C. (2023). A study on photodegradation of trichloroethylene using an optical fiber coated with different photocatalysts. *Materials Science in Semiconductor Processing*, *163*, 107538.

12. Rahman, K. H., Kar, A. K., & Chen, K. C. (2024). Highly active ZnO/Fe3+-TiO2 photocatalysts for visible-light photodegradation application and its colour change behaviour by dd transition. *Materials Science and Engineering: B*, *305*, 117394**. (SVU)**

National Journal Publications:

1. "Influence of catalyst loading on photocatalytic degradation efficiency of CTAB assisted TiO_2 photocatalyst towards Methylene blue dye solution" by **Kazi Hasibur Rahman** and Asit Kumar Kar, Bulletin of Materials Science, 2021, doi: 10.1007/s12034-021-02600-5

Book Chapter Publications:

1. Materials Technology for the Energy and Environmental Nexus, Volume 2, IOP publishing

Chapter 11: “Recent trends and materials used for environmental monitoring and applications” by C Rajkumar, Kazi Hasibur Rahman, P V Chandrasekar and Kuan-Chung Chen, doi:10.1088/978-0-7503-5729-6ch11

International/ National conference proceedings Publications:

1. “The effect of monomer concentration in cationic surfactant assisted synthesis of polyaniline (PANI) and its application in visible light irradiated degradation of methylene blue“ by **Kazi Hasibur Rahman** and Asit Kumar Kar. *AIP Conference Proceedings,* Vol. 2220, 020041 (2020); https://doi.org/10.1063/5.0001627

2. “Optical properties of titanium-di-oxide (TiO_2) prepared by hydrothermal method “ by **Kazi Hasibur Rahman**, Sayari Biswas and Asit Kumar Kar. *AIP Conference Proceedings*, Vol. 1953 (1), 030022, Date: 08.05.2018.

3. “Optical properties of titanium-di-oxide (TiO2) prepared by dip coating method” by Sayari Biswas, **Kazi Hasibur Rahman** and Asit Kumar Kar. *AIP conference proceedings,* Vol. 1953 (1), 030004, Date: 08.05.2018.

4. “Structural and optical properties of ex-situ polymerized PAni-TiO_2 nanocomposite” by **Kazi Hasibur Rahman** and Asit Kumar Kar. *Materials Today: Proceedings, 18,* 1067-1071.(https://doi.org/10.1016/j.matpr.2019.06.565) (2019)

Book Chapter (SVU):

DOI No.	**Name of the Article**	**Name of the Author**	**ISBN No.**	**Year of Publication**

https://doi.org/10.22271/ed.book.2938	A review on electrical properties, conduction mechanism of Polyaniline and its effect of doping on conductivity	**Kazi Hasibur Rahman**	978-93-6135-429-8	2024
https://doi.org/10.22271/ed.book.2938	Review on optical properties of	**Kazi Hasibur Rahman**,	978-93-6135-429-8	2024

	MoS_2 /TiO_2 Nanocomposite	Uday Ghosh		
https://doi.org/10.62906/bs.book.210	Recent developments in Graphene based nanomaterials for the application in Biosensors	**Kazi Hasibur Rahman**	978-93-6233-525-8	2024
https://doi.org/10.22271/ed.book.2938	Recent progress in metal oxides for biosensor application	**Kazi Hasibur Rahman**, B. Rajini Kanth	978-93-6135-429-8	2024
https://doi.org/10.22271/ed.book.2938	Review on improvements of doping strategies on TiO_2 and ZnO nanoparticles visible light photocatalytic applications	**Kazi Hasibur Rahman**	978-93-6135-429-8	2024