

List of publication:2022

1. Mashrafi Bin Mobarak, Md. Sahadat Hossain, Fariha Chowdhury and **Samina Ahmed***, Covid-19 waste facemask conundrum: a facile way of utilization through fabricating composite material with unsaturated polyester resin and evaluation of its mechanical properties, *Heliyon*, 2022, 8, e12197. (**Elsevier, Q1, I.F. 3.77**).
2. Md. Sahadat Hossain, Supanna Malek Tuntun, Newaz Mohammad Bahadur and **Samina Ahmed***, **Enhancement of photocatalytic efficacy exploiting copper doping in nano-hydroxyapatite: Effects of crystallographic parameters on photocatalysis**, *RSC Advances*, 2022, 12, 34080. (**RSC, Q1, I.F. 4.036**)
3. Monika Mahmud, Md. Sahadat Hossain, Mashrafi Bin Mobarak, Md. Saiful Quddus, Muhammad Shahriar Bashar, Umme Sarmeen Akhtar, Shirin Akter Jahan, Dipa Islam and **Samina Ahmed***, Engineering GO@Zn–Hap@CA porous heterostructure for ultra-fast and ultra-high adsorption efficacy: investigation towards the remediation of chromium and lead, *Environ. Sci.: Adv.*, 2022, 1, 827. (**RSC**).
4. Md. Sahadat Hossain, Md. Najem Uddin, Shifa Sarker and **Samina Ahmed***, Crystallographic dependency of waste cow bone, hydroxyapatite, and b-tricalcium phosphate for biomedical application, *J. Saudi Chem. Soc.* 2022, 26, 101559. (**Elsevier, Q1, I.F. 5.6**), doi.org/10.1016/j.jscs.2022.101559
5. Md. Farhad Ali, Md. Asib Ahmed, Md. Sahadat Hossain, **Samina Ahmed** and A.M. Sarwaruddin Chowdhury, Effects of inorganic materials on the waste chicken feather fiber reinforced unsaturated polyester resin-based composite: An approach to environmental sustainability, *Composites Part C: Open Access*, 2022, 9, 100320. (**Elsevier, Q2, I.F. 2.97**)
6. Md. Sahadat Hossain and **Samina Ahmed***, Synthesis of nano-crystallite gypsum and bassanite from waste *Pila globosa* shells: crystallographic characterization, *RSC Adv.*, 2022, 12, 25096 (**RSC, Q1, I.F. 4.036**).
7. Md. Sahadat Hossain, Md. Mahfujul Hasan, Monika Mahmud, Mashrafi Bin Mobarak and **Samina Ahmed***, Assessment of crystallite size of UV-synthesized hydroxyapatite using different model equations, *Chemical Papers*, 2022, <https://doi.org/10.1007/s11696-022-02501-9>. (**Springer, Q2, I.F. 2.146**)
8. Monika Mahmud, Md. Sahadat Hossain, Mashrafi Bin Mobarak, Sazia Sultana, Suriya Sharmin and **Samina Ahmed***, Co-precipitation synthesis of non-cytotoxic and magnetic cobalt ferrite nanoparticles for purging heavy metal from the aqueous medium: Pb(II) adsorption isotherms and kinetics study, *Chemistry and Ecology*, 2022, DOI: 10.1080/02757540.2022.2093351. (**Taylor and Francis, Q2, I.F. 2.239**).
9. Md. Sahadat Hossain, Monika Mahmud, Mashrafi Bin Mobarak, Sazia Sultana, Md. Aftab Ali Shaikh and **Samina Ahmed***, New analytical models for precise calculation of crystallite size: Application to both synthetic (hydroxyapatite) and natural (eggshell)

crystalline materials, *Chemical Papers*, 2022, <https://doi.org/10.1007/s11696-022-02377-9> (**Springer, Q2, I.F. 2.146**).

10. Mashrafi Bin Mobarak, Md. Sahadat Hossain, Fariha Chowdhury and **Samina Ahmed***, Synthesis and characterization of CuO nanoparticles utilizing waste fish scale and exploitation of XRD peak profile analysis for approximating the structural parameters, *Arabian Journal of Chemistry*, 2022, 15, 104117 (**Elsevier, Q1, I.F. 6.212**).
11. Md. Sahadat Hossain, Md. Aftab Ali Shaikh, Md. Saifur Rahaman and **Samina Ahmed***, Modification of crystallographic parameters in a biomaterial employing a series of gamma radiation doses, *Mol. Syst. Des. Eng.*, 2022, 7,1239.
DOI: <http://doi.org/10.1039/D2ME00061J> (**RSC, Q1, I.F. 4.935**).
12. Md. Sahadat Hossain, Monika Mahmud, Mashrafi Bin Mobarak, Sazia Sultana and **Samina Ahmed**, Crystallographic analysis of biphasic hydroxyapatite synthesized by different methods: an appraisal between new and existing models, *Chemical Papers*, 2022, 76:1593–1605. <https://doi.org/10.1007/s11696-021-01949-5>, (**Springer, Q2, I.F. 2.146**).
13. Mashrafi Bin Mobarak, Md. Sahadat Hossain, Monika Mahmud, Sazia Sultana, Zenefar Yeasmin and **Samina Ahmed***, Probing the photocatalytic competency of hydroxyapatite synthesized by solid state and wet chemical precipitation method, *J. Mol. Structure*, 2022, 1252, 132142. (**Elsevier, Q2, I.F. 3.841**).
14. Monika Mahmud, Md. Sahadat Hossain, Mashrafi Bin Mobarak, **Md. Saiful Quddus**, Muhammad Shahriar Bashar, Umme Sarmeen Akhtar, Shirin Akter Jahan, Dipa Islam, and Samina Ahmed ‘Engineering GO@Zn–Hap@CA porous heterostructure for ultra-fast and ultra-high adsorption efficacy: investigation towards the remediation of chromium and lead’ *Environmental Science Advances* (2022), Published by the Royal Society of Chemistry DOI:10.1039/d2va00142j
15. Romana Akter Shathy, Shahriar Atik Fahim, Mithun Sarker, **Md. Saiful Quddus**, Mohammad Moniruzzaman, Shah Md. Masum,* and Md. Ashraful Islam Molla, ‘Natural Sunlight Driven Photocatalytic Removal of Toxic Textile Dyes in Water Using B-Doped ZnO/TiO₂ Nanocomposites’, *Catalysts* 2022, 12(3), 308; indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [CAPlus / SciFinder](#), [CAB Abstracts](#), and many [other databases](#).
Journal Rank: JCR - Q2 (*Chemistry, Physical*) / CiteScore - Q1 (*General Environmental Science*), **Impact Factor: 4.501** (2021) ; 5-Year Impact Factor: 4.641 (2021).<https://doi.org/10.3390/catal12030308> ; <https://www.mdpi.com/2073-4344/12/3/308>
16. Md. Sabbir Hasan, Jannat Al Foisal, G. M. Arifuzzaman Khan, Rownok Jahan, **Md. Hasanuzzaman**, Md. Shamsul Alam, M. Minnatul Karim, M. A. Gafur, Muhammad Angkan Khan, Md. Abdus Sabur, ‘Microbrillated Cellulose-Silver Nanocomposite Based PVA Hydrogels and Their Enhanced Physical, Mechanical and Antibacterial Properties’, *Journal of Polymers and the Environment* (2022) 30:2875–2887,

indexed within [Scopus](#), SCImago, SCIE and many [other databases](#). **Impact Factor:** 3.667 (2020); 5-Year Impact Factor: 3.536 (2020). <https://doi.org/10.1007/s10924-022-02406-4>

17. Abonti Biswas, Tanvir Ahmed, Md Rahmatuzzaman Rana, Md Mozammel Hoque, Md Farid Ahmed, Minaxi Sharma, Kandi Sridhar, Rowshon Ara, Baskaran Stephen Inbaraj. Fabrication and Characterization of ZnO Nanoparticles-Based Biocomposite Films Prepared Using Carboxymethyl Cellulose, Taro Mucilage, and Black Cumin Seed Oil for Evaluation of Antioxidant and Antimicrobial Activities. *Agronomy*, MDPI.
18. Md Ripaj Uddin, Mayeen Uddin Khandaker, Nahida Akter, Md Farid Ahmed, Syed Md Minhaz Hossain, Abdul Gafur, Md Jainal Abedin, Md Aminur Rahman, Abubakr M Idris. Identification and Economic Potentiality of Mineral Sands Resources of Hatiya Island, Bangladesh. *Minerals*, MDPI.
19. Ahsanul Haque, Sumon Ganguli, Juliya Khanam, Alam S.M. Nur, Md. Abdus Sabur, Ashok Kumar Chakraborty. Construction of F-doped Co₃O₄/Co₃O_{3.69}F_{0.31} nanocomposite for boosting photocatalytic removal of organics from industrial waste H₂O under visible-light. *Results in Engineering*, Elsevier.
20. Juliya Khanama, Md. Rashib Hasan, Bristy Biswas, Shirin Akter Jahan, Nahid Sharmin, Samina Ahmed, Sharif Md. Al-Reza. Development of ceramic grade red iron oxide pigment from waste iron source. *Heliyon*, Elsevier