

Publication List of IFRD: 2021

*At present, around **19 scientists** are working in the Institute of Fuel Research and Development (IFRD), Bangladesh Council of Scientific and Industrial Research (BCSIR). In 2021, IFRD scientists published a total of **14 Scopus Web of Science (SCI, SCIE & ESCI) Indexed Papers with 2.4 average impact factor.***

1. Ajoy Kanti Mondal, Shuai Wu, Dezhong Xu, Qiuxia Zou, Lihui Chen, Liulian Huang, Fang Huang, Yonghao Ni, "Preparation of lignosulfonate ionic hydrogels for supercapacitors, sensors and dye adsorbent applications," International Journal of Biological Macromolecules, Elsevier (SCI & Scopus Index Q1 Journal, Impact Factor: 6.95), DOI:<https://doi.org/10.1016/j.ijbiomac.2021.07.021>
2. Mosharof Hossain, Lipiar Khan Mohammad Osman Goni, Nuzhat Muntaha, Mohammad Shah Jamal, Mohammad Asaduzzaman Sujan, Shamim Ahmed, Dipa Islam, Riyadh Hossen Bhuiyan, Abu Naieum Muhammad Fakhruddin, Box–Behnken design-based optimization for biodiesel production from waste cooking oil using Mahogany (*Swietenia macrophylla*) fruit shell derived activated carbon as a heterogeneous base catalyst", Reaction Kinetics, Mechanisms and Catalysis, Springer (SCI & Scopus Index Journal, Impact factor: 1.52), DOI: <https://doi.org/10.1007/s11144-021-01995-w>
3. Mosharof Hossain, Shah Mohammad Asaduzzaman Sujan, Mohammad Shah Jamal, Md. Shahariar Chowdhury, Kuaanan Techato, Abu Naieum Muhammad Fakhruddina, "Abiding Effects of Phenolic Antioxidants on Oxidative Behaviour of Fatty Acid Methyl Esters Derived from Waste Cooking Oil, BioResources, (SCIE and Scopus Index Journal, Impact Factor: 1.614), Link: https://ojs.cnr.ncsu.edu/index.php/BioRes/article/view/BioRes_16_4_7021_Hossaina_Abiding_Phenolic_Antioxidants_Oxidative
4. Abu Kowsar, Sumon Chandra Debnath, Md. Saidul Islam, Al Newaz Bahar, Syed Farid Uddin Farhad, "Numerical Simulation of the High Efficiency Triple Junction Concentrator Photovoltaic Cells Using MSCS-1D" 48th IEEE PVSC, USA, IEEE Xplore (Scopus Index), DOI: 10.1109/PVSC43889.2021.9518975.
5. S.M. Amir-Al Zumahi, Nourin Arobi, M. Mahbubur Rahman, Md. Kamal Hossain, Meshkat Ara Jahan Rozy, M. Shahariar Bashar, Amun Amri, Humayun Kabir, Md. Abul Hossain, Farid Ahmed, "Understanding the optical behaviours and the power conversion efficiency of novel organic dye and nanostructured TiO₂ based integrated DSSCs", Solar Energy, Elsevier (SCI & Scopus Index Q1 Journal, Impact Factor: 5.74), DOI: <https://doi.org/10.1016/j.solener.2021.07.024>
6. Samiya Mahjabin, Md. Mahfuzul Haque, Sobayel Khan, Vidhya Selvanathan, M. Shah Jamal, M.S. Bashar, Hend I. Alkhamash, Mohammad Ismail Hossain, Md. Shahiduzzaman, Nowshad Amin, Kamaruzzaman Sopian, Md. Akhtaruzzaman, "Effects of oxygen concentration variation on the structural and optical properties of reactive sputtered WO_x thin film, Solar Energy, Elsevier (SCI & Scopus Index Q1 Journal, Impact Factor: 5.74), DOI: <https://doi.org/10.1016/j.solener.2021.05.031>
7. M. S. Chowdhury, Kazi Sajedur Rahman, Vidhya Selvanathan, A. K. Mahmud Hasan, M. Shah Jamal, Nurul Asma Samsudin, Md. Akhtaruzzaman, Nowshad Amin and Kuaanan Techato, "Recovery of FTO coated glass substrate via environment-friendly facile recycling perovskite solar cells", RSC Advances (SCIE & Scopus Index Q1 Journal, Impact Factor: 3.2) DOI: <https://doi.org/10.1039/D1RA00338K>
8. Chila Kaewpraek, Liaqat Ali, Md. Arefin Rahman, Mohammad Shakeri, M. S. Chowdhury, M. Shah Jamal, Md. Shahin Mia, Jagadeesh Pasupuleti, Le Khac Dong, Kuaanan Techato, "The Effect of Plants on the Energy Output of Green Roof Photovoltaic Systems in Tropical Climates", Sustainability (SCIE & Scopus Index Q2 Journal, Impact Factor: 2.57), DOI: <https://www.mdpi.com/2071-1050/13/8/4505>
9. Md. Ferdous Rahman, Md. Mahabub Alam Moon, Md. Hasan Ali, Shamim Ahmmed, Samia Tabassum, Jaker Hossain, Abu Bakar Md. Ismail, "A systematic study of how annealing conditions lead to the application-based microstructural, crystallographic, morphological, and optical features of spin-coated CdS

thin-films”, *Optical Materials*, Elsevier (SCI & Scopus Index Q1 Journal, Impact Factor: 2.779), DOI: <https://doi.org/10.1016/j.optmat.2021.111136>

10. Shamim Ahmmed, Asma Aktar, Samia Tabassum, Md. Hafijur Rahman, Md. Ferdous Rahman, Abu Bakar Md. Ismail, “CuO based solar cell with V2O5 BSF layer: Theoretical validation of experimental data”, *Superlattices and Microstructures*, Elsevier (SCIE & Scopus Index Q2 Journal, Impact Factor: 2.1), DOI: <https://doi.org/10.1016/j.spmi.2021.106830>
11. Md. Hafijur Rahman, Shamim Ahmmed, Samia Tabassum, and Abu Bakar Md. Ismail, “Epitaxial deposition of LaF3 thin films on Si using deep eutectic solvent based facile and green chemical route”, *AIP Advances* (SCIE & Scopus Index Q2 Journal, Impact Factor: 1.627), DOI: <https://doi.org/10.1063/5.0039733>
12. Jehadin, F., Taposhy Rabeya, M. asadullah Asad, A. E. Adekunle, Md. Saiful Islam, Efficient conversion of cornstalk to bioethanol using dilute H2SO4 pretreatment, *International Journal of Energy and Environmental Engineering*, (Scopus Index), DOI: <https://doi.org/10.1007/s40095-020-00371-z>
13. Abiodun E.Adekunle, Taposhi Rabeya, Farjana Jehadin, Mohammad A.Asad, Olubunmi O.Ayodele, Md Saiful Islam, “Compositional and microstructural changes in compressed hot water pretreated corn stalk”, *Current Research in Green and Sustainable Chemistry*, Elsevier, DOI: <https://doi.org/10.1016/j.crgsc.2021.100057>
14. Md Saiful Islam, Zeju Zhang, Song-Ben Qu, Chun-Lei Liu, Chen Guo, Chun-Zhao Liu, *Biomass and Bioenergy*, Elsevier (SCIE & Scopus Index Q1 Journal, Impact Factor: 2.6), DOI: <https://doi.org/10.1016/j.biombioe.2020.105923>