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Dr. Md. Maniruzzaman
Associate Professor
Research Area Organic Solar Cells, Organic Synthesis ... ...

Biography

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Education

Ph.D.
Kookmin University, S. Korea,(2010-2014)
Thesis Title: **Design, fabrication, and characterization of Dielectric/Metal/Dielectric electrodes for high efficient polymer solar cells**
MS
University of Dhaka,Bangladesh(2007)
Thesis Title: **Phytochemical and antimicrobial studies on Altenanthera sessilis.**
B.Sc.
University of Dhaka,Bangladesh(2006)Group: Chemistry,
Title of B.Sc. Thesis (Project): Titrametric determination of sugar in different varieties of banana.

Research Interest

Organic Solar Cells, Organic Synthesis ... ...
Organic Solar Cells, Perovskite Solar cells,Nano-materials, Graphene, Cellulose based hydrogel, Natural Product Isolation and Characterization, Organic Synthesis ... .

Publication

Books

Journals

14. Maniruzzaman,M. , Abdur,R. , Sheikh,M. A. K. , Singh,S. and Lee,J. (2023) , " Conductive MoO3â€“PEDOT:PSS Composite Layer in MoO3/Au/MoO3â€“PEDOT:PSS Multilayer Electrode in ITO-Free Organic Solar Cells," ***Processes***, MDPI, vol11, no.2, pp.594

13. (2022) , " Synthesis, characterization and application of a novel polyazo dye as a universal acidâ€“base indicator," ***RSC advances***, Royal Society of Chemistry, vol12, no.43, pp.28034-2804

12. Hossain,I. , Moniruzzaman,M. , Maniruzzaman,M. and Jalil,M. A. (2021) , " Investigation of the effect of different process variables on color and physical properties of viscose and cotton knitted fabrics," ***Heliyon***, Elsevier, vol7, no.8, pp.e07735

11. (2021) , " Antimicrobial, Structure-Activity Relationship and Computational Studies of Some Synthesized Chalcone Derivatives," ***Asian Journal of Chemistry***, Asian Publication Corporation, vol33, no.3 (2021), pp.644-650

10. (2020) , " Isolation of Cerebroside from Gynura procumbens Leaves and Biological Activities of the Leaves Extracts," ***Journal of Chemical Health Risks***, vol10, no.4, pp.353-363

9. MONIRUZZAMAN,M. , JALIL,M. A. , HOSSAIN,M. N. , HOSSAIN,I. and MANIRUZZAMAN,M. (2020) , " Characterization of Chemical-Treated and Gamma Irradiated Pineapple Leaf Fabric/Epoxy Composites: Surface Structure and Physico-Mechanical Properties," ***Tekstil ve MÃ¼hendis***, vol27, no.119, pp.144-153

8. Badal,M. M. R. , Hossain,M. Z. , Maniruzzaman,M. and Yousuf,M. A. (2020) , " Synthesis, identification and computational studies of novel Schiff bases N-(2, 6-dibenzylidenecyclohexylidene)-Nâ€²-(2, 4-dinitrophenyl) hydrazine derivatives," ***SN Applied Sciences***, Springer International Publishing, vol2, no.11, pp.1-9

7. Badal,M. M. R. , Islam,H. M. A. , Maniruzzaman,M. and Yousuf,M. A. (2020) , " Acidochromic behavior of dibenzylidene cyclohexanone-based bischalcone: experimental and theoretical study," ***ACS omega***, vol5, no.36, pp.22978-2298

6. (2015) , " ITO-free organic solar cell with an PEDOT:PTS/Au/TiO2 grid hybrid electrode as a transparent anode," ***Current Applied Physics***, Elsevier

5. Maniruzzaman,M. , Rahman,M. A. , Jeong,K. and Lee,J. (2014) , " MoO3/Au/MoO3â€“PEDOT:PSS multilayer electrodes for ITO-free organic solar cells," ***Materials Science in Semiconductor Processing***, Elsevier, vol27, pp.114-120

4. Maniruzzaman,M. , Rahman,M. A. , Jeong,K. , Nam,H. and Lee,J. (2014) , " ITO free MoO3/Au/MoO3 structures using Al2O3 as protective barrier between MoO3 and PEDOT:PSS in organic solar cells," ***Renewable Energy***, Elsevier, vol27, pp.193-199

4. Maniruzzaman,M. , Lim,C. H. , Yang,K. , Lee,C. , Nam,H. and Lee,a. J. (2014) , " Indium Tin Oxide-Free PEDOT:PSS/SAM/MoO3/Au/MoO3 Multilayer Electrodes for Organic Solar Cells," ***Journal of Nanoscience and Nanotechnology***, American Scientific Publishers

2. Lee,Y. K. , Maniruzzaman,M. , Lee,C. , Lee,M. J. , Lee,E. and Lee,J. (2013) , " PEDOT Gate Electrodes with PVP/Al2O3 Dielectrics for Stable High-Performance Organic TFTs," ***Electronic Materials Letters*** , Springer

1. (2011) , " ITO-free low-costorganicsolarcellswithhighlyconductivepoly(3,4 ethylenedioxythiophene): p-toluenesulfonateanodes," ***Solar EnergyMaterials&SolarCells***, Elsevier

Conference

1. Costa,J. J. and Maniruzzaman,M. , "Detection of Arsenic Contamination in Drinking Water using Color Sensor," ***2018 International Conference on Advancement in Electrical and Electronic Engineering (ICAEEE)*** , IEEE, pp.1-4