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Research field

Synthesizing TiO2: GO Nanotube Arrays

PhD title

Application of TiO2:GO nanotube arrays as photocatalysts for industrial waste water treatment

Summary

It is evident that water contamination has become one of the pressing environmental issues of our time. This is due to increase in population, industrialization and agricultural practices which have led to release of unclean water to water sources. Water is polluted by heavy metals, organic and inorganic pollutants which have adverse effect on both human and aquatic life upon exposure. This therefore calls for development of sustainable, low cost, environmental friendly and efficient green techniques for waste water treatment. Photocatalytic water treatment is a promising green technique due to its ability to utilize solar energy. The study therefore aims at synthesizing and evaluating the performance of TiO2-GO nanotube arrays in industrial waste water treatment using visible light. It is expected that the findings will provide crucial information on the performance of TiO2:GO nanotubes as a photocatalyst in waste water treatment.

Keywords

- Synthesize
- Photocatalyst
- TiO2:GO Nanotubes
- Water

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