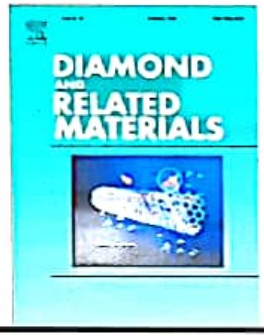
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Covalent immobilization of phosphonium-based ionic liquid onto modified graphitic carbon nitride for visible-light photodegradation and antibacterial applications

Zahra Elyasi [a], Javad Safaei-Ghomi [b] Show more

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Highlights

- Ultrasound-assisted synthesis of [$Ph_3PC_2H_4Br$][Br] as a phosphonium-based ionic liquid is reported.
- To achieve a superior photocatalyst, [$Ph_3PC_2H_4Br$][Br] is covalently linked to ZnO/g-C_3N_4.
- Photocatalytic activity of ZnO/g-C_3N_4/[$Ph_3PC_2H_4$][Br] evaluated for wastewater treatment.
- Proposed photocatalyst shows excellent antibacterial activity against Gram-positive bacteria.

Abstract

The rapid growth of industrialization and subsequent environmental pollution emphasizes the need for the introduction of photocatalysts that efficiently decompose both natural and synthetic contaminants in wastewater treatment processes. To achieve a superior

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Abstract
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