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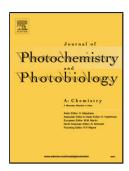
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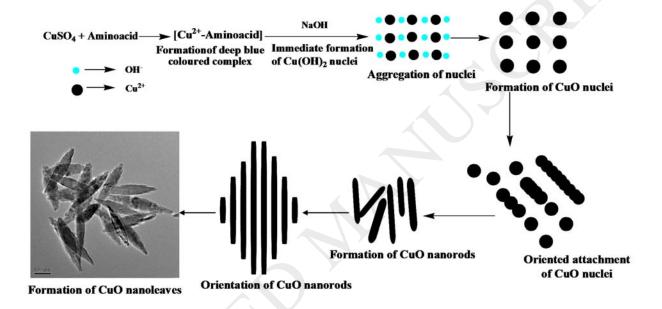
## ACCEPTED MANUSCRIPT

Microwave assisted facile and green route for synthesis of CuO nanoleaves and their efficacy as a catalyst for reduction and degradation of hazardous organic compounds

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#### **Graphical abstract**



#### **Highlights:**

- 1. For the first time, 2D CuO nanoleaves were developed using glutamic acid
- 2. Microwave assisted route was designed for the synthesis of CuO nanoleaves (NLs)
- 3. L-glutamic acid acts as complexing and capping agent in the synthesis of CuO NLs
- **4.** Reduction of toxic nitro compounds were carried out in aqueous phase using CuO NLs as catalyst
- **5.** CuO NLs act as photocatalyst for the degradation of methyl violet 6B and Rose Bengal dye

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