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Influence of tetraalkylammonium cations on quality of decatungstate and its photocatalytic property in visible light-triggered selective oxidation of organic compounds by dioxygens

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Graphic abstract

A high quality of tetramethyl ammonium decatungstate salt (TMADT) is a robust photocatalyst for the visible light-triggered oxidation of inert hydrocarbons by molecular oxygen in MeCN and its activity can be enhanced dramatically under the co-joint action of two additives water and 12 M HCl, originating from that the respective promotion effects of such two additives on photocatalysis can be well joined together.



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