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Visible-Light-Mediated S–H Bond Insertion Reactions of Diazoalkanes with Cysteine Residues in Batch and Flow
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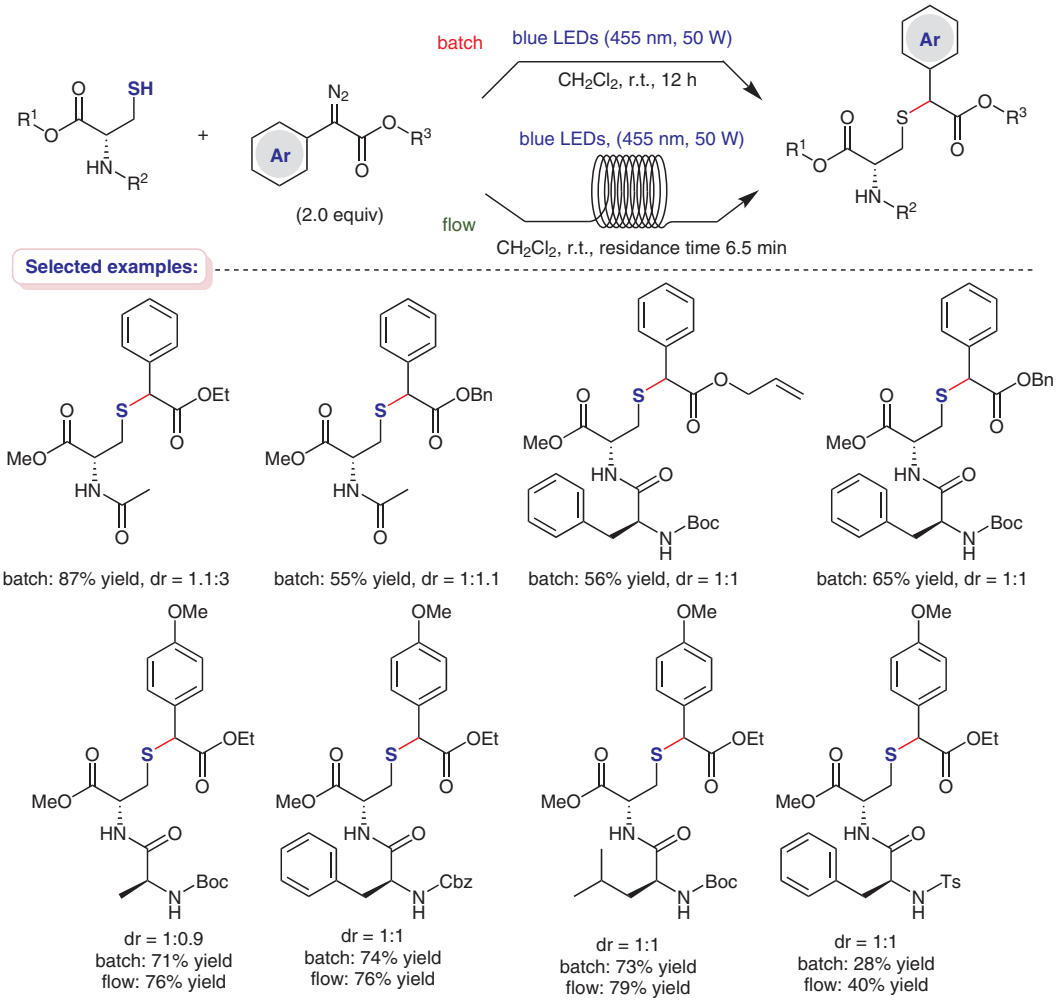
Visible-Light-Mediated Functionalization of Cysteine Derivatives and Cysteine-Containing Peptides



Significance: Functionalization of amino acids and peptides is a powerful synthetic tool in the field of peptide drug discovery. The authors have developed a visible-light-mediated S–H bond alkylation of cysteine derivatives and cysteine-containing peptides.

Comment: The visible-light-mediated S–H bond insertion reaction of cysteine derivatives or cysteine-containing dipeptides with diazoalkanes proceeded smoothly to afford a series of alkylated cysteine derivatives and cysteine-containing peptides in satisfactory yields. Moreover, this method was also extended to a continuous-flow technique.

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Category
Peptide Chemistry

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diazoalkanes
S–H bond insertion
photochemical reaction

Synfact of the Month