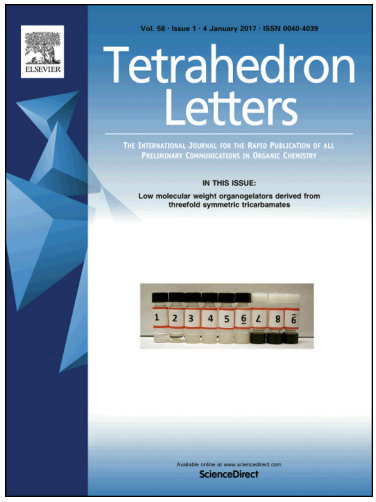

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Multifunctional ionic liquid-bound polystyrene resin with high loading capacity as support in solid-phase peptide synthesis

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ABSTRACT

Polystyrene resin-bound ionic liquids (PSILs) with high loading capacities were prepared by immobilizing multifunctional ionic liquids (ILs) on modified polystyrene (PS) resin and used in the solid phase peptide synthesis. Introduction of hydrophobic anions and functional side chain containing ILs resulted in high yield (82-98%) and purity (92-98%) of the synthesized peptides. The coupling kinetic studies of the first and second amino acids to the PSILs were performed to investigate the effect of IL functionalization on PS supports.

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