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(54) **TRIAZOLIDE BASED IONIC LIQUIDS**

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(57) **ABSTRACT**

A method of synthesizing an ionic liquid, includes reacting a 1,2,3-triazole including at least one of a 4-substituent or a 5-substituent with a hydroxide compound having the formula R^+OH^- in a dehydration reaction, wherein R^+ is an ionic liquid cation. R^+ is a five-membered heterocyclic cation, an aromatic cation, a sulfonium cation, an ammonium cation, or a phosphonium cation. In a number of embodiments, R^+ is a pyridinium cation, a bipyridinium cation, an amino pyridinium cation, a pyridazinium cation, an ozaxolium cation, a pyrazolium cation, an imidazolium cation, a pyramidinium cation, a triazolium cation, a thiazolium cation, an acridinium cation, a quinolinium cation, an isoquinolinium cation, an orange-acridinium cation, a benzotriazolium cation, a methimzolium cation, a sulfonium cation, an ammonium cation, or a phosphonium cation.