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(54) **METHODS OF LITHIATING  
ELECTROACTIVE MATERIALS**

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(57) **ABSTRACT**

A method for forming an electroactive material includes sourcing a current or voltage to an electrochemical reactor that includes a cation source, an electrolyte mixture, and an electroactive material precursor in contact with one another, where the current or voltage serves to ionize and form cations at the cation source that react with the electroactive material precursor in the electrolyte mixture to form the electroactive material. The method may include one or more filtering steps, one or more rinsing steps, or a combination of one or more filtering steps and one or more rinsing steps to collect the electroactive material from the electrolyte.

