**ABSTRACT**

Sustainable power requirements of multifarious portable electronic applications demand the development of high energy and high power density cathode materials for lithium ion batteries. This paper reports a method for rapid synthesis of a cobalt based layered cathode material doped with mixed dopants Cu and Mg. The cathode material exhibits ordered layered structure and delivers discharge capacity of ∼200 mA h g–1 at 0.2C rate with high capacity retention of 88% over the investigated 100 cycles.