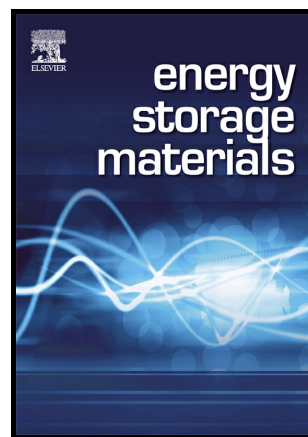


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Porous carbon electrodes with battery-capacitive storage features for high performance Li-ion capacitors

Jin Niu,^{a,b} Rong Shao,^{a,b} Mengyue Liu,^{a,b} Jingjing Liang,^{a,b} Zhengping Zhang,^{a,b} Meiling Dou,^{a,b} Yaqin Huang,^a Feng Wang^{a,b,*}

^a State Key Laboratory of Chemical Resource Engineering, Laboratory of Electrochemical Process and Technology for materials, Beijing University of Chemical Technology, Beijing 100029, China

^b Beijing Advanced Innovation Center for Soft Matter Science and Engineering, Beijing University of Chemical Technology, Beijing 100029, P. R. China

* Corresponding Authors.

E-mail: wangf@mail.buct.edu.cn (F. Wang); Fax: +86-10-64451996; Tel: +86-10-64451996.

Abstract: Li-ion capacitors (LICs) are considered one of the most promising energy storage devices due to their integrated battery and capacitor characteristics. Herein, we demonstrate a green and facile strategy to synthesize high-defect mesopore-dominant porous carbon (referred to as HDMPC) through direct pyrolysis of low-cost sheep bone in an Ar atmosphere. The HDMPC possesses large specific surface area ($2192 \text{ m}^2 \text{ g}^{-1}$) and high proportion of mesopore (98.0 %, accounted by pore volume), as well as numerous intrinsic defects and heteroatom-induced defects. The high defect density and

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