

TiO₂ nanofibers/activated carbon composite as novel effective electrode material for capacitive deionization of brackish water

Ahmed G. El-Deen¹, Jae-Hwan Choi², Khalil Abdelrazek Khalil^{3,4}, Abdulhakim A. Almajid³ and Nasser A. M. Barakat^{1,5,*}

¹BioNanosystem Department, Chonbuk National University, Jeonju 561-756, South Korea

²Department of Chemical Engineering, Kongju National University, 1223-24 Cheonan-daero, Seobuk-gu, Cheonan, Chungnam 331-717, Republic of Korea

³Mechanical Engineering Department, King Saud University, P.O. Box 800, Riyadh 11421, Saudi Arabia

⁴Materials Engineering and Design Department, Aswan University, Aswan, Egypt

⁵Chemical Engineering Department, Faculty of Engineering, Minia University, El-Minia, Egypt

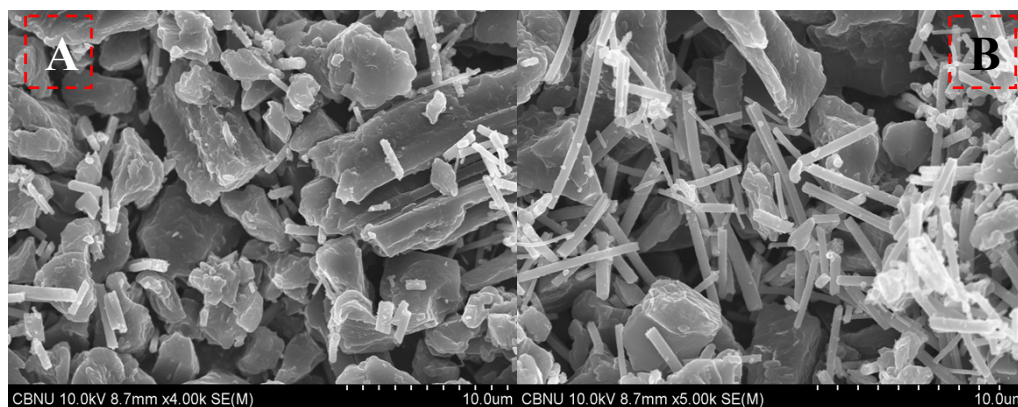


Fig. S1 (A, B) SEM images of ACTNFs 5% and ACTNFs 15% composite electrode.

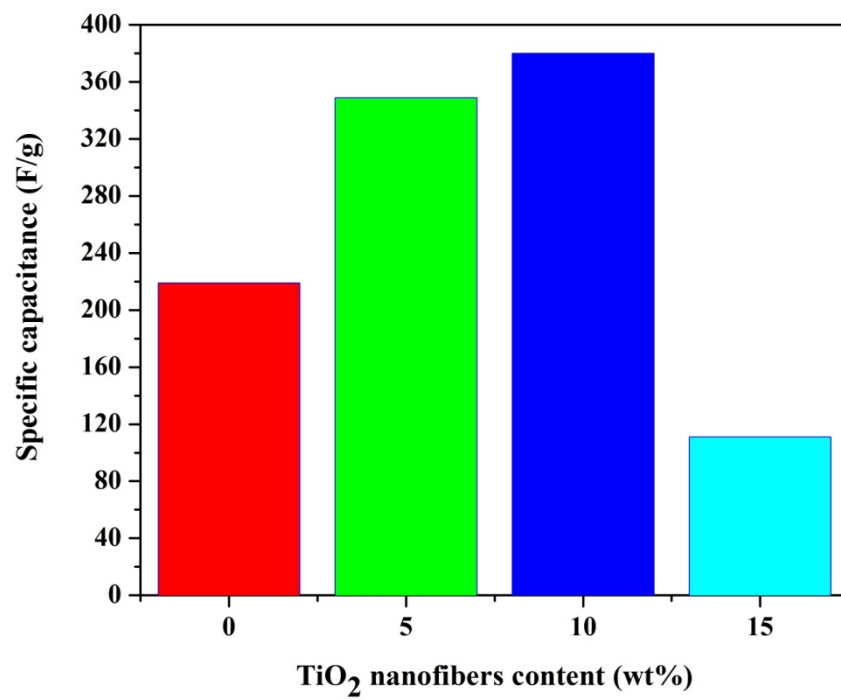


Figure S2 specific capacitance versus TiO₂ nanofibers content.

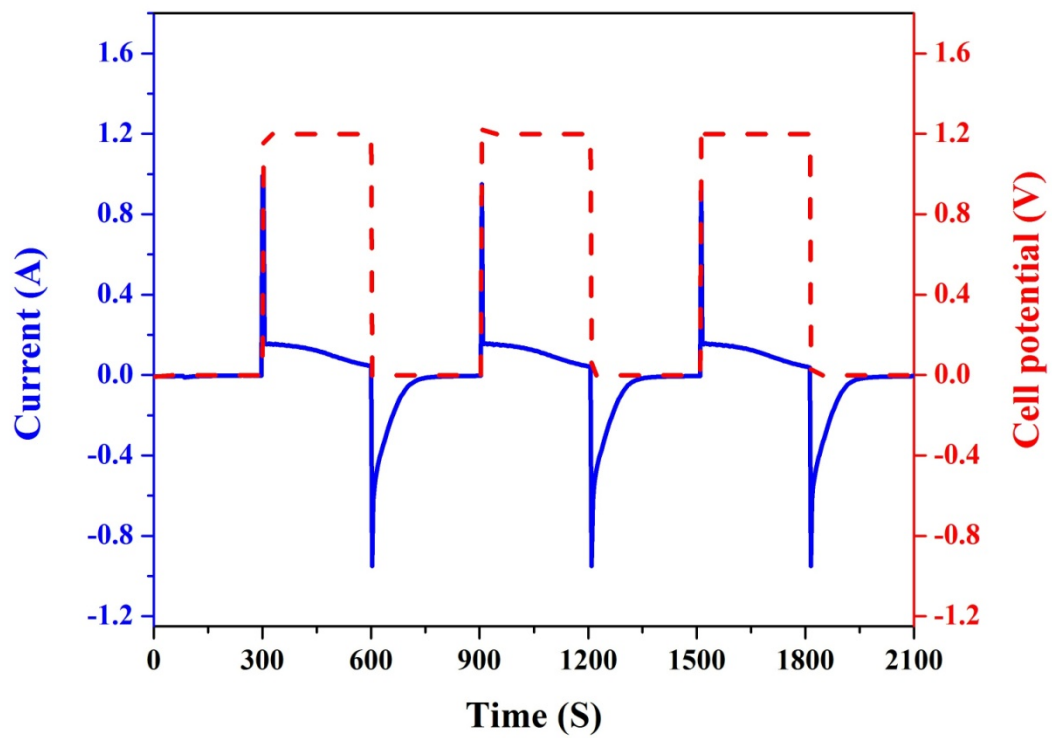


Fig S3 Current changes versus applied cell potential during CDI operation.