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Supplementary Information

Dual functions of Zirconium modification on improving the electrochemical

performance of Ni-rich LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂

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Figure 1S The narrow scan focusing on the elements of (a) Co 2p and (b) Mn 2p of the pristine

NCM811 and the Zr-modified NCM811.



Figure 2S The charge and discharge curves of the pristine NCM811 and the Zr-modified NCM811 at

the C rates of (a) 0.2 C, (b) 0.33C, (c) 0.5C, (d) 1.0C, (e) 2.0C, (f) 3.0C, (g) 5.0C and (h) 10.0C.