Mesopore-dominant Nitrogen-doped Carbon with a Large Defects

Degree and a High Conductivity via Inherent Hydroxyapatite-induced

Self-activation for Lithium-ion Battery

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Figure S1. SEM images of NMC-900.



Figure S2. TEM images of (a) NMC-600, (b) NMC-700, (c) NMC-800, (d) NMC-900

and (e) NMC-1000.



Figure S3. The contents of different N in the NMCs.



Figure S4. XRD pattern of the tortoise shells.



Figure S5. GCD curves of (a) NMC-800 and (b) NMC-1000.



Figure S6. Nyquist plots of NMC-900 after 500 cycles.

	XPS (at. %)			Electric conductivity (S m ⁻¹)
	С	Ν	0	
NMC-600	82.57	9.18	8.25	1.18
NMC-700	84.24	7.02	8.74	107
NMC-800	88.63	6.41	4.96	1047
NMC-900	92.45	3.71	3.84	4382
NMC-1000	93.63	3.16	3.21	2086

Table S1. Elemental analysis of the presented materials.