Electronic Supplementary Material (ESI) for Dalton Transactions. This journal is © The Royal Society of Chemistry 2022

## Supporting Information

## Controlled phase and crystallinity of FeNCN/NC dominating sodium storage performance

Hui Qi<sup>1\*</sup>, Yan Hou<sup>1</sup>, Wenjing Wang<sup>2\*</sup>, Lin Tang<sup>1</sup>, Chuanyun Zhang<sup>1</sup>, Wen Deng<sup>1</sup>, Yayi Cheng<sup>3</sup>,

Jingjing Zhang<sup>1</sup>

<sup>1</sup> School of Mechatronic Engineering, Xi'an Technological University, Shaanxi, China
<sup>2</sup> Faculty of Meterials Metallurgy and Chemistry, Jiangxi University of Science and Technology
<sup>3</sup>School of Materials Engineering, Xi'an Aeronautical University, Shannxi, China
Corresponding author: qihui@xatu.edu.cn; wangwenjinggb@163.com

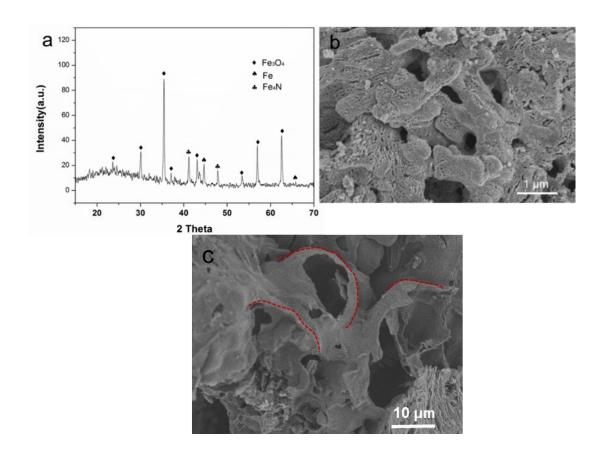


Fig.S1 (a) XRD patterns and (b) FESEM images of the product obtained after the reaction of urea and ferriamine oxalate in separate crucibles;(c) FESEM images of S-0

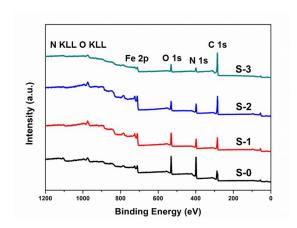


Fig.S2 XPS survey of prepared four samples at different growth stages

Table S1 Element content of the prepared four samples

Sample	S-0	S-1	S-2	S-3
C	37.1	53.5	58.0	78.1
N	34.2	22.6	21.9	11.2
Fe	3.5	8.7	10.5	2.9
0	25.2	15.2	9.6	7.8

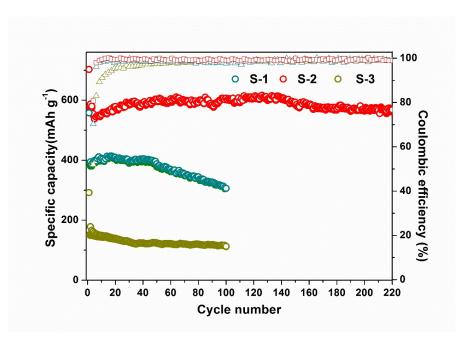


Fig.S3 Cycling performance of three samples at  $0.1\ A\ g^{\text{-}1}$