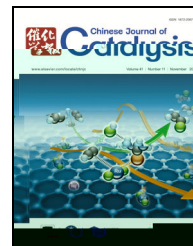




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## Article



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*Article history:*

*in-situ*

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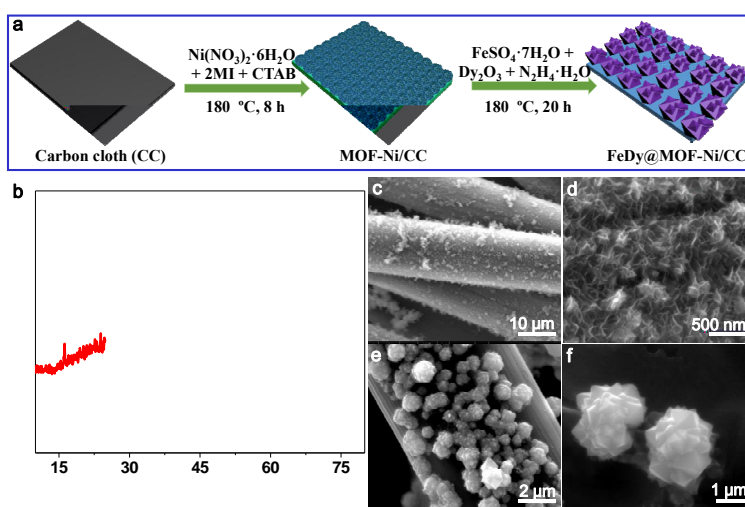
3.1. Analysis of the synthetic strategy

2.4. Synthesis of Ni(OH)<sub>2</sub>/CC and FeDy@Ni(OH)<sub>2</sub>/CC

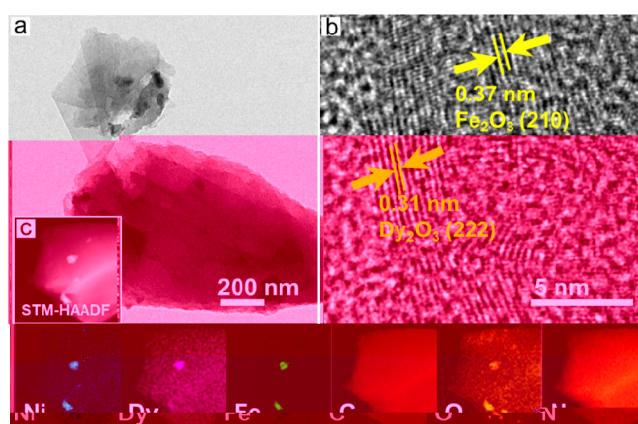
2.5. Electrochemical measurements

3.2. Crystallinity and microstructural analyses

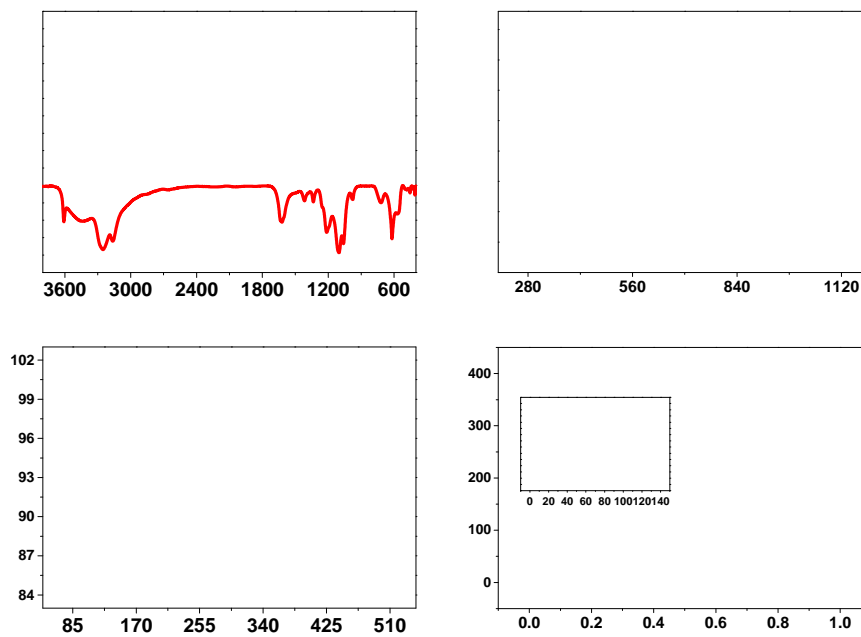
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### 3.3. Surface characteristics and porosity analysis



### 3.4. XPS analysis



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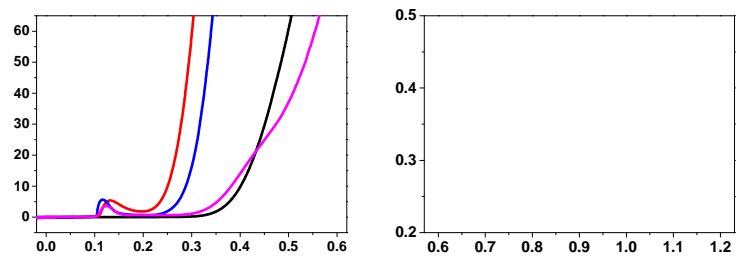
### 3.5. Electrocatalytic performance analysis

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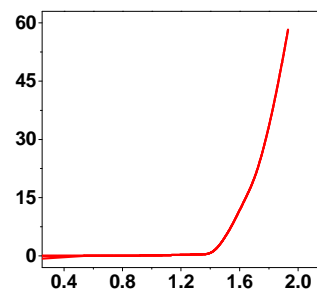
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