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## Field emission properties of the caterpillar-like structural carbon film grown by magnetic and electric fields coupling HFCVD

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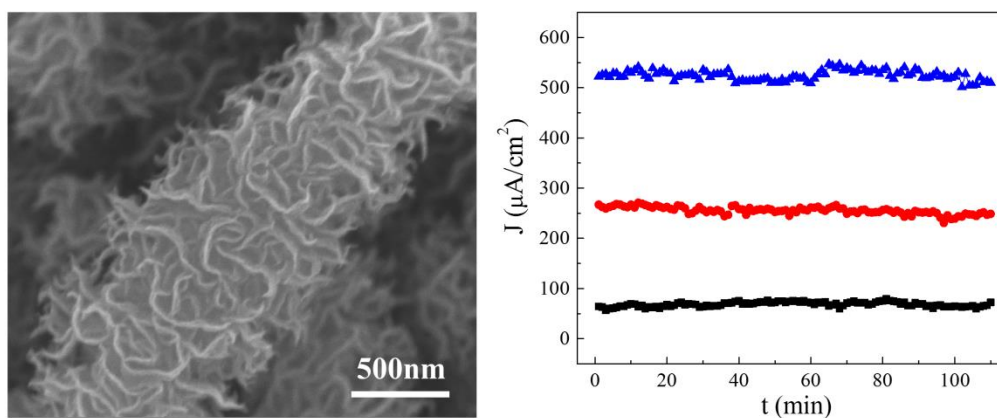
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### Graphic abstract



### Highlights:

1. Magnetic and electric fields were coupled for chemical vapor deposition.
2. The caterpillar-like structural carbon film was prepared by this coupled method.
3. Field emission properties of the micro carbon film were investigated.
4. Emission stability with less than 8% of fluctuation in current density was obtained.

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