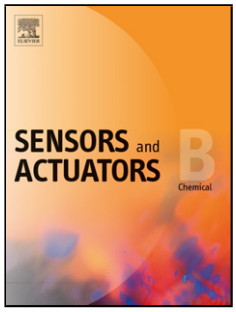

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Rapid synthesis of highly photoluminescent nitrogen-doped carbon quantum dots via a microreactor with foamy copper for the detection of Hg^{2+} ions

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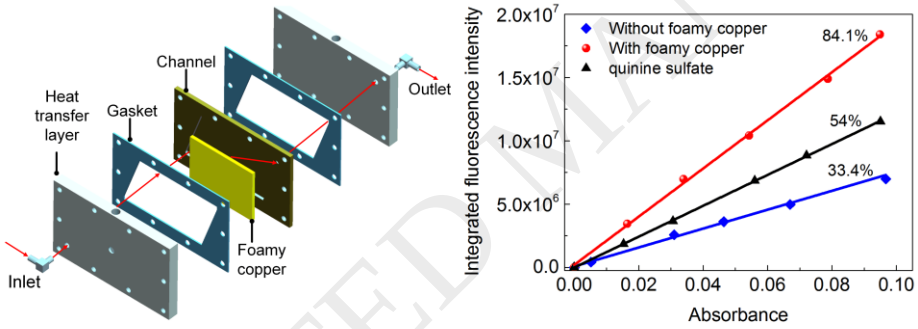
Graphical Abstract



By taking advantage of the foamy copper, a high QY of 84.1% was achieved. Compared to the procedure without adding foamy copper, the QY when foamy copper was used was two times higher.

Highlights

- A rapid synthetic method for highly photoluminescent N-CQDs was developed by using a microreactor with foamy copper having different poriness values.