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SUPPORTING INFORMATION

Sub-10 nm Stable Graphene Quantum Dots Embedded in Hexagonal Boron Nitride

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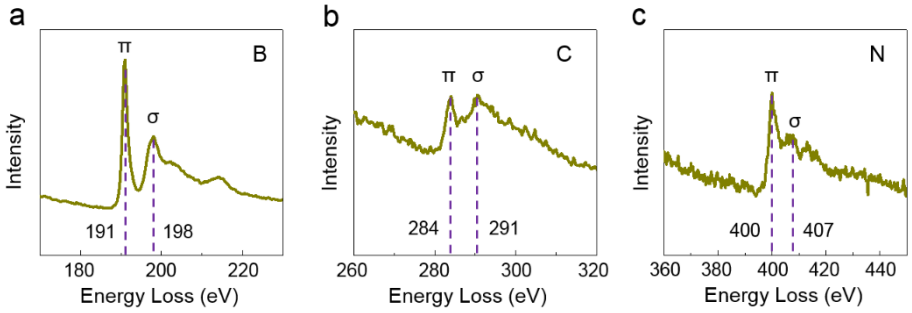

Figure S1. (a-c) EELS peaks of boron (B), carbon (C) and nitrogen (N).

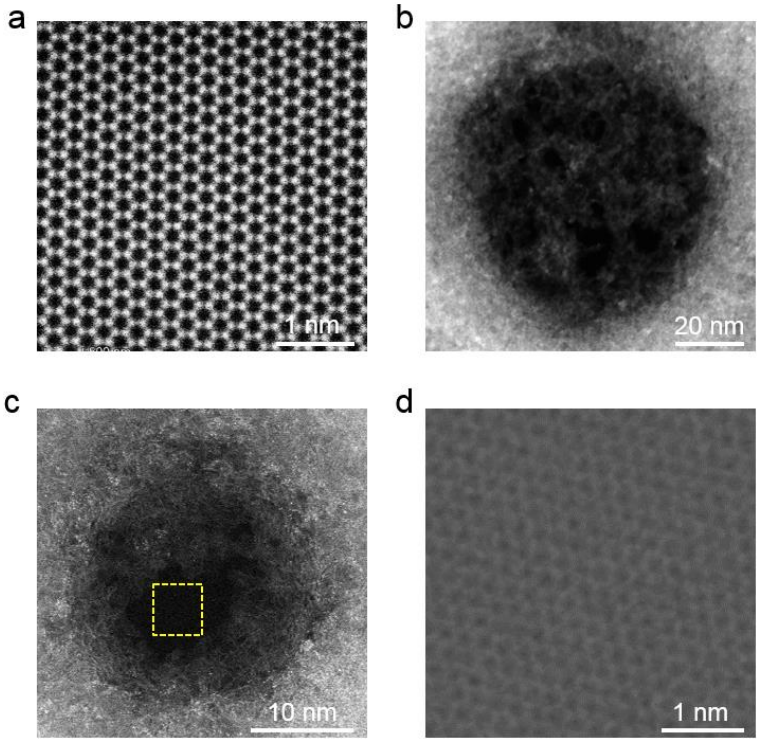

Figure S2. (a) STEM image of h-BN flake. (b-c) GQDs with ~50 nm (b) and 20 nm (c) in diameter. (d) Atomic structure of the GQDs in the yellow dotted box in (c)**.**

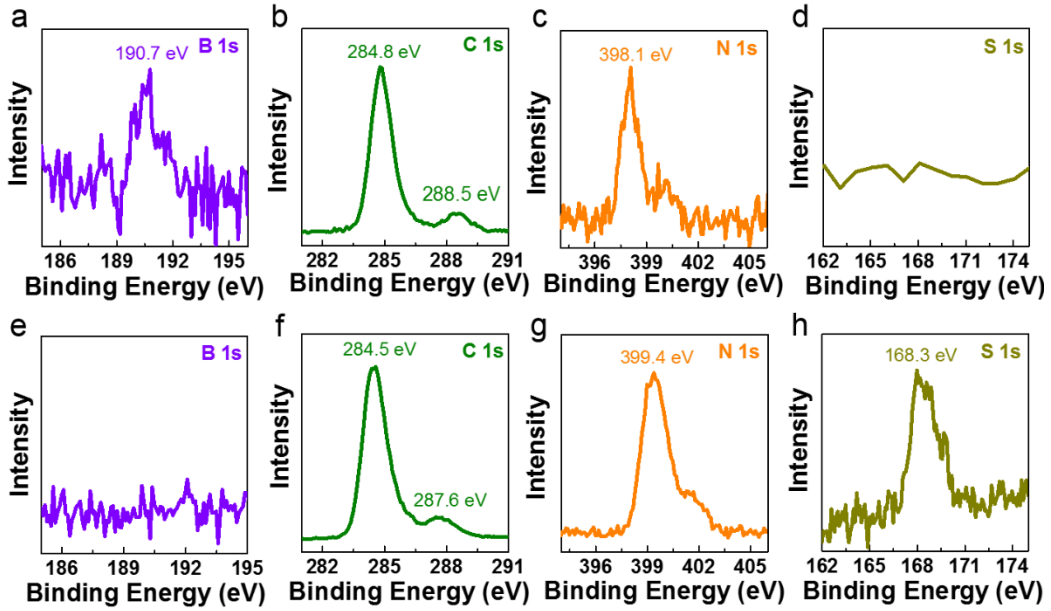

Figure S3. X-ray photoelectron spectroscopy (XPS) data of B, C, N and S 1s core levels of as-grown GQDs (a-d) and commercial GQDs (e-h).

XPS characterizations and results are shown in Figure S3. For our h-BN embedded GQDs, the peaks corresponding to boron (B), nitrogen (N) and carbon (C) can be found (a-c). For commercial GQDs, despite the C, we can also see peaks corresponding to N and sulfur (S), suggesting that commercial GQDs were adsorbed with nitrides and sulphides (d-h) [1, 2].

References

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