

Cite this: DOI: 10.1039/c0xx00000x

www.rsc.org/xxxxxx

ARTICLE TYPE

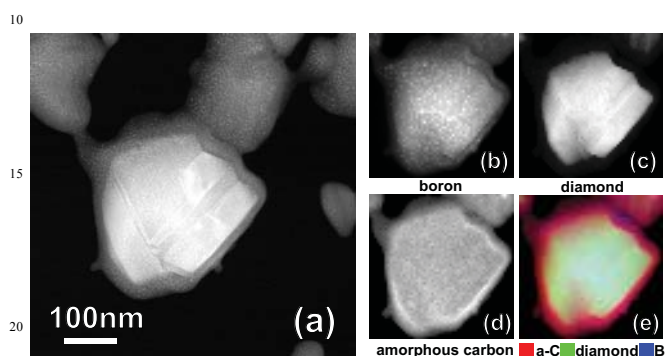
## Analysis of the Local Boron Environment in Boron-doped Nanocrystalline Diamond Films from Chemical Vapor Deposition

Stuart Turner,<sup>\*a</sup> Yinggang Lu,<sup>a</sup> Stoffel D. Janssens,<sup>b,c</sup> Fabiana Da Pieve,<sup>a</sup> Dirk Lamoen,<sup>a</sup> Jo Verbeeck,<sup>a</sup> Ken Haenen,<sup>b,c</sup> Patrick Wagner<sup>b,c</sup> and Gustaaf Van Tendeloo<sup>a</sup>

<sup>5</sup> Received (in XXX, XXX) Xth XXXXXXXXXX 20XX, Accepted Xth XXXXXXXXXX 20XX

DOI: 10.1039/b000000x

### Supplementary Information



**SI Fig. 1** Elemental mapping of a single grain in the B:NCD film in plan view; (a) ADF-STEM image of a single diamond grain in plan-view orientation. (b-e) Elemental maps showing the boron (b), diamond (c) and amorphous carbon (d) distribution. (e) color map