

## Electronic Supplementary Information (ESI)

### Atomic/molecular layer deposition of Ni-terephthalate thin films

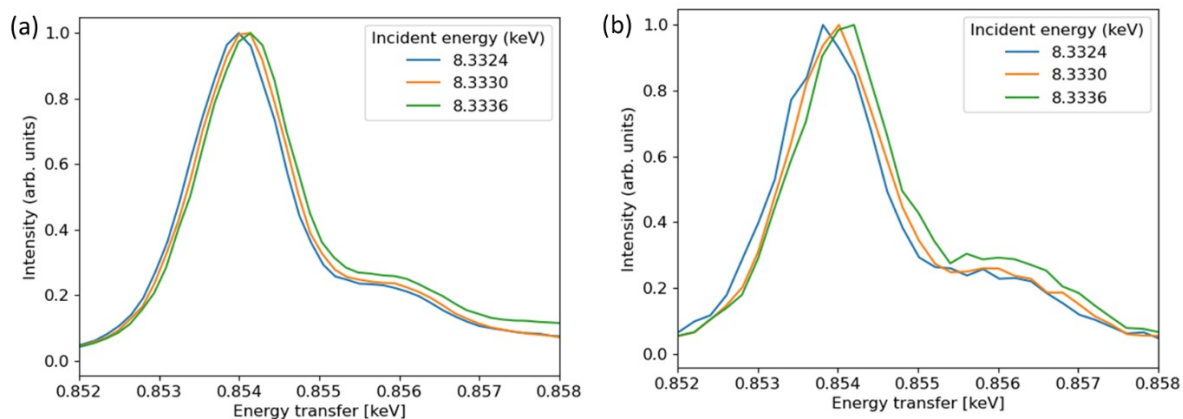
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#### S1. Constant Incident Energy (CIE) cuts.

In case of an ideal octahedral coordination, the emission feature at  $\sim 8.333$  keV incident energy and  $\sim 0.854$  keV energy transfer would have a perfectly symmetric oval shape. The constant incident energy (CIE) cuts of the NiO and Ni-TPA RIXS planes in Fig. S1, taken at different incident energies, show that the shape is slightly distorted for both NiO and Ni-TPA. This distortion is due to the Ni coordination deviating from the ideal octahedral symmetry, as has been found previously for NiO.<sup>1,2</sup>



**Fig. S1** Constant incident energy (CIE) cut for (a) NiO, and (b) Ni-TPA RIXS plane at three different incident energies.

#### References

- 1 N. C. Tombs and H. P. Rooksby, *Nature*, 1950, **165**, 442–443.
- 2 D. Rodik, V. Spasojevic, V. Kusigerski, R. Tellgren and H. Rundlof, *Phys. Stat. Solidi*, 2000, **218**, 527–536.