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(54) **Title:** CORE-SHELL NANOPARTICLES AND METHODS OF FABRICATION THEREOF

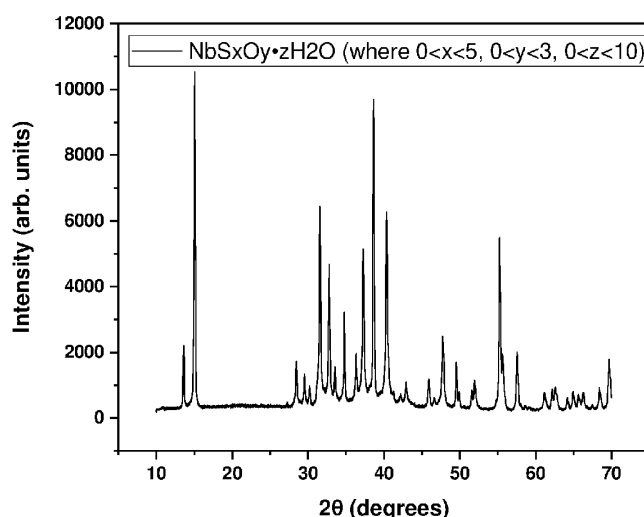


Figure 1

(57) **Abstract:** The present disclosure concerns core-shell nanoparticles, each comprising a core comprising Nb and NbS<sub>2</sub>; preferably NbS<sub>2</sub> and a shell of Formula NbS<sub>x</sub>O<sub>y</sub>·zH<sub>2</sub>O, wherein x is a number from 0 to 5; y is a number from 0 to 3; and z is a number from 0 to 10. The present disclosure also concerns a method of synthesising core-shell nanoparticles.

[Continued on next page]

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