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Comparison of TiZrVHf non-evaporable getter coatings deposited with twisted wire vs alloy targets

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Non-evaporable getter (NEG) coatings can be made with various composition of transition metal alloys. Ternary TiZrV NEG coatings are very commonly used for vacuum chambers for particle accelerators, as they exhibit efficient pumping properties and low outgassing rates. It has been found that quaternary TiZrVHf coatings provide even better pumping properties, and if an alloy target is used for deposition, activation of the NEG coating is possible from 140 $^{\circ}$ C. This study compares the electron stimulated desorption yield from samples with different deposition target. Alloy and twisted wire targets of TiZrVHf were compared, along with an alloy of TiZrV.

Footnotes

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Europe

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