

## **Intense source of slow positrons**

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Abstract:

We describe a novel design for an intense source of slow positrons based on pair production with a beam of electrons from a 10 MeV accelerator hitting a thin target at a low incidence angle. The positrons are collected with a set of coils adapted to the large production angle. The collection system is designed to inject the positrons in a Greaves-Surko trap. Such a source could be the basis for a series of experiments in fundamental and applied research and would also be a prototype source for industrial applications which concern the field of defect characterization in the nanometer scale.