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# Application of short-distance adaptive channeling of low energy particles in above-target graphene to optimize nuclear fusion in unstructured target

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The report discusses a method for optimizing controlled nuclear fusion in an unstructured target using low-energy particles. The essence of the method is the use of quasi-channeling of such particles in a thin single-crystal film of the graphene type located on the polished surface of this target. Such a motion at an optimum particle energy of 500 eV leads to the formation in this film and in the adjacent part of the target of a coherent correlated state of these particles with very large fluctuations of the transverse energy up to 50–150 keV. This effect lead to nuclear fusion in the main unstructured target.

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