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Dislocation Dynamics - Analytical Description of the Interaction Force Between Dipolar Loops

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Abstract: The interaction between dislocation dipolar loops plays an important role in the computation of the dislocation dynamics. The analytical form of the interaction force between two loops derived in the present paper from Kroupa's formula of the stress field generated by a single dipolar loop allows for faster computation.

Keywords: dislocation dynamics; interaction force between dipolar loops;

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