

Abstract Submitted  
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**A Generalized Finite-Strain Function for Condensed Matters on Shock and Static Compression** KYU SOO JHUNG, JINKYUNG JUNG, KYUNG YOUNG CHOI, INHO KIM, Agency for Defense Development, Korea — We have generalized the finite-strain function by introducing a noninteger exponent in expansion variables for the cohesive energy of condensed matter. The noninteger value is determined to make the function converge rapidly. The cohesive energy model successfully reproduces the experimental isotherms and Hugoniot curves of various solids. A volume dependent Gruneisen function has been obtained from the truncation condition and compared with recent experimental and theoretical data for condensed matters.

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