

Cover letter

Dear Professor Henryk Petryk :

I am enclosing herewith an original manuscript entitled " The analysis of deformation and fracture of square plate using improved peridynamic motion equation " by Zhou, Yu, Wang and Huang.

The Highlights of the manuscript are as follows:

1. Construct the 2-dimensional transfer functions of the boundary traction.
2. Improve the peridynamic motion equation with the boundary conditions.
3. Give P-delta curve from peridynamic simulation.
4. Give the peridynamic solutions of three 2-dimensional benchmark problems.

This manuscript has been prepared in accordance with the Author Guidelines, and it has neither previously, nor simultaneously, in whole or in part, been submitted anywhere else.

I would be grateful if my manuscript could be reviewed by you and considered for publication in Archives of Mechanics.

Please acknowledge receipt of this manuscript at your earliest convenience, and let me know if you need any further information.

With best regards!

Your sincerely

Dr Xinfeng Wang (E-mail: xinfengw@nuaa.edu.cn)

State Key Laboratory of Mechanics and Control of Mechanical Structures

Nanjing University of Aeronautics and Astronautics

Nanjing City, 210016

P R China