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## Size-dependent plasticity in contact/friction: from discrete dislocation dynamics inside an asperity to statistical summation over asperities

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# List of Journal Publications of this Work

- Song, H., Vakis, A.I., Liu, X., Van der Giessen, E., 2016. Statistical model of rough surface contact accounting for size dependent plasticity and asperity interaction, submitted.
- Papanikolaou, S., Song, H., Van der Giessen, E., 2016. Obstacles and sources in dislocation dynamics: Strengthening and statistics of abrupt plastic events in nanopillar compression, submitted.
- Song, H., Van der Giessen, E., Liu, X., 2016. Strain gradient plasticity analysis of elasto-plastic contact between rough surfaces. *Journal of the Mechanics and Physics of Solids*, 96, 18-28.
- Song, H., Van der Giessen, E., Vakis, A.I., 2016. Erratum: Asperity Interaction and Substrate Deformation in Statistical Summation Models of Contact Between Rough Surfaces [*Journal of Applied Mechanics*, 2014, 81 (4), pp. 041012]. *Journal of Applied Mechanics*, 83(8):087001-087001-1.
- Song, H., Deshpande, V.S., Van der Giessen, E., 2016. Discrete dislocation plasticity analysis of loading rate-dependent static friction. *Proc.R. Soc.A*, 472:20150877.
- Song, H., Dikken, R.J., Nicola, L., Van der Giessen, E., 2015. Plastic ploughing of a sinusoidal asperity on a rough surface. *Journal of Applied Mechanics*, 82(7), 071006.

