

Accepted Manuscript

Sliding frictional contact analysis of an elastic solid with couple stresses

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PII: S0020-7403(17)30821-4
DOI: [10.1016/j.ijmecsci.2017.09.037](https://doi.org/10.1016/j.ijmecsci.2017.09.037)
Reference: MS 3948



To appear in: *International Journal of Mechanical Sciences*

Received date: 30 March 2017
Revised date: 20 September 2017
Accepted date: 22 September 2017

Please cite this article as: Hong-Xia Song , Liao-Liang Ke , Yue-Sheng Wang , Sliding frictional contact analysis of an elastic solid with couple stresses, *International Journal of Mechanical Sciences* (2017), doi: [10.1016/j.ijmecsci.2017.09.037](https://doi.org/10.1016/j.ijmecsci.2017.09.037)

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Highlights

- The contact stresses have a pronounced departure from classical results as size parameter increases.
- A great value of the tensile stress can occur at the contact surface even if the friction coefficient is zero.
- The stress concentration is significantly amplified for fixed, however small, values of size parameter.

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