

# Accepted Manuscript

XFEM modeling of multistage hydraulic fracturing in anisotropic shale formations

Mao Sheng, Gensheng Li, Danas Sutula, Shouceng Tian, Stephane P.A. Bordas



PII: S0920-4105(16)30954-8

DOI: [10.1016/j.petrol.2017.11.007](https://doi.org/10.1016/j.petrol.2017.11.007)

Reference: PETROL 4423

To appear in: *Journal of Petroleum Science and Engineering*

Received Date: 9 November 2016

Revised Date: 24 October 2017

Accepted Date: 7 November 2017

Please cite this article as: Sheng, M., Li, G., Sutula, D., Tian, S., Bordas, S.P.A., XFEM modeling of multistage hydraulic fracturing in anisotropic shale formations, *Journal of Petroleum Science and Engineering* (2017), doi: 10.1016/j.petrol.2017.11.007.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# XFEM modeling of multistage hydraulic fracturing in anisotropic shale formations

Mao Sheng<sup>a</sup>, Gensheng Li<sup>\*a</sup>, Danas Sutula<sup>c</sup>, Shouceng Tian<sup>a</sup>, Stephane P. A. Bordas<sup>†b,c,d</sup>

a. State Key Laboratory of Petroleum Resources and Prospecting, (China University of Petroleum, Beijing), Beijing P.R. China;

b. Research Unit in Engineering Science, Computational Mechanics, Legato team, Computational Science Research Priority, University of Luxembourg, Luxembourg;

c. Institute of Mechanics and Advanced Materials, Theoretical and Applied Mechanics, Cardiff University, Wales, United Kingdom;

d. Mechanical Engineering Department, University of Western Australia, Crawley, Australia.

---

\* Correspondence to: Gensheng Li, College of Petroleum Engineering, China University of Petroleum, 102249, Beijing, China, E-mail: [ligs@cup.edu.cn](mailto:ligs@cup.edu.cn)

† Correspondence to: Stéphane P. A. Bordas, Research Unit in Engineering Science, Computational Mechanics, University of Luxembourg, Luxembourg, E-mail: [bordasS@cardiff.ac.uk](mailto:bordasS@cardiff.ac.uk), [stephane.bordas@alum.northwestern.edu](mailto:stephane.bordas@alum.northwestern.edu), [stephane.bordas@uni.lu](mailto:stephane.bordas@uni.lu)

Download English Version:

<https://daneshyari.com/en/article/8125570>

Download Persian Version:

<https://daneshyari.com/article/8125570>

[Daneshyari.com](https://daneshyari.com)