

# Accepted Manuscript

Analytical network-averaging of the tube model: Strain-induced crystallization in natural rubber

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PII: S0022-5096(17)30727-5  
DOI: [10.1016/j.jmps.2018.04.003](https://doi.org/10.1016/j.jmps.2018.04.003)  
Reference: MPS 3324



To appear in: *Journal of the Mechanics and Physics of Solids*

Received date: 15 August 2017  
Revised date: 1 February 2018  
Accepted date: 7 April 2018

Please cite this article as: Vu Ngoc Khiêm, Mikhail Itskov, Analytical network-averaging of the tube model: Strain-induced crystallization in natural rubber, *Journal of the Mechanics and Physics of Solids* (2018), doi: [10.1016/j.jmps.2018.04.003](https://doi.org/10.1016/j.jmps.2018.04.003)

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**Highlights**

- A novel constitutive model for SIC is proposed, because all previous models deviate from calorimetric experimental data.
- All parameters for the crystallization kinetics can be directly taken from physical measurements.
- Crystallization nucleation and growth are bounded.
- The model automatically transforms to our theories on rubber elasticity and mechanically-induced chemiluminescence.

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