



Professor Guillaume Parry

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Science and Engineering of Materials
Grenoble Institute of Technology and Université de Grenoble-Alpes, CNRS, Grenoble, France

Selected Publications:

Parry G, Coupeau C, Colin J, Cimetière A, Grilhé J. Buckling and post-buckling of stressed straight-sided wrinkles: experimental AFM observations of bubbles formation and finite element simulations. *Acta Mater.* 2004;52:3959–3966.

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G. Parry, A. Cimetiere, C. Coupeau, J. Colin, J. Grilhe, “Stability diagram of unilateral buckling patterns of strip-delaminated films”, *Phys. Rev. E*, 74 (2006), p. 066601

Guillaume Parry, Christophe Coupeau, Jerome Colin and Alain Cimetiere, “Investigating the secondary buckling of thin films with a model based on elastic rods with hinges”, *Journal of Mechanics of Materials and Structures*, Vol. 4, No. 1, 2009

J.Y. Faou, G. Parry, S. Grachev, E. Barthel, “How does adhesion induce the formation of telephone cord buckles?”, *Phys. Rev. Lett.*, 108 (2012), 116102

C. Coupeau, G. Parry, J. Colin, M.-L. David, J. Labanowski and J. Grilhe, “Kinetic evolution of blistering in hydrogen-implanted silicon”, *Applied Physics Letters*, Vol. 103, 031908, 2013

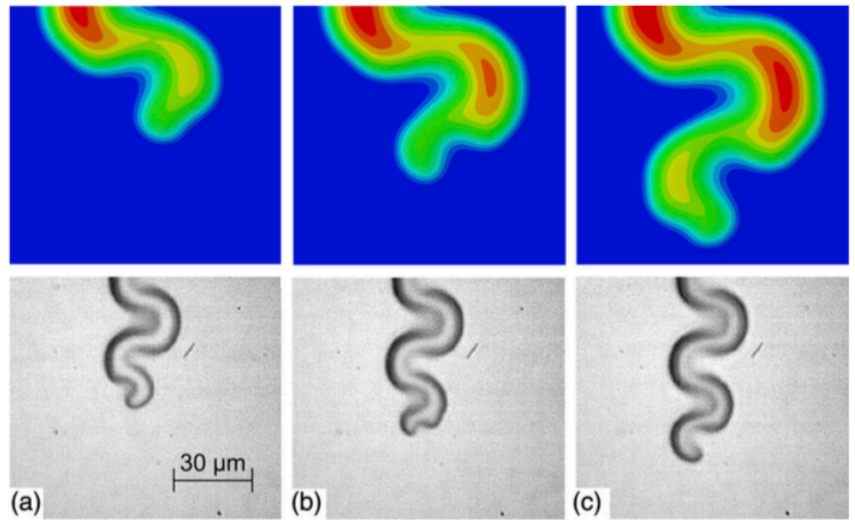


FIG. 1 (color online). Telephone cord propagation: comparison between numerical results (top) and optical measurements (bottom). Configurational instability induces a sag at the front, resulting in the pinning of the outer edge of the buckle in almost pure shear. The blister grows further around this pinning point thus changing the direction of rotation.

From: J.Y. Faou, G. Parry, S. Grachev, E. Barthel, “How does adhesion induce the formation of telephone cord buckles?”, *Phys. Rev. Lett.*, 108 (2012), 116102

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Nadia Ben Dahmane, Guillaume Parry and Rafael Estevez, “Cloquage de films mince ductiles sur substrat rigide”, 22nd French Congress of Mechanics, Lyon, 24-28 August 2015

R. Boijoux, G. Parry, J.-Y. Faou and C. Coupeau, “How soft substrates affect the buckling delamination of thin films through crack front sink-in”, *Applied Physics Letters*, Vol. 110, No. 14, 141602, 3 April 2017

R. Boijoux, G. Parry and C. Coupeau, “Buckle depression as a signature of Young’s modulus mismatch between a film and its substrate”, *Thin Solid Films*, Vol. 645, pp 379-382, 1 January 2018

C. Coupeau, R. Boijoux, Y. Ni and G. Parry, “Interacting straight-sided buckles: An enhanced attraction by substrate elasticity”, *Journal of the Mechanics and Physics of Solids*, Vol. 124, pp 526-535, March 2019

G. Parry, S. Hamade, J. Durinck, C. Coupeau and J. Colin, “Influence of interface steps on the buckle delamination of thin films”, *Journal of the Mechanics and Physics of Solids*, Vol. 132, Article 103698, November 2019