



# ACOUSTICS 2012

## Negative refraction of waves in an elastic phononic crystal matching density and index of water

A.-C. Hladky-Hennion<sup>a</sup>, C. Croenne<sup>b</sup>, J. Vasseur<sup>a</sup>, B. Dubus<sup>a</sup>, B. Morvan<sup>c</sup> and A. N. Norris<sup>d</sup>

<sup>a</sup>IEMN département ISEN, UMR CNRS 8520, 41 boulevard Vauban, 59046 Lille Cedex, France

<sup>b</sup>Department of Physics and Astronomy, University of Manitoba, Winnipeg, Canada R3T 2N2  
<sup>c</sup>Laboratoire Ondes et Milieux Complexes, FRE-3102 CNRS, Place Robert Schuman, 76610

Le Havre, France

<sup>d</sup>Rutgers University, Mechanical and Aerospace Engineering, Piscataway, NJ 08854, USA  
anne-christine.hladky@isen.fr