

Contents

Special issue on complexity of nonlinear waves

Foreword	
<i>Andrus Salupere and Gérard A. Maugin</i>	201
Nonlinear dispersive wave equations for microstructured solids	
<i>Arkadi Berezovski</i>	203
On a hierarchy of nonlinearly dispersive generalized Korteweg–de Vries evolution equations	
<i>Ivan C. Christov</i>	212
Elastic pantographic 2D lattices: a numerical analysis on the static response and wave propagation	
<i>Francesco dell’Isola, Ivan Giorgio, and Ugo Andreaus</i>	219
Tracks of surface drifters from a major fairway to marine protected areas in the Gulf of Finland	
<i>Nicole Delpeche-Ellmann, Tomas Torsvik, and Tarmo Soomere</i>	226
Parameterization of run-up characteristics for long bell-shaped solitary waves propagating in a bay of parabolic cross-section	
<i>Oleg Didenkulov, Ira Didenkulova, and Efim Pelinovsky</i>	234
Quantification of changes in the beach volume by the application of an inverse of the Bruun Rule and laser scanning technology	
<i>Maris Eelsalu, Tarmo Soomere, and Kalev Julge</i>	240
Complexity in engineering and natural sciences	
<i>Jüri Engelbrecht</i>	249
Unidirectional wave motion in a nonlocally and nonlinearly elastic medium: the KdV, BBM, and CH equations	
<i>Hüsnü Ata Erbay, Saadet Erbay, and Albert Erkip</i>	256
Some remarks on the stability and instability properties of solitary waves for the double dispersion equation	
<i>Hüsnü Ata Erbay, Saadet Erbay, and Albert Erkip</i>	263
Nonlinear evaluation of the kinematics of directional field waves	
<i>John Grue</i>	270
Numerical simulation of capillary gravity waves excited by an obstacle in shallow water	
<i>Motonori Hirata, Shinya Okino, and Hideshi Hanazaki</i>	278
Implications of the theory of turbulent mixing for wave propagation in media with fluctuating coefficient of refraction	
<i>Jaan Kalda and Mihkel Kree</i>	285
Asymmetric waves in wave energy systems analysed by the stochastic Gauss–Lagrange wave model	
<i>Georg Lindgren</i>	291
Simulation of solitary wave propagation in carbon fibre reinforced polymer	
<i>Martin Lints, Andrus Salupere, and Serge Dos Santos</i>	297
Numerical investigation of acoustic solitons	
<i>Bruno Lombard, Jean-François Mercier, and Olivier Richoux</i>	304
Quotients and subalgebras of sup-algebras	
<i>Xia Zhang and Valdis Laan</i>	311