

**Comment on "Solitons in the Heimburg-Jackson model of sound propagation in lipid bilayers are enabled by dispersion of a stiff membrane" by M. Drab et al.**

**Peets, Tanel; Tamm, Kert; Engelbrecht, Jüri** The European physical journal E 2023 / art. 34 <https://doi.org/10.1140/epje/s10189-023-00299-2>

**Determining properties of nonlinear microstructured materials by means of solitary waves**

**Janno, Jaan; Engelbrecht, Jüri** Proc. 5th International Conference on Inverse Problems in Engineering : Cambridge, 2005. Vol. II 2005 / p. J02 1-6

**Discrete spectral analysis for solitary waves**

**Engelbrecht, Jüri; Salupere, Andrus; Kalda, Jaan; Maugin, Gerard** Acoustic interactions with submerged elastic structures. Part 2, Propagation, ocean acoustics and scattering 2001 / p. 1-40

**Emergence of solitonic structures in hierarchical Korteweg-de Vries Systems**

**Salupere, Andrus; Lints, Martin; Illison, Lauri** Applied wave mathematics II : selected topics in solids, fluids, and mathematical methods and complexity 2019 / p. 89-124 [https://doi.org/10.1007/978-3-030-29951-4\\_5](https://doi.org/10.1007/978-3-030-29951-4_5) [https://www.esther.ee/record=b5303400\\*est](https://www.esther.ee/record=b5303400*est)

**Extreme elevations and slopes of interacting solitons in shallow water**

**Soomere, Tarmo; Engelbrecht, Jüri** Wave motion 2005 / p. 179-192 : ill  
<https://www.sciencedirect.com/science/article/abs/pii/S0165212504000812>

**Hidden and driven solitons in microstructured media**

**Salupere, Andrus; Engelbrecht, Jüri** 21st International Congress of Theoretical and Applied Mechanics : August 15-21, 2004, Warsaw, Poland : ICTAM04 : abstracts and CD-ROM proceedings 2004 / p. 278  
[http://fluid.ippt.gov.pl/ictam04/text/sessions/docs/SM11/11813/SM11\\_11813.pdf](http://fluid.ippt.gov.pl/ictam04/text/sessions/docs/SM11/11813/SM11_11813.pdf)

**Identification of properties of microstructured materials by means of Gaussian wave packets and solitary waves**

**Janno, Jaan; Engelbrecht, Jüri** 5th International Conference on Optimal Research "Simulation and Optimization in Business and Industry" : May 17-20, 2006, Tallinn, Estonia : programme and abstracts 2006 / p. 1

**Multi-soliton interactions and the inverse problem of wave crests**

**Peterson, Pearu** 2001 [https://www.esther.ee/record=b1556262\\*est](https://www.esther.ee/record=b1556262*est)

**Nonlinear waves in continuous media**

**Engelbrecht, Jüri** Encyclopedia of Continuum Mechanics 2020 [https://doi.org/10.1007/978-3-662-55771-6\\_235](https://doi.org/10.1007/978-3-662-55771-6_235)

**Numerical simulation of propagation of solitary deformation waves in a compressible hyperelastic rod**

**Vallikivi, Margit; Salupere, Andrus; Dai, Hui-Hui** Mathematics and computers in simulation 2012 / p. 1348-1362 : ill  
<https://www.sciencedirect.com/science/article/pii/S0378475411001790>

**Numerical simulation of waves and fronts in structured materials : a thermodynamic approach**

Berezovski, Arkadi; **Engelbrecht, Jüri; Maugin, Gerard** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2003 / 1, p. 30-42 : ill [https://artiklid.elnet.ee/record=b1011964\\*est](https://artiklid.elnet.ee/record=b1011964*est)

**On hidden solitons in KdV related systems**

**Salupere, Andrus** Mathematics and computers in simulation 2016 / p. 252-262 : ill <http://dx.doi.org/10.1016/j.matcom.2014.04.012>

**On mechanical aspects of nerve pulse propagation and the Boussinesq paradigm**

**Peets, Tanel; Tamm, Kert** Proceedings of the Estonian Academy of Sciences 2015 / p. 331-337 : ill  
[https://artiklid.elnet.ee/record=b2740556\\*est](https://artiklid.elnet.ee/record=b2740556*est)

**On propagation of 1D solitary waves in Mindlin-type microstructured solids**

**Tamm, Kert; Salupere, Andrus** Book of abstracts : The Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena : Computation and Theory : Athens, Georgia, March 23-26, 2009 2009 / p. 86  
<https://www.sciencedirect.com/science/article/pii/S0378475410002260>

**On propagation of solitary deformation waves in a compressible hyperelastic rod**

**Salupere, Andrus; Vallikivi, Margit; Dai, Hui-Hui** Book of abstracts : The Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena : Computation and Theory : Athens, Georgia, March 23-26, 2009 2009 / p. 84

**On pseudospectral method, discrete spectral analysis and solitons**

**Salupere, Andrus** OAS 2011 : International Conference on Optimization and Analysis of Structures, August 25-27, 2011, Tartu, Estonia : abstracts 2011 / p. 40

**On solitary waves and solitons in hierarchical systems**

**Salupere, Andrus; Engelbrecht, Jüri; Ilison, Lauri**; Tamm, K. The Forth International Conference on Nonlinear Evolution Equations and Wave Phenomena : Computation and Theory : Athens, Georgia, April 10-14, 2005 : book of abstracts 2005 / p. 158

**On solitary waves and solitons in microstructured media**

**Salupere, Andrus; Engelbrecht, Jüri; Ilison, Olari; Ilison, Lauri** IMA International Conference, Resent Advances in Nonlinear Mechanics : 30 Aug. - 1 Sept. 2005, Aberdeen, Scotland, University of Aberdeen : book of abstracts 2005 / p. 144

**On solitonic solutions for the hyperelastic rod equation**

**Salupere, Andrus; Rätsep, Margus** Wave motion 2019 / 8 p <https://doi.org/10.1016/j.wavemoti.2019.102404> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**On solitons in media modelled by the hierarchical KdV equation**

**Salupere, Andrus; Lints, Martin; Engelbrecht, Jüri** Archive of applied mechanics 2014 / p. 1583-1593 : ill

**On solitons in microstructured solids and granular materials**

**Salupere, Andrus; Engelbrecht, Jüri; Ilison, Olari; Ilison, Lauri** Mathematics and computers in simulation 2005 / p. 502-513 : ill

**On solutions of a Boussinesq-type equation with displacement-dependent nonlinearity: A soliton doublet to the memory of Alexander Samsonov**

**Peets, Tanel; Tamm, Kert; Simson, Päivo; Engelbrecht, Jüri** Wave motion 2019 / p. 10-17

<https://doi.org/10.1016/j.wavemoti.2018.11.001> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**On the application of 2D discrete spectral analysis in case of the KP equation**

**Salupere, Andrus; Ratas, Mart** Mechanics research communications 2018 / p. 141-147 : ill

<https://doi.org/10.1016/j.mechrescom.2017.08.010> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**On the formation of solitons in media with higher-order dispersive effects**

**Ilison, Olari; Salupere, Andrus** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2003 / 1, p. 135-144 : ill  
<https://artiklid.elnet.ee/record=b1011948#est>

**On the KdV soliton formation and discrete spectral analysis**

**Salupere, Andrus; Maugin, Gerard; Engelbrecht, Jüri; Kalda, Jaan** Wave motion 1996 / p. 49-66: ill

**On the Kudryashov–Sinelshchikov equation for waves in bubbly liquids**

**Randruüt, Merle** Physics letters A 2011 / p. 3687-3692 : ill

**On the long-time behavior of soliton ensembles**

**Salupere, Andrus; Engelbrecht, Jüri; Peterson, Pearu** Abstract book : Second IMACS Conference on Nonlinear Evolution Equations and Wave Phenomena : Computation and Theory : April 9-12, 2001, Athens, USA 2001 / ? p  
<https://www.sciencedirect.com/science/article/pii/S0378475402001787>

**On the long-time behaviour of soliton ensembles**

**Salupere, Andrus; Engelbrecht, Jüri; Peterson, Pearu** Mathematics and computers in simulation 2003 / p. 137-147 : ill

**On the numerical determination of solitary waves for systems with quartic potential and higher order dispersion**

**Salupere, Andrus; Ilison, Olari** Proceedings of the NSCM-11 : Nordic Seminar on Computational Mechanics, October 16-17, Royal Institute of Technology, Department of Structural Engineering 1998 / p. 106-109

**On the problem of periodicity and hidden solitons for the KdV model**

**Engelbrecht, Jüri; Salupere, Andrus** Chaos 2005 / [6] p. : ill

**On the propagation of 1D solitary waves in Mindlin-type microstructured solids**

**Tamm, Kert; Salupere, Andrus** Mathematics and computers in simulation 2012 / p. 1308-1320 : ill

<https://www.sciencedirect.com/science/article/pii/S0378475410002260>

**On the propagation of solitary pulses in microstructured materials**

**Ilison, Olari; Salupere, Andrus** Chaos, solitons & fractals 2006 / 1, p. 202-214 : ill

<https://ui.adsabs.harvard.edu/abs/2006CSF....29..202I/abstract>

**On the propagation of solitary waves in microstructured solids**

**Ilison, Olari; Salupere, Andrus** 21st International Congress of Theoretical and Applied Mechanics : August 15-21, 2004, Warsaw, Poland : ICTAM04 : abstracts and CD-ROM proceedings 2004 / p. 275

## **On the propagation of solitary waves in Mindlin-type microstructured solids**

Tamm, Kert; Salupere, Andrus Proceedings of the Estonian Academy of Sciences 2010 / 2, p. 118-125 : ill

## **Periodically forced solitonic structures in dispersive media**

Salupere, Andrus; Kukk, Martti Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2003 / 1, p. 145-156 : ill  
[https://artiklid.elnet.ee/record=b1011991\\*est](https://artiklid.elnet.ee/record=b1011991*est)

## **Propagation of sech2-type solitary waves in hierarchical KdV-type systems**

Ilison, Lauri; Salupere, Andrus Mathematics and computers in simulation 2009 / 11, p. 3314-3327 : ill  
<https://www.sciencedirect.com/science/article/pii/S0378475409001293>

## **Propagation of sech2-type solitary waves in higher-order KdV-type systems**

Ilison, Olari; Salupere, Andrus Chaos, solitons & fractals 2005 / p. 453-465 : ill

## **Propagation of solitary waves in microstructured media**

Salupere, Andrus; Engelbrecht, Jüri; Ilison, Olari; Ilison, Lauri Finno-Ugric International Conference of Mechanics : 29 May - 4 June, 2005, Rackeve, Hungary 2005 / ? p

## **Rogue waves - towards a unifying concept? : discussions and debates**

Ruban, Victor; Kodama, Yuji; Ruderman, Michael; Soomere, Tarmo The European physical journal. Special topics 2010 / p. 5-15  
[https://www.ester.ee/record=b2624547\\*est](https://www.ester.ee/record=b2624547*est)

## **Rogue waves in shallow water**

Soomere, Tarmo The European physical journal. Special topics 2010 / p. 81-96 : ill [https://www.ester.ee/record=b2624547\\*est](https://www.ester.ee/record=b2624547*est)

## **Runup of nonlinear asymmetric waves on a plane beach**

Didenkulova, Irina; Pelinovsky, Efim; Soomere, Tarmo; Zahibo, Narcisse Tsunami and nonlinear waves 2007 / p. 175-190 : ill  
[https://link.springer.com/chapter/10.1007/978-3-540-71256-5\\_8](https://link.springer.com/chapter/10.1007/978-3-540-71256-5_8)

## **Simulation of solitary wave propagation in carbon fibre reinforced polymer**

Lints, Martin; Salupere, Andrus; Dos Santos, Serge Proceedings of the Estonian Academy of Sciences 2015 / p. 297-303 : ill

## **Solitary waves governed by complicated nonlinearity and dispersion**

Salupere, Andrus; Engelbrecht, Jüri; Ilison, Olari; Ilison, Lauri List of abstracts FPU+50 : Nonlinear Waves 50 Years After Fermi-Pasta-Ulam : Rouen, France, June 21-25, 2005 2005 / p. 16-17

## **Solitary waves in dispersive solids**

Engelbrecht, Jüri; Salupere, Andrus; Peterson, Pearu; Maugin, Gerard 3rd EUROMECH Solid Mechanics Conference : book of abstracts 1997 / p. 336

## **Solitary waves in nonlinear microstructured materials**

Janno, Jaan; Engelbrecht, Jüri Journal of physics A : mathematical and general 2005 / p. 5159-5172 : ill

## **Soliton ensembles and solitonic structures**

Engelbrecht, Jüri; Salupere, Andrus Applicable analysis 2012 / p. 237-250 : ill  
<https://www.tandfonline.com/doi/full/10.1080/00036811.2011.608253>

## **Soliton trains in dispersive media**

Engelbrecht, Jüri; Peets, Tanel; Tamm, Kert Low temperature physics Fizika nizkikh temperatur 2018 / p. 887-892  
<https://doi.org/10.1063/1.5041436> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Solitonide mitu nägu : ettekanne konverentsil "50 aastat Küberneetika Instituudi loomisest" 3. septembril 2010**

Küberneetika maja saalis kell 15.00-17.00

Engelbrecht, Jüri Tallinna Tehnikaülikooli aastaraamat 2010 2011 / lk. 125-129

## **Solitonide kohtumine - õrn embus või vihane võitlus?**

Soomere, Tarmo Akadeemia 2008 / lk. 2287-2315 : ill [https://www.ester.ee/record=b1071914\\*est](https://www.ester.ee/record=b1071914*est)

## **Solitonuurijad Tallinnas**

Engelbrecht, Jüri Eesti Päevaleht 1996 / 29. mai, lk. 7: ill

## **Solitons and solitary waves in hierarchical Korteweg-de Vries type systems = Solitonid ja üksiklained hierarhilistes Kortewegi-de Vriesi tüüpiliste süsteemides**

Ilison, Lauri 2009 [https://www.ester.ee/record=b2499322\\*est](https://www.ester.ee/record=b2499322*est)

## Solitons and solitary waves in media with higher order dispersive and nonlinear effects

Ilison, Olari 2005 [https://www.esther.ee/record=b2073549\\*est](https://www.esther.ee/record=b2073549*est)

### Solitons and solitonic structures - what is visible and what is hidden

Salupere, Andrus Contributions to the Foundations of Multidisciplinary Research in Mechanics : papers presented during the 24th International Congress of Theoretical and Applied Mechanics ICTAM 2016, Montreal, August 22-26, 2016. Vol. 3 2017 / p. 2216-2217 : ill [http://iutam.org/wp-content/uploads/2017/02/ICTAM\\_Proceedings\\_Vol\\_3.pdf](http://iutam.org/wp-content/uploads/2017/02/ICTAM_Proceedings_Vol_3.pdf)

### Solitons in a perturbed Korteweg-de Vries system

Peterson, Pearu; Salupere, Andrus Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1997 / 1/2, p. 102-110

### Solitons in hierarchical Korteweg-de Vries type systems

Ilison, Lauri; Salupere, Andrus Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2003 / 1, p. 125-134 : ill [https://artiklid.elnet.ee/record=b1011947\\*est](https://artiklid.elnet.ee/record=b1011947*est)

### Solitons interactions

Soomere, Tarmo Encyclopedia of complexity and systems science. Volume 9. S 2009 / p. 8479-8504 : ill

### Solitons modelled by Boussinesq-type equations

Engelbrecht, Jüri; Peets, Tanel; Tamm, Kert Mechanics research communications 2018 / p. 62-65

<https://doi.org/10.1016/j.mechrescom.2017.05.008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### Spectral analysis of soliton formation

Engelbrecht, Jüri; Salupere, Andrus; Peipman, Tõnu; Maugin, Gerard Proceedings of the IUTAM/ISIMM Symposium on Structure and Dynamics of Nonlinear Waves in Fluids 1995

### Stress and solitary waves in solids

Engelbrecht, Jüri; Ratasoo, Arvi; Salupere, Andrus Proceedings of the Fourth Conference of the European Association for Structural Dynamics - EURODYN '99 : Prague, Czech Republic, 7-10 June 1999 1999 / p. 23-30

### Technique for detection of solitons in numerical experiments and virtual soliton

Salupere, Andrus Proceedings of the European Congress on Computational Methods in Applied Sciences and Engineering : ECCOMAS 2000 : 11-14 Sept. 2000, Barcelona, Spain 2000 / [17] p. [CD-ROM]

### Technique for detection of solitons in numerical experiments and virtual soliton

Salupere, Andrus Book of abstracts of the European Congress on Computational Methods in Applied Sciences and Engineering : ECCOMAS 2000 : 11-14 Sept. 2000, Barcelona, Spain 2000 / p. 774  
[https://www.researchgate.net/publication/287702254\\_Technique\\_for\\_detection\\_of\\_solitons\\_in\\_numerical\\_experiments\\_and\\_virtual\\_soliton\\_concept](https://www.researchgate.net/publication/287702254_Technique_for_detection_of_solitons_in_numerical_experiments_and_virtual_soliton_concept)

### The generation and dissipation of a solitonic wave that travels in the reverse direction to the flow in the Saint John River Estuary, New Brunswick, Canada

Delpeche, Nicole; Clarke, J. Hughes; Haigh, S International Conference on Complexity of Nonlinear Waves : October 5-7, 2009 : book of abstracts 2009 / p. 12

### The structure of algebraic solitons and compactons in the generalized Korteweg–de Vries equation

Pelinovsky, Efim; Talipova, Tatyana; Soomere, Tarmo Physica D : Nonlinear Phenomena 2021 / art. 132785, 7 p. : ill

<https://doi.org/10.1016/j.physd.2020.132785> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### Travelling waves in forced Korteweg-de Vries systems

Peterson, Pearu Tenth Nordic Seminar on Computational Mechanics, Tallinn Technical University, October 24-25, 1997 1997 / p. 315-317

### Weakly two-dimensional interaction of solitons in shallow water

Soomere, Tarmo; Engelbrecht, Jüri European journal of mechanics B. Fluids 2006 / p. 636-648 : ill

### Üksiklainete formeerumisest

Engelbrecht, Jüri; Peipman, Tõnu Tehnikauuringute areng Eesti NSV-s : vabariikliku konverentsi ettekannete teesid Tallinn, 15.-16. oktoober 1986 1986 / lk. 174-176 [https://www.esther.ee/record=b1258828\\*est](https://www.esther.ee/record=b1258828*est)

### К вопросу формирования солитонов

Peipman, Tõnu; Engelbrecht, Jüri Eesti NSV Teaduste Akadeemia toimetised. Füüsika. Matemaatika = Известия Академии наук Эстонской ССР. Физика. Математика = Proceedings of Academy of Sciences of the Estonian SSR. Physics. Mathematics 1985 / lk. 37-42 : joon., tab <https://www.etera.ee/zoom/13383/view?page=1&p=separate&tool=info> [https://www.esther.ee/record=b1264310\\*est](https://www.esther.ee/record=b1264310*est)

