

Condensed Matter Theory publications 1996-

Papers in Refereed Journals

- 1 “Base pair openings and temperature dependence of DNA flexibility”,
N. Theodorakopoulos and M. Peyrard,
Phys. Rev. Lett. 108, 078104 (2012); [arXiv:1201.6561](https://arxiv.org/abs/1201.6561)
[DOI:10.1103/PhysRevLett.108.078104](https://doi.org/10.1103/PhysRevLett.108.078104)
- 2 “Structural correlations and melting of B-DNA fibers”,
A. Wildes, N. Theodorakopoulos, J. Valle-Orero, S. Cuesta-López, J-L Garden and M. Peyrard,
Phys. Rev. E 83, 061923 (2011); [arXiv:1106.2632](https://arxiv.org/abs/1106.2632)
[DOI:10.1103/PhysRevE.83.061923](https://doi.org/10.1103/PhysRevE.83.061923)
- 3 “Bubbles, clusters and denaturation in genomic DNA: modeling, parametrization and efficient computation”,
N. Theodorakopoulos,
Journal of Nonlinear Mathematical Physics 18, Suppl. 2, pp. 429-447 (2011); [arXiv:1102.0259](https://arxiv.org/abs/1102.0259)
[DOI:10.1142/S1402925111001611](https://doi.org/10.1142/S1402925111001611)
- 4 “The thermal denaturation of DNA studied with neutron scattering”,
A. Wildes, N. Theodorakopoulos, J. Valle-Orero, S. Cuesta-López, J-L Garden and M. Peyrard,
Phys. Rev. Lett. 106, 048101 (2011); [arXiv:1101.1797](https://arxiv.org/abs/1101.1797)
[DOI:10.1103/PhysRevLett.106.048101](https://doi.org/10.1103/PhysRevLett.106.048101)
- 5 “Melting of genomic DNA: predictive modeling by nonlinear lattice dynamics”,
N. Theodorakopoulos,
Phys. Rev. E 82, 021905 (2010); [arXiv:1007.2728](https://arxiv.org/abs/1007.2728)
[DOI:10.1103/PhysRevE.82.021905](https://doi.org/10.1103/PhysRevE.82.021905)
- 6 “Theoretical Study of the O₂ Interaction with a Tetrahedral Al₄ Cluster”,
N.C. Bacalis, A. Metropoulos, and A. Gross,
J. Phys. Chem. A 114, 11746 (2010).
[DOI:10.1021/jp1052198](https://doi.org/10.1021/jp1052198)
- 7 “Shape of the geometrically active atomic states of carbon”,
Xiong Zhuang and N.C. Bacalis,
Chinese Physics B 19, 023601 (2010).
[DOI:10.1088/1674-1056/19/2/023601](https://doi.org/10.1088/1674-1056/19/2/023601)
- 8 “Theoretical investigation of the interaction of CH₄ with Al₂ and Al₃ neutral and charged clusters”,
E.I. Alexandrou, A. Gross and N.C. Bacalis,

J. Chem. Phys. 132, 154701 (2010).

[DOI:10.1063/1.3376174](https://doi.org/10.1063/1.3376174)

9 “Pressure-induced structural transformations in glass $0.3\text{Li}_2\text{O}-0.7\text{B}_2\text{O}_3$: A molecular dynamics study”,

A. Vegiri and E.I. Kamitsos,

Phys. Rev. B 82, 054114 (2010).

[DOI: 10.1103/PhysRevB.82.054114](https://doi.org/10.1103/PhysRevB.82.054114)

10 “On 4-point correlation functions in simple polymer models”,

J-G. Hagmann, K.K. Kozłowski, N. Theodorakopoulos and M. Peyrard,

Journal of Statistical Mechanics: Theory and Experiment P04011 (2009); [arXiv:0903.4816](https://arxiv.org/abs/0903.4816)

[DOI:10.1088/1742-5468/2009/04/P04011](https://doi.org/10.1088/1742-5468/2009/04/P04011)

11 “Properties of hydrogen terminated silicon nanocrystals via a transferable tight-binding Hamiltonian, based on ab-initio results”,

N.C. Bacalis and A.D. Zdetsis,

J. Math. Chem. 46, 962 (2009).

[DOI:10.1007/s10910-009-9557-x](https://doi.org/10.1007/s10910-009-9557-x)

12 “A generic procedure for determining atomic LS spectral terms and their LS eigenfunctions”,

Z. Xiong and N.C. Bacalis,

Chinese Physics B 18, 542 (2009).

[DOI:10.1088/1674-1056/18/2/026](https://doi.org/10.1088/1674-1056/18/2/026)

13 “Molecular dynamics investigation of mixed-alkali borate glasses: Short-range order structure and alkali-ion environments”,

A. Vegiri, C.P.E. Varsamis and E.I. Kamitsos,

Phys. Rev. B 80, 184202 (2009).

[DOI:10.1103/PhysRevB.80.184202](https://doi.org/10.1103/PhysRevB.80.184202)

14 “Inherent restrictions of the Hylleraas-Undheim-MacDonald higher roots, and minimization functionals at the excited states”,

N.C. Bacalis, Z. Xiong and D. Karaoulanis,

J. Comput. Meth. Sci. Eng. 8, 277 (2008) (Category: Invited Paper); [journal link](#)

15 “DNA denaturation bubbles at criticality”,

N. Theodorakopoulos,

Phys. Rev. E 77, 031919 (2008); [arXiv:0802.2194](https://arxiv.org/abs/0802.2194)

[DOI: 10.1103/PhysRevE.77.031919](https://doi.org/10.1103/PhysRevE.77.031919)

16 “Interaction of dioxygen with Al clusters and Al(111): A comparative theoretical study”,

C. Mosch, C. Koukounas, N.C. Bacalis, A. Metropoulos, A. Gross and A. Mavridis,

J. Phys. Chem. C 112, 6924 (2008).

[DOI: 10.1021/jp711991b](https://doi.org/10.1021/jp711991b)

- 17 “Modeling DNA beacons at the mesoscopic scale”,
J. Errami, M. Peyrard and N. Theodorakopoulos,
European Physical Journal E 23, 397 (2007); [arXiv:0706.2458](https://arxiv.org/abs/0706.2458)
[DOI: 10.1140/epje/i2007-10200-x](https://doi.org/10.1140/epje/i2007-10200-x)

- 18 “Radiative decay from doubly to singly excited states of He via generalization of Laguerre-type orbitals: A non-orthogonal formalism”,
Z. Xiong and N.C. Bacalis,
Chinese Phys. 16, 374 (2007).
[DOI: 10.1088/1009-1963/16/2/017](https://doi.org/10.1088/1009-1963/16/2/017)

- 19 “Analytic variationally optimized internally orthogonalized modified Laguerre-type orbitals in accurate atomic configuration interaction calculation”,
Z. Xiong and N.C. Bacalis,
Chinese Phys. 15, 992 (2006).

- 20 “Phase transitions in one dimension: are they *all* driven by domain walls?”,
N. Theodorakopoulos,
Physica D 216, 185 (2006).

- 21 “Structure and dynamics of ionic borate glasses”,
C.P.E. Varsamis, A. Vegiri, E.I. Kamitsos,
Phys. Chem. Glasses: Eur. J. Glass Sci. Technol. B 47, 419 (2006).

- 22 “Description of the lowest-energy surfaces of the CH+O system: Interpolation of ab initio configuration-interaction total energies by a tight-binding Hamiltonian”,
N.C. Bacalis, A. Metropoulos and D.A. Papaconstantopoulos,
Phys. Rev. A 71, 022707 (2005).

- 23 “Generalization of Laguerre orbitals toward an accurate, concise and practical analytic atomic wave function”,
Z. Xiong and N.C. Bacalis,
Commun. Mathem. Computer Chem. 53, 283 (2005).

- 24 “Analytic atomic wave functions of NMCSCF quality – and applications”,
Z. Xiong, M. Velgakis and N.C. Bacalis,
Int. J. Quantum Chem. 104, 418 (2005).

- 25 “Composition- and temperature-dependence of cesium-borate glasses by molecular dynamics”,
A. Vegiri, C.P.E. Varsamis and E.I. Kamitsos,
J. Chem. Phys. 123, 014508 (2005).

- 26 “Nonlinear structures and thermodynamic instabilities in a one-dimensional lattice system”,
N. Theodorakopoulos, M. Peyrard and R.S. MacKay,
Phys. Rev. Lett. 93, 258101 (2004).
[DOI: 10.1103/PhysRevLett.93.258101](https://doi.org/10.1103/PhysRevLett.93.258101)
- 27 “Reorientational relaxation and rotational-translational coupling in water clusters in a dc external electric field”,
A. Vegiri,
J. Mol. Liquids 110, 155 (2004).
- 28 “Dynamic response of liquid water to an external static electric field at T=250 K”,
A.Vegiri (Invited paper),
J. Mol. Liquids 112, 107 (2004).
- 29 “Origin of the enhanced structural and reorientational relaxation rates in the presence of relatively weak dc electric fields”,
A. Vegiri,
Pure Appl. Chem. 76, 215 (2004).
- 30 “Clustering and percolation in lithium borate glasses”,
A.Vegiri and C.P.E. Varsamis,
J. Chem. Phys. 120, 7689 (2004).
- 31 “Thermodynamic instabilities in one dimensional particle lattices: a finite-size scaling approach”,
N. Theodorakopoulos,
Phys. Rev. E 68, 026109 (2003).
- 32 “Thermal denaturation of a helicoidal DNA model”,
M. Barbi, S. Lepri, M. Peyrard and N. Theodorakopoulos,
Phys. Rev. E 68, 061909 (2003).
- 33 “Thermodynamic instabilities in one dimension: correlations, scaling and solitons”,
T. Dauxois, N. Theodorakopoulos and M. Peyrard,
J. Stat. Phys. 107, 869 (2002).
- 34 “Electric field induced transitions in water clusters”,
S. V. Shevkunov and A. Vegiri,
J. Mol. Struct. THEOCHEM 593, 19 (2002).
- 35 “Translational dynamics of a cold water cluster in the presence of an external uniform electric field”,
A. Vegiri,
J. Chem. Phys. 116, 8786 (2002); Virtual Journal of Biological Physics Research – May 2002.

- 36 “Molecular dynamics investigation of lithium borate glasses: local structure and ion dynamics”,
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
Phys. Rev. B 65, 104203 (2002).
- 37 “Cation dynamics in lithium borate glasses”,
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
J. Non-Cryst. Solids 307-310, 956 (2002).
- 38 “Transferable tight binding parameters for paramagnetic and ferromagnetic iron”,
N.C. Bacalis, D.A. Papaconstantopoulos, M.J. Mehl and M. Lach-hab,
Physica B 296, 125 (2001).
- 39 “Applications of the NRL-tight binding method to magnetic systems”,
M.J. Mehl, D.A. Papaconstantopoulos, I.I. Mazin, N.C. Bacalis and W.E. Pickett,
J. Appl. Phys. 89, 6880 (2001).
- 40 “Electronic apex locators: operation principles and clinical considerations”
J. Margelos, N.C. Bacalis and S. Perdicouris,
Odontostomatological Progress 55, 187 (2001).
- 41 “Equilibrium structures of the N=64 water cluster in the presence of external electric fields”,
S.V. Schevkunov and A. Vegiri,
J. Mol. Struct. THEOCHEM 574, 27 (2001).
- 42 “A molecular dynamics study of structural transitions in small water clusters in the presence of an external electric field”,
A. Vegiri and S.V. Shevkunov,
J. Chem. Phys. 115, 4175 (2001); Virtual Journal of Biological Physics Research – September 2001.
- 43 “A molecular dynamics study of Li-doped borate glasses”,
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
Cond. Matter Phys. 4, 119 (2001).
- 44 “Order of the phase transition in models of DNA thermal denaturation”,
N. Theodorakopoulos, T. Dauxois and M. Peyrard,
Phys. Rev. Lett. 85, 6 (2000).
- 45 “Existence of He_2^- negative ions with remote electrons in antibonding orbitals”,
N.C. Bacalis,
J. Phys. B 33, 1415 (2000).
- 46 “Comment on the formation of $\text{He}^{2-} \text{}^4\text{I}_g$ states”,

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47 “Determination of working length in endodontic therapy. How accurately can it be achieved with current methods”,

J. Margelos, N.C. Bacalis, and S. Perdicouris,
Stoma 28, 39 (2000).

48 “A revised many-body potential energy function for the description of the $H_3O^+(H_2O)_n$ clusters”,

S.V. Shevkunov, and A. Vegiri,
Mol. Phys. 98, 149 (2000).

49 “Hydration shell structure of the $OH^- (H_2O)_{n=1-15}$ clusters from a model potential function”,

A. Vegiri and S.V. Shevkunov,
J. Chem. Phys. 113, 8521 (2000); Virtual Journal of Biological Physics Research – November 2000.

50 “Cluster collisions of water tetramers: A classical dynamical study”,

A. Vegiri and S.C. Farantos,
Chem. Phys. 262, 337 (2000).

51 “Interpretation of the spin glass behaviour of diluted magnetic semiconductors below the nearest-neighbour percolation threshold via realistic Monte Carlo simulations”,

D. Karaoulanis, J.P. Xanthakis and N.C. Bacalis,
J. Magn. Magn. Mater. 221, 407 (2000).

52 “Solitons and non-dissipative diffusion”,

N. Theodorakopoulos and M. Peyrard,
Phys. Rev. Lett. 83, 2293 (1999).

53 “Examination of the structural properties of the $H_3O^+(H_2O)_n$ clusters in the (μ PT) grand canonical ensemble, by employing a new many-body potential energy function”,

S.V. Shevkunov, A. Vegiri,
J. Chem. Phys. 111, 9303 (1999).

54 “Device parameter optimization of strained Si channel SiGe/Si n-modfet's using a one-dimensional charge control model”,

G. Halkias and A. Vegiri,
IEEE Trans. Electron Devices 45, 2430 (1998).

55 “Theoretical investigation of metastable hydrogen de-excitation in collisions with He and Ne”,

A. Vegiri,

J. Phys. B 31, 473 (1998).

56 “Low temperature asymptotics of isotropic ferromagnetic chains at non-zero fields”,
N. Theodorakopoulos and N.C. Bacalis,
Phys. Rev. B 55, 52 (1997).

57 “Electronic structure of ordered and disordered Cu-Ag alloys”,
N.C. Bacalis, G. Anagnostopoulos, N.I. Papanicolaou and D.A. Papaconstantopoulos,
Phys. Rev. B 55, 2144 (1997).

58 “Wavevector-dependent Stoner approach to band ferromagnetism in Ni”,
N.C. Bacalis, N. Theodorakopoulos and D.A. Papaconstantopoulos,
Phys. Rev. B 55, 11391 (1997).

59 “Nonlinear dynamics of classical Heisenberg chains”,
V. Constantoudis and N. Theodorakopoulos,
Phys. Rev. E 55, 7612 (1997).

60 “Lyapunov exponent, stretching numbers and islands of stability of the kicked top”,
V. Constantoudis and N. Theodorakopoulos,
Phys. Rev. E 56, 5189 (1997).

61 “Variational predictability of diabatic, adiabatic, and impossible diatomic states”,
N.C. Bacalis,
J. Phys. B 29, 1587 (1996).

62 “The neutral parent states of the ionic He₂”,
N.C. Bacalis,
Phys. Rev. A 53, 3057 (1996).

63 “Thermodynamics of the Ishimori-Haldane-Fadeev ferromagnetic chain: The field-dependent case”,
N. Theodorakopoulos, N.C. Bacalis and Z. Xiong,
Phys. Rev. B 54, 4033 (1996).

64 “Biomonitoring human exposure to environmental carcinogenic chemicals”,
P.B. Farmer, O. Sepai, R. Lawrence, H. Autrup, P. Nielsen, A.B. Vestergard, R. Waters, C. Leuratti, N.J. Jones, J. Stone, R.A. Bann, J.H. van Delft, M.S. Steenwinkl, S.A. Kyrtopoulos, V.I. Souliotis, N. Theodorakopoulos, N.C. Bacalis, A.T. Natarajan, A.D. Tates, A. Haugen. A. Andreassen, S. Ovreb, D.E. Shuker, K.S. Amaning and P. Castelain,
Mutagenesis 11, 363 (1996).

65 “On the rovibrational spectra of the excimer HeH and its isotopes. A multistate close-coupling treatment”,
A. Vegiri,

J. Phys. B 29, 3611 (1996).

2. Papers in Proceedings of International and National Conferences

66 “Remarks on the Hylleraas-Undheim and MacDonald higher roots, and functionals having local minimum at the excited states”,

N.C. Bacalis, Z. Xiong, and D. Karaoulanis,

Proceedings of the ICCMSE-2008, 25-30 September 2008, Hersonissos, Crete, Greece, Computational Methods in Science and Engineering, Advances in Computational Science, AIP-CP1148, Vol. 2, pp. 372-375 (2009).

67 “Theoretical investigation of the interaction of CH_4 with Al_n neutral and charged clusters”

E.I. Alexandrou and N.C. Bacalis

Proceedings of the ICCMSE-2008, 25-30 September 2008, Hersonissos, Crete, Greece, Computational Methods in Science and Engineering, Advances in Computational Science, AIP-CP1148, Vol. 2, pp. 380-383 (2009).

68 “Utilizing the fact that among all trial functions orthogonal to an approximate ground state, Φ^0 , the closest, Φ^{1+} , to the exact first excited state, ψ^1 , has lower energy than the exact: $E[\Phi^{1+}] < E[\psi^1]$ ”,

N.C. Bacalis,

Proc. of the International Conference on Computational Methods in Science and Engineering (2007). Computation in Modern Science and Engineering, T.E. Simos and G. Maroulis (Eds.), AIP CP 963, vol. 2 Part A, pp. 6-9.

69 “Properties of silicon nanocrystals via a transferable tight-binding Hamiltonian, based on ab-initio results”,

A.D. Zdetsis and N.C. Bacalis,

Lecture Series on Computer and Computational Science, Brill Academic Publishers, T. Simos and G. Maroulis (Eds.), vol. 4, pp. 1477-1479 (2005).

70 “Minimal modeling of DNA thermal and mechanical instabilities”,

N. Theodorakopoulos,

Proceedings of “Mathematical Methods and Models of Continuum Biomechanics”, Oberwolfach Reports (European Mathematical Society), vol. 2, pp. 523-526 (2005).

71 “Lowest energy path of oxygen near CH: A combined configuration interaction and tight-binding approach”,

N.C. Bacalis, A. Metropoulos, D.A. Papaconstantopoulos,

Proc. Int. Conf. Computational Meth. Sci. and Eng., Athens (2004), Lecture Series on Computer and Computational Sciences, Vol 1, T.E. Simos and G. Maroulis (Eds.), VSP International Science Publishers (2004), pp. 1015-1021.

72 “Studies of ionic borate glasses by molecular dynamics”,
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
Proc. XIX Greek Conf. on Solid State Physics and Materials Science, C.B. Lioutas (Ed.),
Thessaloniki, Greece, (September 2004), pp. 609-612 (in Greek).

73 “Generalization of Laguerre orbitals toward an accurate, concise and practical analytic
atomic wave function”,
Z. Xiong, N.C. Bacalis,
Proc. Int. Conf. Comput. Meth. in Sci. and Eng. (2003), T.E. Simos (Ed.), World Scientific
(2003), pp. 687-691.

74 “Spectroscopic studies of mobile cations in glass”,
E.I. Kamitsos, C.P.E. Varsamis and A. Vegiri,
Proc. Int. Congr. Glass, Edinburgh, Scotland, 2001, vol. 1, pp. 234-246 (invited paper).

75 “A molecular dynamics study of lithium borate glasses”,
C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
Proc. XVI Greek Conf. on Solid State Physics, Nafplio, Greece, September 2000, pp. 121-124
(in Greek).

76 “Studies of hybridization by ab-initio atomic calculations”,
Z. Xiong and N.C. Bacalis,
Proc. XV Greek Conf. on Solid State Physics, Patras, 1999, pp. 243-247 (in Greek).

3. Book Chapters

77 “Statistical physics of localized vibrations”,
N. Theodorakopoulos,
in “Energy Localisation and Transfer”, T. Dauxois, A. Litvak-Hinenzon, R.S. MacKay & A.
Spanoudaki (Eds.), Advanced Series on Nonlinear Dynamics, Vol. 22, pp. 341-353, World
Scientific (2004).

78 “Phase transitions in homogeneous biopolymers: basic concepts and methods”,
N. Theodorakopoulos,
in “Localization and energy transfer in nonlinear systems”, L. Vazquez, R.S. MacKay and M.P.
Zorzano (Eds.), World Scientific (2003), pp. 130-152; cond-mat/0210188.

79 “Critical dynamics of DNA denaturation”,
N. Theodorakopoulos, M. Peyrard and T. Dauxois,
in “Localization and energy transfer in nonlinear systems”, L. Vazquez, R.S. MacKay and M.P.
Zorzano (Eds.), World Scientific (2003), pp. 239-247; cond-mat/0211287.

4. Dissertations

a. PhD theses

80 “[Investigation of the interaction of Aluminum clusters with methane](#)”,
E. Alexandrou; supervisors N.C. Bacalis and F. Roubani-Kalanzopoulou; School of Chemical Engineering, Department of Materials Science and Engineering, National Technical University of Athens (2009).

81 “[Modelling DNA hairpins](#)”,
J. Errami, supervisors M. Peyrard and N. Theodorakopoulos, ENS-Lyon & Universität Konstanz (2007).

82 “Low-lying atomic excitation spectrum via global optimization of the wave function (An atomic configuration-interaction via generalization of Laguerre type orbitals)”,
Z. Xiong, supervisors N.C. Bacalis and M.I. Velgakis, University of Patras, Engineering Science Department (2002).

83 “Nonlinear dynamics of magnetic systems”,
V. Constantoudis, supervisor N. Theodorakopoulos, University of Athens, Physics Department (1998).

5. Conference Presentations (2005-)

84 “Melting of genomic DNA sequences: predictive modeling by nonlinear lattice dynamics”,
N. Theodorakopoulos,
Coarse-Grain Mechanics of DNA: Bases to Chromosomes, CECAM workshop, Lyon (France), June 1-4, 2010 (invited talk).

85 “Neutron scattering signature of DNA fiber melting: a nonlinear lattice dynamics approach”,
N. Theodorakopoulos,
Localized Excitations in Nonlinear Complex Systems (LENCOS), Sevilla (Spain) July 14-17, 2009.

86 “Remarks on the Hylleraas-Undheim and MacDonald higher roots, and functionals having local minimum at the excited states”,
N.C. Bacalis*, Z. Xiong and D. Karaoulanis,
International Conference on Computational Methods in Science and Engineering (2008), Hersonissos, Crete, Greece, September 25-30, 2008 (invited talk).

87 “Investigation of the reaction between aluminum clusters and methane”,
E. Alexandrou*, H.M. Polatoglou and N.C. Bacalis,

International Conference on Computational Methods in Science and Engineering (2008), Hersonissos, Crete, Greece, September 25-30, 2008 (oral presentation).

88 “Statistical physics of DNA breathing, melting and unzipping”,
N. Theodorakopoulos,
Greek-Turkish Conference on Statistical Physics and Dynamical Systems,
Rhodos / Marmaris, September 11-17, 2008 (invited talk).

89 “[Mesoscopic modeling of DNA: The statistical physics of melting, unzipping and hairpin formation](#)”,
N. Theodorakopoulos,
1st meeting of the Greek Biological Physics / Biophysics Network, Athens, November 30 2007,
National Hellenic Research Foundation (oral).

90 “Investigation of the reaction between aluminum cluster and methane”,
E. Alexandrou*, I.D. Petsalakis, H.M. Polatoglou and N.C. Bacalis,
CECAM Workshop on “Catalysis from First Principles”, Lyon, France, September 11-14 2006
(poster).

91 “Structure and dynamics of ionic borate glasses”,
C.P.E. Varsamis, A. Vegiri*, and E.I. Kamitsos,
10th Int. Conf. on the Structure of Non-Crystalline Materials, Prague, Czech Republic, September
18-22, 2006 (poster).

92 “Properties of silicon nanocrystals via a transferable tight-binding Hamiltonian, based on
ab-initio results”,
A.D. Zdetsis, N.C. Bacalis*,
International Conference of Computational Methods in Sciences and Engineering, Loutraki,
Greece, 21-26 October, 2005 (oral).

93 “Minimal modeling of DNA thermal and mechanical instabilities”,
N. Theodorakopoulos,
Miniworkshop on Mathematical Methods and Models of Continuum Biomechanics,
Mathematisches Forschungsinstitut Oberwolfach, 20-26 February 2005 (invited).

94 “Phase transitions in one dimension: are they *all* driven by domain walls?”,
N. Theodorakopoulos,
Nonlinear Physics: Condensed Matter, Dynamical Systems and Biophysics, Institut Henri
Poincare, Paris, 30-31 May 2005 (invited).

6. Miscellaneous publications (Science popularization, Education & Science policy)

- 95 “Το μεγάλο φιάσκο της NASA”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.44, [20/12/2010](#)
- 96 “Charter schools: Ιδιωτικοποίηση της Παιδείας στην Αμερική”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.40, [20/11/2010](#)
- 97 “Φοιτητικές κινητοποιήσεις στην Αγγλία”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.39, [13/11/2010](#)
- 98 “Η εκπαίδευση ως εξαγωγίμο προϊόν”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.32, [25/9/2010](#)
- 99 “Στα nano-γήπεδα του άνθρακα”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.28, [28/8/2010](#)
- 100 “Ο θαυμαστός κόσμος των αμμόλοφων”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.21, [10/7/2010](#)
- 101 “Αυτός ο κόσμος ο μικρός, ο μέγας: Τα εικονικά και τα πραγματικά κοινωνικά δίκτυα”,
Α. Βεγίρη,
Δρόμος της Αριστεράς, φ.7, [2/4/2010](#)
- 102 “Ο ανορθολογισμός μιάς συγχώνευσης”,
Ν. Θεοδωρακόπουλος, Ε.Ι. Καμίτσος, Γ. Χρυσικός,
Ελευθεροτυπία, [28/7/2009](#) .
- 103 “Δαπάνες Ε&Α, εξωστρέφεια και βελτιστοποίηση λειτουργίας του ακαδημαϊκού –
ερευνητικού συστήματος”,
Ν. Θεοδωρακόπουλος,
Συμπόσιο Έρευνας & Τεχνολογίας, Ένωση Ελλήνων Ερευνητών, Αθήνα, [27-28/1/2005](#) .