

## Publication list

Name: G. Tsironis

Publications in refereed journals and proceedings of International Conferences:

A. Until 2004

- *Papers*
- 1. "Proposal for Experiments for the Investigation of Exciton Coherence", V. M. Kenkre, **G. P. Tsironis**, J. Lumin. **32**, 615 (1984).
- 
- 2. "Initial Condition Effects on the Time Dependence of the Signal in Transient Grating Experiments", V. M. Kenkre and **G. P. Tsironis**, J. Lumin. **34**, 107 (1985).
- 
- 3. "Coherence Investigations and Initial Condition Effects in Transient Gratings in Molecular Crystals", V. M. Kenkre, **G. P. Tsironis**, D. Schmid, J. de Physique **C7**, 91 (1985).
- 
- 4. "Nonlinear Effects in Quasielastic Neutron Scattering: Exact Line-Shape for a Dimer", V. M. Kenkre and G. P. Tsironis, Phys. Rev. B **35**, 1473 (1987).
- 
- 5. "Initial Condition Effects in the Evolution of a Nonlinear Dimer", **G. P. Tsironis** and V. M. Kenkre, Phys. Lett. A **127**, 209 (1988).
- 
- 6. "Effects of Dissipation on Nonlinearity in Transport: Evolution and Integrability Properties in a Molecular Dimer", **G. P. Tsironis**, V. M. Kenkre and D. Finley, Phys. Rev. A **37**, 4474 (1988).
- 
- 7. "Color Induced Transition to a non-Conventional Diffusion Regime", **G. P. Tsironis** and P. Grigolini, Phys. Rev. Lett. **61**, 7 (1988).
- 
- 8. "Escape over a Potential Barrier in the Presence of Colored Noise: Predictions of a Local Linearization Theory", **G. P. Tsironis** and P. Grigolini, Phys. Rev. A **38**, 3749 (1988).
- 
- 9. "Escape Over a Potential Barrier Driven by Colored Noise: Large but Finite Correlation Times", F. J. de la Rubia, E. Peacock-López, G. P. Tsironis, K. Lindenberg, L. Ramirez-Piscina and J. M. Sancho, Phys. Rev. A-RC **38**, 3827 (1988).
- 
- 10. "First Passage Times for Nonlinear Evolution in the Presence of Dichotomous Noise", **G. P. Tsironis** and C. Van den Broeck, Phys. Rev. A **38**, 4362 (1988).
- 
- 11. "On the Description of the Temperature Dependence of the Transient Grating Signal in Molecular Crystals", **G. P. Tsironis** and V. M. Kenkre, Z. Phys. B **73**, 231 (1988).
- 
- 12. "Proton Conductivity in Quasi-one Dimensional Hydrogen-Bonded systems: A Nonlinear Approach", **G. P. Tsironis** and St. Pnevmatikos, Phys. Rev. B **39**, 7161 (1989).
- 
- 13. "Theory of Fluorescence Depolarization of Dimers from the Nonlinear Schrödinger Equation", V. M. Kenkre and **G. P. Tsironis**, Chem. Phys. **128**, 219 (1989).
-

- 14. "Protonic Conductivity: A New Application of Soliton Theory", St. Pnevmatikos and **G. P. Tsironis**, J. de Physique **50**, C3-3 (1989).
- 15. "Comment on Bistability and Colored Noise in Nonequilibrium Systems: Theory versus Precise Numerics", **G. P. Tsironis**, K. Lindenberg, E. Peacock-Lopez and B. J. West, Phys. Rev. Lett. **63**, 214 (1989).
- 16. Reply to Comment on "Colored-Induced Transition to a Nonconventional Diffusion Regime", **G. P. Tsironis**, P. Grigolini, R. Mannella, V. Palleschi and K. Lindenberg, Phys. Rev. Lett. **63**, 217 (1989).
- 17. "First-Passage Time in a Bistable Potential", L. Ramirez-Piscina, J. M. Sancho, F. J. de la Rubia, K. Lindenberg and **G. P. Tsironis**, Phys. Rev. A **40**, 2120 (1989).
- 18. "Bistable Systems Driven by Colored Noise", K. Lindenberg, B. J. West and **G. P. Tsironis**, Reviews of Solid State Science **3**, 143 (1989).
- 19. "Nonlinear Quasiparticles in Hydrogen-Bonded Systems", St. Pnevmatikos, **G. P. Tsironis** and A. V. Zolotaryuk, J. Mol. Liquids **41**, 85 (1989).
- 20. "Evidence for Solitons in Hydrogen-Bonded Networks", E. Nylund and **G. P. Tsironis**, Phys. Rev. Lett. **66**, 1886 (1991).
- 21. "Measurements of a Hamiltonian System and Their Description by a Disursive Model", T. Chen, A. Gerasimov, B. Cole, R. Johnson, I. Kourbanis, C. Manz, N. Merminga, L. Michelotti, S. Peggs, F. Pilat, S. Pruss, C. Saltmarsh, T. Satogata, R. Talman, C. Trahern and **G. P. Tsironis**, Phys. Rev. Lett. **68**, 33 (1992).
- 22. "Driven Response of a Trapped Particle Beam", T. Satogata, T. Chen, B. Cole, D. Finley, A. Gerasimov, G. Goderre, M. Harrison, R. Johnson, I. Kourbanis, C. Manz, N. Merminga, L. Michelotti, S. Peggs, F. Pilat, S. Pruss, C. Saltmarsh, S. Saritepe, R. Talman, C. G. Trahern and **G. P. Tsironis**, Phys. Rev. Lett. **68**, 1838 (1992).
- 23. "Tuning the Kenkre-Campbell Selftrapping Transition", M. I. Molina and **G. P. Tsironis**, Phys. Rev. A **46**, 1124 (1992).
- 24. "Applications of Selftrapping in Optically Coupled Devices", **G. P. Tsironis**, M. I. Molina and W. Deering, Physica D **68**, 135, (1993).
- 25. "Proton Dynamics in Hydrogen-Bonded Systems", E. S. Nylund, K. Lindenberg and **G. P. Tsironis**, Journal of Statistical Physics **70**, 163 (1993).
- 26. "Dynamics of Selftrapping in the Discrete Nonlinear Schrödinger Equation", M. I. Molina and **G. P. Tsironis**, Physica D, **65**, 267 (1993).
- 27. "Optical Switching in Three Coupler Configurations", M. I. Molina, W. Deering and **G. P. Tsironis**, Physica D, **66**, 135 (1993).
- 28. "Dynamical Domains of a Nondegenerate Nonlinear Dimer", **G. P. Tsironis**, Physics Letters A **173**, 381 (1993).
- 29. "Directional Couplers with Linear and Nonlinear Elements", W. D. Deering, M. I. Molina and **G. P. Tsironis** Appl. Phys. Lett., **62**, 2471 (1993).
-

- 30. "Nonlinear Impurities in a Linear Chain", M. I. Molina and **G. P. Tsironis**, Phys. Rev. B-RC, **47**, 15330 (1993).
- 
- 31. "Non-adiabatic nonlinear impurities in linear hosts", D. Chen, M. I. Molina and **G. P. Tsironis**, J. of Phys: Conden. Matter **5**, 8689 (1993).
- 
- 32. "Hamiltonian Approach to Molecular Dissociation in a Coupled Nonlinear Electron-Vibron System", D. Hennig, **G. P. Tsironis** and H. Gabriel, Phys. Rev. E **49**, 3653 (1994).
- 
- 33. "Absence of Localization in a Nonlinear Random Binary Alloy", M. I. Molina and **G. P. Tsironis**, Phys. Rev. Lett. **73**, 464 (1994).
- 
- 34. "Wave Propagation in Periodic Nonlinear Dielectric Superlattices", D. Hennig, H. Gabriel, **G. P. Tsironis** and M. I. Molina, Appl. Phys. Lett. **64**, 2934 (1994).
- 
- 35. "A Nonlinear Quasiperiodic Kronig-Penney Model", D. Hennig, **G. P. Tsironis**, M. I. Molina and H. Gabriel, Phys. Lett. A. **190**, 259 (1994).
- 
- 36. "Wave Propagation in a Nonlinear Quasiperiodic Kronig-Penney Model", N. Sun, D. Hennig, M. I. Molina and **G. P. Tsironis**, J. Phys. Condensed Matter, **6**, 7741 (1994).
- 
- 37. "Generalized Nonlinear Impurity in a Linear Chain", **G. P. Tsironis**, M. I. Molina and D. Hennig, Phys. Rev. E **50**, 2365 (1994).
- 
- 38. "Self-trapping properties and recurrence phenomena in a modified discrete nonlinear Schrödinger equation", G. Kalosakas, **G. P. Tsironis** and E. N. Economou, J. Phys: Condensed Matter **6**, 7847 (1994).
- 
- 39. "Stationary States in a Doubly Nonlinear Trimer Model of Optical Couplers", J. C. Eilbeck, **G. P. Tsironis** and S. K. Turitsyn, Physica Scripta **52**, 386 (1995).
- 40. "Multistability of Conductance in a Doped Semiconductor Superlattice", Ning. S. Sun and **G. P. Tsironis**, Phys. Rev. B-RC, **51**, 11221 (1995).
- 
- 41. "Spatial Properties of Integrable and Nonintegrable Discrete Nonlinear Schrödinger Equations", D. Hennig, N. G. Sun, H. Gabriel and **G. P. Tsironis**, Phys. Rev. E **52**, 255 (1995).
- 
- 42. "Resonant States in Paired Correlated Binary Alloys: Hamiltonian Map Approach", F. Izrailev, T. Kottos and **G. P. Tsironis**, Phys. Rev. B **52**, 3274 (1995).
- 
- 43. "Breather-like Impurity Modes in Nonlinear Lattices", K. Ø. Rasmussen, D. Hennig, **G. P. Tsironis** and H. Gabriel, Phys. Rev. E-RC, **52**, 4628 (1995).
- 
- 44. "Disorder in the Discrete Nonlinear Schrödinger Equation", M. I. Molina and **G. P. Tsironis**, Intern. J. of Mod. Phys. B **9**, 1899 (1995).
- 
- 45. "Finite Temperature Two-State Small Polaron Dynamics: Averaged Hamiltonian Approach", Z. Ivic, **G. P. Tsironis**, D. Kostic and M. Lalic, J. Phys: Condensed Matter, **8**, 157 (1996).
- 
- 46. "Dynamics of Coupled Gap Solitons", V. Konotop and **G. P. Tsironis**, Phys. Rev. E, **53**, 5393 (1996).
- 
- 47. "Vectorial Stochastic Motion Driven by Dichotomous Noise", T. E. Dialynas and **G. P. Tsironis**, Phys. Lett. A, **218**, 292 (1996).

- 48. "Scaling Properties of Localization Length in Paired Correlated Binary Alloys of Finite Size", F. M. Izrailev, T. Kottos and G. P. Tsironis, *J. Phys. Condensed Matter*, **8**, 2823 (1996).
- 49. "Quantum Diffusion and Localization of Wavepackets in Disordered Media", F. M. Izrailev, T. Kottos, A. Politi, R. Ruffo and **G. P. Tsironis**, *Europhys. Lett.* **34**, 441 (1996).
- 50. "Dynamics in Chains Randomly Doped with Nonadiabatic Impurities", D. Chen, M. I. Molina and **G. P. Tsironis**, *J. Phys. Condensed Matter*, **8**, 6917 (1996).
- 51. "Breather mobility in discrete  $\phi^4$  nonlinear lattices", Ding Chen, S. Aubry and **G. P. Tsironis**, *Phys. Rev. Lett.* **77**, 4776 (1996).
- 52. "Slow Relaxation Phenomena Induced by Breathers in Nonlinear Lattices", **G. P. Tsironis** and S. Aubry, *Phys. Rev. Lett.* **77**, 5225 (1996).
- 53. "Observations of Dispersive Transport in Synchrotrons", B. Cole and **G. P. Tsironis**, *Particle Accelerators*, **55**, 283 (1996).
- 54. "Selftrapping and Stationary Properties of a Generalized Nonlinear Schrödinger Equation", G. Kalosakas, P. Maniadis and **G. P. Tsironis**, *Physica Scripta* **55**, 523 (1997).
- 55. "Ratchet and Switching Effects in Stochastic Kink Dynamics", A. V. Savin, **G. P. Tsironis** and A. V. Zolotaryuk, *Phys. Lett. A* **229**, 279 (1997).
- 56. "Evolution of Wave Packets in Quasi-One-Dimensional and Quasi-One-Dimensional Disordered Models: Diffusion Versus Localisation", F. Izrailev, T. Kottos, A. Politi and **G. P. Tsironis**, *Phys. Rev. E*, **55**, 4951 (1997).
- 57. "Soliton Propagation in a Hydrogen-Bonded Chain with mass Variation", G. Kalosakas, A. V. Zolotaryuk, **G. P. Tsironis** and E. N. Economou, *Phys. Rev. E*, **56**, 1088 (1997).
- 58. "Hamiltonian Study of the Transport Properties of Disordered Correlated Kronig-Penney Alloys", T. Kottos, F. Izrailev and **G. P. Tsironis**, *J. Phys. Condensed Matter*, **9**, 1777 (1997).
- 59. "Reversal Effects in Stochastic Kink Dynamics", A. V. Savin, **G. P. Tsironis** and A. V. Zolotaryuk, *Phys. Rev. E*, **56**, 2457 (1997).
- 60. "Quantum Vibrational Impurity Embedded in a One-Dimensional Chain", M. I. Molina, J. A. Rössler and **G. P. Tsironis**, *Phys. Lett. A*, **234**, 59 (1997).
- 61. "Ratchet Motion Induced by Deterministic and Correlated Stochastic Forces", T. E. Dialynas, Katja Lindenberg and **G. P. Tsironis**, *Phys. Rev. E*, **56**, 3976 (1997).
- 62. "The Antiadiabatic Limit of the Holstein Model with a Nonlinear Phonon Hamiltonian: Localization Properties", R. Roncaglia and **G. P. Tsironis**, *Physica D*, **113**, 318 (1998).
- 63. "Exact Solution of a Generalized Nonlinear Schrödinger Equation Dimer", P. L. Christiansen, P. Maniadis and **G. P. Tsironis**, *Physica Scripta*, **57**, 192 (1998).
- 64. "Fractal Dimensions in Tunneling Processes and Effects of Environmental Fluctuations", V. I. Kovanis, P. Grigolini, V. M. Kenkre and **G. P. Tsironis**, *Fractals*, **6**, 59 (1998).

- 65. "Discrete Quantum Motors", R. Roncaglia and **G. P. Tsironis**, Phys. Rev. Lett. **81**, 10 (1998).
- 66. "Polaron Solutions and Normal Mode Analysis of the Semiclassical Holstein Model", G. Kalosakas, S. Aubry and **G. P. Tsironis**, Phys. Rev. B **58**, 3094 (1998).
- 67. "Spatio-temporal Organization of Coupled Nonlinear Pendula through Impurities", A. Gavrielides, T. Kottos, V. Kovanis and **G. P. Tsironis**, Phys. Rev. E **58**, 5529 (1998).
- 68. "Self-organization of Coupled Nonlinear Pendula through Impurities", A. Gavrielides, T. Kottos, V. Kovanis and **G. P. Tsironis**, Europhysics Lett. **44**, 559 (1998).
- 69. "Possibility of observation of polaron normal modes in the far-infrared spectrum of acetanilide and related organics", G. Kalosakas, S. Aubry and **G. P. Tsironis**, Phys. Lett. A **247**, 413 (1998).
- 70. "Energy relaxation in discrete nonlinear lattices", A. Bikaki, N. Voulgarakis, S. Aubry and **G. P. Tsironis**, Phys. Rev. E **59**, 1234 (1999).
- 71. "Wave Transmission in Nonlinear Lattices", D. Hennig and **G. P. Tsironis**, Physics Reports **307** (5-6), 333 (1999).
- 72. "Directional Newtonian Motion and Reversals of Molecular Motors", G. Stratopoulos, T. Dialynas and **G. P. Tsironis**, Phys. Lett. A **252**, 151 (1999).
- 73. "Soliton-breather reaction pathways", T. Maniadis, **G. P. Tsironis**, A. R. Bishop and A. V. Zolotaryuk, Phys. Rev. E **60**, 7618 (1999).
- 74. "Dependence of thermal conductivity on discrete breathers in lattices", **G. P. Tsironis**, A. R. Bishop, A. Savin and A. V. Zolotaryuk, Phys. Rev. E **60**, 6610 (1999).
- 75. "Thermal Transient Gratings as Probes for Intrincic Localized Modes" R. Roncaglia and **G. P. Tsironis**, Physica Scripta **61**, 123 (2000).
- 76. "Impurity-induced stabilization of solitons in arrays of parametrically driven nonlinear oscillators", N. V. Alexeeva, I. V. Barashenkov and **G. P. Tsironis**, Phys. Rev. Lett. **84**, 3053 (2000).
- 77. "Discrete Nonlinear Schrödinger Breathers in a Phonon Bath", K. O. Rasmussen, S. Aubry, A. R. Bishop and **G. P. Tsironis**, Eur. Jour. Phys. B **15**, 169 (2000).
- 78. "Compactlike breathers: Bridging the continuous with the anticontinuous limit", M. Eleftheriou, B. Dey and **G. P. Tsironis**, Phys. Rev. E, **62**, 7540 (2000).
- 79. "Stationary and dynamical properties of polarons in the anharmonic Holstein model", N. Voulgarakis and **G. P. Tsironis**, Phys. Rev. B **63** 014302 (2001).
- 80. "Discrete gap breathers in chains with strong hydrogen bonding", A. V. Zolotaryuk, P. Maniadis and **G. P. Tsironis**, Physica B **296**, 251 (2001).
- 81. "Analytical conditions for targeted energy transfer", A. Aubry, G. Kopidakis, A. M. Morgante and **G. P. Tsironis**, Physica B **296**, 222 (2001).

- 82. "Taming spatiotemporal chaos by impurities in the parametrically driven damped nonlinear Schrödinger equation", N. V. Alexeeva, I. V. Barashenkov and **G. P. Tsironis**, J. of Nonlinear Mathematical Physics, **8** supplement, 5 (2001).
- 83. "Multiquanta breather model for PtCl", N. K. Voulgarakis, G. Kalosakas, A. R. Bishop **and G. P. Tsironis**, Phys. Rev. B **64**, 020301-1 (2001).
- 84. "Targeted Energy Transfer through Discrete Breathers in Nonlinear Systems", G. Kopidakis, S. Aubry **and G. P. Tsironis**, Phys. Rev. Lett **87** 165501 (2001).
- 85. "Polaronic electron transfer in beta-sheet protein models", N. K. Voulgarakis, D. Hennig, H. Gabriel **and G. P. Tsironis**, J. Phys.: Condens. Matter **13** 9821 (2001).
- 86. "Resonant motion of discrete breathers in curved nonlinear chains", R. Reigada, M. Ibanes, J. M. Sancho **and G. P. Tsironis**, J. Phys. A:Math. Gen. **34**, 8465 (2001).
- 87. "Dynamical properties of discrete breathers in curved chains with first and second neighbor interactions", M. Ibanes, J. M. Sancho **and G. P. Tsironis**, Phys. Rev. E **65**, 041902 (2002).
- 88. "Shape profile of compact-like discrete breathers in nonlinear dispersive lattice systems" B. Dey, M. Eleftheriou, S. Flach **and G. P. Tsironis**, Phys. Rev. E, **65** 017601 (2002).
- 89. "Transport of localized vibrational energy in biopolymer models with rigidity", **G. P. Tsironis**, M. Ibanes and J. M. Sancho, Europhysics Letters, **57**, 697 (2002).
- 90. "An algebraic approach to discrete breather construction", **G. P. Tsironis**, J. Phys. A, **35**, 951 (2002).
- 91. "Heat conduction in one-dimensional systems with hard-point inter-particle interactions", A. V. Savin, **G. P. Tsironis** and A. V. Zolotaryuk, Phs. Rev. Lett, **88**, 154301 (2002).
- 92. "Existence and stability of discrete gap breathers in a diatomic beta FPU chain. P. Maniadis, A. V. Zolotaryuk **and G. P. Tsironis**, Phys. Rev. E **67**, 046612 (2003).
- 93. "Confinement of discrete breathers in inhomogeneously pro\_led nonlinear chains", I. Bena, A. Saxena, **G. P. Tsironis**, M. Ibanes, J. M. Sancho, Phys. Rev. E **67**, 037601 (2003).
- 94. "If discrete breathers is the answer, what is the question?", invited artice, **G. P. Tsironis**, Chaos **13**, 657 (2003).
- 95. "Breathers in a one-dimensional nonlinear thermalized lattice with a gap", M. Eleftheriou, S. Flach, **G. P. Tsironis**, Physica D **186**, 20 (2003).
- 96. "Computational investigation of intrinsic localization in crystalline silicon", N. K. Voulgarakis, G. Hadjisavvas, P. C. Kelires **and G. P. Tsironis**, Phys. Rev. B **69**, 113201 (2004).
- *Proceedings*

## B. 2005-2012

- *Papers*

- 97. "Breather lattices as pseudo-spin glasses", M. Eleftheriou and **G. P. Tsironis**, *Physica Scripta* **71**, 318 (2005).
- 
- 98. "Energy localization and molecular dissociation", S. Takeno and **G. P. Tsironis**, *Phys. Lett. A* **343**, 274 (2005).
- 
- 99. "Coupled nonlinear Schrödinger field equations for electromagnetic wave propagation in nonlinear left-handed materials", N. Lazarides and **G. P. Tsironis**, *Phys. Rev. E* **71**, 036614 (2005).
- 
- 100. "Thermal conductivity of a classical on dimensional Heisenberg spin model", A. V. Savin, G. P. Tsironis and X. Zotos, *Phys. Rev. B* **72**, 140402(R) (2005).
- 
- 101. "Biphonons in the  $\beta$ -Fermi-Pasta-Ulam model", Z. Ivic and G. P. Tsironis, *Physica D* **216**, 200 (2006).
- 
- 102. "Discrete breathers in nonlinear magnetic metamaterials", N. Lazarides, M. Eleftheriou and **G. P. Tsironis**, *Phys. Rev. Lett.* **97**, 157406 (2006).
- 
- 103. "Kinesin as an electrostatic machine", A. Ciudad, J. M. Sancho and **G. P. Tsironis**, *J. of Biological Physics*, **32**, 455 (2006).
- 
- 104. "rf SQUID metamaterials", N. Lazarides and **G. P. Tsironis**, *Appl. Phys. Lett.* **90**, 163501 (2007).
- 
- 105. "Self-focussing and envelope pulse generation in nonlinear magnetic metamaterials", I. Kourakis, N. Lazarides and **G. P. Tsironis**, *Phys. Rev. E* **75**, 067601 (2007).
- 
- 106. "Thermal conductivity of a classical spin-phonon model", A. V. Savin, **G. P. Tsironis** and X. Zotos, *Phys. Rev. B* **75**, 214305 (2007).
- 
- 107. "Semiclassical and quantum polarons in Acetanilide", P. Hamm and **G. P. Tsironis**, invited review, in "Nonlinear waves in complex systems", Eds. J. G. Caputo and M. P. Soerensen, *Eur. Phys. J. Special Topics* **147**, 303-331 (2007).
- 
- 108. "Magnetoinductive breathers in metamaterials", M. Elefteriou, N. Lazarides, **G. P. Tsironis**, *Phys. Rev. E* **77** 036608 (2008).
- 
- 109. "Left-handed metamaterials with saturable nonlinearity", A. Maluckov, Lj. Hadžievski, N. Lazarides, **G.P. Tsironis**, *Phys. Rev. E* **77**, 046607 (2008).
- 
- 110. "Surface breathers in discrete magnetic metamaterials", N. Lazarides, **G. P. Tsironis** and Y. S. Kivshar, *Phys. Rev. E* **77** (R) (2008).
- 
- 111. "Dissipative discrete breathers in rf SQUID metamaterials", N. Lazarides, **G. P. Tsironis** and M. Eleftheriou, *Nonl. Phenom. in Complex Syst.* **11**, 250 (2008).
- 
- 112. "Barrier crossing to the small Holstein polaron regime", P. Hamm and **G. P. Tsironis**, *Phys. Rev. B* **78**, 092301 (2008).
- 
- 113. "Extreme events in discrete nonlinear lattices", A. Maluckov, Lj. Hadžievski, N. Lazarides, **G.P. Tsironis**, *Phys. Rev. E* **79**, 025601 (2009).
-

- 114. "Discrete breathers and solitons in metamaterials, **G. P. Tsironis**, N. Lazarides and M. Eleftheriou, Invited Book Chapter, in "Nonlinearities in Periodic Structures and Metamaterials", C. Denz, S. Flach, and Y. Kivshar ed., pp 101-116, (Springer, 2009)
- 115. "Electrostatic analysis of charge interactions in proteins", **G. P. Tsironis**, A. Ciudad and J. M. Sancho, Intern. Journal of Quantum Chemistry, **110**, 233, (2009).
- 116. "Dissipative Breathers in rf SQUID Metamaterials", **G. P. Tsironis**, N. Lazarides, and M. Eleftheriou, PIERS Online Vol. 5 No. 1 pp: 26-30 (2009).
- 117. "Surface magnetoinductive breathers in two-dimensional magnetic metamaterials", M. Eleftheriou, N. Lazarides, **G. P. Tsironis**, and Y. S. Kivshar, Phys. Rev. E **80** 017601 (2009).
- 118. "Bulk and surface magnetoinductive breathers in binary metamaterials", M. I. Molina, N. Lazarides and **G. P. Tsironis**, Phys. Rev. E, **80**, 046605 (2009).
- 119. "Breather induction by modulational instability in binary metamaterials", N. Lazarides, M. I. Molina, and **G. P. Tsironis**, Acta Physica Polonica A **116**, 635 (2009).
- 120. "Multistability and localization in coupled nonlinear split-ring resonators", N. Lazarides, M. I. Molina, **G. P. Tsironis** and Y. S. Kivshar, Phys. Lett. A **374**, 2095 (2010).
- 121. "Driven linear modes: Analytical solutions for finite discrete systems", N. Lazarides and **G. P. Tsironis**, Phys. Lett. A, **374**, 2179 (2010).
- 122. "Bulk and surface breathers in binary metamaterials", N. Lazarides, M. I. Molina, and **G. P. Tsironis**, Physica B **405**, 3007 (2010).
- 123. "Discrete nonlinear Schrödinger equation dynamics in complex networks", F. Perakis and **G. P. Tsironis**, Phys. Let. A **375**, 676 (2011).
- 124. "Exact dynamics for fully connected nonlinear networks", **G. P. Tsironis**, Phys. Let. A **375**, 1304 (2011).
- 125. "Nonlinear magnetoinductive transmission lines", N. Lazarides, V. Paltoglou and **G. P. Tsironis**, arXive.1101.2519v1. (2011)
- 126. "Strain-induced interface reconstruction in epitaxial heterostructures", N. Lazarides, V. Paltoglou, P. Maniadis, **G. P. Tsironis** and C. Panagopoulos, ArXive:submit/0242039 (2012)
- 127. Optical surface modes in the presence of nonlinearity and disorder, M. I. Molina, N. Lazarides and G. P. Tsironis, Phys. Rev. E. 85, 017601 (2012).
- 128. Luneburg lens waveguid networks, M. Mattheakis, G. P. Tsironis and V. I. Kovanis, invited article for the the special volume "Switchable and recon\_gurable metamaterials", J. Opt. 14, 114005 (2012).
- *Proceedings*