

1. Daphne Davelou, Georgios Kopidakis, Efthimios Kaxiras, and Ioannis N. Remediakis, “Nanoribbon Edges of Transition-metal Dichalcogenides: Stability and Electronic Properties”, *Phys. Rev. B*, **96**, 165436 (2017).
2. Aristea E. Maniadaki and Georgios Kopidakis, “Hydrogen on Hybrid MoS<sub>2</sub>/Graphene Nanostructures”, *Phys. Status Solidi Rapid Res. Lett.*, **10**, 453 (2016).
3. Georgios D. Barmparis, Georgios Kopidakis, and Ioannis N. Remediakis, “Shape-dependent Single-electron Levels for Au Nanoparticles”, *Materials*, **9**, 300 (2016).
4. Aristea E. Maniadaki, Georgios Kopidakis, and Ioannis N. Remediakis, “Strain Engineering of Electronic Properties of Transition Metal Dichalcogenide Monolayers”, *Solid State Commun.*, **227**, 33 (2016).
5. Daphne Davelou, Georgios Kopidakis, George Kioseoglou, and Ioannis N. Remediakis, “MoS<sub>2</sub> Nanostructures: Semiconductors with Metallic Edges”, *Solid State Commun.*, **192**, 42 (2014).
6. N.V. Galanis, I.N. Remediakis, and G. Kopidakis, “Structure and Mechanical Properties of Ultra-Nanocrystalline Diamond and Nanocrystalline Cu from Atomistic Simulations”, *Mechanics of Materials*, **67**, 79 (2013).
7. R.P. Webb, J.M. Dailey, R.J. Manning, G.D. Maxwell, A.J. Poustie, S. Lardenois, R. Harmon, J. Harrison, G. Kopidakis, E. Athanasopoulos, A. Krithinakis, F. Doukhan, M. Omar, D. Vaillant, F. Di Nallo, M. Koyabe, and C. Di Cairano-Gilfedder, “All-Optical Header Processing in a 42.6 Gb/s Optoelectronic Firewall”, *IEEE Journal of Selected Topics in Quantum Electronics*, **18**, 757 (2012).
8. M. Johansson, G. Kopidakis”, and S. Aubry, “KAM Tori in 1D Random Discrete Nonlinear Schrodinger Model? ”, *EPL (Europhys. Lett.)*, **91**, 50001 (2010).
9. N.V. Galanis, I.N. Remediakis, and G. Kopidakis, “Mechanical Response of Nanocrystalline Cu from Atomistic Simulations, *Phys. Status Solidi C*, **7**, 1372 (2010).
10. G. Vantarakis, C. Mathioudakis, G. Kopidakis, C.Z. Wang, K.M. Ho, and P.C. Kelires, “Interfacial Disorder and Optoelectronic Properties of Diamond Nanocrystals”, *Phys. Rev. B*, **80**, 045307 (2009).
11. Magnus Johansson, Georgios Kopidakis, Stefano Lepri, and Serge Aubry, “Transmission Thresholds in Time-periodically Driven Nonlinear Disordered Systems”, *EPL (Europhys. Lett.)*, **86**, 10009 (2009).
12. I.N. Remediakis, G. Kopidakis, and P.C. Kelires, “Softening of Ultra-Nanocrystalline Diamond at Low Grain Sizes”, *Acta Materialia*, **56**, 5340 (2008).
13. G. Kopidakis, S. Komineas, S. Flach, and S. Aubry, “Absence of Wave Packet Diffusion in Disordered Nonlinear Systems”, *Phys. Rev. Lett.*, **100**, 084103 (2008).
14. G. Kopidakis, I.N. Remediakis, M.G. Fytas, and P.C. Kelires, “Atomic and Electronic Structure of Crystalline-Amorphous Carbon Interfaces”, *Diamond and Related Materials*, **16**, 1875 (2007).
15. I.N. Remediakis, M.G. Fytas, C. Mathioudakis, G. Kopidakis, and P.C. Kelires, “Structure, Elastic Properties and Strength of Amorphous and Nanocomposite Carbon”, *Diamond and Related Materials*, **16**, 1835 (2007).
16. C. Mathioudakis, G. Kopidakis, P. Patsalas, and P.C. Kelires, “Disorder and Optical Properties of Amorphous Carbon”, *Diamond and Related Materials*, **16**, 1788 (2007).
17. P. Maniadis, G. Kopidakis, S. Aubry, “Energy Dissipation Threshold and Self-induced Transparency in Systems with Discrete Breathers”, *Physica D*, **216**, 121 (2006).
18. S. Aubry and G. Kopidakis, “A Nonadiabatic Theory for Ultrafast Catalytic Electron Transfer, A Model for the Photosynthetic Reaction Center”, *Journal of Biological Physics*, **31**, 375 (2005).
19. C. Mathioudakis, G. Kopidakis, P.C. Kelires, M. Gioti, P. Patsalas, and S. Logothetidis, “Electronic and Optical Properties of a-C from Tight-Binding Molecular Dynamics Simulations”, *Thin Solid Films*, **482**, 151 (2005).

- 20.** M.G. Fyta, C. Mathioudakis, G. Kopidakis, and P.C. Kelires, “Structure, Stability, and Stress Properties of Amorphous and Nanostructured Carbon Films”, *Thin Solid Films*, **482**, 56 (2005).
- 21.** C. Mathioudakis, G. Kopidakis, P.C. Kelires, C.Z. Wang, and K.M. Ho, “Physical trends in Amorphous Carbon: A Tight-Binding Molecular Dynamics Study”, *Phys. Rev. B*, **70**, 125202 (2004).
- 22.** P. Maniadis, G. Kopidakis, and S. Aubry, “Classical and Quantum Targeted Energy Transfer between Nonlinear Oscillators”, *Physica D*, **188**, 153 (2004).
- 23.** S. Aubry and G. Kopidakis, “A Nonlinear Dynamical Model for Ultrafast Catalytic Transfer of Electrons at Zero Temperature”, *Int. J. Mod. Phys. B*, **17**, 3908 (2003).
- 24.** Magnus Johansson, Anna Maria Morgante, Serge Aubry, and Georgios Kopidakis, “Standing Wave Instabilities, Breather Formation and Thermalization in Hamiltonian Anharmonic Lattices”, *Eur. Phys. J. B.*, **29**, 279 (2002).
- 25.** Anna Maria Morgante, Magnus Johansson, Serge Aubry, and Georgios Kopidakis, “Breather-Phonon Resonances in Finite-size Lattices: “Phantom Breathers”?”, *J. Phys. A: Math. Gen.*, **35**, 4999 (2002).
- 26.** Anna Maria Morgante, Magnus Johansson, Georgios Kopidakis, and Serge Aubry, “Standing Wave Instabilities in a Chain of Coupled Nonlinear Oscillators”, *Physica D*, **162**, 53 (2002).
- 27.** G. Kopidakis, S. Aubry, and G.P. Tsironis, “Targeted Energy Transfer through Discrete breathers in Nonlinear Systems”, *Phys. Rev. Lett.*, **87**, 165501 (2001).
- 28.** G. Hadjisavvas, G. Kopidakis, and P. C. Kelires, “Structural Models of Amorphous Silicon Surfaces”, *Phys. Rev. B.*, **64**, 125413 (2001).
- 29.** S. Aubry, G. Kopidakis, and V. Kadelburg, “Variational Proof for Hard Discrete breathers in some Classes of Hamiltonian Dynamical Systems”, *Discrete and Continuous Dynamical Systems – Series B*, **1**, 271 (2001).
- 30.** G. Kopidakis and S. Aubry, “Discrete breathers in Realistic Models: Hydrocarbon Structures”, *Physica B*, **296**, 237 (2001).
- 31.** S. Aubry, G. Kopidakis, A.M. Morgante, and G.P. Tsironis, “Analytic Conditions for Targeted Energy Transfer between Nonlinear Oscillators or Discrete breathers”, *Physica B*, **296**, 222 (2001).
- 32.** Anna Maria Morgante, Magnus Johansson, Georgios Kopidakis, and Serge Aubry, “Oscillatory Instabilities of Standing Waves in One-Dimensional Nonlinear Lattices”, *Phys. Rev. Lett.*, **85**, 550 (2000).
- 33.** G. Kopidakis and S. Aubry, “Intraband Discrete breathers in Disordered Systems II: Localization”, *Physica D*, **139**, 247 (2000).
- 34.** G. Kopidakis and S. Aubry, “Discrete breathers and Delocalization in Nonlinear Disordered Systems”, *Phys. Rev. Lett.*, **84**, 3236 (2000).
- 35.** G. Kopidakis and S. Aubry, “Intraband Discrete breathers in Disordered Systems I: Delocalization”, *Physica D*, **130**, 155 (1999).
- 36.** G. Kopidakis, C.Z. Wang, C.M. Soukoulis, and K.M. Ho, “Hydrogen-induced Structural Changes in Tetrahedral Amorphous Carbon”, *Phys. Rev. B*, **58**, 14106 (1998).
- 37.** G. Kopidakis, C.Z. Wang, C.M. Soukoulis, and K.M. Ho, “A Tight-Binding Molecular Dynamics Study of Phonon Anharmonic Effects in Diamond and Graphite”, *J. Phys: Cond. Matt.*, **9**, 7071 (1997).
- 38.** P.W. Murray, S.Thorshaug, I.Stensgaard, F. Besenbacher, E. Laegsgaard, A. Ruban, K.W. Jacobsen, G. Kopidakis, and H.L. Skriver, “A New Heteroepitaxial Subsurface Growth Mode Resulting in Interlayer Mixing”, *Phys. Rev. B*, **55**, 1380 (1997).
- 39.** G. Kopidakis, C.M. Soukoulis, and E.N. Economou, “Localization and Electron-Phonon Interactions in Disordered Systems”, *Europhys. Lett.*, **33**, 459 (1996).

- 40.** G. Kopidakis, C.M. Soukoulis, and E.N. Economou, “Electron-Phonon Interaction, Localization, and Polaron Formation in One-Dimensional Systems”, *Phys. Rev. B*, **51**, 15038 (1995).
- 41.** G. Kopidakis, C.M. Soukoulis, and E.N. Economou, “Electron-Phonon Interactions and Recurrence Phenomena in One-Dimensional Systems”, *Phys. Rev. B*, **49**, 7036 (1994).