

## 2014 m. VU TFAI VSTS publikacijų sąrašai

### Straipsniai ISI sąrašo žurnaluose

1. M.-J. Lee, J. Ruseckas, Ch.-Y. Lee, V. Kudriašov, K.-F. Chang, H.-W. Cho, G. Juzeliūnas and I. A. Yu, *Experimental demonstration of spinor slow light*, Nature Commun. **5**, 5542 (2014).
2. V. Kudriašov, J. Ruseckas, A. Mekys, A. Ekers, N. Bezuglov, and G. Juzeliūnas, *Superluminal two-color light in a multiple Raman gain medium*, Phys. Rev. A **90**, 033827 (2014).
3. N. Goldman, G. Juzeliūnas, P. Öhberg and I. B. Spielman, *Light-induced gauge fields for ultracold atoms*, Rep. Prog. Phys. **77** 126401 (2014).
4. A. Kononovicius, J. Ruseckas, *Continuous transition from the extensive to the non-extensive statistics in an agent-based herding model*, Eur. Phys. J. B **87**, 169 (2014).
5. R. Kazakevičius, J. Ruseckas, *Lévy flights in inhomogeneous environments and 1/f noise*, Physica A **411**, 95 (2014).
6. J. Ruseckas and B. Kaulakys, *Scaling properties of signals as origin of 1/f noise*, J. Stat. Mech. **2014**, P06005 (2014).
6. A. Celi, P. Massignan, J. Ruseckas, N. Goldman, I. B. Spielman, G. Juzeliūnas, and M. Lewenstein, *Synthetic Gauge Fields in Synthetic Dimensions*, Phys. Rev. Lett. **112**, 043001 (2014).
7. E. Anisimovas, F. Gerbier, T. Andrijauskas, and N. Goldman, *Design of laser-coupled honeycomb optical lattices supporting Chern insulators*, Phys. Rev. A **89**, 013632 (2014).
8. A. Acus, E. Norvaišas, and Ya. Shnir, *Hopfions interaction from the viewpoint of the product ansatz*, Phys. Lett. B **733**, 15–20 (2014).
9. S. Feili, H. R. Hamed, *Large Kerr nonlinearity in a crystal of molecular magnets system*. Opt. Comm. **315**, 116–121 (2014).
10. H. R. Hamed, I. A. Khaledi-Nasab, and H. Ghaforyan. *Tunneling Control of Transmission Coefficient and Group Index in a Quantum Dot Nanostructure*. Advances in Condensed Matter Physics, Volume 2014 (2014), Article ID 589415, 9 pages.
11. H. R. Hamed, *Electron localization in an asymmetric double quantum well nanostructure*. Physica B, **440**, 83–87(2014).
12. H. R. Hamed. *Enormous enhancements of the Kerr nonlinearity at C-band telecommunication wavelength in an Er<sup>3+</sup>-doped YAG crystal*. Physica B, **442**, 60–65(2014).
13. H. R. Hamed. *Transient and steady-state properties of asymmetric semiconductor quantum wells at telecom wavelength bands*. JETP Letters, **100**, 44-54 (2014).
14. H. R. Hamed. *Optical bistability through the cavity effect in a four-level open atomic medium*. JETP Letters, **100**, 299-305 (2014).
15. H. R. Hamed. *Inter-dot tunneling control of optical bistability in triple quantum dot molecules*. Physica B, **449**, 5–9 (2014).
16. H. R. Hamed. *Optical bistability via Josephson coupling energy in a superconducting quantum circuit*. Laser Phys. **24**, 115203 (2014).
17. H. R. Hamed. *Electron localization in an asymmetric double quantum well nanostructure (II): Improvement via Fano-type interference*. Physica B, **450**, 128–135 (2014).
18. H. R. Hamed. *Optical Bistability and Multistability via Magnetic Field Intensities in a Solid*. Applied Optics, **53**, 5391-5397 (2014).
19. H. R. Hamed. *Ultra-slow propagation of light located in ultra-narrow transparency windows through four quantum dot molecules*. Laser Phys. Lett. **11**, 085201 (9pp) (2014).

20. H. R. Hamed, A. Radmehr, M. Sahrai. *Manipulation of Goos-Hänchen shift in mercury atomic configuration via interacting dark-state resonances*. Phys. Rev. A **90**, 053836 (2014)
21. H. R. Hamed, G. Juzeliūnas, A. Raheli and M. Sahrai, *High refractive index and lasing without inversion in an open four-level atomic system*, Opt. Commun. **311**, 261-265 (2014).
22. V. Gontis, A. Kononovicius, *Consentaneous agent-based and stochastic model of the financial markets*, PLoS ONE **9**, e102201 (2014), doi: [10.1371/journal.pone.0102201](https://doi.org/10.1371/journal.pone.0102201).
23. A. Kononovicius, V. Gontis, *Control of the socio-economic systems using herding interactions*, Physica A **405**, 80-84 (2014), doi: [10.1016/j.physa.2014.03.003](https://doi.org/10.1016/j.physa.2014.03.003).
24. V. Gineitytė, *Perturbative Analogue for the Concept of Conjugated Circuits in Benzenoid Hydrocarbons*, MATCH Commun. Math. Comput. Chem. **72** 39-73 (2014).
25. V. Gineityte, *Electron Transfer Properties of Alternant Hydrocarbons in Terms of Inverse Adjacency Matrices of Molecular Graphs*, Croat. Chem. Acta **87** (2) (2014) 171–183; <http://dx.doi.org/10.5562/cca2275>.
26. R. Janciene, G. Mikulskiene, T. Javorskis, A. Vektariene, G. Vektaris, L. Kosychova, *Dihydroquinazolinol[3,2-a][1,5]benzodiazepines: Synthesis and Computational Study of Reductive N-Heterocyclization of N-(2-Nitrobenzoyl)-1,5-benzodiazepin-2-ones*, Journal of Heterocyclic Chemistry 2014 05 14 (publikuota on line) DOI: 10.1002/jhet.2038.
27. I. I. Beterov, T. Andrijauskas, D. B. Tretyakov, V. M. Entin, E. A. Yakshina, I. I. Ryabtsev, and S. Bergamini, *Jaynes-Cummings dynamics in mesoscopic ensembles of Rydberg-blockaded atoms*, Phys. Rev. A **90**, 043413 (2014).

#### **Straipsniai kituose leidiniuose ir konferencijų pranešimų medžiaga**

28. R. Jančienė, A. Vektarienė, G. Mikulskienė, L. Kosychova, G. Vektaris, *Synthesis, structure of 7-methyl-6,7-dihydroquinazolino-[3,2-a][1,5]benzodiazepin-13(5H)-one derivatives and study of the reaction mechanism by DFT analysis*, Chem. and Chem. Technol.: Proc. Intern. Conf., Kaunas, 25 April 2014, p. 202-207 ISSN 2351-5643.
29. V. Gineitytė, *Quasi-classical alternatives in quantum chemistry*, [arXiv](https://arxiv.org/abs/1402.6268) (2014); <http://arxiv.org/abs/1402.6268>