

Списък на всички научни публикации - публикувани

- **Звено: (ИФТТ) Институт по физика на твърдото тяло**

- **Тип на публикацията:**

- Научна монография
- Глава от научна монография
- Студия в научно списание
- Статия в научно списание
- Статия в сборник на научен форум
- Студия в тематичен сборник
- Статия в тематичен сборник
- Научно съобщение

- **Година на публикуване:** 2017 ÷ 2017

- **Тип записи:** Записи, които влизат в отчета на звеното

1. **Antonova K., Duta L., Szekeres A., Stan G.E., Mihailescu I. N., Anastasescu M., Stroescu H., Gartner M.** Influence of laser pulse frequency on the microstructure of aluminum nitride thin films synthesized by pulsed laser deposition. *Applied Surface Science*, 394, Elsevier, 2017, ISSN:0169-4332, DOI:10.1016/j.apsusc.2016.10.114, 197-204. ISI IF:3.387
2. **Antonova K., Metselaar L., Dozov I., Belamie E., Davidson P., Yeomans Ju. M., Doostmohammadi A.** Electric-field induced shape transition of nematic tactoids. *Physical Review E Cond. Mat. Soft*, 96, 10 July, 2017, DOI:10.1103/PhysRevE.96.022706, 022706-1-022706-8. ISI IF:2.288
3. **Avramov, I.D., U.Stahl.** On the Mass Sensitivity of Rayleigh Surface Acoustic Wave (RSAW) Resonators. *IEEE Explore*, 2017, ISSN:ISSN 2161-2536, DOI:DOI 10.1109/ISSE2017.80001982
4. **Berova M., Sandulov M., Tsvetkova T., Kitova S., Bischoff L., Boettger R., Zuk J.** Ion beam induced surface modification of ta-C thin films. *Acta Physica Polonica A*, 132, 2, 2017, 299-301. ISI IF:0.43
5. **Berova, M., Sandulov, M., Tsvetkova, T., Szekeres, A., Terziyska, P., Kitova, S., Boettger, R., Bischoff, L.** Optical contrast formation in ta-C films by ion implantation.. *Revue Roumanie de Chimie*, 62, 10, Academie Romania, 2017, 761-765. ISI IF:0.418
6. **Bineva I., Pejova B., Mihailov V., Dinescu A., Danila M., Karatodorov S.** Structural and morphological characterization of ternary nanocrystalline Cu-In-S thin films prepared by laser ablation. *Journal of Physics: Conference Series*, 794, 1, IOP Science, 2017, ISSN:1742-6596, DOI:https://doi.org/10.1088/1742-6596/794/1/012019, 012019. SJR:0.24
7. **Bivas, I., Tonchev, N.S.** Membrane Stretching Elasticity of Lipid Vesicle and Thermal Shape Fluctuations. arXiv, Cite as: arXiv:1712.09911 [cond-mat.soft], Cornell University Library, 2017
8. **Boradjiev, I., Christova, E., Eberl, H.** Dispersion theoretic calculation of the H→Z+γ amplitude. arXiv:1711.07298, 2017
9. **Boyadjiev, S. I., Georgieva, V., Stefan, N., Stan, G. E., Mihailescu, N., Visan, A., Mihailescu, I. N., Besleaga, C., Szilagyi, I. M.** Characterization of PLD grown WO₃ thin films for gas sensing. *Applied Surface Science*, 417, Elsevier, 2017, ISSN:0169-4332, DOI:10.1016/j.apsusc.2017.03.212, 218-223. SJR:0.951, ISI IF:3.387
10. **Boyadjiev, S. I., Keri, O., Bardos, P., Firkala, T., Gaber, F., Nagy, Z. K., Baji, Z., Takacs, M., Szilagyi, I. M.** TiO₂/ZnO and ZnO/TiO₂ core/shell nanofibers prepared by electrospinning and atomic layer deposition for photocatalysis and gas sensing. *Applied Surface Science*, 424, 2, Elsevier, 2017, ISSN:0169-4332, DOI:10.1016/j.apsusc.2017.03.030, 190-197. SJR:0.951, ISI IF:3.387

11. **Boyadjiev, S. I.**, Stefan, N., Stan, G., Arvizu, M., Szilágyi, I. M., Visan, A., Mihailescu, N., Mihailescu, I. N., Besleaga, C., Österlund, L., Gesheva, K. A.. Study of the electrochromic properties of MAPLE and PLD deposited WO₃ thin films. 21st International Conference of Solid State Ionics, Padua, Italy, 18-23 June 2017, 2017
12. **Boyadjiev, S. I.**, Stefan, N., Szilágyi, I. M., Mihailescu, N., Visan, A., Mihailescu, I. N., Stan, G. E., Besleaga, C., **Iliev, M. T.**, Gesheva, K. A.. Characterization of MAPLE deposited WO₃ thin films for electrochromic applications. Journal of Physics: Conference Series, 780, IOP Publishing, 2017, ISSN:1742-6588, DOI:10.1088/1742-6596/780/1/012013, 012013. SJR:0.24
13. **Dimitrov, D. Z.**, **Rafailov, P. M.**, Chen, Y. F., Lee, C. S., Todorov, R., Juang, J. Y.. Growth and characterization of LuVO₄ single crystals. Journal of Crystal Growth, 473, Elsevier, 2017, 34. ISI IF:1.751
14. **Dimitrov, D.**, **Rafailov, P.**, Marinova, V., Babeva, T., Goovaerts, E., Chen, Y. F., Lee, C. S., Juang, J. Y.. Structural and optical properties of LuVO₄ single crystals. Journal of Physics: Conf. Series, 794, IOP Publishing, 2017, 012029. SJR:0.24
15. **Dimo Nikolov Astadjov.** High-End State-of-Art Copper Bromide Vapor Lasers: Optical, Electric and Thermal Properties. ArXiv e-publication <https://arxiv.org/abs/1712.02422>, Cornell University Library, Ithaca, NY, US, 2017, 135
16. **Esmeryan K. D.**, Castano C. E., Abolghasemibizaki M., Mohammadi R.. An artful method for in-situ assessment of the anti-biofouling potential of various functional coatings using a quartz crystal microbalance. Sensors and Actuators B Chemical, 243, Elsevier, 2017, DOI:<http://dx.doi.org/10.1016/j.snb.2016.12.073>, 910-918. SJR:1.305, ISI IF:5.401
17. **Esmeryan K. D.**, Castano C. E., Bressler A. H., Abolghasemibizaki M., Fergusson C. P., Roberts A., Mohammadi R.. Kinetically driven graphite-like to diamond-like carbon transformation in low temperature laminar diffusion flames. Diamond and Related Materials, 75, Elsevier, 2017, DOI:<http://dx.doi.org/10.1016/j.diamond.2017.01.014>, 58-68. SJR:0.707, ISI IF:2.561
18. **Esmeryan K. D.**, Castano C. E., Mohammadi R.. Interactions of superhydrophobic carbon soot coatings with short alkyl chain alcohols and fluorocarbon solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 529, Elsevier, 2017, DOI:<https://doi.org/10.1016/j.colsurfa.2017.06.067>, 715-724. SJR:0.831, ISI IF:2.714
19. **Gaminchev, KG.** Thermal and structural properties of iron at high pressure by molecular dynamics. Condensed Matter, Materials Science, 1702.04909, 2017, ISSN:2331-8422, 1-10
20. **Ganka Kamisheva.** Nestor Marcoff's Contribution to Bulgarian Physics and Mathematics Education. Biomath Communications, 4, 1, Biomath Forum, 2017, ISSN:ISSN 2367-5233 (print) ISSN 2367-5241 (online), 36-50
21. **Genova J.**, **Dencheva-Zarkova, M.**. Interaction of elaiophylin with model bilayer membrane. IOP Science, 794, Journal of Physics: Conference Series, 2017, ISSN:1742-6596, DOI:10.1088, 012031. SJR:0.022
22. **Georgiev, M.**, **Chamati, H.** Spin multipole moments as collective quantum phenomena. Journal of Physics: Conference Series, 794, Institute of Physics, 2017, ISSN:1742-6596, DOI:10.1088/1742-6596/794/1/012026, 012026. SJR:0.21
23. **H Naradikian, M Petrov, B Katranchev, T Milenov, S Tinchev.** Surface characterization and orientation interaction between diamond- like carbon layer structure and dimeric liquid crystals. 780, Journal of Physics: Conf. Series, 2017, DOI:10.1088/1742-6596/780/1/012010, SJR:0.26
24. **Hadjichristov G B, Marinov Y.G, Petrov A.G, Prasad S K.** Photoresponsive azo-doped aerosil/7CB nematic nanocomposites: the effect from concentration of the azobenzene photoactive agent. J. Phys: Conf. Series, 794, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/794/1/012037, 012037. SJR:0.24

25. **Hadjichristov G B, Marinov Y.G.** Photoresponsive azo-doped Aerosil/7CB nematic liquid-crystalline nanocomposite films: the role of polyimide alignment layers of the films. *Journal of Physics: Conference Series*, 780, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/780/1/012008, 012008. SJR:0.24
26. **Hristova-Vasileva T., Bineva I., Dinescu A., Danila M., Arsova D.** As₂Se₃ thin films deposited by frequency assisted thermal evaporation – morphology and structure. *Journal of Physics: Conference Series*, 794, 1, IOP Science, 2017, ISSN:1742-6596, DOI:10.1088/1742-6596/794/1/012015, 012015. SJR:0.24
27. **Ilievskaja, I., Petrov, V., Andreeva, V., Kovacheva, D., Zaleski, A., Drozd, M., Bukowska, E., Mikli, V., Stoyanova-Ivanova, A.** Structural and morphological characterization of heat-activated nickel-titanium archwires. *Bulgarian Chemical Communications*, 49, Special Issue A, 2017, 33-39. ISI IF:0.229
28. **Iordanova E, Yankov G, Garasz K.** Surface Modification of Different Materials by fs-Laser Irradiation. *Bulgarian Journal of Physics*, 44, 2, 2017, 133-144
29. **Ivanov O., Angelov K., Mitova I., Pérez Díaz J. L.** Chemical warfare agents, methods for detection and simulant substances. *Scientific technical union of technical engineering Industry – 4.0*, Sofia, 2017, ISBN:978-619-7383-06
30. **Ivanov O., Mitova I., Pérez-Díaz J. L., Yordanova A.** Measurements of speed and diameters of droplets of fogs with devices, operating on the basis of the Surface photo-charge effect. *Proceedings of The First International Scientific Conference on Security "CONFSEC 2017"*, 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 173-175
31. **Ivanov O., Mitova I., Pérez-Díaz J. L., Yordanova A.** Measurements of speed and diameters of droplets of fogs with devices, operating on the basis of the Surface photo-charge effect. *Security & Future*, 4, 2017, ISSN:2535-0668, 154-156
32. **Ivanov O., Ralev Y., Todorov P., Popov I., Angelov K., Pérez Díaz J. L.** System for fog generation for development of sensors. *Proceedings Military Science and Security - Fifth International Scientific and Technical Conference on Engineering, Technologies, Education and Security*, 1, 2017, ISSN:2535-0315 (Print), 2535-0323 (Online), 44-47
33. **Marinov Y.G, Hadjichristov G B, Petrov A.G, Koduru H K, Marino L, Scaramuzza N.** Dielectric and electrical behaviours of polymeric (PEO/PVP):NaIO₄ composite for solid electrolytes. *Journal of Physics: Conference Series*, 794, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/794/1/012020, 012020. SJR:0.24
34. **Marinov Y.G, Vlahov, T, Blagoev B, Luka G, Krajewski T, Guzewicz E, Vlahov ES.** Characterization of ZnO Nanolayers by complex Impedance Spectroscopy. *40th International Spring Seminar on Electronics Technology (ISSE)*, IEEE, 2017, ISSN:2161-2536, DOI:10.1109/ISSE.2017.8000970
35. **Marinov Y.G, Vlahov, T, Alexandrova M, Slavov S, Lakov L, Toncheva K, Vlahov ES.** INVESTIGATION OF IONIC CONDUCTIVE CERAMICS Bi₁₂TiO₂₀ BY COMPLEX IMPEDANCE SPECTROSCOPY. *научни известия на НТSM*, 1(216), proceedings „NDT days 2017“, 2017, ISSN:1310-3946
36. **Marinov Y.G, Marinov M P, Hadjichristov G B, Petrov A.G, Prasad S K, Marino L, Scaramuzza N.** Dielectric study of azo-doped aerosil/7CB nematic nanocomposite upon UV light. *Journal of Physics: Conference Series*, 780, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/780/1/012009, 012009. SJR:0.24
37. **Mitev, DP, Peshev, DT, Peev, G, Peeva, LG.** 1742-6588. *Journal of Physics: Conference Series*, IOP Publishing, 2017, ISSN:1742-6588, SJR:0.217
38. **Nesheva, D., Pantchev, B., Nedev, N., Valdez, B., Dzhurkov, V., Nedev, R., Manolov, E.** Resistive switching behavior of SiO_x layers with Si nanoparticles. *Journal of Physics: Conference Series*, 794, 1, Institute of Physics, 2017, ISSN:1742-6588, DOI:10.1088/1742-6596/794/1/012018, 012018. SJR:0.24

39. **O Ivanov, S Karatodorov, J. L. Pérez Díaz.** Novel Electromagnetic Sensor for Contaminations in Fog Based on the Laser-induced Charge Effect. *Proceedings of IEEE SENSORS 2017, CFP17SE, IEEE, 2017, ISBN:978-1-5386-4056-2, 1509-1511*
40. **Panajotov K., Clerc M.G., Tlidi M.** Spatiotemporal chaos and two-dimensional dissipative rogue waves in Lugiato-Lefever model. *The European Physical Journal D, 71, 176, Springer-Verlag, 2017, DOI:10.1140/epjd/e2017-80068-y, 1-8. ISI IF:1.228*
41. **Paskaleva, A., Spassov, D., Terziyska, P.** Electric, dielectric and optical properties of Ga₂O₃ grown by metal organic chemical vapour deposition. *Journal of Physics: Conference Series, 794, IOP Publishing, 2017, 012017. SJR:0.24*
42. **Paskaleva, A, Spassov, D, Danković, D.** CONSIDERATION OF CONDUCTION MECHANISMS IN HIGH-K DIELECTRIC STACKS AS A TOOL TO STUDY ELECTRICALLY ACTIVE DEFECTS. *Facta Universitatis, Series: Electronics and Energetics, 30, 4, 2017, 511-548*
43. **Pecheva, E., Petrov, T., Hikov, T., Montgomery, P., Leong-Hoi, A., Antoni, F.** Precise femtosecond laser ablation of dental hard tissue: preliminary investigation on adequate laser parameters. *Journal of Physics Conference Series, 794, 012036, IOP Science, 2017, 012036*
44. **Pecheva, E., Montgomery, P., Leong-Hoi, A., Serio, B., Uhring, W.** Improvement in measurements of hydroxyapatite layers by hybrid high dynamic range image processing in white-light interferometry. *Materials Today Proceedings, 4, 1, Elsevier, 2017, S36-S43*
45. **Pecheva, E.** Study of biocompatible and biological materials: can they be influenced by external factors?. *Materials Research Foundations, Materials Research Forum LLC, USA, 2017, ISBN:978-1-945291-24-1, DOI:10.21741/9781945291258, 215*
46. **Petrov, M, Katranchev, B, Rafailov, P.** The unique physical properties of the hydrogen bonded in dimers liquid crystals. *Journal of Physics: Conf. Series, 780, 2017, DOI:10.1088/1742-6596/780/1/012010, SJR:0.26*
47. **Slavkova, Z., Genova, G., Shirokikh, S., Koroleva, M.** Significance of investigating properties of membranes with incorporated nanoparticles for drug delivery applications. *Proc. Int. Conference "Chemical technology of functional Nanomaterials", Moscow, Russia, 2017, 16*
48. **Spassov, D, Paskaleva, A, Fröhlich, K, Ivanov, Tz.** Effect of oxygen concentration and metal electrode on the resistive switching in MIM capacitors with transition metal oxides. *Journal of Physics: Conference Series, 794, IOP Science, 2017, 012016. SJR:0.22*
49. **Sveshtarov, P.** Carbon Nanotubes: A Review. *Bulgarian Journal of Physics, 44, Heron Press Ltd., 2017, 109-132*
50. **Tankova, V, Blagoev, K, Grozeva, M, Malcheva, G, Steflekova, V, Alexandrov, S, Hristova, T, Ivanov, G, Nekhrizov, G.** Qualitative and quantitative laser-induced breakdown spectroscopy analysis of archaeological metal artefacts. *Proceedings of SPIE - The International Society for Optical Engineering, 2017, ISSN:0277786X, SJR:0.216*
51. **Temelkov, K. A., Slaveeva, S. I., Fedchenko, Yu. I.** Determination of gas-discharge plasma parameters in powerful metal halide vapor lasers. *Proc. of SPIE, 10226, 2017, ISSN:0277-786X, SJR:0.2*
52. **Torosov, B. T., Vitanov, N. V.** Pseudo-Hermitian Landau-Zener-Stückelberg-Majorana model. *Physical Review A, 96, 1, American Physical Society, 2017, 013845. ISI IF:2.925*
53. **Varbev, S. K., Primatarowa, M. T., Kamburova, R. S.** Soliton dynamics in two coupled ferromagnetic chains. *Journal of Physics: Conference Series, 794, 1, Institute of Physics, 2017, ISSN:1742-6596, DOI:https://doi.org/10.1088/1742-6596/794/1/012027, SJR:0.211*

54. **Victoria Atanassova, Ivan Kostadinov, Margarita Grozeva.** Laser Cleaning of Different Surfaces by Copper Bromide Vapour Laser: Application for Cultural Heritage Preservation. *Comptes Rendus de L'Academie Bulgare des Sciences*, 70, 8, 2017, ISSN:2367-5535, SJR:0.207, ISI IF:0.251
55. **Victoria Atanassova, Ivan Kostadinov, Peter Zahariev, Margarita Grozeva, Ilko Miloushev.** Laser Cleaning of Graffiti on Stone. *Proc. SPIE 10226, 19th International Conference and School on Quantum Electronics: Laser Physics and Applications*, 2017, DOI:10.1117/12.2262668, SJR:0.216
56. **Vitkova, V., Mitkova, D., Antonova, K.** Capacitance of lipid bilayers in sugar-free aqueous solutions. 70, 10, *Compt. rend. Acad. bulg. Sci.*, 2017, ISSN:2367-5535, 1355-1362. ISI IF:0.251
57. **Вани Танкова, Галина Малчева, Кирил Благоев, Любен Лещаков.** Изследване на бронзови археологически предмети от късната бронзова епоха и ранната желязна епоха с лазерно индуцира на плазма (LIBS). Тракийската древност: технологични и генетични изследвания, история и нематериално наследство. Сборник в чест на 75-годишнината на Петър Манджуков. София, 2017, 28
58. **Камишева, Г.** Ролята на Нестор Марков за създаването на българска физическа терминология. Нестор Марков и неговият принос в лексикографията и образованието. Доклади от Юбилейната научна сесия по случай 180 години от рождението на Нестор Марков, ИК Стилует, 2017, ISBN:978-619-194-027-1, 63-76
59. **Цонев, Л.** Античният ансамбъл Стълпище, Русенско – елемент от трако-фригийската контактна зона. Електронно списание Онгъл, 14, Асоциация за антропология, етнология и фолклористика „Онгъл”, 2017, ISSN:1314-3115, 165-201
60. **Цонев, Л.** Археоастрономия и археоурбанистика – общ поглед и някои проблеми. Електронно списание Онгъл, 14, Асоциация за антропология, етнология и фолклористика „Онгъл”, 2017, ISSN:1314-3115, 123-164
61. **Цонев, Л.** Девташларите край Плиска – предложение за реинтерпретация. Електронно списание Онгъл, 14, Асоциация за антропология, етнология и фолклористика „Онгъл”, 2017, ISSN:1314-3115, 107-122
62. **Цонев, Л.** Каменни паметници от раннохристиянската епоха. Културната приемственост като показател за етническа непрекъснатост. Сборник Богатството на българското християнство, Български исторически четения 2016, Булга медиа, 2017, ISBN:978-954-9670-30-1, 141-150
63. **Цонев, Л.** Кладенци-телескопи: предизвикателство пред интердисциплинарните изследвания. Светът на физиката, XXXX, 1, Съюз на физиците в България, 2017, ISSN:0861-4210, 16-28
64. **Цонев, Л.** Луминесцентно датиране в археологията. Част I. Светът на физиката, XXXX, 3, Съюз на физиците в България, 2017, ISSN:0861-4210, 164-183
65. **Цонев, Л.** Мегалити и други древности: интердисциплинарни студии. Булга медиа, 2017, ISBN:978-954-9670-32-5, 420
66. **Цонев, Л.** Менхири в България и на Балканите – проблеми и наличност. Електронно списание Онгъл, 14, Асоциация за антропология, етнология и фолклористика „Онгъл”, 2017, ISSN:1314-3115, 3-106
67. Ahvenniemi, E., Akbashev, A. R., Ali, S., Bechelany, M., Berdova, M., **Boyadjiev, S.**, Cameron, D. C., Chen, R., Chubarov, M., Cremers, V., Devi, A., Drozd, V., Elnikova, L., Gottardi, G., Grigoras, K., Hausmann, D. M., Hwang, C. S., Jen, S.-H., Kallio, T., Kanervo, J., Khmel'nitskiy, I., Kim, D. H., Klibanov, L., Koshtyal, Y., Krause, A. O. I., Kuhs, J., Kärkkäinen, I., Kääriäinen, M.-L., Kääriäinen, T., Lamagna, L., Łapicki, A. A., Leskelä, M., Lipsanen, H., Lyytinen, J., Malkov, A., Malygin, M.. Recommended reading list of early publications on atomic layer deposition—Outcome of the “Virtual Project on the History of ALD”. *Journal of Vacuum Science & Technology A: Vacuum, Surfaces, and Films*, 35, 1, AIP Publishing LLC, 2017, ISSN:0734-2101, DOI:10.1116/1.4971389, 010801. SJR:0.417, ISI IF:1.724

68. Angelov K., **Ivanov O.**, **Todorov P.**, Pérez-Díaz J. L.. Computational fluid dynamic model for estimating droplet number flow rate through a laser beam. Proceedings of The First International Scientific Conference on Security "CONFSEC 2017", 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 155-158
69. Angelov K., **Ivanov O.**, **Todorov P.**, Pérez-Díaz J. L.. Computational fluid dynamic model for estimating droplet number flow rate through a laser beam. Security & Future, 2, 2017, ISSN:2535-0668, 79-82
70. Angelov K., **Todorov P.**, Pérez Díaz J. L.. Aerosol generation devices suitable for simulating fogs in laboratory conditions. Proceedings Military Science and Security - Fifth International Scientific and Technical Conference on Engineering, Technologies, Education and Security, 1, 2017, ISSN:2535-0315 (Print), 2535-0323 (Online), 103-106
71. Angelov K., **Todorov P.**, Pérez Díaz J. L.. Aerosol generation devices suitable for simulating fogs in laboratory conditions. Security & Future, 1, 2017, ISSN:2535-0668, 38-41
72. Averlant E., Tlidi M., **Panajotov K.**, Weicker L.. Coexistence of cavity solitons with different polarization states and different power peaks in all-fiber resonators. Optics Letters, 42, 14, OSA, 2017, DOI:10.1364/OL.42.002750, 2750-2753. ISI IF:3.416
73. Babeva T., **A. Andreev**, Grand J., Vasileva M., **Karakoleva E.**, **Zafirova B. S.**, Georgieva B., **Koprinarova J.**, Mintovac S.. Optical fiber-Ta₂O₅ waveguide coupler covered with hydrophobic zeolite film for vapor sensing. Sensors & Actuators: B. Chemical, 248, ELSEVIER, 2017, ISSN:0925-4005, DOI:https://doi.org/10.1016/j.snb.2017.03.157, 359-366. SJR:1.333, ISI IF:5.401
74. Balli, M, Mansouri, S, Jandl, S, Fournier, P, **Dimitrov, D. Z.**. Analysis of the anisotropic magnetocaloric effect in RMn₂O₅ single crystals. Magnetochemistry, 3, 4, 2017, 9 pages
75. Belmonte C., Berghe F. V., **Panajotov K.**, Durt T.. Probing Quantum Memory Effects in the Single Photon Regime. PROGRESS IN PHYSICS, 13, 1, 2017, ISSN:1555-5534, 22-34
76. Bonev T., Markov H., Tomov T., Bogdanovski R., Markishki P., Belcheva M., Dimitrov W., Kaminski K., **Milushev I.**, Musaev F., Napetova M., Nikolov G., Nikolov P., **Tenev T.**. ESpeRo: Echelle Spectrograph Rozhen. Bulgarian Astronomical Journal, 26, 2017, ISSN:1313-2709, 67-90. SJR:0.15
77. Butcher, K. S. A., **Terziyska, P. T.**, Gergova, R., Georgiev, V., Binsted, P. W., Skerget, S.. DC voltage fields generated by RF plasmas and their influence on film growth morphology through static attraction to metal wetting layers: Beyond ion bombardment effects. JOURNAL OF APPLIED PHYSICS, 121, American Institute of Physics, 2017, DOI:doi: 10.1063/1.4973483, 013301-1-013301-13. ISI IF:2.068
78. Chamel N., Mutafchieva Y. D., Stoyanov Zh. K., **Mihailov L. M.**, Pavlov R. L.. Landau Quantisation of Electron Motion in the Crust of Highly Magnetised Neutron Stars. Quantum Systems in Physics, Chemistry, and Biology, 30, Progress in Theoretical Chemistry and Physics, Springer, 2017, 181-191
79. Coarer F. D., Quirce A., Perez P., Valle A., Pesquera L., Sciamanna M., Thienpont H., **Panajotov K.**. Injection Locking and Polarization Switching Bistability in a 1550 nm VCSEL Subject to Parallel Optical Injection. IEEE Journal of Selected Topics in Quantum Electronics, 23, 6, 2017, DOI:10.1109/JSTQE.2017.2690840, 1800910. ISI IF:3.971
80. Coarer F. D., Quirce A., Valle A., Pesquera L., Sciamanna M., Thienpont H., **Panajotov K.**. Polarization dynamics induced by parallel optical injection in a single-mode VCSEL. Optics Letters, 42, 11, OSA, 2017, DOI:10.1364/OL.42.002130, 2130-2133. ISI IF:3.416
81. Czyszanowski T., Gebiski M., Dems M., **Panajotov K.**. Semiconductor-metal subwavelength grating VCSELs: new concept of emission mirror enabling vertical current injection. Proc. SPIE, 10122, SPIE, 2017, DOI:10.1117/12.2253152, 101220M. SJR:0.228

82. Czyszanowski T., Gebski M., Dems M., Wasiak M., Sarzała R., Panajotov K.. Subwavelength grating as both emission mirror and electrical contact for VCSELs in any material system. *Scientific Reports*, 7, 40348, Nature, 2017, DOI:10.1038/srep40348, 1-11. ISI IF:4.259
83. Danković, D, Manić, I, Stojadinović, N, Prijić, Z, Djorić-Veljković, S, Davidović, V, Prijić, A, Paskaleva, A, Spassov, D, Golubović, S. Modelling of Threshold Voltage Shift in Pulsed NBT Stressed P-Channel Power VDMOSFETs. *Proc. Of 30th IEEE International conference on Microelectronics (MIEL'2017)* 2017, Nis, Serbia, 9-11 Oct. 2017, 2017, 147
84. Davidović, V, Paskaleva, A, Spassov, D, Guziewicz, E, Krajewski, T, Golubović, S, Djorić-Veljković, S, Manić, I, Danković, D, Stojadinović, N. Electrical and Charge Trapping Properties of HfO₂/Al₂O₃ Multilayer Dielectric Stacks. *Proc. Of 30th IEEE International conference on Microelectronics (MIEL'2017)* 2017, Nis, Serbia, 9-11 Oct. 2017, 2017, 143
85. Davidović, V, Paskaleva, A, Spassov, D, Guziewicz, E, Krajewski, T, Golubović, S, Djorić-Veljković, S, Manić, I, Danković, D, Stojadinović, N. Ispitivanje višeslojnih HfO₂/Al₂O₃ struktura za memorijske komponente. *Proc. of ETRAN 2017 Conf.*, Kladovo, Serbia, 05-08 juna 2017, 2017, ISSN:978-86-7466-692-0, MO1.1.1-4
86. dos Santos Lima, G. Z., Corso, G., Correa, M. A., Sommer, R. L., Ivanov, P. Ch., Bohn, F.. Universal temporal characteristics and vanishing of multifractality in Barkhausen avalanches. *PHYSICAL REVIEW E*, 96, 2, 2017, ISSN:2470-0045, DOI:10.1103/PhysRevE.96.022159, 022159. ISI IF:2.366
87. Egorysheva, A. V., Milenov, T. I., Rafailov, P. M., Gaitko, O. M., Avdeev, G. V., Dudkina, T. D.. Optical and Vibrational Spectra of Bi_{1.8}Fe_{1.2}(1 - x)Ga_{1.2}SbO₇ Solid Solutions with Pyrochlore-Type Structure. *Russian Journal of Inorganic Chemistry*, 62, 7, Pleiades Publishing, Ltd., 2017, 960. ISI IF:0.787
88. Exner G, Marinov Y.G, Perez E. Investigation of the structure and thermal behaviour of polymer liquid crystal / single wall carbon nanotubes nanocomposite. *Journal of Physics: Conference Series*, 780, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/780/1/012011, 012011. SJR:0.24
89. Fogarassy, Zs., Petrik, P., Duta, L., Stan, G., Mihailescu, I.N., Anastasescu, M., Gartner, M., Antonova, K., Szekeres, A.. TEM and AFM Studies of AlN films synthesized by Pulsed Laser Deposition. *Applied Physics A*, 123, 2017, 756-1-756-12. ISI IF:1.455
90. Galluzzi A., Polichetti M., Buchkov K., Nazarova E., Mancusi D., Pace S.. Critical current and flux dynamics in Ag-doped FeSe superconductor. *Supercond. Sci. Technol.*, 30, 2, IOP Science, 2017, DOI:https://doi.org/10.1088/1361-6668/30/2/025013, 025013. ISI IF:2.878
91. Gelkov M., Ivanov O., Pulis V., Pérez-Díaz J. L.. Small-scale infrared fog detector. *Proceedings of The First International Scientific Conference on Security "CONFSEC 2017"*, 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 162-164
92. Gelkov M., Ivanov O., Pulis V., Pérez-Díaz J. L.. Small-scale infrared fog detector. *Security & Future*, 2, 2017, ISSN:2535-0668, 86-88
93. Gelkov M., Pulis V., Ivanov O., Pérez-Díaz J. L., Stanchev T., Yordanova A., Todorov P.. An apparatus for recording of extremes in electrical signals - FDI-1. *Proceedings of The First International Scientific Conference on Security "CONFSEC 2017"*, 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 165-168
94. Gelkov M., Pulis V., Ivanov O., Pérez-Díaz J. L., Stanchev T., Yordanova A., Todorov P.. An apparatus for recording of extremes in electrical signals - FDI-1. *Security & Future*, 3, 2017, ISSN:2535-0668, 117-120
95. Gonevski N., Ivanov O., Todorov P., Pulis V., Pérez Díaz J. L.. Device for fog density control. *Innovations*, 1, 2017, ISSN:Print 1314-8907 / Web 2534-8469, 21-24

96. Gonevski N., **Ivanov O.**, **Todorov P.**, Pulis V., Pérez Díaz J. L.. Device for fog density control. Proceedings Military Science and Security - Fifth International Scientific and Technical Conference on Engineering, 1, 2017, ISSN:2535-0315 (Print), 2535-0323 (Online), 99-102
97. H. Hartman, L. Engström, H. Lundberg, H. Nilsson, P. Quinet, V. Fivet, P. Palmeri, **G. Malcheva**, **K. Blagoev**. Radiative data for highly excited 3d84d levels in Ni II from laboratory measurements and atomic calculations. 600, A108, A&A, 2017, DOI:<https://doi.org/10.1051/0004-6361/201629615>, 13. ISI IF:5.014
98. J. L. Pérez-Díaz, **M. Kuneva**. Application of Surface Photo-Charge Effect for Control of Fluids. Advances in Biosensors: Reviews, 1, IFSA Publishing, S.L., 2017, ISBN:ISBN: 978-84-697-3467-4, 121-137
99. Jimenez Martin M., Rodríguez-Laguna J., D'Huys O., de la Rubia J., **Korutcheva E.**. Synchronization of fluctuating delay-coupled chaotic networks. Phys. Rev. E, 95, APS, 2017, ISSN:2470-0045, DOI:10.1103/PhysRevE.95.052210, 052210. ISI IF:2.366
100. Koduru H K, Kondamareddy K K, Iliev M T, **Marinov Y.G**, **Hadjichristov G B**, Karashanova D, Scaramuzza N. Synergetic effect of TiO₂ nano filler additives on conductivity and dielectric properties of PEO/PVP nanocomposite electrolytes for electrochemical cell applications. Journal of Physics: Conference Series, 780, 1, IOP Publishing Ltd., 2017, DOI:10.1088/1742-6596/780/1/012006, 012006. SJR:0.24
101. Koduru H K, Marino L, Scarpelli F, **Petrov A.G**, **Marinov Y.G**, **Hadjichristov G B**, Iliev M.T., Scaramuzza N. Structural and dielectric properties of NaIO₄ e Complexed PEO/PVP blended solid polymer electrolytes. Current Applied Physics, 17, 11, Elsevier, 2017, DOI:10.1016/j.cap.2017.07.012, 1518-1531. ISI IF:1.971
102. Koelman PMJ, **Yordanova D.**, Musavi S. Tadayon, Graef WAAD, Mihailova D., Dijk J.. Uncertainty analysis of a reduced CO₂ global model. ISPC 23 July 31th to August 4th, 2017 Montreal, Canada, 2017, 786-789
103. Krajewski, T. A., **Terziyska, P.**, Luka, G., Lusakowska, E., Jakiela, R., **Vlakhov, E. S.**, Guziewicz, E.. Diversity of contributions leading to the nominally n-type behavior of ZnO films obtained by low temperature Atomic Layer Deposition. Journal of Alloys and Compounds, 727, 15 December 2017, Elsevier, 2017, DOI:<https://doi.org/10.1016/j.jallcom.2017.08.206>, 902-911. ISI IF:3.133
104. Kudryavtsev A. A., Saifutdinov A. I., **Stefanova M. S.**, **Pramatarov P. M.**, Sysoev S. S.. Measurement of plasma parameters in He microdischarge by means of additional sensor electrode. Physics of Plasmas, 24, 054507, AIP Publishing, 2017, ISSN:1089-7674, DOI:<http://dx.doi.org/10.1063/1.4983620>, 1-5. ISI IF:2.115
105. Marciniak M., Gebski M., Dems M., **Panajotov K.**, Czystanowski T. G.. High contrast grating VCSELs for sensing applications. Proc. SPIE, 10111, SPIE, 2017, DOI:10.1117/12.2253189, 101113B. SJR:0.228
106. Nikolov, A. S., Balchev, I. I., Nedyalkov, N. N., **Kostadinov, I. K.**, Karashanova, D. B., Atanasova, G. B.. Influence of the laser pulse repetition rate and scanning speed on the morphology of Ag nanostructures fabricated by pulsed laser ablation of solid target in water.. Applied Physics A, 123, 11, Springer, 2017, 719. ISI IF:1.455
107. Nikolova E., Jordanov I.P., **Dimitrova Z.I.**, Vitanov N.K.. Evolution of nonlinear waves in a blood-filled artery with an aneurysm. AIP Conference Proceedings, 1895, 1, AIP, 2017, ISBN:978-0-7354-1579-9, ISSN:0094243X, DOI:10.1063/1.5007391, 070002-1-070002-8. SJR:0.16
108. Nurgaliev, T., **Blagoev, B.**, **Buchkov, B.**, Mateev, E., Gajda, G., Nedkov, I., Kovacheva, K., Slavov, K., Starbova, K., Starbov, N, Nankovski, M.. Magnetron sputtering of Fe-oxides on the top of HTS YBCO films. Journal of Magnetism and Magnetic Materials, 429, Elsevier, 2017, DOI:<https://doi.org/10.1016/j.jmmm.2017.01.019>, 138-141. SJR:0.71, ISI IF:2.63

109. Pashev K., **Ivanov O.**, Pulis V., **Todorov P.**, Pérez-Díaz J. L.. Device for fog density control with multiple reflections of the beam. Proceedings of The First International Scientific Conference on Security "CONFSEC 2017", 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 159-161
110. Pashev K., **Ivanov O.**, Pulis V., **Todorov P.**, Pérez-Díaz J. L.. Device for fog density control with multiple reflections of the beam. Security & Future, 2, 2017, ISSN:2535-0668, 83-85
111. Pavlov R., **Mihailov L.**, Maruani J., Perez Diaz J. L., **Ivanov O.**. Ideas for Eplanation of an Electric Signal Generation at Interaction between Electromagnetic Field and Matter. Nuclear Theory, 36, Heron Press, 2017, 6
112. Perez-Diaz J. L., **Ivanov O.**, Peshev Z., Alvarez-Valenzuela M., Valiente-Blanco I., Evgenieva T., Dreischuh T., Gueorguiev O., **Todorov P.**, Vaseashta A.. Fogs: physical basis, characteristic properties, and impacts on the environment and human health. Water, 9, 10, 2017, ISSN:2073-4441, DOI:10.3390/w9100807, 807. ISI IF:1.832
113. Petrov, V, **Ilievska, I**, Andreeva, L, Mikli, V, Zaleski, A, **Stoyanova-Ivanova, A**. Studying the Effects of Autoclaving Process on Orthodontic Archwires. MedInform Journal, 4, 1, 2017, DOI:10.18044/Medinform.201741.559, 529-568
114. Popov J., **Ivanov O.**, Pérez-Díaz J. L.. A measuring device for weak signals, with a high-impedance input - SPCE Meter 1. Proceedings of The First International Scientific Conference on Security "CONFSEC 2017", 2, 2017, ISSN:(PRINT) 2603-2945, (ONLINE) 2603-2953, 169-172
115. Popov J., **Ivanov O.**, Pérez-Díaz J. L.. A measuring device for weak signals, with a high-impedance input - SPCE Meter 1. Security & Future, 3, 2017, ISSN:2535-0668, 121-124
116. Quirce A., Popp A., Coarer F. D., Pérez P., Valle A., Pesquera L., Hong Y., Thienpont H., **Panajotov K.**, Sciamanna M.. Analysis of the polarization of single-mode vertical-cavity surface-emitting lasers subject to parallel optical injection. Journal of the Optical Society of America B, 34, 2, OSA, 2017, DOI:10.1364/JOSAB.34.000447, 447-455. ISI IF:1.843
117. Raddo T. R., **Panajotov K.**, Borges B.-H. V., Virte M.. Strain induced polarization chaos in a solitary VCSEL. Scientific Reports, 7, 14032, Nature, 2017, DOI:10.1038/s41598-017-14436-3, 1-7. ISI IF:4.259
118. Rommel, M., **Paskaleva, A**. Investigation of high-k dielectric stacks by C-AFM: advantages, limitations and possible applications". Conductive Atomic Force Microscopy: Application in nanomaterials", ed. M. Lanza, Chapter 4, Wiley VCH, 2017, ISBN:978-3-527-34091-0, 79-118
119. Sedky A., **Nazarova E.**, Nenkov K., **Buchkov K.**. A comparative Study between Electro and Magneto Excess Conductivities in FeTeSe Superconductors. J. Supercond. Nov. Magn., 30, 10, Springer US, 2017, DOI:https://doi.org/10.1007/s10948-017-4096-3, 2751-2762. ISI IF:1.18
120. Skeparovski, A, **Spasov, D**, **Paskaleva, A**, Novkovski, N. A Case Study of C-V Hysteresis Instability in Metal-High-k-Oxide-Silicon Devices with ZrO₂/Al₂O₃/ZrO₂ Stack as a Charge Trapping Layer. Proc. Of 30th IEEE International conference on Microelectronics (MIEL'2017) 2017, Nis, Serbia, 9-11.Oct. 2017, 2017, 79
121. T Krenek, **S Karatodorov**, R Medlna, **V Mihailov**, J Savkova. Pulsed Nd:YAG deposition of nanostructured FeS 1-x containing meta-stable phases.. IOP Conference Series: Materials Science and Engineering, 175, 1, IOP Publishing, 2017, ISSN:1757-899X, DOI:https://doi.org/10.1088/1757-899X/175/1/012022, 1-4
122. T Krenek, R Medlna, **S Karatodorov**, **V Mihailov**, M Pola, A.H.Reshak. Formation of metastable phases of ferrous sulfide via pulsed Nd:YAG laser deposition: Experimental and theoretical study. Journal of Alloys and Compounds, 2014, 723, Elsevier, 2017, DOI:https://doi.org/10.1016/j.jallcom.2017.06.229, 689-697. ISI IF:3.113

123. Tlidi M., **Panajotov K.** Two-dimensional dissipative rogue waves due to time-delayed feedback in cavity nonlinear optics. *Chaos*, 27, 013119, 2017, DOI:10.1063/1.4974852, 1-5. ISI IF:2.283
124. Usatenko, Z, Kuterba, P, **Chamati, H**, Halun, J. Investigation of ring polymers in confined geometries. *Journal of Physics: Conference Series*, 794, Institute of Physics, 2017, ISSN:1742-6596, DOI:10.1088/1742-6596/794/1/012002, 012002. SJR:0.21
125. Usatenko, Z, Kuterba, P, **Chamati, H**, Romeis, D. Linear and ring polymers in confined geometries. *Eur. Phys. J. - Special Topics*, 226, Springer, 2017, ISSN:1951-6355, DOI:10.1140/epjst/e2016-60335-0, 651. ISI IF:1.417
126. Velchev Ch. J., Pavlov R. L., Tonev D., Stoyanov Zh. K., **Mihailov L. M.**, Mutafchieva Y. D., Van Neck D.. Effects of Isotope Characteristics on the Electron System Ground State Energy of Helium-like Ions. *Quantum Systems in Physics, Chemistry, and Biology*, 30, Progress in Theoretical Chemistry and Physics, Springer, 2017, 283-300
127. Vitanov, N. K., **Dimitrova, Z. I.**, Ivanova, T. I.. On solitary wave solutions of a class of nonlinear partial differential equations based on the function $1/\cosh(\alpha x + \beta t)$. *Applied Mathematics and Computation*, 315, Elsevier, 2017, ISSN:0096-3003, DOI:10.1016/j.amc.2017.07.064, 372-380. ISI IF:1.738
128. Xiong, Wanting, Faes, Luca, **Ivanov, Plamen Ch.** Entropy measures, entropy estimators, and their performance in quantifying complex dynamics: Effects of artifacts, nonstationarity, and long-range correlations. *PHYSICAL REVIEW E*, 95, 6, 2017, ISSN:2470-0045, DOI:10.1103/PhysRevE.95.062114, 062114. ISI IF:2.366
129. Милена Тонкова, Петя Пенкова, Иван Кръстев, Цветина Доброволска, Богдан Рангелов, Камелия Калчевска, **Галина Малчева, Вани Танкова**, Радостина Стоянова. Технологични характеристики на метални предмети от депозит на майстор занаятчия от тракийското ямно светилище при Малко Тръново, Чирпанско: археология и археометрия. Тракийската древност: технологични и генетични изследвания, история и нематериално наследство. Сборник в чест на 75-годишнината на Петър Манджуков. София, 2017, 52
130. Петров В, Андреева Л, **Стоянова-Иванова А, Илиевска Ив**, Георгиева М. Приложение на физичните методи за изследване в ортодонтската практика. *Обществено дентално здраве- постижения, предизвикателска, перспективи,* 2017, 86-99
131. Петрунов, В, **Стоянова-Иванова, А, Илиевска, И**. Приложение на физичните методи за изследване на TiNb дъги в ортодонтската практика. *Обществено дентално здраве- постижения, предизвикателска, перспективи,* 2017, 77-85
132. Солдатов А.Н., Полуниин Ю.П., **Костадинов И.К.**, Шумейко А.С., Васильева А.В., Лоева Я.А.. Оптимизация процесса абляции костной ткани в среднем ИК-диапазоне при низкой частоте повторения импульсов. *Лазерно-информационные технологии в медицине, биологии, геоэкологии и транспорте – 2017* : тр. XXV Междунар. конф. г. Новоросийск, 4-9 сент.2017г., Новоросийск: Изд-во РИО ГМУ имени адмиралаФ.Ф.Ушакова, 2017. С.61, 2017, 61
133. Таня Христова, Георги Иваанов, Цветина Доброволска, Иван Кръстев, Георги Авдеев, Богдан Рангелов, Красимир Костов, Геновева Атанасова, Камелия Калчевска, **Вани Танкова, Кирил Благоев, Галина Малчева, Маргарита Грозева, Василка Стефлекова**, Радостина Стоянова. Калаят – загадката в бронзовите предмети от некропола при Балей, Видинско. Тракийската древност: технологични и генетични изследвания, история и нематериално наследство. Сборник в чест на 75-годишнината на Петър Манджуков. София, 2017, 9
134. Христов Д., **Кънева М.** Количествената история на Софийския университет „Св. Климент Охридски” 1888-1939, записана в биобиблиографиите на неговите преподаватели, т. II. 2, Фараго, 2017, ISBN:ISBN 978-619-206-050-3, 168