8.1. Списък на публикациите на доц. д-р Димитър Димитров, с които се участва в настоящата процедура

A. Научни публикации, еквивалентни на хабилитационен труд

A1. Dimitre Z. Dimitrov, Vera Marinova, Chih- Yao Ho, Dimitrina Petrova, Blagovest Napoleonov, Blagoy Blagoev, Velichka Strijkova, Ken- Yuh Hsu, Shiuan- Huei Lin, Jenh-Yih Juang "ALD deposited ZnO: Al films on mica for flexible PDLC devices" Nanomaterials, 11(4), 1011 (2021) **IF 4.324, Q1**

A2. M. Balli, S. Mansouri, D. Z. Dimitrov, P. Fournier, S. Jandl, and J.-Y. Juang "Strong conventional and rotating magnetocaloric effects in $TbVO_4$ crystals over a wide cryogenic temperature range" Physical Review Materials, 4 (11), 114411 (2020) **IF 3.337, Q1**

A3. D. Dimitrov, V. Marinova, S. Petrov, D. Petrova, B. Napoleonov, B. Blagoev, V. Strijkova, Ken Yuh Hsu and Shiuan Huei Lin "Atomic layer deposited Al-doped ZnO thin films for display applications" Coatings 10(6):539 (2020) **IF 2.330, Q2**

A4. P. M. Rafailov, D. Z. Dimitrov*, Y.-F. Chen, C.-S. Lee and J.-Y. Juang "Symmetry of the Optical Phonons in $LuVO_4$: A Raman Study" Crystals 10 (5) 341 (2020) **IF 2.061, Q2**

A5. D. Z. Dimitrov, P. M. Rafailov, Y.- F. Chen, C.- S. Lee, R. Todorov, J.- Y. Juang "Growth and characterization of $LuVO_4$ single crystals" Journal of Crystal Growth, Vol. 473, pp. 34–38 (2017) **IF 1.573, Q2**

A6. D. Dimitrov, P. Rafailov, V. Marinova, T. Babeva, E. Goovaerts, YF Chen, CS Lee, JY Juang "Structural and optical properties of $LuVO_4$ single crystals" Journal of Physics: Conference Series, Volume 794, Issue 1, 012029M (2017) **SJR 0.221**

A7. M. Balli, S. Jandl, P. Fournier, and D. Z. Dimitrov "Giant rotating magnetocaloric effect at low magnetic fields in multiferroic $TbMn_2O_5$ single crystals" Applied Physics Letters, 108, 102401 (2016) **IF 3.593, Q1**

B. Научни публикации извън хабилитационен труд

B1. A. D'Arco, V. Mussi, S. Petrov, S. Tofani, M. Petrarca, R. Beccherelli, D. Dimitrov, V. Marinova, S. Lupi, and D. C. Zografopoulos "Fabrication and spectroscopic characterization of graphene transparent electrodes on flexible cyclo-olefin substrates or terahertz electro-optic applications" Nanotechnology 31 (36) 364006 (2020) **IF 3.399, Q1**

B2. K. Buchkov, D. Dimitrov, J. Mickovski, Ch. Dikov, E. Goovaerts, D. Petrova, T. Babeva and V. Marinova "Synthesis and characterization of 2D platinum diselenide" Journal of Physics: Conference Series 1492, 012022 (2020) **SJR 0.221**

B3. B. Napoleonov, V. Marinova, D. Petrova, B. Blagoev, I. Avramova and D. Dimitrov "Development of ALD ZnO:Al as transparent conductive films" Journal of Physics: Conference Series 1492, 012026 (2020) **SJR 0.221**

B4. S. Petrov, P.M Rafailov, V. Marinova, S.-H. Lin, Y.-C. Lai, P. Yu, G.-C. Chi, D. Z Dimitrov, D. Karashanova, M. Gospodinov "Chemical vapor deposition growth of bilayer graphene via altering gas flux geometry" Thin Solid Films, 690, 137521 (2019) **IF 1.888, Q2**

B5. C.-C. Chiou, F.-H. Hsu, S. Petrov, V. Marinova, P. Vitanov, D. Dimitrov, K.-Y. Hsu, Y.-H. Lin, and S.-H. Lin "Flexible light valves using polymer-dispersed liquid crystals and TiO_2/Ag/TiO_2 multilayers" Optics Express 27(12) 16911-16921 (2019) **IF 3.561, Q1**

B6. P. M. Rafailov, R. Todorov, V. Marinova, D. Z. Dimitrov, M. M. Gospodinov "Optical spectroscopic study of Ru and Rh doped $Bi_{12}TiO_{20}$ crystals" Bulgarian Chemical Communications, Volume 51 (2) 219-223 (2019) **SJR 0.14, Q4**

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B8. I. Angelova, C.-C. Chiou, V. Marinova, S.- H. Lin, D. Petrova, and D. Dimitrov "Polymer dispersed liquid crystals devices on rigid and flexible substrates using graphene electrodes" AIP Conference Proceedings 2075, 020022 (2019) **SJR 0.182**

B9. T. Fidanova, S. Petrov, B. Napoleonov, V. Marinova, D. Petrova, P. Rafailov, S.- H. Lin, and D. Dimitrov "Single and multilayer graphene grown by CVD technique: characterization for electro-optical applications" AIP Conference Proceedings 2075, 020017 (2019) **SJR 0.182**

B10. S. Chattopadhyay, V. Simonet, V. Skumryev, A. A. Mukhin, D. Z. Dimitrov, M. Gospodinov, and E. Ressouche "Single-crystal neutron diffraction study of hexagonal $YbMnO_3$ multiferroic under magnetic field" Physical Review B 98, 134413 (2018) **IF 3.736, Q1**

B11. M. Balli, S. Jandl, P. Fournier, J. Vermette, Dimitre Z Dimitrov "Unusual rotating magnetocaloric effect in the hexagonal ErMnO3 single crystal" Physical Review B 98, 184414 (2018) **IF 3.736, Q1**

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B14. M. Balli, S. Mansouri, S. Jandl, P. Fournier, D. Z Dimitrov "Analysis of the anisotropic magnetocaloric effect in RMn_2O_5 single crystals" Magnetochemistry 3, 36 (2017)

B15. B. S. Blagoev, E. Vlakhov, V. Videkov, B. Tzaneva, G. Łuka, B. S. Witkowski, P. Terziyska, J. Leclercq, T. A. Krajewski, E. Guziewicz, D. Z. Dimitrov, V B Mehandzhiev and P Sveshtarov "Atomic layer deposition of ZnO:Al on PAA substrates" Journal of Physics: Conference Series 764, 012004 (2016) **SJR 0.221**

B16. S. Mansouri, S. Jandl, M. Balli, J. Laverdière, P. Fournier, and D. Z. Dimitrov "Raman and crystal field studies of Tb-O bonds in $TbMn_2O_5$" Physical Review B, 94, 115109 (2016) **IF 3.736, Q1**

B17. M. Balli, S. Mansouri, S. Jandl, P. Fournier, and D. Z. Dimitrov "Large rotating magnetocaloric effect in the orthorhombic $DyMnO_3$ single crystal" Solid State Communications, Vol. 239, pp. 9–13 (2016) **IF 1.638, Q2**

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B20. Y.-C. Lai, S.-C. Yu, P. M. Rafailov, E. Vlaikova, V. Marinova, S.- H. Lin, P. Yu, G.- C. Chi, D. Dimitrov, P. Sveshtarov, V. Mehandjiev and M. M. Gospodinov "Chemical vapour deposition growth and Raman characterization of graphene layers and carbon nanotubes" Journal of Physics: Conference Series 682, 012009 (2016) **SJR 0.221**

B21. N. Bozhinov, B. Blagoev, V. Marinova, T. Babeva, E. Goovaerts, D. Dimitrov "Properties of ALD Aluminum-doped ZnO as transparent conductive oxide" Bulgarian Chemical Communications, Volume 48, Special Issue G, pp. 193-197 (2016) **SJR 0.148, Q4**

B22. V. G. Ivanov, V. G. Hadjiev, A. P. Litvinchuk, D. Z. Dimitrov, B. L. Shivachev, M. V. Abrashev, B. Lorenz, M. N. Iliev "Lattice Dynamics and Spin-Phonon Coupling in CaMn2O4: A Raman Study" Physical Review B, 89(18) 184307 (2014) **IF 3.929, Q1**

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B24. D. Dimitrov, V. Marinova, V. Tomov, P. Rafailov, M. Gospodinov "Crystals growth of topological insulators in $Bi_2(Se_xTe_{1-x})_3$ system" Bulgarian Chemical Communications, Volume 45, Special Issue B, pp. 226-228 (2013) **SJR 0.175, Q4**

B25. D. Z. Dimitrov "Silver nanoparticles assisted etching of silicon" Bulgarian Chemical Communications, Volume 45, Special Issue B, pp. 229-234 (2013) **SJR 0.175, Q4**

B26. Dionisiev, V. Marinova, K. Buchkov, H. Dikov, I. Avramova and D. Dimitrov "Synthesis and Characterizations of 2D Platinum Diselenide" Mater. Proc., 2(1), 22 (2020)

B27. M. Balli, S. Jandl, P. Fournier, and D. Z. Dimitrov "On the rotating magnetocaloric effect in multiferroic RMn_2O_5 compounds" Refrigeration Science and Technology 2016, pp. 217-221, 7th Int. Conf. on Magnetic Refrigeration at Room Temperature, THERMAG 2016; Torino; Italy; 11 -14 Sept. 2016; Code 126960 (2016) **SJR 0.12**

Р. Патенти:

P1. D. Dimitrov, C.-H. Lin, C.-W. Lan and D.-C. Wu "Method for forming solar cell with selective emitter" US Patent 8987038 (2015)

P2. Chen Chien-Hsun; **Dimitrov Dimitre Zahariev**; Lin Ching-Hsi; Shiao Jui-Chung; Wu Der-Chin "Back-contact heterojunction solar cell" Patent CN103137767 (2013)