### **Příspěvky týmu VUT v časopisech v roce 2019 s tematickou návazností na projekt AMISPEC**

### (supp\_mat\_liter\_vut\_tematicky\_2019.doc)

### Příspěvky týmu z VUT v impaktovaných mezinárodních časopisech (r. 2019) tematicky odpovídající problematice řešené v projektu Amispec, bez dedikace na projekt:

1. V. A. Ponomarev, …, **J. Polčák**, D. V. Shtansky: Microstructure, chemical and biological performance of boron-modified TiCaPCON films. Applied Surface Science 465 (28) (2019) p. 486-497. (<http://doi.org/10.1016/j.apsusc.2018.09.157>)

1. M. Stöger-Pollach, **K. Bukvišová**, S. Schwarz, **M. Kvapil, T. Šamořil, M. Horák**: Fundamentals of cathodoluminescence in a STEM: The impact of sample geometry and electron beam energy on light emission of semiconductors. Ultramicroscopy 200 (2019) p. 111-124. (<https://doi.org/10.1016/j.ultramic.2019.03.001>)
2. **M. Horák, V. Křápek, M. Hrtoň,** A. Konečná, **F. Ligmajer**, M. Stöger-Pollach, **T. Šamořil**, A. Paták, **Z. Édes, O. Metelka, J. Babocký, T. Šikola**: Limits of Babinet’s principle for solid and hollow plasmonic antennas. Scientific Reports 9 (2019) p. 4004. (<https://doi.org/10.1038/s41598-019-40500-1>)
3. **M. Kolíbal**, **K. Bukvišová**, **L. Kachtík**, A. Zak, L. Novák, **T. Šikola**: Formation of Tungsten Oxide Nanowires by Electron-Beam-Enhanced Oxidation of WS2 Nanotubes and Platelets. Journal of Physical Chemistry C 123 (14) (2019) p. 9552-9559. (<https://doi.org/10.1021/acs.jpcc.9b00592>)
4. **F. Ligmajer**, **M. Horák**, **T. Šikola**, M. Fojta, A. Daňhel: Silver Amalgam Nanoparticles and Microparticles: A Novel Plasmonic Platform for Spectroelectrochemistry. Journal of Physical Chemistry C 123 (2019). p. 16957-16964. (<http://dx.doi.org/10.1021/acs.jpcc.9b04124>)
5. P. Havranová, **F. Ligmajer**, A. Daňhel: Electrodeposition of Silver Amalgam on Thin Gold Film Electrodes for Voltammetric Detection of 4‐Nitrophenol and DNA Labeled with Osmium Tetroxide‐Bipyridine Complex. Electroanalysis 31 (2019) p. 1952-1960. (<https://doi.org/10.1002/elan.201900306>)
6. **O. Polat**, M. Coskun, **R. Kalousek**, **J. Zlámal**, B. Zengin Kurt, Y. Caglar, M. Caglar, A. Turut: Frequency and temperature-dependent electric modulus spectroscopy of osmium-doped YbFeO3 structure. Journal of Physics: Condensed Matter 32 (2019) p. 065701. (<https://doi.org/10.1088/1361-648X/ab4daa>)

1. G. Franceschi, M. Wagner, J. Hofinger, **T. Krajňák**, M. Schmid, U. Diebold, M. Riva: Growth of In2O3 (111) thin films with optimized surfaces. Physical Review Materials 3 (2019) p. 103403. (<http://doi.org/10.1103/PhysRevMaterials.3.103403>)

1. P. Pons-Valencia, F. J. Alfaro-Mozaz, M. M. Wiecha, **V. Biolek**, I. Dolado, S. Vélez, P. Li, P. Alonso-González, F. Casanova, L. E. Hueso, L. Martín-Moreno, R. Hillenbrand, A. Y. Nikitin: Launching of hyperbolic phonon-polaritons in h-BN slabs by resonant metal plasmonic antennas. Nature Communications 10 (2019) p. 3242. (<https://doi.org/10.1038/s41467-019-11143-7>)
2. Gablech, V. Svatoš, O. Caha, A. Dubroka, J. Pekárek, J. Klempa, P. Neužil, M. Schneider, **T. Šikola**: Preparation of high-quality stress-free (001) aluminum nitride thin film using a dual Kaufman ion-beam source setup. Thin Solid Films 670 (2015) p. 105-112. (<http://doi.org/10.1016/j.tsf.2018.12.035>)
3. J. Redondo, P. Lazar, P. Procházka, **S. Průša**, J. Lachnitt, A. Cahlík, B. Mallada, J. Berger, B. Šmíd, L. Kormoš, P. Jelínek, J. Čechal, M. Švec: Identification of two-dimensional FeO2 termination of hematite ɑ-Fe2O3(0001) surface. Journal of Physical Chemistry C 123 (2019). (<http://doi.org/10.1021/acs.jpcc.9b00244>)
4. A. Manakhov, …, **J. Polčák**, …, D. V. Shtansky: Bioactiva TiCaPCON-coated PCL nanofibers as a promising materiál for bone tissue engineering. Applied Surface Science 479 (2019) p. 796. (<https://doi.org/10.1016/j.apsusc.2019.02.163>)
5. E. S. Permyakova, …, **J. Polčák**, … D. V. Shtansky: Plasma Surface Polymerized and Biomarker Conjugated Boron Nitride Nanoparticles for Cancer-Specific Therapy: Experimental and Theoretical Study. Nanomaterials 9 (12) (2019) p. 1658. (<https://doi.org/10.3390/nano9121658>)
6. A. Pazniak, …, **J. Polčák**, …, D. Kuznetsov: Ti3C2Tx MXene characterization produced from SHS-ground Ti3AlC2. Materials & Design 183 (2019) p. 108143. (<https://doi.org/10.1016/j.matdes.2019.108143>)