### Příspěvky týmu VUT v mezinárodních časopisech v roce 2016 s návazností na projekt AMISPEC

### (supp\_mat\_liter\_vut\_2016.doc)

1. M. Kolíbal, L. Novák, T. Shanley, M. Toth, T. Šikola: Silicon Oxide Nanowire Growth Mechanisms Revealed by Real-Time Electron Microscopy , *Nanoscale* **8** (2016), 266. (dx.doi.org/10.1039/C5NR05152E)
2. M. Šimšíková, M. Bartoš, J. Čechal, T. Šikola: Decolorization of Organic Dyes by Gold Nanoflowers Prepared on Reduced Graphene Oxide by Tea Polyphenols, *Catal. Sci. Technol.* 6 (2016), 3008. (dx.doi.org/10.1039/C5CY01836F)
3. Z. Édes, V. Křápek, T. Šikola: Modeling of plasmon-enhanced photoluminescence of Si nanocrystals embedded in thin silicon-rich oxinitride layer, *Acta. Phys. Pol. A* 129 (2016), A70. (dx.doi.org/10.12693/APhysPolA.129.A-70)
4. V. Křápek, P. Klenovský, T. Šikola: Type-I and type-II confinement in quantum dots: excitonic fine structure, *Acta. Phys. Pol. A* 129 (2016), A66. (dx.doi.org/10.12693/APhysPolA.129.A-66)
5. D. Salamon, R. Kalousek, J. Zlámal, K. Maca: Role of conduction and convection heat transfer during rapid crack-free sintering of bulk ceramic with low thermal conductivity, *J. Europ. Ceram. Soc.* **36** (2016), 2955.
6. J. Rozbořil, Y. Rechkemmer, D. Bloos, F.Münz, C.N. Wang, P. Neugebauer, J. Čechal, J. Novák, J. van Slageren: Magneto-optical investigations of molecular nanomagnet monolayers, *Dalton Trans.* **45** (2016), 7555. (dx.doi.org/10.1039/C6DT00839A)
7. T. Ha Pham, J. Vogel, J. Sampaio, M. Vanatka, J.-C. Rojas-Sanchez, M. Bonfim, D. S. Chaves, F. Choueikani, P. Ohresser, E. Otero, A. Thiaville, S. Pizzini: Very large domain wall velocities in Pt/Co/GdOx and Pt/Co/Gd trilayers with Dzyaloshinskii-Moriya interaction, *EPL* **113** (2016) 67001. (dx.doi.org/10.1209/0295-5075/113/67001)
8. M. Kvapil, A. Kromka, B. Rezek, R. Kalousek, V. Křápek, P. Dub, T. Šikola: Influence of nanocrystalline diamond on resonant properties of gold plasmonic antennas, *Phys. Status Solidi A* **213** (2016), 1564. (dx.doi.org/10.1002/pssa.201532927)
9. L. Flajšman, M. Urbánek, V. Křižáková, M. Vaňatka, I. Turčan, T. Šikola: High-resolution fully vectorial scanning Kerr magnetometer, *Rev. Sci. Instrum.* **87** (2016), 053704. (dx.doi.org/10.1063/1.4948595)
10. M. Kolíbal,  T. Pejchal, T. Vystavěl, T. Šikola: The synergic effect of atomic hydrogen adsorption and catalyst spreading on Ge nanowire growth orientation and kinking, *Nano Lett.* **16** (2016), 4880.
11. J. Čechal, C. S. Kley, R. Pétuya, F. Schramm, M. Ruben, S. Stepanow, A. Arnau, K. Kern: CO2 Binding and Induced Structural Collapse of a Surface-Supported Metal-Organic Network,*J. Phys. Chem. C* **120** (2016), 18622.
12. C. Elbadawi, T. T. Tran, M. Kolíbal, T. Šikola, J. Scott, Q. Cai, L. H. Li, T. Taniguchi, K. Watanabe, M. Toth, I. Aharonovich, C. Lobo: Electron beam directed etching of hexagonal boron nitride. *Nanoscale* **8** (2016) 16182. (dx.doi.org/10.1039/c6nr04959a)
13. A. Akrap, M. Hakl, S. Tchoumakov, I. Crassee, J. Kuba, M. O. Goerbig, C. C. Homes, O. Caha, J. Novák, F. Teppe, W. Desrat, S. Koohpayeh, L. Wu, N. P. Armitage, A. Nateprov, E. Arushanov, Q. D. Gibson, R. J. Cava, D. van der Marel, B. A. Piot, C. Faugeras, G. Martinez, M. Potemski, M. Orlita: Magneto-Optical Signature of Massless Kane Electrons in Cd3As2, *Phys. Rev. Lett.* **117** (2016), 136401. (dx.doi.org/10.1103/PhysRevLett.117.136401)
14. O. Šik, P. Bábor, P. Škarvada, M. Potoček, T. Trčka, L. Grmela, E. Belas: Investigation of the effect of argon ion beam on CdZnTe single crystals surface structural properties, *Surf. Coat. Technol.,* (2016), (dx.doi.org/10.1016/j.surfcoat.2016.05.006)
15. J. He, W. Zheng, F. Ligmajer, C.-F. Chan, Z. Bao, K.-L. Wong, X. Chen, J. Hao, J. Dai, S.-F. Yu, D. Y. Lei: Plasmonic Enhancement and Polarization Dependence of Upconversion Emissions from Single Gold Nanorod@SiO2@CaF2:Yb3+>,Er3+ Hybrid Core-Shell-Satellite Nanostructures, *Light-Sci. Appl.,* Accepted.
16. L. Kormoš, M. Kratzer, K. Kostecki, M. Oehme, T. Šikola, E. Kasper, J. Schulze, C. Teichert: Surface analysis of epitaxially grown GeSn alloys with Sn contents between 15% and 18%, *Surf. Interface Anal.* **49**, (2017) 297–302 (dx.doi.org/10.1002/sia.6134)
17. R. Kalousek, J. Spousta, J. Zlámal, P. Dub, T. Šikola, Z. Shen, D. Salamon, K. Maca: Rapid heating of zirconia nanoparticle-powder compacts by infrared radiation heat transfer, *J. Europ. Ceram. Soc.* **37** (2016), 3, 1067-1072 (dx.doi.org/10.1016/j.jeurceramsoc.2016.10.004)
18. J. Babocký et al.: Patterning large area plasmonic nanostructures on non-conductive substrates using variable pressure electron beam lithography, *J. Vac. Sci. Technol B* **34**, 6, Article Nr.: 06K801.
19. M. Bartošík, L. Kormoš, L. Flajšman, R. Kalousek, Z. Lišková, J. Mach,T. Šamořil, T. Šikola: Nanometer-sized water bridge and pull-off force in ambient AFM at different relative humidity: reproducibility measurement and model based on surface tension change,

*J. Phys. Chem. B* **121**, pp. 610 – 619.