

- 80) **J. Houska**, J. Rezek, R. Cerstvy, "Dependence of the ZrO₂ growth on the crystal orientation: growth simulations and magnetron sputtering", Appl. Surf. Sci. 572, 151422 (2022). <http://doi.org/10.1016/j.apsusc.2021.151422>
- 79) A. Farhadizadeh, J. Vlcek, **J. Houska**, S. Haviar, R. Cerstvý, M. Cervena, "Hard and electrically conductive multicomponent diboride-based films with high thermal stability", Ceram. Int. 48, 540-547 (2022). <http://doi.org/10.1016/j.ceramint.2021.09.131>
- 78) **J. Houska**, "Maximum Achievable N Content in Atom-by-atom Growth of Amorphous Si-B-C-N Materials", Materials 14, 5744 (2021). <http://doi.org/10.3390/ma14195744>
- 77) J.C. Jiang, T. Barta, J. Vlcek, **J. Houska**, E.I. Meletis, "Microstructure of high-performance thermochromic ZrO₂/V_{0.984}W_{0.016}O₂/ZrO₂ coating with a low transition temperature (22 °C) prepared on flexible glass", Surf. Coat. Technol. 424, 127654 (2021). <http://doi.org/10.1016/j.surfcoat.2021.127654>
- 76) **J. Houska**, "Toward colorless smart windows", Sol. Energy Mater. Sol. Cells 230, 111210 (2021). <http://doi.org/10.1016/j.solmat.2021.111210>
- 75) M. Matas, M. Prochazka, J. Vlcek, **J. Houska**, "Dependence of characteristics of Hf(M)SiBCN (M = Y, Ho, Ta, Mo) thin films on the M choice: ab initio and experimental study", Acta Mater. 206, 116628 (2021). <http://doi.org/10.1016/j.actamat.2021.116628>
- 74) M. Kotrlova, P. Zeman, **J. Houska**, M. Prochazka, R. Cerstvy, S. Haviar, J. Vlcek, "High-temperature oxidation resistance and thermal stability of hard and optically transparent Hf-B-Si(-Y/Ho)-C-N films at temperatures up to 1600°C", J. Non-Cryst. Solids 553, 120470 (2021). <http://doi.org/10.1016/j.jnoncrysol.2020.120470>
- 73) M. Prochazka, J. Vlcek, **J. Houska**, S. Haviar, R. Cerstvy, K. Veltruska, "Multifunctional MoO_x and MoO_xN_y films with 2.5 < x < 3.0 and y < 0.2 prepared using controlled reactive deep oscillation magnetron sputtering", Thin Solid Films 717, 138442 (2021). <http://doi.org/10.1016/j.tsf.2020.138442>
- 72) T. Barta, J. Vlcek, **J. Houska**, S. Haviar, R. Cerstvy, J. Szelwicka, M. Fahland, J. Fahlteich, "Scalable Technique for Preparation of Strongly Thermochromic VO₂-based Coatings with a Transition Temperature of 22 °C on Ultrathin Flexible Glass", Coatings 10, 1258 (2020). <http://doi.org/10.3390/coatings10121258>
- 71) **J. Houska**, "Maximum achievable N content in atom-by-atom growth of amorphous Si-C-N", ACS Appl. Mater. Inter. 12, 41666-41673 (2020). <http://doi.org/10.1021/acsami.0c08300>
- 70) D. Kolenaty, J. Vlcek, T. Barta, J. Rezek, **J. Houska**, S. Haviar, "High-performance thermochromic VO₂-based coatings prepared on glass by a low-temperature (330 °C) scalable deposition technique", Sci. Rep. 10, 11107 (2020). <http://doi.org/s41598-020-68002-5>

- 69) J. Capek, S. Batkova, M. Matas, S. Kos, T. Kozak, S. Haviar, **J. Houska**, J. Schusser, J. Minar, F. Dvorak, P. Zeman, "Bixbyite Ta₂N₂O films prepared by HiPIMS and post-deposition annealing: structure and properties", J. Vac. Sci. Technol. A 38, 033409 (2020). <http://doi.org/10.1116/6.0000066>
- 68) A. Belosludtsev, J. Vlcek, **J. Houska**, S. Haviar, R. Cerstvy, "Tunable composition and properties of Al-O-N films prepared by reactive deep oscillation magnetron sputtering", Surf. Coat. Technol. 392, 125716 (2020). <http://doi.org/10.1016/j.surfcoat.2020.125716>
- 67) **J. Houska**, T. Kozak, "Distribution of O atoms on partially oxidized metal targets, and the consequences for reactive sputtering of individual metal oxides", Surf. Coat. Technol. 392, 125685 (2020). <http://doi.org/10.1016/j.surfcoat.2020.125685>
- 66) P. Zeman, S. Zuzjakova, R. Cerstvy, **J. Houska**, Y. Shen, J. Todt, J. Jiang, R. Daniel, J. Keckes, E.I. Meletis, J. Vlcek, "Extraordinary high-temperature behavior of electrically conductive Hf₇B₂₃Si₂₂C₆N₄₀ ceramic film", Surf. Coat. Technol. 391, 125686 (2020). <http://doi.org/10.1016/j.surfcoat.2020.125686>
- 65) A. Choukourov, I. Melnichuk, I. Gordeev, D. Nikitin, R. Tafiichuk, P. Pleskunov, J. Hanus, **J. Houska**, T. Kretkova, M. Dopita, "Self-organization of vapor-deposited polyolefins at the solid/vacuum interface", Prog. Org. Coat. 143, 105630 (2020). <http://doi.org/10.1016/j.porgcoat.2020.105630>
- 64) **J. Houska**, P. Machanova, M. Zitek, P. Zeman, "Molecular dynamics and experimental study of the growth, structure and properties of Zr-Cu films", J. Alloy Compd. 828, 154433 (2020). <http://doi.org/10.1016/j.jallcom.2020.154433>
- 63) P. Mares, J. Vlcek, **J. Houska**, J. Kohout, J. Capek, "Effect of energetic particles on pulsed magnetron sputtering of hard nanocrystalline MBCN (M = Ti, Zr, Hf) films with high electrical conductivity", Thin Solid Films 688, 137334 (2019). <http://dx.doi.org/10.1016/j.tsf.2019.05.053>
- 62) **J. Houska**, "Maximum N content in a-CN_x by ab-initio simulations", Acta Mater. 174, 189-194 (2019). <http://dx.doi.org/10.1016/j.actamat.2019.05.048>
- 61) J. Rezek, P. Novak, **J. Houska**, A.D. Pajdarova, T. Kozak, "High-rate reactive high-power impulse magnetron sputtering of transparent conductive Al-doped ZnO thin films prepared at ambient temperature", Thin Solid Films 679, 35-41 (2019). <http://dx.doi.org/10.1016/j.tsf.2019.04.009>
- 60) D. Javdosnak, J. Musil, Z. Soukup, S. Haviar, R. Cerstvy, **J. Houska**, "Tribological properties and oxidation resistance of tungsten and tungsten nitride films at temperatures up to 500°C", Tribol. Int. 132, 210-220 (2019). <http://dx.doi.org/10.1016/j.triboint.2018.12.019>
- 59) **J. Houska**, D. Kolenaty, J. Vlcek, T. Barta, J. Rezek, R. Cerstvy, "Significant improvement of the performance of ZrO₂/V_{1-x}W_xO₂/ZrO₂ thermochromic coatings by utilizing a second-order interference", Sol. Energy Mater. Sol. Cells 191, 365-371 (2019). <http://dx.doi.org/10.1016/j.solmat.2018.12.004>

- 58) J. Vlcek, D. Kolenaty, T. Kozak, **J. Houska**, J. Capek, S. Kos, "Ion-flux characteristics during low-temperature (300 °C) deposition of thermochromic VO₂ films using controlled reactive HiPIMS", J. Phys. D Appl. Phys. 52, 025205 (2019). <http://dx.doi.org/10.1088/1361-6463/aae9c6>
- 57) J. Capek, S. Batkova, S. Haviar, **J. Houska**, R. Cerstvy, P. Zeman, "Effect of annealing on structure and properties of Ta-O-N films prepared by high power impulse magnetron sputtering", Ceram. Int. 45, 9454-9461 (2019). <http://dx.doi.org/10.1016/j.ceramint.2018.09.019>
- 56) D. Kolenaty, **J. Houska**, J. Vlcek, "Improved performance of thermochromic VO₂/SiO₂ coatings prepared by low temperature pulsed reactive magnetron sputtering: prediction and experimental verification", J. Alloy. Compd. 767, 46-51 (2018). <http://dx.doi.org/10.1016/j.jallcom.2018.07.093>
- 55) **J. Houska**, D. Kolenaty, J. Vlcek, R. Cerstvy, "Properties of thermochromic VO₂ films prepared by HiPIMS onto unbiased amorphous glass substrates at a low temperature of 300 °C", Thin Solid Films 660, 463-470 (2018). <http://dx.doi.org/10.1016/j.tsf.2018.06.057>
- 54) J. Rezek, **J. Houska**, M. Prochazka, S. Haviar, T. Kozak, P. Baroch, "In-Ga-Zn-O thin films with tunable optical and electrical properties prepared by high-power impulse magnetron sputtering", Thin Solid Films 658, 27-32 (2018). <http://dx.doi.org/10.1016/j.tsf.2018.05.029>
- 53) V. Simova, J. Vlcek, S. Zuzjakova, **J. Houska**, Y. Shen, J. Jiang, E.I. Meletis, V. Peřina, "Magnetron sputtered Hf-B-Si-C-N films with controlled electrical conductivity and optical transparency, and with ultrahigh oxidation resistance", Thin Solid Films 653, 333-340 (2018). <http://dx.doi.org/10.1016/j.tsf.2018.03.064>
- 52) S. Zuzjakova, P. Zeman, S. Haviar, R. Cerstvy, **J. Houska**, J. Rezek, J. Vlcek, "Thermal stability of structure, microstructure and enhanced properties of Zr-Ta-O films with a low and high Ta content", Surf. Coat. Technol. 335, 95-103 (2018). <http://dx.doi.org/10.1016/j.surfcoat.2017.12.026>
- 51) J. Rezek, J. Vlcek, **J. Houska**, J. Capek, P. Baroch, "Enhancement of the deposition rate in reactive mid-frequency ac magnetron sputtering of hard and optically transparent ZrO₂ films", Surf. Coat. Technol. 336, 54-60 (2018). <http://dx.doi.org/10.1016/j.surfcoat.2017.09.015>
- 50) J. Vlcek, D. Kolenaty, **J. Houska**, T. Kozak, R. Cerstvy, "Controlled reactive HiPIMS - effective technique for low-temperature (300 °C) synthesis of VO₂ films with semiconductor-to-metal transition", J. Phys. D Appl. Phys. 50, 38LT01 (2017). <http://dx.doi.org/10.1088/1361-6463/aa8356>
- 49) **J. Houska**, T. Kozak, "Relationships between the distribution of O atoms on partially oxidized metal (Al, Ag, Cu, Ti, Zr, Hf) surfaces and the adsorption energy: a density-functional theory study", J. Appl. Phys. 121, 225303 (2017). <http://dx.doi.org/10.1063/1.4985281>

- 48) M. Matas, **J. Houska**, "Strong Effect of the Interaction Potential Cutoff on the Crystallinity of Films Grown by Simulations", Mol. Simul. 43, 1436-1441 (2017).
<http://dx.doi.org/10.1080/08927022.2017.1319056>
- 47) **J. Houska**, "Force field for realistic molecular dynamics simulations of TiO₂ growth", Comp. Mater. Sci. 134, 1-7 (2017). <http://dx.doi.org/10.1016/j.commatsci.2017.03.024>
- 46) A. Belosludtsev, J. Vlcek, **J. Houska**, R. Cerstvy, "Reactive high-power impulse magnetron sputtering of ZrO₂ films with gradient ZrO_x interlayers on pretreated steel substrates", J. Vac. Sci. Technol. A 35, 031503 (2017).
<http://dx.doi.org/10.1116/1.4978037>
- 45) A. Belosludtsev, **J. Houska**, J. Vlcek, S. Haviar, R. Cerstvy, J. Rezek, M. Kettner, "Structure and properties of Hf-O-N films prepared by high-rate reactive HiPIMS with smoothly controlled composition", Ceram. Int. 43, 5661-5667 (2017).
<http://dx.doi.org/10.1016/j.ceramint.2017.01.102>
- 44) **J. Houska**, D. Kolenaty, J. Rezek, J. Vlcek, "Characterization of thermochromic VO₂ (prepared at 250 °C) in a wide temperature range by spectroscopic ellipsometry", Appl. Surf. Sci. 421, 529-534 (2017). <http://dx.doi.org/10.1016/j.apsusc.2016.10.084>
- 43) N.W. Pi, M. Zhang, J. Jiang, A. Belosludtsev, J. Vlcek, **J. Houska**, E.I. Meletis, "Microstructure of hard and optically transparent HfO₂ films prepared by high-power impulse magnetron sputtering with a pulsed oxygen flow control, Thin Solid Films 619, 239 (2016). <http://dx.doi.org/10.1016/j.tsf.2016.10.059>
- 42) **J. Houska**, P. Mares, V. Simova, S. Zuzjakova, R. Cerstvy, J. Vlcek, "Dependence of characteristics of MSiBCN (M = Ti, Zr, Hf) on the choice of metal element: experimental and ab-initio study", Thin Solid Films 616, 359 (2016).
<http://dx.doi.org/10.1016/j.tsf.2016.08.066>
- 41) **J. Houska**, "Molecular dynamics study of the growth of crystalline ZrO₂", Surf. Coat. Technol. 304, 23 (2016). <http://dx.doi.org/10.1016/j.surfcoat.2016.07.004>
- 40) **J. Houska**, P. Steidl, J. Vlcek, J. Martan, "Thermal properties of hard B₄C, BCN, ZrBC and ZrBCN ceramics", Ceram. Int. 42, 4361 (2016).
<http://dx.doi.org/10.1016/j.ceramint.2015.11.115>
- 39) **J. Houska**, "Force field for realistic molecular dynamics simulations of ZrO₂ growth", Comp. Mater. Sci. 111, 209 (2016).
<http://dx.doi.org/10.1016/j.commatsci.2015.09.025>
- 38) J. Vlcek, A. Belosludtsev, J. Rezek, **J. Houska**, J. Capek, R. Cerstvy, S. Haviar, "High-rate reactive high-power impulse magnetron sputtering of hard and optically transparent HfO₂ films", Surf. Coat. Technol. 290, 58 (2016).
<http://dx.doi.org/10.1016/j.surfcoat.2015.08.024>

- 37) M. Zhang, J. Jiang, P. Mares, **J. Houska**, J. Vlcek, E.I. Meletis, "Effect of the Si content on the microstructure of hard, multifunctional Hf-B-Si-C films prepared by pulsed magnetron sputtering", Appl. Surf. Sci. 357, 1343 (2015).
<http://dx.doi.org/10.1016/j.apsusc.2015.09.249>
- 36) **J. Houska**, "Ageing resistance of SiBCN ceramics", Ceram. Int. 41, 7921 (2015).
<http://dx.doi.org/10.1016/j.ceramint.2015.02.132>
- 35) **J. Houska**, J. Kohout, P. Mares, R. Cerstvy, J. Vlcek, "Dependence of structure and properties of hard nanocrystalline conductive films MBCN (M = Ti, Zr, Hf) on the choice of metal element", Thin Solid Films 586, 22 (2015).
<http://dx.doi.org/10.1016/j.tsf.2015.04.023>
- 34) S. Zuzjakova, P. Zeman, **J. Houska**, R. Cerstvy, J. Musil, "Thermal stability and transformation phenomena in magnetron sputtered Al-Cu-O films", Ceram. Int. 42, 6020 (2015). <http://dx.doi.org/10.1016/j.ceramint.2015.01.045>
- 33) J. Vlcek, J. Rezek, **J. Houska**, T. Kozak, J. Kohout, "Benefits of the controlled reactive high-power impulse magnetron sputtering of stoichiometric ZrO₂ films", Vacuum 114, 131 (2015). <http://dx.doi.org/10.1016/j.vacuum.2014.12.004>
- 32) J. Rezek, J. Vlcek, **J. Houska**, R. Cerstvy, "High-rate reactive high-power impulse magnetron sputtering of Ta-O-N films with tunable composition and properties", Thin Solid Films 566, 70 (2014). <http://dx.doi.org/10.1016/j.tsf.2014.07.033>
- 31) M. Zhang, J. Jiang, **J. Houska**, J. Kohout, J. Vlcek, E.I. Meletis, "A Study of the Microstructure Evolution of Hard Zr-B-C-N Films by High-resolution Transmission Electron Microscopy", Acta Mater. 77, 212 (2014).
<http://dx.doi.org/10.1016/j.actamat.2014.05.064>
- 30) **J. Houska**, "Quantitative investigation of the role of high-energy particles in Al₂O₃ thin film growth: A molecular-dynamics study", Surf. Coat. Technol. 254, 131 (2014).
<http://dx.doi.org/10.1016/j.surfcoat.2014.05.072>
- 29) J. Kohout, J. Vlcek, **J. Houska**, P. Mares, R. Cerstvy, P. Zeman, M. Zhang, J. Jiang, E. I. Meletis, S. Zuzjakova, "Hard multifunctional Hf-B-Si-C films prepared by pulsed magnetron sputtering", Surf. Coat. Technol. 257, 301 (2014).
<http://dx.doi.org/10.1016/j.surfcoat.2013.12.007>
- 28) J. Vlcek, J. Rezek, **J. Houska**, R. Cerstvy, R. Bugyi, "Process stabilization and a significant enhancement of the deposition rate in reactive high power impulse magnetron sputtering of ZrO₂ and Ta₂O₅ films", Surf. Coat. Technol. 236, 550 (2013).
<http://dx.doi.org/10.1016/j.surfcoat.2013.10.052>
- 27) **J. Houska**, "Pathway for a low-temperature deposition of α -Al₂O₃: a molecular-dynamics study", Surf. Coat. Technol. 235, 333 (2013).
<http://dx.doi.org/10.1016/j.surfcoat.2013.07.062>
- 26) V. Petrman, **J. Houska**, "Trends in formation energies and elastic moduli of ternary and quaternary transition metal nitrides", J. Mater. Sci. 48, 7642 (2013).

<http://dx.doi.org/10.1007/s10853-013-7582-4>

- 25) **J. Houska**, J. Kohout, J. Vlcek, "Effect of N and Zr content on structure, electronic structure and properties of ZrBCN materials", Thin Solid Films 542, 225 (2013).
<http://dx.doi.org/10.1016/j.tsf.2013.07.010>
- 24) J. Vlcek, P. Calta, P. Steidl, P. Zeman, R. Cerstvy, **J. Houska**, J. Kohout, "Pulsed reactive magnetron sputtering of high-temperature Si-B-C-N films with high optical transparency", Surf. Coat. Technol. 226, 34 (2013).
<http://dx.doi.org/10.1016/j.surfcoat.2013.03.033>
- 23) **J. Houska**, S. Mraz, J.M. Schneider, "Experimental and molecular dynamics study of the growth of crystalline TiO₂", J. Appl. Phys. 112, 073527 (2012).
<http://dx.doi.org/10.1063/1.4757010>
- 22) **J. Houska**, J. Blazek, J. Rezek, S. Proksova, "Overview of optical properties of Al₂O₃ films prepared by various techniques", Thin Solid Films 520, 5405 (2012).
<http://dx.doi.org/10.1016/j.tsf.2012.03.113>
- 21) **J. Houska**, S. Ulrich, "Stress reduction in cubic boron nitride by oxygen addition: explanation of the mechanism by ab-initio simulations", Surf. Coat. Technol. 206, 2541 (2012). <http://dx.doi.org/10.1016/j.surfcoat.2011.11.007>
- 20) J. Blazek, J. Musil, P. Stupka, R. Cerstvy, **J. Houska**, "Properties of nanocrystalline Al-Cu-O films reactively sputtered by DC pulse dual magnetron", Appl. Surf. Sci. 258, 1762 (2011). <http://dx.doi.org/10.1016/j.apsusc.2011.10.039>
- 19) V. Petrman, **J. Houska**, S. Kos, P. Calta, J. Vlcek, "Effect of nitrogen content on electronic structure and properties of SiBCN materials", Acta Mater. 59, 2341 (2011).
<http://dx.doi.org/10.1016/j.actamat.2010.12.030>
- 18) **J. Houska**, S. Kos, "Ab-initio modelling of complex amorphous transition metal-based materials", J. Phys.: Condens. Matter 23, 025502 (2011).
<http://dx.doi.org/10.1088/0953-8984/23/2/025502>
- 17) **J. Houska**, S. Kos, "SiBCN materials for high-temperature applications: Atomistic origin of electrical conductivity", J. Appl. Phys. 108, 083711 (2010).
<http://dx.doi.org/10.1063/1.3493265>
- 16) **J. Houska**, J.E. Klemberg-Sapieha, L. Martinu, "Atom-by-atom simulations of chemical vapor deposition of nanoporous hydrogenated silicon nitride", J. Appl. Phys. 107, 083501 (2010). <http://dx.doi.org/10.1063/1.3371680>
- 15) **J. Houska**, J.E. Klemberg-Sapieha, L. Martinu, "Formation and behavior of unbonded hydrogen in a-C:H of various compositions and densities", Surf. Coat. Technol. 203, 3770 (2009). <http://dx.doi.org/10.1016/j.surfcoat.2009.06.022>
- 14) **J. Houska**, J.E. Klemberg-Sapieha, L. Martinu, "Relationships between composition and properties of (Cr/Ti)SiN and (Cr/Ti)CN alloys: an ab-initio study", J. Phys.: Condens. Matter 21, 285302 (2009).

<http://dx.doi.org/10.1088/0953-8984/21/28/285302>

- 13) **J. Houska**, J.E. Klemberg-Sapieha, L. Martinu, "Atomistic simulations of the characteristics of TiSiN nanocomposites of various compositions", *Surf. Coat. Technol.* 203, 3348 (2009). <http://dx.doi.org/10.1016/j.surfcoat.2009.04.021>
- 12) J. Capek, S. Hreben, P. Zeman, J. Vlcek, R. Cerstvy, **J. Houska**, "Effect of the gas mixture composition on high temperature behavior of magnetron sputtered Si-B-C-N coatings", *Surf. Coat. Technol.* 203, 466 (2008).
<http://dx.doi.org/10.1016/j.surfcoat.2008.07.025>
- 11) J. Cizek, J. Vlcek, S. Potocky, **J. Houska**, Z. Soukup, J. Kalas. P. Jedrzejowski, J.E. Klemberg-Sapieha and L. Martinu, "Mechanical and optical properties of quaternary Si-B-C-N films prepared by reactive magnetron sputtering", *Thin Solid Films* 516, 7286 (2008). <http://dx.doi.org/10.1016/j.tsf.2007.12.156>
- 10) **J. Houska**, J. Capek, J. Vlcek, M.M.M. Bilek, D.R. McKenzie, "Bonding statistics and electronic structure of novel Si-B-C-N materials: ab-initio calculations and experimental verification", *J. Vac. Sci. Technol. A* 25, 1411 (2007).
<http://dx.doi.org/10.1116/1.2764081>
- 9) **J. Houska**, J. Kalas, J. Vlcek, M.M.M. Bilek, D.R. McKenzie, "Effect of implanted argon on hardness of novel magnetron sputtered Si-B-C-N materials: experiments and ab-initio simulations", *J. Phys.: Condens. Matter* 19, 196228 (2007).
<http://dx.doi.org/10.1088/0953-8984/19/19/196228>
- 8) P. Kudlacek, J. Vlcek, **J. Houska**, J.G. Han, M.J. Jung, Y.M. Kim, "Ion bombardment characteristics during deposition of TiN films using a grid-assisted magnetron system with enhanced plasma potential", *Vacuum* 81, 1109 (2007).
<http://dx.doi.org/10.1016/j.vacuum.2007.03.006>
- 7) **J. Houska**, J. Vlcek, S. Potocky, V. Perina, "Influence of substrate bias voltage on structure and properties of hard Si-B-C-N films prepared by reactive magnetron sputtering", *Diamond Relat. Mater.* 16, 29 (2007).
<http://dx.doi.org/10.1016/j.diamond.2006.03.012>
- 6) **J. Houska**, J. Vlcek, S. Hreben, M.M.M. Bilek, D.R. McKenzie, "Effect of B and the Si/C ratio on high-temperature stability of novel Si-B-C-N materials", *Europhys. Lett.* 76, 512 (2006). <http://dx.doi.org/10.1209/epl/i2006-10283-5>
- 5) J. Vlcek, S. Potocky, **J. Houska**, P. Zeman, V. Perina, Y. Setsuhara, "New quaternary Si-B-C-N films prepared by reactive magnetron sputtering", *Trans. Mater. Res. Soc. Jpn.* 31, 447 (2006).
- 4) **J. Houska**, O. Warschkow, M.M.M. Bilek, D.R. McKenzie, J. Vlcek, S. Potocky, "The effect of argon on the structure of amorphous SiBCN materials: an experimental and ab initio study", *J. Phys.: Condens. Matter* 18, 2337 (2006).
<http://dx.doi.org/10.1088/0953-8984/18/7/019>

- 3) J. Vlcek, S. Potocky, J. Cizek, **J. Houska**, M. Kormunda, P. Zeman, V. Perina, J. Zemek, Y. Setsuhara, S. Konuma, "Reactive magnetron sputtering of hard Si-B-C-N films with a high-temperature oxidation resistance", J. Vac. Sci. Technol. A 23, 1513 (2005). <http://dx.doi.org/10.1116/1.2049298>
- 2) M.J. Jung, Y.M. Chung, **J. Houska**, P. Baroch, J. Vlcek, J. Musil, K.H. Nam, J.G. Han, "A study on the energy distribution for grid-assisting magnetron sputtering", Surf. Coat. Technol. 200, 421 (2005). <http://dx.doi.org/10.1016/j.surfcoat.2005.03.005>
- 1) **J. Houska**, M.M.M. Bilek, O. Warschkow, D.R. McKenzie, J. Vlcek, "Ab initio simulations of nitrogen evolution in quenched CN_x and SiBCN amorphous materials", Phys. Rev. B 72, 054204 (2005). <http://dx.doi.org/10.1103/PhysRevB.72.054204>