

Candidates edition 2011:

1. **Bur, C.**, Bastuck, M., Puglisi, D., Schütze, A., Lloyd Spetz, A., Andersson, M.; Discrimination and quantification of volatile organic compounds in the ppb-range with gas sensitive SiC-FETs using multivariate statistics,(2015) Sensors and Actuators, B: Chemical, . Article in press. DOI: 10.1016/j.snb.2015.03.016
2. Darmastuti, Z., **Bur, C.**, Lindqvist, N., Andersson, M., Schütze, A., Spetz, A.L.; Hierarchical methods to improve the performance of the SiC-FET as SO₂ sensors in flue gas desulphurization systems, (2015) Sensors and Actuators, B: Chemical, 206, pp. 609-616. DOI: 10.1016/j.snb.2014.09.113
3. Darmastuti, Z., **Bur, C.**, Möller, P., Rahlin, R., Lindqvist, N., Andersson, M., Schütze, A., Spetz, A.L.; SiC-FET based SO₂ sensor for power plant emission applications, (2014) Sensors and Actuators, B: Chemical, 194, pp. 511-520. DOI: 10.1016/j.snb.2013.11.089
4. **Bur, C.**, Bastuck, M., Spetz, A.L., Andersson, M., Schütze, A.; Selectivity enhancement of SiC-FET gas sensors by combining temperature and gate bias cycled operation using multivariate statistics, (2014) Sensors and Actuators, B: Chemical, 193, pp. 931-940. DOI: 10.1016/j.snb.2013.12.030
5. Helwig, N., Schüler, M., **Bur, C.**, Schütze, A., Sauerwald, T.; Gas mixing apparatus for automated gas sensor characterization, (2014) Measurement Science and Technology, 25 (5), art. no. 055903. DOI: 10.1088/0957-0233/25/5/055903
6. **Bur, C.**, Andersson, M.E., Spetz, A.L., Schütze, A.; Detecting volatile organic compounds in the ppb range with gas sensitive platinum gate SiC-field effect transistors, (2014) IEEE Sensors Journal, 14 (9), art. no. 6820739, pp. 3221-3228. DOI: 10.1109/JSEN.2014.2326693
7. **Bur, C.**, Bastuck, M., Puglisi, D., Schütze, A., Spetz, A.L., Andersson, M.; Discrimination and quantification of volatile organic compounds in the ppb-range with gas sensitive SiC-Field effect transistors,(2014) Procedia Engineering, 87, pp. 604-607. DOI: 10.1016/j.proeng.2014.11.561
8. Puglisi, D., Eriksson, J., **Bur, C.**, Schütze, A., Spetz, A.L., Andersson, M.; Silicon carbide field effect transistors for detection of ultra-low concentrations of hazardous volatile organic compounds, (2014) Materials Science Forum, 778-780, pp. 1067-1070. DOI: 10.4028/www.scientific.net/MSF.778-780.1067
9. Bastuck, M., **Bur, C.**, Spetz, A.L., Andersson, M., Schütze, A.; Identification of ammonia and carbon monoxide based on the hysteresis of a gas-sensitive SiC field effect transistor, (2013) 2013 Transducers and Eurosensors XXVII: The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, TRANSDUCERS and EUROSENSORS 2013, art. no. 6626749, pp. 250-253. DOI: 10.1109/Transducers.2013.6626749
10. **Bur, C.**, Andersson, M., Spetz, A.L., Helwig, N., Schütze, A.; Detecting Volatile Organic Compounds in the ppb range with platinum-gate SiC-Field Effect Transistors, (2013) IEEE SENSORS 2013 - Proceedings, art. no. 6688279. DOI: 10.1109/ICSENS.2013.6688279
11. Darmastuti, Z., **Bur, C.**, Moller, P., Lindqvist, N., Andersson, M., Schütze, A., Spetz, A.L.; SiC FET based SO₂ sensor for power plant emission applications, (2013) 2013 Transducers and Eurosensors XXVII: The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, TRANSDUCERS and EUROSENSORS 2013, art. no. 6626976, pp. 1150-1153. DOI: 10.1109/Transducers.2013.6626976
12. **Bur, C.**, Bastuck, M., Schütze, A., Spetz, A.L., Andersson, M.; Combination of temperature cycled and gate bias cycled operation to enhance the selectivity of SiC-FET gas sensors, (2013) 2013 Transducers and Eurosensors XXVII: The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, TRANSDUCERS and EUROSENSORS 2013, art. no. 6627199, pp. 2041-2044. DOI: 10.1109/Transducers.2013.6627199
13. Lloyd Spetz, A., Darmastuti, Z., **Bur, C.**, Huotari, J., Bjorklund, R., Lindqvist, N., Lappalainen, J., Jantunen, H., Schütze, A., Andersson, M.; Chemical sensor systems for environmental and emission control, (2013) Proceedings of SPIE - The International Society for Optical Engineering, 8725, art. no. 87250I. DOI: 10.1117/12.2016795

14. Lloyd Spetz, A., Huotari, J., **Bur, C.**, Bjorklund, R., Lappalainen, J., Jantunen, H., Schütze, A., Andersson, M.; Chemical sensor systems for emission control from combustions, (2013) *Sensors and Actuators, B: Chemical*, 187, pp. 184-190. DOI: 10.1016/j.snb.2012.10.078
15. **Bur, C.**, Reimann, P., Andersson, M., Spetz, A.L., Schütze, A.; New method for selectivity enhancement of SiC field effect gas sensors for quantification of NO_x, (2012) *Microsystem Technologies*, 18 (7-8), pp. 1015-1025. DOI: 10.1007/s00542-012-1434-z
16. **Bur, C.**, Reimann, P., Andersson, M., Schütze, A., Spetz, A.L.; Increasing the selectivity of Pt-gate SiC field effect gas sensors by dynamic temperature modulation, (2012) *IEEE Sensors Journal*, 12 (6), art. no. 6104345, pp. 1906-1913. DOI: 10.1109/JSEN.2011.2179645
17. **Bur, C.**, Schütze, A., Andersson, M., Lloyd Spetz, A.; Hierarcical strategy for quantification of NO_x in a varying background of typical exhaust gases, (2011) *Proceedings of IEEE Sensors*, art. no. 6127046, pp. 137-140. DOI: 10.1109/ICSENS.2011.6127046
18. **Bur, C.**, Reimann, P., Andersson, M., Spetz, A.L., Schütze, A.; Temperature cycled operation of sic field effect gas sensors: Increasing the selectivity for improved sensor systems, (2011) *AIP Conference Proceedings*, 1362, pp. 91-92. DOI: 10.1063/1.3626317
19. **Bur, C.**, Reimann, P., Andersson, M., Spetz, A.L., Schütze, A.; New method for selectivity enhancement of SiC field effect gas sensors for quantification of NO_x, (2011) *Proceedings of SPIE - The International Society for Optical Engineering*, 8066, art. no. 80660I. DOI: 10.1117/12.886431
20. **Bur, C.**, Reimann, P., Schütze, A., Andersson, M., Spetz, A.L.; Increasing the selectivity of Pt-gate SiC field effect gas sensors by dynamic temperature modulation, (2010) *Proceedings of IEEE Sensors*, art. no. 5690598, pp. 1267-1272. DOI: 10.1109/ICSENS.2010.5690598
21. Battie, Y., En Naciri, A., **Chamorro, W.**, Horwat, D.; Generalized effective medium theory to extract the optical properties of two-dimensional nonspherical metallic nanoparticle layers,(2014) *Journal of Physical Chemistry C*, 118 (9), pp. 4899-4905. DOI: 10.1021/jp4119343
22. **Chamorro, W.**, Horwat, D., Pigeat, P., Miska, P., Migot, S., Soldera, F., Boulet, P., Mücklich, F.; Near-room temperature single-domain epitaxy of reactively sputtered ZnO films, (2013) *Journal of Physics D: Applied Physics*, 46 (23), art. no. 235107. DOI: 10.1088/0022-3727/46/23/23510
23. **William Chamorro**, Jaafar Ghanbaja, Yann Battie, Aotmane En Naciri, Flavio Soldera, Frank Mücklich, and David Horwat, Local Structure-Driven Localized Surface Plasmon Absorption and Enhanced Photoluminescence in ZnO-Au Thin Films, *J. Phys. Chem. C*, DOI: 10.1021/acs.jpcc.6b09974
24. **Doroudgarian, N.**, Pupure, L., Joffe, R.; Moisture uptake and resulting mechanical response of bio-based composites. II. Composites,(2015) *Polymer Composites*, 36 (8), pp. 1510-1519. DOI: 10.1002/pc.23058
25. Pupure, L., **Doroudgarian, N.**, Joffe, R.; Moisture uptake and resulting mechanical response of biobased composites. I. constituents, (2014) *Polymer Composites*, 35 (6), pp. 1150-1159. DOI: 10.1002/pc.22762
26. **Melk, L.**, Rovira, J.J.R., Antti, M.-L., Anglada, M.; Coefficient of friction and wear resistance of zirconia-MWCNTs composites, (2014) *Ceramics International*, 41 (1), pp. 459-468. DOI: 10.1016/j.ceramint.2014.08.092
27. **Melk, L.**, Roa Rovira, J.J., García-Marro, F., Antti, M.-L., Milsom, B., Reece, M.J., Anglada, M.; Nanoindentation and fracture toughness of nanostructured zirconia/multi-walled carbon nanotube composites; (2015) *Ceramics International*, 41 (2), pp. 2453-2461. DOI: 10.1016/j.ceramint.2014.10.060
28. **Melk, L.**, Turon-Vinas, M., Roa, J.J., Antti, M.-L., Anglada, M.; The influence of unshielded small cracks in the fracture toughness of yttria and of ceria stabilised zirconia, (2016) *Journal of the European Ceramic Society*, 36 (1), pp. 147-153. DOI: 10.1016/j.jeurceramsoc.2015.09.017

29. **Latifa Melk**, Marta-Lena Antti, Marc Anglada, Material removal mechanisms by EDM of zirconia reinforced MWCNT nanocomposites, *Ceramics International* 42 (2016) 5, pp. 5792-5801. doi.org/10.1016/j.ceramint.2015.12.120.
30. **Latifa Melk**, JohanneMouzon, Miquel Turon, FaridAkhtar, Marta-Lena Antti, MarcAnglada, Surface microstructural changes of spark plasma sintered zirconia after grinding and annealing, *Ceramics International* 42 (2016) 14, pp. 15610-15617; doi.org/10.1016/j.ceramint.2016.07.014
31. Forsén, R., **Schramm, I.C.**, Persson, P.O.Å., Mücklich, F., Odén, M., Ghafoor, N.; Nanostructuring and coherency strain in multicomponent hard coatings, (2014) *APL Materials*, 2 (11), art. no. 116104. DOI: 10.1063/1.4901125
32. Knutsson, A., **Schramm, I.C.**, Asp Grönhagen, K., Mücklich, F., Odén, M.; Surface directed spinodal decomposition at TiAlN/TiN interfaces, (2013) *Journal of Applied Physics*, 113 (11), art. no. 114305. DOI: 10.1063/1.4795155
33. **I.C. Schramm**, M.P. Johansson Jöesaar, J. Jensen, F. Mücklich and M. Odén, Impact of nitrogen vacancies on the high temperature behavior of (Ti1-xAlx)Ny alloys, *Acta Materialia* 119 (2016) 218–228
34. **I.C. Schramm**, C. Pauly, M.P. Johansson Jöesaar, P. Eklund, J. Schmauch, F. Mücklich, M. Odén, Solid state formation of Ti4AlN3 in cathodic arc evaporated (Ti1-xAlx)Ny alloys, *Acta Materialia* 129 (2017) 268
35. **I.C. Schramm**, C. Pauly, M.P. Johansson Jöesaar, S. Slawik, S. Suárez, F. Mücklich and M. Odén, Effect of nitrogen vacancies on phase stability and mechanical properties of arc deposited (Ti0.52Al0.48)Ny (y < 1) coatings, *Surface and Coatings Technology* 330 (2017) 77
36. Gaddam, R., **Sefer, B.**, Pederson, R., Antti, M.-L.; Oxidation and alpha-case formation in Ti-6Al-2Sn-4Zr-2Mo alloy, (2015) *Materials Characterization*, 99, pp. 166-174. DOI: 10.1016/j.matchar.2014.11.023
37. Gaddam, **R., Sefer, B.**, Pederson, R., Antti, M.-L.; Study of alpha-case depth in Ti-6Al-2Sn-4Zr-2Mo and Ti-6Al-4V, (2013) *IOP Conference Series: Materials Science and Engineering*, 48 (1), art. no. 012002. DOI: 10.1088/1757-899X/48/1/012002
38. **Yalamanchili, K., Schramm, I.C.**, Jiménez-Piqué, E., Rogström, L., Mücklich, F., Odén, M., Ghafoor, N.; Tuning hardness and fracture resistance of ZrN/Zr0.63Al0.37N nanoscale multilayers by stress-induced transformation toughening, (2015) *Acta Materialia*, 89, pp. 22-31. DOI: 10.1016/j.actamat.2015.01.066
39. **Yalamanchili, K.**, Forsén, R., Jiménez-Piqué, E., Johansson Jöesaar, M.P., Roa, J.J., Ghafoor, N., Odén, M.; Structure, deformation and fracture of arc evaporated Zr-Si-N hard films, (2014) *Surface and Coatings Technology*, 258, pp. 1100-1107. DOI: 10.1016/j.surfcoat.2014.07.024
40. **K. Yalamanchili, F. Wang**, H. Aboufadi, **J. Barrirero**, L. Rogström, E. Jiménez-Pique, F. Mücklich, F. Tasnadi, M. Odén, and N. Ghafoor, Growth and thermal stability of TiN/ZrAlN: Effect of internal interfaces, *Acta Mater.*, 121 (2016), pp. 396–406.
41. **K. Yalamanchili, F. Wang, I.C. Schramm**, J. Andersson, M.P. Johansson Jöesaar, F. Tasnadi, F. Mücklich, N. Ghafoor and M. Odén, Exploring the high entropy alloy concept in (AlTiVNbCr)N Thin Solid Films 636 (2017) 346
42. **Yang, J.**, García Marro, F., Trifonov, T., Odén, M., Johansson-Jöesaar, M.P.; Contact damage resistance of TiN-coated hardmetals: Beneficial effects associated with substrate grinding, (2015) *Surface and Coatings Technology*, 275, pp. 133-41.
43. **Yang, J.**, Roa, J.J., Odén, M., Johansson-Jöesaar, M.P., Esteve, J.; Substrate surface finish effects on scratch resistance and failure mechanisms of TiN-coated hardmetals, (2015) *Surface and Coatings Technology*, 265, pp. 174-84
44. **Zrida, H.**, Loukil, M.S., Varna, J., Ayadi, Z.; Crack opening displacement determination in damaged cross-ply laminate using electronic speckle pattern interferometry (ESPI), *IOP Conference Series:*

Materials Science and Engineering, 31 (2012) art. no. 012002. DOI: 10.1088/1757-899X/31/1/012002

45. **H.Zrida**, K.Giannadakis., J.Varna and Z.Ayadi., The effect of meso-structure heterogeneity on the cracks initiation and the displacement distribution in NCF composites, Conference paper: IOP Conference series: Materials Science and Engineering, 31 (2012) art. no. 012023. doi:10.1088/1757-899X/31/1/012023
46. **Zrida, H.**, Marklund, E., Ayadi, Z., Varna, J.; Master curve approach to axial stiffness calculation for non-crimp fabric biaxial composites with out-of-plane waviness, (2014) Composites Part B: Engineering, 64, pp. 214-221. DOI: 10.1016/j.compositesb.2014.04.023
47. **Zrida, H.**, Marklund, E., Ayadi, Z., Varna, J.; Effective stiffness of curved 0°-layers for stiffness determination of cross-ply non-crimp fabric composites, (2014) Journal of Reinforced Plastics and Composites, 33 (14), pp. 1339-1352. DOI: 10.1177/0731684414526290
48. **Zrida, H.**, Hriz, K., Jaballah, N., Sakly, N., Kreher, D., Majdoub, M.; New poly(p-phenylenevinylene) derivatives containing isosorbide unit in the side-chain, (2014) Express Polymer Letters, 8 (10), pp. 709-722. DOI: 10.3144/expresspolymlett.2014.74
49. **Zrida, H.**, Hriz, K., Jaballah, N., Hrichi, H., Kreher, D., Majdoub, M.; New soluble anthracene-based polymer for opto-electronic applications, (2015) Journal of Materials Science, 14 p. Article in Press. DOI: 10.1007/s10853-015-9037-6
50. **H.Zrida.**, P.Fernberg., J.Varna and Z.Ayadi., Effect of extreme temperatures on micro-damage development in CF/polyimide laminates, Conference paper: 20th international conference on composite materials ICCM 2015, Copenhagen, Denmark.
51. J Varna, **H Zrida** and P Fernberg, Microdamage analysis in thermally aged CF/polyimide laminates, IOP Conference Series: Materials Science and Engineering, 139 (2016), art. no. 012050. doi:10.1088/1757-899X/139/1/012050
52. **H.Zrida**, P.Fernberg., J.Varna and Z.Ayadi., "Microcracking in thermally cycled and aged Carbon fibre/polyimide laminates", Journal paper: International journal of fatigue, 2016 (94), 121-130.
53. **H.Zrida**, P.Fernberg., J.Varna and Z.Ayadi., "Microcracking in thermally cycled and aged Carbon fibre/polyimide laminates", Journal paper: International journal of fatigue, 2016 (94), 121-130.

Candidates edition 2012:

1. Raza, Z., **Shulumba, N.**, Caffrey, N.M., Dubrovinsky, L., Abrikosov, I.A.; First-principles calculations of properties of orthorhombic iron carbide Fe₇ C₃ at the Earth's core conditions, (2015) Physical Review B - Condensed Matter and Materials Physics, 91 (21), art. no. 214112. DOI: 10.1103/PhysRevB.91.214112
2. **Shulumba, N.**, Alling, B., Hellman, O., Mozafari, E., Steneteg, P., Odén, M., Abrikosov, I.A.; Vibrational free energy and phase stability of paramagnetic and antiferromagnetic CrN from ab initio molecular dynamics, (2014) Physical Review B - Condensed Matter and Materials Physics, 89 (17), art. no. 174108. DOI: 10.1103/PhysRevB.89.174108
3. Steneteg, P., Hellman, O., Vekilova, O.Y., **Shulumba, N.**, Tasnádi, F., Abrikosov, I.A., Temperature dependence of TiN elastic constants from ab initio molecular dynamics simulations, (2013) Physical Review B - Condensed Matter and Materials Physics, 87 (9), art. no. 094114. DOI: 10.1103/PhysRevB.87.094114
4. **N. Shulumba**, O. Hellman, Z. Raza, B. Alling, **J. Barrirero**, F. Mücklich, I. A. Abrikosov, and M. Odén, Lattice Vibrations Change the Solid Solubility of an Alloy at High Temperatures, Phys. Rev. Lett., vol. 117, no. 20, p. 205502, 2016.
5. Mücklich, F., Engstler, M., Britz, D., **Barrirero, J.**, Rossi, P.; Why we need all dimensions to solve both very old and very new questions in materials at the micro-, nano- and atomic scales, (2015) Practical Metallography, 52 (9), pp. 507-524. DOI: 10.3139/147.110360

6. **Barrirero, J.**, Engstler, M., Ghafoor, N., De Jonge, N., Odén, M., Mücklich, F.; Comparison of segregations formed in unmodified and Sr-modified Al-Si alloys studied by atom probe tomography and transmission electron microscopy, *Journal of Alloys and Compounds*, 611 (2014) pp. 410-421. DOI: 10.1016/j.jallcom.2014.05.121
7. Liang, S.-M., Engstler, M., Groten, V., **Barrirero, J.**, Mücklich, F., Bührig-Polaczek, A., Schmid-Fetzer, R.; Key experiments and thermodynamic revision of the binary Al-Sr system, *Journal of Alloys and Compounds*, 610, (2014) pp. 443-450. DOI: 10.1016/j.jallcom.2014.05.018
8. Engstler, M., **Barrirero, J.**, Ghafoor, N., Odén, M., Mücklich, F.; 3D microstructure characterization and analysis of Al-Si foundry alloys at different length scales, *Microscopy and Microanalysis*, 20 (2014) (3), pp. 956-957. DOI: 10.1017/S1431927614006503
9. Li, J.H., **Barrirero, J.**, Engstler, M., Aboufadel, H., Mücklich, F., Schumacher, P.; Nucleation and Growth of Eutectic Si in Al-Si Alloys with Na Addition, *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 46 (2014) (3), pp. 1300-1311. DOI: 10.1007/s11661-014-2702-6
10. **Barrirero, J.**, Engstler, M., Mücklich, F.; Atom probe analysis of Sr distribution in AlSi foundry alloys, (2013) TMS Light Metals, (Light Metals 2013 - At the TMS 2013 Annual Meeting and Exhibition), pp. 291-296.
11. J. H. Li, **J. Barrirero**, G. Sha, H. Aboufadel, F. Mücklich, and P. Schumacher, Precipitation hardening of an Mg-5Zn-2Gd-0.4Zr (wt. %) alloy, *Acta Mater.*, 108 (2016), pp. 207–218. doi:10.1016/j.actamat.2016.01.053.
12. C. M. Menezes, N. Bogoni, **J. Barrirero**, H. Aboufadel, F. Mücklich, and C. A. Figueroa, Influence of the surface chemistry - structure relationship on the nanoscale friction of nitrated and post-oxidized iron, *Surf. Coatings Technol.*, vol. 308, pp. 220–225, 2016.
13. **J. Barrirero**, J. Li, M. Engstler, N. Ghafoor, P. Schumacher, M. Odén, and F. Mücklich, Cluster formation at the Si/liquid interface in Sr and Na modified Al–Si alloys, *Scripta Materialia*, 117 (2016) pp. 16–19. doi.org/10.1016/j.scriptamat.2016.02.018
14. J.J. Roa, H. Aboufadel, **J. Barrirero**, M. Turon-Vinas, F. Mücklich, M. Anglada, Chemical segregation in a 12Ce-ZrO₂/3Y-ZrO₂ ceramic composite, *Mater. Charact.* 132, pp. 83–91, 2017
15. Bähre, D., **Fang, S.-Q.**, Gliche, J., Trapp, K.; Set-Up Of A Test Bench For The Investigation Of Single Parameter Effects In Abrasive Processes By Force Measurements, (2014) *Advanced Materials Research*, 1052, pp. 441-446. DOI: 10.4028/www.scientific.net/AMR.1052.44
16. **S. Fang**, L. Llanes, M. Engstler, D. Baehre, F. Soldera, and F. Mücklich, Surface Topography Quantification of Super Hard Abrasive Tools by Laser Scanning Microscopy, *Materials Performance and Characterization*, 5 (2016) 5, pp. 796-815. <https://doi.org/10.1520/MPC20160008>. ISSN 2165-3992.
17. **Fang, S.**; Llanes, L.; Bähre, D.; Mücklich, F. 3D characterization of cubic boron nitride (CBN) composites used as tool material for high precision abrasive machining processes, In *Ceramics International*, 43, (2017) 17, Pages 14693-14700, ISSN 0272-8842.
18. **S. Fang**, L. Llanes, S. Klein, C. Gachot, A. Rosenkranz, D. Bähre, F. Mücklich, Frictional Performance Assessment of Cemented Carbide Surfaces Textured by Laser, *IOP Conference Series: Materials Science and Engineering* 258 (2017) 12006. doi:10.1088/1757-899X/258/1/012006.
19. **Shiqi Fang**, Flavio Soldera, Andreas Rosenkranz, Thomas Herrmann, Dirk Bähre, Luis Llanes, Frank Mücklich, Microstructural and Metallurgical Assessment of the Laser-Patterned Cemented Tungsten Carbide (WC-CoNi), *Procedia Manufacturing* 26 (2018) 198-204. 10.1016/j.promfg.2018.07.027
20. **S Fang**, CJ Hsu, S Klein, L Llanes, D Bähre, F Mücklich, Influence of Laser Pulse Number on the Ablation of Cemented Tungsten Carbides (WC-CoNi) with Different Grain Size, *Lubricants* 6, 1 (2018), 11.

21. **Wang, Y.**, Ghanbaja, J., Soldera, F., Migot, S., Boulet, P., Horwat, D., Mücklich, F., Pierson, J.F.; Tuning the structure and preferred orientation in reactively sputtered copper oxide thin films, (2015) *Applied Surface Science*, 335, pp. 85-91. DOI: 10.1016/j.apsusc.2015.02.028
22. **Wang, Y.**, Ghanbaja, J., Soldera, F., Boulet, P., Horwat, D., Mücklich, F., Pierson, J.F.; Controlling the preferred orientation in sputter-deposited Cu₂O thin films: Influence of the initial growth stage and homoepitaxial growth mechanism, (2014) *Acta Materialia*, 76, pp. 207-212. DOI: 10.1016/j.actamat.2014.05.008
23. **Wang, Y.**, Miska, P., Pilloud, D., Horwat, D., Mücklich, F., Pierson, J.F.; Transmittance enhancement and optical band gap widening of Cu₂O thin films after air annealing, (2014) *Journal of Applied Physics*, 115 (7), art. no. 073505. DOI: 10.1063/1.4865957
24. J.-F. Pierson, **Y. Wang**, J. Ghanbaja, S. Bruyère, P. Boulet, F. Soldera, D. Horwat, F. Mücklich, Local heteroepitaxial growth to promote the selective growth orientation, crystallization and interband transition of sputtered NiO thin films, *CrystEngComm*, 18(2015) , 0, 1732-1739
25. **Y. Wang**, J. Ghanbaja, S. Bruyère, P. Boulet, F. Soldera, D. Horwat, F. Mücklich, and J. F. Pierson, Local heteroepitaxial growth to promote the selective growth orientation, crystallization and interband transition of sputtered NiO thin films, *CrystEngComm*, 18 (2016) 1732, DOI: 10.1039/c5ce02419f
26. **Y. Wang**, S. Lany, J. Ghanbaja, Y. Fagot-Revurat, Y. P. Chen, F. Soldera, D. Horwat, F. Mücklich, and J. F. Pierson, Electronic structures of Cu₂O, Cu₄O₃, and CuO: A joint experimental and theoretical study, *Physical Review B* 94, 245418 (2016). DOI: 10.1103/PhysRevB.94.245418
27. **Y. Wang**, J. Ghanbaja, S. Bruyère, F. Soldera, D. Horwat, F. Mücklich, J. F. Pierson, Room temperature self-assembled growth of vertically aligned columnar copper oxide nanocomposite thin films on unmatched substrates, *Scientific Reports* 7, (2017) , 0, 1-9
28. **Yong Wang**, Jaafar Ghanbaja, Flavio Soldera, Pascal Boulet, David Horwat, Frank Mücklich, and Jean-Francois Pierson, Local Homoepitaxial Growth in Sputtered NiO Thin Films: An Effective Approach to Tune the Crystallization, Preferred Growth Orientation, and Electrical Properties. *Phys. Status Solidi RRL* 2018, 12, 1800191. DOI: 10.1002/pssr.201800191
29. Tasnádi, F., **Wang, F.**, Odén, M., Abrikosov, I.A.; Special quasirandom structure method in application for advanced properties of alloys: A study on Ti_{0.5}/Al_{0.5} N and TiN/Ti_{0.5}/Al_{0.5}/N multilayer, (2015) *Computational Materials Science*, 103, pp. 194-199. DOI: 10.1016/j.commatsci.2015.03.030
30. **Fei Wang**, David Holec, Magnus Odén, Frank Mücklich, Igor.A.Abrikosov and Ferenc Tasnádi, Systematic ab initio investigation of the elastic modulus in quaternary transition metal nitride alloys and their coherent multilayers. *Acta Materialia* 127 (2017), 124-132.
31. **Fei Wang**, Igor.A.Abrikosov, Sergey Simak, Magnus Odén, Frank Mücklich, and Ferenc Tasnádi. Coherency effects on the mixing thermodynamics of cubic Ti_{1-x}Al_xN/TiN(001) multilayers. *Physical Review B*, 93 (2016) (17), 174201.
32. Ektarawong , S. Simak, L. Hultman, J. Birch, F. Tasnádi, **F. Wang** and B. Alling. Effects of configurational disorder on the elastic properties of icosahedral boron-rich alloys based on B₆O, B₁₃C₂, and B₄C, and their mixing thermodynamics. *Journal of Chemical Physics*, 2016, 144(13).
33. Ferenc Tasnádi, **Fei Wang**, Magnus Odén, and Igor.A.Abrikosov. Thermal expansion of quaternary nitride coatings. *Journal of Physics Condensed Matter* 30(13) 2018, 135901. doi.org/10.1088/1361-648X/aab0b8
34. F. Tasnádi, J. Zhu, **F. Wang**, L. Rogström, T.-W. Hsu, H. Lind, I.A. Abrikosov, M. P. Johansson-Jõesaar, and M. Odén. High temperature thermodynamics of spinodal decomposition in arc deposited Ti_xNbyAl_zN coatings. *Materials & design* 150 (2018)165-170. doi.org/10.1016/j.matdes.2018.04.033
35. R. Gaddam, **B. Sefer**, R. Pederson, M.-L. Antti, Study of alpha-case depth in Ti-6Al-2Sn-4Zr-2Mo and Ti-6Al-4V, *IOP Conference Series: Materials Science and Engineering* 48 (1), (2013), 012002.

36. R. Gaddam, **B. Sefer**, R. Pederson, M.-L. Antti, Oxidation and alpha-case formation in Ti-6Al-2Sn-4Zr-2Mo alloy, *Materials Characterization* 99, (2015), 166-174.
37. **B. Sefer**, J. J. Roa, A. Mateo, R. Pederson, M.-L. Antti, Evaluation of the bulk and alpha-case layer properties in Ti-6Al-4V at micro- and nano-metric length scale, in: V. Venkatesh, A.L. Pilchak, J.E. Allison, S. Ankem, R. Boyer, J. Christodoulou, H.L. Fraser, M.A. Imam, J. Kosaka, H.J. Rack, A. Chatterjee, A. Woodfield (Eds.), *Proceedings of the 13th World Conference on Titanium*, John Wiley & Sons Inc., Hoboken, New Jersey, (2016), 1619-1624.
38. **B. Sefer**, R. Gaddam, J.J. Roa, A. Mateo, M.-L. Antti, R. Pederson, Chemical milling effect on the low cycle fatigue properties of cast Ti-6Al-2Sn-4Zr-2Mo alloy, *International Journal of Fatigue* 92, (2016) 193-202.
39. **B. Sefer**, R. Gaddam, R. Pederson, A. Mateo, R. Tegman, M.-L. Antti, Oxidation behaviour of Ti-6Al-4V and Ti-6Al-2Sn-4Zr-2Mo alloys exposed to air at elevated temperatures, *Corrosion Science*, (2017), re-submission in progress.
40. **B. Sefer**, I. Dobryden, N. Almqvist, R. Pederson, M.-L. Antti, Chemical milling of cast Ti-6Al-4V and Ti-6Al-2Sn-4Zr-2Mo alloys in hydrofluoric-nitric acid solutions, *Corrosion the Journal of Science and Engineering* 73 No. 4, (2017) 394-407.
41. **Safari A**, Emami N, Cervantes MJ. Bio-lubricant flow behaviour in mini-channels. *Lubr Sci.* 2016; 28(4):221-42
42. **Safari A**, Cervantes MJ, Emami N. Viscoelastic behaviour effect of hyaluronic acid on reciprocating flow inside mini-channel. *Lubr Sci.* 2016.
43. **Safari A**, Espanol M, Ginebra M.P, Cervantes MJ, Emami N. "Effect of Dynamic Loading versus Static Loading on Frictional Behavior of UHMPEW Pin in Artificial Biolubricant", *Biosurface and Biotribology* 3, no. 1 (2017): 35-44.
44. **R. Schieber**, F. Lasserre, M. Hans, M. Fernández-Yagüe, M. Díaz-Ricart, G. Escolar, M.-P. Ginebra, F. Mücklich, M. Pegueroles, Direct Laser Interference Patterning of CoCr Alloy Surfaces to Control Endothelial Cell and Platelet Response for Cardiovascular Applications, *Adv. Healthcare Mater.* 2017, 6, 1700327. <https://doi.org/10.1002/adhm.201700327>
45. Emma Björk, Peter Mäkie, Lina Rogström, **Aylin Atakan**, Norbert Schell and Magnus Odén, Formation of block-copolymer-templated mesoporous silica, *Journal of Colloid and Interface Science*, 2018, 521, 183-189.
46. **Aylin Atakan**, Edwin Erdtman, Peter Mäkie, Lars Ojamäe and Magnus Odén, Time evolution of the CO₂ hydrogenation to fuels over Cu-Zr-SBA-15 catalysts, *Journal of Catalysis*, 2018, 362, 55-64.
47. **Aylin Atakan**, Peter Mäkie, Fredrik Söderlind, Julien Keraudy, Emma Johansson and Magnus Odén, Synthesis of a Cu-infiltrated Zr-doped SBA-15 catalyst for CO₂ hydrogenation into methanol and dimethyl ethert, *Physical Chemistry, Chemical Physics - PCCP*, 2017, 19, 19139-19149.

Candidates edition 2013:

1. **Zhuang, L** and Pupurs, A, Effect of neighboring fibers on energy release rate during fiber/matrix debond growth. Proceeding in 16th EUROPEAN CONFERENCE ON COMPOSITE MATERIALS, 2014, Seville, Spain.
2. **Zhuang, L.** and R. Talreja, Analysis of Formation of the Critical State in Tensile Failure of Unidirectional Composites. Proceeding in ASME 2015 International Mechanical Engineering Congress & Exposition, 2015, Houston.
3. **Zhuang, L.**, Talreja, R., and Varna, J., "Effect of manufacturing induced fiber break on local tensile failure in composites." Proceeding in 31st ASC Technical Conference.2016, Williamsburg.

4. **Zhuang, L.**, Talreja, R., and Varna, J., 2016, "Tensile failure of unidirectional composites from a local fracture plane," *Composites Science and Technology*, 133, pp. 119-127.
5. **Zhuang, L.**, Pupurs, A., Varna, J., and Ayadi, Z., 2016, "Fiber/matrix debond growth from fiber break in unidirectional composite with local hexagonal fiber clustering," *Composites Part B: Engineering*, 101, pp. 124-131.
6. **Zhuang, L.**, Pupurs, A., Varna, J., and Ayadi, Z., 2016, "Effect of fiber clustering on debond growth energy release rate in UD composites with hexagonal packing," *Engineering Fracture Mechanics*, 161, pp. 76-88.
7. **Zhuang, L.**, Talreja, R., and Varna, J., "Effect of cooldown induced fiber/matrix interfacial disbond on transverse failure in composites." Proceeding in 32st ASC Technical Conference.2017, West Lafayette.
8. Varna, Janis, **Linqi Zhuang**, Andrejs Pupurs, and Zoubir Ayadi. "Growth and Interaction of Debonds in Local Clusters of Fibers in Unidirectional Composites during Transverse Loading." In *Key Engineering Materials*, vol. 754, pp. 63-66. Trans Tech Publications, 2017.
9. **Y. H. Chen**, L. Rogström, J. Schroeder, D. Ostach, M. P. Johansson, N. Schell, J. Birch and M. Odén, "Effects of decomposition mechanism and microstructure evolution on the phase transformation rate in TiCrAlN alloys", *Journal of Alloys and Compounds*, 691, 1024-1032 (2017).
10. **Y.H. Chen**, L. Rogström, J.J. Roa, J.Q. Zhu, **I.C. Schramm**, L.J.S. Johnson, N. Schell, F. Mücklich, M.J. Anglada and M. Odén, Thermal and mechanical stability of wurtzite-ZrAlN/cubic-TiN and wurzite-ZrAlN/cubic-ZrN multilayers, *Surface and Coatings Technology* 324 (2017) 328
11. **Yu-Hsiang Chen**, J. J. Roa, Mats P. Johansson-Jöesaar, J. M. Andersson, M. J. Anglada, Magnus Odén and Lina Rogström, Enhanced thermal stability and fracture toughness of TiAlN coatings by Cr, Nb and V-alloying, *Surface & Coatings Technology*, 2018, 342, 85-93.
12. **Benavides, V.**, Chernogorova, O.P., Drozdova, E.I., Ushakova, I.N., Soldatov, A.V.; Raman and electron microscopy study of C60 collapse/transformation to a nanoclustered graphene-based disordered carbon phase at high pressure/temperature, (2015) *Physica Status Solidi (B) Basic Research*, 252 (11), pp. 2626-2629. DOI: 10.1002/pssb.201552665
13. **Vicente Benavides**, Olga P. Chernogorova, Ekaterina I. Drozdova, Iraida N. Ushakova and Alexander V. Soldatov, *Phys. Status Solidi B* 252, No. 11, 2626–2629 (2015).
14. **E. Roitero**, F. Lasserre, M. Anglada, F. Mücklich, E. Jiménez-Piqué, A parametric study of laser interference surface patterning of dental zirconia: Effects of laser parameters on topography and surface quality, *Dental Materials*, 33(2017) , 0, pp. e28-e38
<http://dx.doi.org/10.1016/j.dental.2016.09.040>
15. **E Roitero**, F Lasserre, JJ Roa, M Anglada, F Mücklich, E Jiménez-Piqué, Nanosecond-laser patterning of 3Y-TZP: Damage and microstructural changes, *Journal of the European Ceramic Society* 37 (15), 4876-4887.
16. **E Roitero**, M Ochoa, M Anglada, F Mücklich, E Jiménez-Piqué, Low temperature degradation of laser patterned 3Y-TZP: Enhancement of resistance after thermal treatment, *Journal of the European Ceramic Society* 38, 4 (2018), 1742-1749.
<https://doi.org/10.1016/j.jeurceramsoc.2017.10.044>
17. **E Roitero**, M Anglada, F Mücklich, E Jiménez-Piqué, Mechanical reliability of dental grade zirconia after laser patterning, *Journal of the mechanical behavior of biomedical materials* 86, (2018) 257-263
18. **K.M. Calamba**, **I.C. Schramm**, M.P. Johansson Jöesaar, J. Ghanbaja, J.F. Pierson, F. Mücklich and M. Odén, Enhanced thermal stability and mechanical properties of nitrogen deficient titanium aluminum nitride (Ti_{0.54}Al_{0.46}Ny) thin films by tuning the applied negative bias voltage, *Journal of Applied Physics* 122 (2017) 065301

19. **M. Mickan**, U. Helmersson, H. Rinnert, J. Ghanbaja, D. Muller, and D. Horwat, Room temperature deposition of homogeneous, highly transparent and conductive Al-doped ZnO films by reactive high power impulse magnetron sputtering, *Sol. Energy Mater. Sol. Cells* 157 (2016) 742
20. **M. Mickan**, M. Stoffel, H. Rinnert, U. Helmersson, and D. Horwat, Restoring the Properties of Transparent Al-Doped ZnO Thin Film Electrodes Exposed to Ambient Air, *J. Phys. Chem. C* 121 (2017) 14426
21. **Kanupriya Khurana**, FrankMüller, KarinJacobs, ThomasFaidt, Jens-Uwe Neurohr, Samuel Grandthyll, Frank Mücklich, CristinaCanal, Maria Pau Ginebra, Plasma polymerized bioceramics for drug delivery: Do surface changes alter biological behaviour? *European Polymer Journal*, 107, (2018), 25-33, <https://doi.org/10.1016/j.eurpolymj.2018.07.016>

Candidates edition 2014:

1. **F. Forouzan**, E.Vuorinen, & F.Mücklich, "Post weld-treatment of laser welded AHSS by application of quenching and partitioning technique.", *Materials Science and Engineering: A*.vol.698, 174-182, 2017.
2. **F. Forouzan**; N.Strandqvist; E. Vuorinen; E. Navara, F. Mücklich,"Effect of Tempering on Microstructure and Mechanical Properties of Laser Welded and Post-Weld Treated AHSS Specimens" ,*Materials Science Forum*,891,18-24,Trans Tech Publications,2017.
3. **F. Forouzan**; S.Gunasekaran; A. Hedayati, E.Vuorinen; F. Mücklich ,"Microstructure Analysis and Mechanical Properties of Low Alloy High Strength Quenched and Partitioned Steel",*Solid State Phenomena*,258,,574-578, Trans Tech Publications,2017
4. **F. Forouzan**; H. Zhang, E. Vuorinen, F. Mücklich, "Study of The Kinetics of Precipitation in an AHSS steel after Laser Welding and Quenching and Partitioning", *International Materials Research Meeting In The Greater Region, Saarbrucken, Germany*,6-7 April,2017.
5. **F Forouzan**, M Guitar, E Vuorinen, F Mücklich, Effect of Carbon Partitioning, Carbide Precipitation, and Grain Size on Brittle Fracture of Ultra-High-Strength, Low-Carbon Steel after Welding by a Quenching and Partitioning *Metals* 8 (10), 747
6. **A. E. Giba**, P. Pigeat, S. Bruyère, H. Rinnert, F. Soldera, F. Mücklich, R. Gago and David Horwat, Strong Room Temperature Blue Emission from Rapid Thermal Annealed Cerium-Doped Aluminum (Oxy)Nitride Thin Films. *ACS Photonics*, 2017. 4(8): p. 1945-1953
7. **A. E. Giba**, P. Pigeat, S. Bruyère, T. Easwarakhanthan, F. Mücklich and David Horwat, Controlling refractive index in AlN films by texture and crystallinity manipulation. *Thin Solid Films*, 2017. 636: p. 537-545.
8. **Alaa E. Giba**, Philippe Pigeat, Stéphanie Bruyere, Hervé Rinnert, Flavio Soldera, Frank Mücklich, and David Horwat. From Blue to White Luminescence in Cerium-Doped Aluminum Oxynitride: Electronic Structure and Local Chemistry Perspectives, *J. Phys. Chem. C* 122 (37) (2018) pp. 21623-21631. DOI: 10.1021/acs.jpcc.8b06992
9. **Alaa E. Giba**, Philippe Pigeat, Stéphanie Bruyère, Hervé Rinnert, Frank Mücklich; Raul Gago, David Horwat; Ultraviolet Optical Excitation of Near Infrared Emission of Yb-doped Crystalline Aluminum Oxynitride Thin Films, *Journal of applied physics* 124 (3) 2018, 033102
10. **Idriss El Azhari**, José Garcia, Mohammad Zamanzade, Flavio Soldera, Christoph Pauly, Luis Llanes, Frank Mücklich, Investigations on micro-mechanical properties of polycrystalline Ti(C,N) and Zr(C,N) coatings, *Acta Materialia* 149 (2018) 364-376.
11. **Idriss El Azhari, Jenifer Barrirero**, José Garcia, Flavio Soldera, Luis Llanes, Frank Mücklich, Atom Probe Tomography investigations on grain boundary segregation in polycrystalline Ti(C,N) and Zr(C,N) CVD coatings, *Scripta Materialia*, accepted.

12. A. Pupurs, J.Varna, M. Loukil, **H. Ben Kahla**, D.Mattsson, Effective stiffness concept in bending modeling of laminates with damage in surface 90-layers, Composites. Part A, Applied science and manufacturing, Vol. 82, 244-252 p.
13. **H. Ben Kahla**, Z. Ayadi, F. Edgren, A. Pupurs, J. Varna, Statistical model for initiation governed intralaminar cracking in composite laminates during tensile quasi-static and cyclic tests. International Journal of Fatigue, 116 (2018) 1-12. doi.org/10.1016/j.ijfatigue.2018.05.030
14. **Utkudeniz Ozturk**, Jose Maria Cabrera and Jessica Calvo; High-Temperature Deformation of Inconel 718Plus™; J. Eng. Gas Turbines Power 139(3), 032101 (2016) Paper No: GTP-16-1243; doi: 10.1115/1.4034539
15. **Ozturk U**, Cabrera J, Calvo J. A Physically Based Model for High Temperature Deformation of Inconel 718Plus™. ASME. Turbo Expo: Power for Land, Sea, and Air, Volume 6: Ceramics; Controls, Diagnostics and Instrumentation; Education; Manufacturing Materials and Metallurgy ();V006T24A012. doi:10.1115/GT2017-64043.
16. Páramo-Kañetas, P.; **Ozturk, U.**; Calvo, J.; Cabrera, J.; Guerrero, M.; High-temperature deformation of delta-processed Inconel 718; Journal of materials processing technology 255 (2018), p. 204-211; DOI: 10.1016/j.jmatprotec.2017.12.014

Candidates edition 2015:

1. **A Borroto**, S. Bruyère, N. Thurieau, C. Gendarme, E. Jimenez-Piqué, JJ Roa, J. F. Pierson, F. Mücklich, D. Horwat, Structural and mechanical properties of Zr_{1-x}Mox thin films: From the nano-crystalline to the amorphous state, Journal of Alloys and Compounds 729 (2017) 137-143.
2. **K Aristizabal**, A Katzensteiner, A Bachmaier, F Mücklich, S Suarez, Study of the structural defects on carbon nanotubes in metal matrix composites processed by severe plastic deformation, Carbon 125, 156-161
3. **K Aristizabal**, S Suárez, A Katzensteiner, A Bachmaier, F Mücklich, Evolution of the microstructure in carbon nanotube reinforced Nickel matrix composites processed by high-pressure torsion, IOP Conference Series: Materials Science and Engineering 258 (1), 012008.
4. J Lee, **P Srimuk**, **K Aristizabal**, C Kim, S Choudhury, YC Nah, F Mücklich, V. Presser, Pseudocapacitive desalination of brackish water and seawater via vanadium pentoxide decorated multi-walled carbon nanotubes, ChemSusChem 10 (2017) 3611.
5. C. Kim; **P. Srimuk**; J. Lee; M. Aslan; V. Presser, Semi-continuous capacitive deionization using multi-channel flow stream and ion exchange membranes, Desalination, 425 (1), pp. 104-110, 2018.
6. **P. Srimuk**; J. Lee; S. Fleischmann; S. Choudhury; N. Jäckel; M. Zeiger; C. Kim; M. Aslan; V. Presser, Faradaic deionization of brackish and sea water via pseudocapacitive cation and anion intercalation into few layered molybdenum disulfide, Journal of Materials Chemistry A, 5 (30), pp. 15640-15649, 2017.
7. C. Kim; **P. Srimuk**; J. Lee; S. Fleischmann; M. Aslan; V. Presser, Influence of pore structure and cell voltage of activated carbon cloth as a versatile electrode material for capacitive deionization, Carbon, 122 (1), pp. 329-335, 2017.
8. J. Lee; **P. Srimuk**; S. Fleischmann; A. Ridder; M. Zeiger; V. Presser, Nanoconfinement of redox reactions enables rapid zinc iodide energy storage with high efficiency, Journal of Materials Chemistry A, 5 (24), pp. 12520-1527, 2017.
9. B. Krüner; **P. Srimuk**; S. Fleischmann; M. Zeiger; A. Schreiber; M. Aslan; A. Quade; V. Presser, Hydrogen-treated, submicrometer carbon beads for fast capacitive deionization with high performance stability, Carbon, 117 (1), pp. 46-54, 2017.
10. **P. Srimuk**; M. Zeiger; N. Jäckel; A. Tolosa; B. Krüner; S. Fleischmann; I. Grobelsek; M. Aslan; B. Shvartsev; M. E. Suss; V. Presser, Enhanced performance stability of carbon/titania hybrid

- electrodes during capacitive deionization of oxygen saturated saline water, *Electrochimica Acta*, 224 (1), pp. 314-328, 2017.
11. J. Lee; N. Jäckel; D. Kim; M. Widmaier; S. Sathyamoorthi; **P. Srimuk**; C. Kim; S. Fleischmann; M. Zeiger; V. Presser, Porous carbon as a quasi-reference electrode in aqueous electrolytes, *Electrochimica Acta*, 222 (1), pp. 1800-1805, 2016.
 12. **P. Srimuk**; F. Kaasik; B. Krüner; A. Tolosa; S. Fleischmann; N. Jäckel; M. C. Tekeli; M. Aslan; M. E. Suss; V. Presser, MXene as a novel intercalation-type pseudocapacitive cathode and anode for capacitive deionization, *Journal of Materials Chemistry A*, 4 (47), pp. 18265-18271, 2016.
 13. **P. Srimuk**; L. Ries; M. Zeiger; S. Fleischmann; N. Jäckel; A. Tolosa; B. Krüner; M. Aslan; V. Presser, High performance stability of titania decorated carbon for desalination with capacitive deionization in oxygenated water, *RSC Advances*, 6 (108), pp. 106081-106089, 2016.
 14. **Claudia de Melo**, Maud Jullien, Jaafar Ghanbaja, François Montaigne, Jean-François Pierson, Flavio Soldera, Federica Rigoni, Nils Almqvist, Alberto Vomiero, Frank Mücklich, and David Horwat, Local Structure and Point-Defect-Dependent Area-Selective Atomic Layer Deposition Approach for Facile Synthesis of p-Cu₂O/n-ZnO Segmented Nanojunctions, *ACS Appl. Mater. Interfaces*, doi: 10.1021/acsami.8b12584
 15. **Claudia de Melo**, Maud Jullien, Yann Battie, Aotmane En Naciri, Jaafar Ghanbaja, François Montaigne, Jean-François Pierson, Federica Rigoni, Nils Almqvist, Alberto Vomiero, Sylvie Migot, Frank Mücklich, and David Horwat; Tunable Localized Surface Plasmon Resonance and Broadband Visible Photoresponse of Cu Nanoparticles/ZnO Surfaces; *ACS Applied Materials & Interfaces* Article ASAP; DOI: 10.1021/acsami.8b17194