

1. T. Gries, R. Catrin, S. Migot, F. Soldera, J. L. Endrino, A. R. Landa-Canovas, F. Cleymand, D. Mangin, F. Mücklich, D. Horwat  
Local Modification of the Microstructure and Electrical Properties of Multifunctional Au–YSZ Nanocomposite Thin Films by Laser Interference Patterning  
(2014) *ACS Applied Materials & Interfaces* 6, pp. 13707–13715;  
DOI: 10.1021/am503160w
2. E. Ramos-Moore, C. Espinoza, R. S. Coelho, H. Pinto, P. Brito, F. Soldera, F. Mücklich, J. L. Garcia  
Investigations on Thermal Stresses of a Graded Ti(C,N) Coating Deposited on WC-Co Hardmetal  
(2014) *Advanced Materials Research*, 996, pp. 848-854.  
DOI: 10.4028/www.scientific.net/AMR.996.848
3. R. Albrecht, A. Bommer, C. Pauly, F. Mücklich, A. W. Schell, P. Engel, T. Schröder, O. Benson, J. Reichel, C. Becher  
Narrow-band single photon emission at room temperature based on a single nitrogen-vacancy center coupled to an all-fiber-cavity  
(2014) *Applied Physics Letters*, 105, 7, 73113  
DOI: 10.1063/1.4893612
4. J. Kodolányi, P. Hoppe, E. Gröner, C. Pauly, F. Mücklich  
The Mg isotope composition of presolar silicate grains from red giant stars  
(2014) *Geochimica et Cosmochimica Acta*, 140, pp. 577-605  
DOI: 10.1016/j.gca.2014.05.053
5. J. Riedrich-Möller, C. Arend, C. Pauly, F. Mücklich, M. Fischer, S. Gsell, M. Schreck, C. Becher  
Deterministic coupling of a single silicon-vacancy color center to a photonic crystal cavity in diamond  
(2014) *Nano letters*, 14, 9, pp. 5281-5287  
DOI: 10.1021/nl502327b
6. Y. Wang, P. Miska, D. Pilloud, D. Horwat, F. Mücklich, J. F. Pierson  
Transmittance enhancement and optical band gap widening of Cu<sub>2</sub>O thin films after air annealing  
(2014) *Journal of Applied Physics*, 115 (7), art. no. 073505  
DOI: 10.1063/1.4865957
7. A. Rosenkranz, L. Reinert, C. Gachot, F. Mücklich  
Alignment and wear debris effects between laser-patterned steel surfaces under dry sliding conditions  
(2014) *Wear*, 318, 1-2, pp. 49-61  
DOI: 10.1016/j.wear.2014.06.016
8. A. Rosenkranz, C. Gachot, S. Bettscheider, B. Martin, H. Kliem, F. Mücklich  
Correlation between solid–solid contact ratios and lubrication regimes measured by a refined electrical resistivity circuit  
(2014) *Wear* 320, 51-61  
DOI: 10.1016/j.wear.2014.08.018
9. J. Barrirero, M. Engstler, N. Ghafoor, N. de Jonge, M. Odén, F. Mücklich  
Comparison of segregations formed in unmodified and Sr-modified Al–Si alloys studied by atom probe tomography and transmission electron microscopy  
(2014) *Journal of Alloys and Compounds*, 611, pp. 410-421  
DOI: 10.1016/j.jallcom.2014.05.121
10. S.-M. Liang, M. Engstler, V. Groten, J. Barrirero, F. Mücklich, A. Bührig-Polaczek, R. Schmid-Fetzer  
Key experiments and thermodynamic revision of the binary Al–Sr system  
(2014) *Journal of Alloys and Compounds*, 610, pp. 443-450  
DOI: 10.1016/j.jallcom.2014.05.018
11. Szurdak, A. Rosenkranz, C. Gachot, G. Hirt, F. Mücklich  
Manufacturing and tribological investigation of hot micro-coined lubrication pockets  
(2014) *Key Engineering Materials*, 611-612, pp. 417-424  
DOI: 10.4028/www.scientific.net/KEM.611-612-417

12. F. L. Miguel, R. Müller, M. Weinmann, R. Hempelmann, S. Mathur, F. Mücklich  
Production and characterization of nanocomposite thin films based on Ni matrix reinforced with SnO<sub>2</sub> single-crystalline nanowires for electrical contact applications  
(2014) *Journal of Alloys and Compounds*, 603, pp. 14-18  
DOI: 10.1016/j.jallcom.2014.03.066
13. S. Suárez, F. Lasserre, O. Prat, F. Mücklich  
Processing and interfacial reaction evaluation in MWCNT/Ni composites  
(2014) *physica status solidi (a)* 211, 7, pp. 1555-1561  
DOI: 10.1002/pssa.201431018
14. M. F. Broglia, S. Suárez, F. Soldera, F. Mücklich, C. A. Barbero, R. Bellingeri, F. Alustiza, D. Acevedo  
Direct laser interference patterning of polystyrene films doped with azo dyes, using 355 nm laser light  
(2014) *Applied Surface Science*, 300, pp. 86-90  
DOI: 10.1016/j.apsusc.2014.02.008
15. M. A. Guitar, H. Aboufadi, C. Pauly, P. Leibenguth, S. Migot, F. Mücklich  
Production of single-phase intermetallic films from Ru-Al multilayers  
(2014) *Surface and Coatings Technology*, 244, pp. 210-216  
DOI: 10.1016/j.surfcoat.2014.02.022
16. M. A. Guitar, E. Ramos-Moore, F. Mücklich  
The influence of impurities on the formation of protective aluminium oxides on RuAl thin films  
(2014) *Journal of Alloys and Compounds*, 594, pp. 165-170  
DOI: 10.1016/j.jallcom.2014.01.137
17. S. Suárez, E. Ramos-Moore, B. Lechthaler, F. Mücklich, F.  
Grain growth analysis of multiwalled carbon nanotube-reinforced bulk Ni composites  
(2014) *Carbon*, 70, pp. 173-178  
DOI: 10.1016/j.carbon.2013.12.089
18. Y. Wang, J. Ghanbaja, F. Soldera, P. Boulet, D. Horwat, F. Mücklich, J. F. Pierson  
Controlling the preferred orientation in sputter-deposited Cu<sub>2</sub>O 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
19. D. Britz, A. Hegetschweiler, F. Mücklich  
Opening the Door to Fundamental Understanding of Structure and Color Metallography – a Correlative Microscopy Study on Steel  
(2014) *Microscopy and Microanalysis*, 20 (Suppl. 3), pp. 834-835  
DOI: 10.1017/S1431927614005893
20. P. Rossi, M. Engstler, F. Mücklich  
Homogeneity Quantification Method and its Application to Microstructure Assessment  
(2014) *Practical Metallography*, 51, pp. 180-199  
DOI: 10.3139/147.110287
21. S. Suárez, A. Rosenkranz, C. Gachot, F. Mücklich  
Enhanced tribological properties of MWCNT/Ni bulk composites - Influence of processing on friction and wear behavior  
(2014) *Carbon*, 66, pp. 164-171  
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84886781422&partnerID=40&md5=3c6226e455f3ff5b9b9eea5575083157>
22. K. Yalamanchili, I. C. Schramm, E. Jiménez-Piqué, L. Rogström, F. Mücklich, N. Ghafoor, M. Odén  
Growth and Mechanical Behavior of Nanoscale Structures in ZrN/ZrO<sub>2</sub>. 63AlO<sub>3</sub> 37N Multilayers  
(2014)  
<https://www.semanticscholar.org/paper/Growth-and-Mechanical-Behavior-of-Nanoscale-in-ZrN-Yalamanchili-Schramm/df90b93d3b0d45fb0c109b9f456dc71d7103a62d>

23. R. Forsén, I. C. Schramm, B. Alling, Per O Å Persson, F. Mücklich, M. Odén, N. Ghafoor  
Nanostructuring and coherency strain in multicomponent hard coatings  
(2014) *APL Mater.* 2 116104  
DOI: 10.1063/1.4901125
24. F. Mücklich, M. Hans, M. Solioz  
Warum sterben Bakterien auf Kupferoberflächen?  
(2014) *Manag. Krankenhaus*
25. M. Engstler, J. Barrirero, N. Ghafoor, M. Odén, F. Mücklich  
3D Microstructure Characterization and Analysis of Al-Si Foundry Alloys at Different Length Scales  
(2014) *Microsc. Microanal.* 20 956–957  
DOI: 10.017/S1431927614006503
26. K. E. Trinh, F. Mücklich, E. Ramos-Moore  
The role of microstructure and surface topography in the electrical behavior of Sn-coated Cu contacts  
(2014) *ICEC 2014; 27th Int. Conf. Electr. Contacts*, pp. 1–6
27. C. Selzner, F. Mücklich  
New microstructure investigations of arc damaged silver/tin oxide electrodes by means of FIB-  
technique  
(2014) *ICEC 2014; 27th Int. Conf. Electr. Contacts*, pp. 1–5
28. F. Mücklich, J. Webel, H. Aboulfadl, N. Lindow, H.-C. Hege  
Correlative Tomography-Extraction of Reliable Information with Adequate Resolution from mm Scale  
Down to Sub-nm Scale  
(2014) *Microsc. Microanal.* 20 838–839  
DOI: 10.1017/S1431927614005911
29. M. Hans, J. C. Támara, S. Mathews, B. Bax, A. Hegetschweiler, R. Kautenburger, M. Solioz, F. Mücklich  
Laser cladding of stainless steel with a copper-silver alloy to generate surfaces of high antimicrobial  
activity  
(2014) *Appl. Surf. Sci.* 320 195–199  
DOI: 10.1016/j.apsusc.2014.09.069
30. C. Hahn, G. Reitz, R. Moeller, P. Rettberg, M. Hans, F. Mücklich  
Introducing the potential of antimicrobial materials for human and robotic spaceflight activities  
(2014) *Cosp.* 40 F4--1  
<https://ui.adsabs.harvard.edu/abs/2014cosp...40E1132H/abstract>
31. M. Roland, A. Kruglova, N. Harste, F. Mücklich, S. Diebels  
Numerical Simulation of Al-Si alloys with and without a Directional Solidification  
(2014) *Image Anal. Stereol.* 33 29–37  
DOI: 10.5566/ias.v33.p29-37