

- L. Lin, L.P.H. Jeurgens, *Local Deformation-Controlled Fast Directional Metal Outflow in Metal/Ceramic Nanolayer Sandwiches upon Low Temperature Annealing*, **ACS Applied Materials & Interfaces** 11 (2019) 39046–39053 [DOI: [10.1021/acsami.9b10498](https://doi.org/10.1021/acsami.9b10498)].
- E. Ilic, *Corrosion Mechanisms of Diamond-like Carbon Coated Interlayers & Interfaces*, **Thesis no. 7487**, École Polytechnique Fédérale de Lausanne (2019) [DOI: [10.5075/epfl-thesis-7487](https://doi.org/10.5075/epfl-thesis-7487)].
- M. Cihova, E. Martinelli, P. Schmutz, A. Myriss, R. Schäublin, A.M. Weinberg, P.J. Uggowitzer, J.F. Löffler, *The role of zinc in the biocorrosion behavior of resorbable Mg–Zn–Ca alloys*, **Acta Biomaterialia** 100 (2019) 398–414 [DOI: [10.1016/j.actbio.2019.09.021](https://doi.org/10.1016/j.actbio.2019.09.021)].
- J. Huo, G. Zou, L. Lin, K. Wang, S. Xing, G. Zhao, L. Liu, Y.N. Zhou, *Highly focused femtosecond laser directed selective boron doping in single SiC nanowire device for n-p conversion*, **Applied Physics Letters** 115 (2019) 133104 [DOI: [10.1063/1.5115335](https://doi.org/10.1063/1.5115335)].
- M. Cihova, P. Schmutz, R. Schäublin, J.F. Löffler, *Biocorrosion Zoomed In: Evidence for Dealloying of Nanometric Intermetallic Particles in Magnesium Alloys*, **Advanced Materials** 31 (2019) 1903080 [DOI: [10.1002/adma.201903080](https://doi.org/10.1002/adma.201903080)].
- W. Cui, T. Moehl, S. Sioj, S.D. Tilley, *Operando electrochemical study of charge carrier processes in water splitting photoanodes protected by atomic layer deposited TiO₂*, **Sustainable Energy Fuels** 3 (2019) 3085–3092 [DOI: [10.1039/c9se00399a](https://doi.org/10.1039/c9se00399a)].
- L. Reith, K. Lienau, C.A. Triana, S. Sioj, G.R. Patzke, *Preparative History vs Driving Force in Water Oxidation Catalysis: Parameter Space Studies of Cobalt Spinel*, **ACS Omega** 4 (2019) 15444–15456 [DOI: [10.1021/acsomega.9b01677](https://doi.org/10.1021/acsomega.9b01677)].
- A. Hu, J. Janczak-Rusch, T. Sano, *Joining Technology Innovations at the Macro, Micro, and Nano Levels*, **Applied Science** 9 (2019) 3568 [DOI: [10.3390/app9173568](https://doi.org/10.3390/app9173568)].
- D. Landmann, Y. Tang, B. Kunz, R. Huber, D. Widner, P. Rickhaus, R.N. Widmer, H.R. Elsener, C. Battaglia, *Fabrication, characterization, and application-matched design of thermoelectric modules based on Half-Heusler FeNbSb and TiNiSn*, **Journal of Applied Physics** 126 (2019) 085113 [DOI: [10.1063/1.5108636](https://doi.org/10.1063/1.5108636)].
- S. Xing, L. Lin, G. Zou, W.W. Duley, L. Liu, Y.N. Zhou, *Two-photon absorption induced nanowelding for assembling ZnO nanowires with enhanced photoelectrical properties*, **Applied Physics Letters** 115 (2019) 103101 [DOI: [10.1063/1.5116242](https://doi.org/10.1063/1.5116242)].
- L. Dörner, C. Cancellieri, B. Rheingans, M. Walter, R. Kägi, P. Schmutz, M.V. Kovalenko, L.P.H. Jeurgens, *Cost-effective sol-gel synthesis of porous CuO nanoparticle aggregates with tunable specific surface area*, **Scientific Reports** 9 (2019) 11758 [DOI: [10.1038/s41598-019-48020-8](https://doi.org/10.1038/s41598-019-48020-8)].
- E. Ilic, A. Pardo, T. Suter, S. Mischler, P. Schmutz, R. Hauert, *A methodology for characterizing the electrochemical stability of DLC coated interlayers and interfaces*, **Surface and Coatings Technology** 375 (2019) 402–413 [DOI: [10.1016/j.surfcoat.2019.07.055](https://doi.org/10.1016/j.surfcoat.2019.07.055)].
- T. Wejrzanowski, J. Lipecka, J. Janczak-Rusch, M. Lewandowska, *Al-Si/AlN nanomultilayered systems with reduced melting point: Experiments and simulations*, **Applied Surface Science** 493 (2019) 261–270 [DOI: [10.1016/j.apsusc.2019.07.045](https://doi.org/10.1016/j.apsusc.2019.07.045)].
- A.V. Druzhinin, D. Ariosa, S. Sioj, N. Ott, B.B. Straumal, J. Janczak-Rusch, L.P.H. Jeurgens, C. Cancellieri, *Effect of the individual layer thickness on the transformation of Cu/W nano-multilayers into nanocomposites*, **Materialia** 7 (2019) 100400 [DOI: [10.1016/j.mtla.2019.100400](https://doi.org/10.1016/j.mtla.2019.100400)].

- C. Burkhardt, N. Dauphas, U. Hans, B. Bourdon, T. Kleine, *Elemental and isotopic variability in solar system materials by mixing and processing of primordial disk reservoirs*, **Geochimica et Cosmochimica Acta** 261 (2019) 145-170 [DOI: [10.1016/j.gca.2019.07.003](https://doi.org/10.1016/j.gca.2019.07.003)].
- V.N. Strocov, L.L. Lev, M. Kobayashi, C. Cancellieri, M.-A. Husanu, A. Chikina, N.B.M. Schröter, X. Wang, J.A. Krieger, Z. Salman, *k-resolved electronic structure of buried heterostructure and impurity systems by soft-X-ray ARPES*, **Journal of Electron Spectroscopy and Related Phenomena** 236 (2019) 1-8 [DOI: [10.1016/j.elspec.2019.06.009](https://doi.org/10.1016/j.elspec.2019.06.009)].
- H. Ma, T. Gagnidze, B. Walfort, M.D. Russell, C. Cancellieri, I. Shorubalko, F. La Mattina, *Direct-epitaxial growth of SrAl₂O₄:Eu,Dy thin films on Al₂O₃ substrate by pulsed laser deposition*, **Applied Surface Science** 491 (2019) 53-59 [DOI: [10.1016/j.apsusc.2019.06.098](https://doi.org/10.1016/j.apsusc.2019.06.098)].
- H.R. Elsener, B. Rheingans, L.P.H. Jeurgens, T. Burgdorf, S. Brüngger, D. Piazza, P. Wurz, *Brazed metal-ceramic components for space applications*, **LÖT 2019 DVS Berichte** Band 353 (2019) 207-214 [[Source](#)].
- S. Büchele, Z. Chen, S. Mitchell, R. Hauert, F. Krumeich, J. Pérez-Ramírez, *Tailoring Nitrogen-Doped Carbons as Hosts for Single-Atom Catalysts*, **ChemCatChem** 11 (2019) 2812-2820 [DOI: [10.1002/cctc.201900547](https://doi.org/10.1002/cctc.201900547)].
- E. Vorobyeva, E. Fako, Z. Chen, S.M. Collins, D. Johnstone, P.A. Midgley, R. Hauert, O.V. Safonova, G. Vito Vilé, N. López, S. Mitchell, J. Pérez-Ramírez, *Atom-by-Atom Resolution of Structure–Function Relations over Low-Nuclearity Metal Catalysts*, **Angewandte Chemie International Edition** 58 (2019) 8724-8729 [DOI: [10.1002/anie.201902136](https://doi.org/10.1002/anie.201902136)].
- R. Wick-Joliat, T. Musso, R. Ramanujam Prabhakar, J. Löckinger, S. Siol, W. Cui, L. Sévery, T. Moehl, J. Suh, J. Hutter, M. Iannuzzi, S.D. Tilley, *Stable and tunable phosphonic acid dipole layer for band edge engineering of photoelectrochemical and photovoltaic heterojunction devices*, **Energy & Environmental Science** 12 (2019) 1901-1909 [DOI: [10.1039/C9EE00748B](https://doi.org/10.1039/C9EE00748B)].
- B. Rheingans, L.P.H. Jeurgens, J. Janczak-Rusch, *Reaktive Nanomultischichten zum Löten ohne Ofen*, **SVS Zeitschrift** 02 (2019) 14-18 [[Source](#)].
- B. Ozdirik, T. Suter, U. Hans, T. Depover, K. Verbeken, P. Schmutz, L.P.H. Jeurgens, H. Terryn, I. De Graeve, *Study of the hydrogen uptake in deformed steel using the microcapillary cell technique*, **Corrosion Science** 155 (2019) 55-66 [DOI: [10.1016/j.corsci.2019.04.029](https://doi.org/10.1016/j.corsci.2019.04.029)].
- T. Gagnidze, H. Ma, C. Cancellieri, G.-L. Bona, F. La Mattina, *Structural properties of ultrathin SrO film deposited on SrTiO₃*, **Science and Technology of Advanced Materials** 20 (2019) 456-463 [DOI: [10.1080/14686996.2019.1599693](https://doi.org/10.1080/14686996.2019.1599693)].
- E. Ilic, A. Pardo, R. Hauert, P. Schmutz, S. Mischler, *Silicon Corrosion in Neutral Media: The Influence of Confined Geometries and Crevice Corrosion in Simulated Physiological Solutions*, **Journal of the Electrochemical Society** 166 (2019) 125-133 [DOI: [10.1149/2.0241906jes](https://doi.org/10.1149/2.0241906jes)].
- G. Borin Barin, A. Fairbrother, L. Rotach, M. Bayle, M. Paillet, L. Liang, V. Meunier, R. Hauert, T. Dumsloff, A. Narita, K. Müllen, H. Sahabudeen, R. Berger, X. Feng, R. Fasel, P. Ruffieux, *Surface-synthesized graphene nanoribbons for room-temperature switching devices: substrate transfer and ex-situ characterization*, **ACS Applied Nano Materials** 2 (2019) 2184-2192 [DOI: [10.1021/acsanm.9b00151](https://doi.org/10.1021/acsanm.9b00151)].
- S. Siol, *Assessing Metastability in Heterostructural Semiconductor Alloys*, **Physica Status Solidi A** (2019) 1800858 [DOI: [10.1002/pssa.201800858](https://doi.org/10.1002/pssa.201800858)].
- S. Siol, C. Beall, N. Ott, M. Döbeli, M. González-Castanõ, R. Wick-Joliat, S. David Tilley, Lars P.H. Jeurgens, P. Schmutz, C. Cancellieri, *Anodizing of Self-Passivating WxTi1-x Precursors for WxTi1-x On Oxide Alloys with Tailored Stability*, **ACS Applied Materials Interfaces** 11 (2019) 9510-9518 [DOI: [10.1021/acsami.8b19170](https://doi.org/10.1021/acsami.8b19170)].

- Z. Chen, S. Mitchell, F. Krumeich, R. Hauert, S. Yakunin, M.V. Kovalenko, J. Pérez-Ramírez, *Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride*, **ACS Sustainable Chemistry & Engineering** 7 (2019) 5223-5230 [DOI: [10.1021/acssuschemeng.8b06148](https://doi.org/10.1021/acssuschemeng.8b06148)].
- A. Pardo, E. Ilic, K. Thorwarth, M. Stiefel, R. Hauert, *Corrosion fatigue in DLC-coated articulating implants: an accelerated methodology to predict realistic interface lifetime*, **Science and Technology of Advanced Materials** 20 (2019) 173-186 [DOI: [10.1080/14686996.2019.1580483](https://doi.org/10.1080/14686996.2019.1580483)].
- V. Araullo-Peters, C. Cancellieri, M. Chiodi, J. Janczak-Rusch, L.P.H. Jeurgens, *Tailoring Fast Directional Mass Transport of Nano-Confined Ag-Cu Alloys upon Heating: Effect of the AlN Barrier Thickness*, **ACS Applied Materials & Interfaces** 11 (2019) 6605-6614 [DOI: [10.1021/acsaami.8b19091](https://doi.org/10.1021/acsaami.8b19091)].
- B. Rheingans, I. Spies, A. Schumacher, S. Knappmann, R. Furrer, L.P.H. Jeurgens, J. Janczak-Rusch, *Joining with Reactive Nano-Multilayers: Influence of Thermal Properties of Components on Joint Microstructure and Mechanical Performance*, **Applied Sciences** 9 (2019) 262 [DOI: [10.3390/app9020262](https://doi.org/10.3390/app9020262)].
- S.K. Kaiser, R. Lin, S. Mitchell, E. Fako, F. Krumeich, R. Hauert, O.V. Safonova, V.A. Kondratenko, E.V. Kondratenko, S.M. Collins, P.A. Midgley, N. López, J. Pérez-Ramírez, *Controlling the speciation and reactivity of carbon supported gold nanostructures for catalysed acetylene hydrochlorination*, **Chemical Science** 10 (2019) 359 [DOI: [10.1039/c8sc03186j](https://doi.org/10.1039/c8sc03186j)].
- L. Huber, S. B. Hauser, E. Brendlé, P. Ruch, J. Ammann, R. Hauert, R. N. Widmer, C.J. Ubert, S.K. Matam, S. Yoon, Y. Zhang, M.M. Koebel, *The effect of activation time on water sorption behavior of nitrogen-doped, physically activated, monolithic carbon for adsorption cooling*, **Microporous and Mesoporous Materials** 276 (2019) 239-250 [DOI: [10.1016/j.micromeso.2018.09.025](https://doi.org/10.1016/j.micromeso.2018.09.025)].