

Veröffentlichungen (Auszug, seit 2010)

Arbeitsgruppe Elektrochemie (Dr. Michael Schneider, Fraunhofer IKTS,
Winterbergstraße 28, D-01277 Dresden)

M. Schneider, U. Langklotz, A. Michaelis, B. Arnold: "Micro-Electrochemical Investigation on Aluminium-Steel Friction Welds"

Surface & Interface Analysis 42 (2010) 281-286

M. Schneider, U. Langklotz, A. Michaelis:

"Thickness determination of thin anodic titanium oxide films – A comparison between coulometry and reflectometry"

Surface & Interface Analysis, 43 (2011) 1471-1479

M. Schneider, C. Lämmel, C. Heubner; A. Michaelis:

"In-situ temperature measurement on the metal/oxide/electrolyte interface during the anodizing of aluminum"

Materials & Corrosion, 2011 DOI: 10.1002/maco.201106129 bzw. Mat. Corr. 64 (2013) 60-68

M. Schneider, S. Schroth, S. Richter, N. Schubert, S. Höhn, A. Michaelis:

"In-situ investigation of the interplay between microstructure and anodic copper dissolution under near-ECM conditions - Part 1: The active state"

Electrochimica Acta 56 (2011) 7628– 7636

U. Langklotz, M. Schneider, C. Seifert, A. Michaelis:

"Investigation concerning the applicability of Raman spectroscopy for prospective in-line monitoring of electrode processing for lithium ion batteries"

Mat.-wiss. u. Werkstofftech. 42 (2011) 820-826

U. Sydow, K. Sempf, M. Herrmann, M. Schneider, H.-J. Kleebe, A. Michaelis:

Electrochemical corrosion of silicon carbide ceramics

Materials & Corrosion, 64 (2013) 218-224

M. Schneider, M. Weiser, S. Dörfler, H. Althues, S. Kaskel, A. Michaelis:

"Electrodeposition of copper on aligned multi-walled carbon nanotubes"

Surface Engineering, 28 (2012) 435-441

M. Schneider, U. Langklotz, M. Labus, B. Arnold, A. Michaelis:

"Investigation of corrosion products formed on C35-AlMgSi0.5 friction welds during natural weathering in marine climate"

Corrosion Engineering Science and Technology, 47 (2012) 312-319

M. Schneider, S. Schroth, S. Richter, N. Schubert, S. Höhn, A. Michaelis:

"In-situ investigation of the interplay between microstructure and anodic copper dissolution under near-ECM conditions - Part 2: The transpassive state"

Electrochimica Acta, 70 (2012) 76-83

M. Schneider, U. Langklotz, K. Sempf:

"Corrosion damage to a dropped handle bar made of AA7075 "

Practical Metallography 49 (2012) 511-530

T.J. Rabbow, N. Junker, C. Kretzschmar, M. Schneider, A. Michaelis:

„Electrochemically induced degradation of screen printed gold thick films"

Journal of Ceramic Science and Technology, 3 (2012) 199-210

U. Langklotz, M. Schneider, C. Seifert; A. Michaelis:

„Investigation of the water uptake of tape cast cathodes for lithium ion batteries"

Journal of Ceramic Science and Technology 04 (2013) 69-76

M. Schneider, K. Kremmer, S. K. Weidmann, W. Fürbeth:
"Interplay between parameter variation and oxide structure of a modified PAA process"
Surface and Interface Analysis 45 (2013) 1503-1509

M. Schneider, U. Langklotz, A. Michaelis:
"Spectroscopic reflectometry as in-operando method for thickness determination of anodic oxide films on titanium"
Surface and Interface Analysis 45 (2013), 1247-1251

M. Schneider, M. Weiser, S. Dörfler; H. Althues, S. Kaskel, A. Michaelis:
Pulse plating of platinum on aligned multi-walled carbon nanotubes
Surface Engineering 29 (2013), 427- 433

M. Schneider, N. Schubert, S. Höhn, A. Michaelis:
"Anodic dissolution behaviour and surface texture development of cobalt under high current densities"
Electrochimica Acta 106 (2013) 279-289

C. Lämmel, M. Schneider, M. Weiser, A. Michaelis:
"Investigations of electrochemical double layer capacitor (EDLC) materials – a comparison of test methods"
Mat.-wiss. u. Werkstofftech. 44 (2013) 641-649

N. Schubert, M. Schneider, A. Michealis:
"The mechanism of anodic dissolution of cobalt in neutral and alkaline electrolyte at high current density"
Electrochimica Acta 113 (2013) 748-754

C. Heubner M. Schneider C. Lämmel U. Langklotz, A. Michaelis:
In-Operando Temperature Measurement Across the Interfaces of a Lithium-Ion Battery Cell
Electrochimica Acta 113 (2013) 730-734

M. Herrmann, K. Sempf, M. Schneider, U. Sydow, K. Kremmer, A. Michaelis:
"Electrochemical corrosion of silicon carbide ceramics in H₂SO₄"
Journal of the European Ceramic Society 34 (2014) 229–235

M. Herrmann, K. Sempf, H. Wendrock, M. Schneider, K. Kremmer, A. Michaelis: „Electrochemical corrosion of silicon carbide ceramics in sodium hydroxide"
Journal of the European Ceramic Society 34 (2014) 1687–1693

M.M. Lohrengel, K.P. Rataj, N. Schubert, M. Schneider, S. Höhn, A. Michaelis, M. Hackert-Oschätzchen, A. Martin, A. Schubert: "Electrochemical machining of hard metals–WC/Co as example",
Powder Metallurgy 57, 2014, 21-30

M. Schneider, K. Kremmer, C. Lämmel, K. Sempf, M. Herrmann:
"Galvanic corrosion of metal/ceramic coupling"
Corrosion Science 80 (2014) 191–19

M. Schneider, K. Kremmer:
"The effect of bath aging on the microstructure of anodic oxide layers on AA1050"
Surface & Coatings Technology 246 (2014) 64–70

M. Schneider, N. Schubert, S. Höhn, A. Michaelis:
"Anodic dissolution of cobalt in aqueous sodium nitrate solution at high current densities"
Materials and Corrosion 2014 DOI: 10.1002/maco.201407638

N. Junker, T.J. Rabbow, M. Schneider, J. Schilm, A. Michaelis:
"Chemical Degradation of Screen-Printed Thick Films on LTCC"
Journal of Ceramic Science and Technology 5 (2014) 209-216

N. Schubert, M. Schneider, A. Michaelis:
" Electrochemical Machining of Cemented Carbides"
International Journal of Refractory Metals and Hard Materials 47 (2014) 54-60

C. Heubner, C. Lämmel, N. Junker, M. Schneider, A. Michaelis:
„Microscopic in-operando thermography at the cross section of a single lithium ion battery stack”,
Electrochemistry Communications 48 (2014) 130-133

M. Schneider, M. Weiser, C. Schrötke, F. Meißner, I. Endler, A. Michaelis:
„Pulse plating of manganese oxide nanoparticles on aligned MWCNT”
Surface Engineering 31 (2015) 214-220

C. Heubner, M. Schneider, A. Michaelis:
„Investigation of charge transfer kinetics of Li-Intercalation in LiFePO₄“
Journal of Power Sources 288 (2015) 115-120

C. Heubner, U. Langklotz, M. Schneider, A. Michaelis:
„Analysis of the counter-electrode potential in a 3-electrode lithium ion battery cell“
Journal of Electroanalytical Chemistry, doi:10.1016/j.jelechem.2015.10.037

C. Heubner, M. Schneider, C. Lämmel, A. Michaelis:
„Local Heat Generation in a Single Stack Lithium Ion Battery Cell“
Electrochimica Acta (2015) 404-412

C. Heubner, M. Schneider, A. Michaelis:
„Detailed study of heat generation in porous LiCoO₂ electrodes “
Journal of Power Sources 307 (2016) 199-207

C. Heubner, S. Heiden, B. Matthey, M. Schneider, A. Michaelis:
„Sodiation vs. Lithiation of FePO₄: A comparative kinetic study “
Electrochimica Acta 216 (2016) 412-419

M. Weiser, C. Schulze, M. Schneider, A. Michaelis:
“Platinum electrodeposition from a dinitrosulfatoplatinate(II) electrolyte”
Applied Surface Science, 390, 2016, 333-338

M. Schneider, K. Kremmer, S. Höhn:
“Corrosion protection of thickness reduced plasma electrolytic layers on AZ31”
Materials and Corrosion 2016, DOI: 10.1002/maco.201508763