

## Publikationen ab 2005

1. J. Mähliß, A. Abbadie, F. Brunier, R. Merz, A. Brodyanski and B. O. Kolbesen, Etch features revealed on Si(100) by wet chemical etching with solutions containing potassium iodide, ECS Trans. San Francisco, to be published, (2009)
2. B. O. Kolbesen, J. Mähliß and D. Possner, Defect Delineation by Chemical Etching Techniques in Silicon and Engineered Silicon Substrates, ECS Trans. Shanghai, to be published, (2009)
3. M. Guder, M. Pellowska, M. Pohland, B.O. Kolbesen  
Ozone chemistry for BEOL resist stripping – A systematic analytical attempt to understand the interaction of O<sub>3</sub> with modern DUV-resists, Solid State Phenomena Vols. **145-146** (2009) pp 311-314, doi:10.4028/3-908454-03-4.311
4. M. Lommel, P. Hönicke, M. Kolbe, M. Müller, F. Reinhardt, P. Möbus, E. Mankel, B. Beckhoff, B.O. Kolbesen  
Preparation and characterization of self-assembled monolayers on germanium surfaces; *Solid State Phenomena*, **145-146**, 169-172 (2009), DOI:10.4028/3-908454-03-4.169 ([Abstract](#))
5. Shang-Ray Yang, Bernd O. Kolbesen  
A comparative study of the growth of octadecyltrichlorosilane and 3-mercaptopropyltrimethoxysilane self-assembled monolayers on hydrophilic silicon surfaces, *Applied Surface Science* **255** (2008) 1726-1735
6. B. O. Kolbesen, J. Mähliß, D. Possner, Recent progress in etching chemistries for defect delineation in silicon, 5th JSPS Si Symposium, Nov. 10-14, 2008  
<http://fukuoka.riam.kyushu-u.ac.jp/hawaii2008/>
7. J. Mähliß, A. Abbadie, F. Brunier and B. O. Kolbesen,  
Chromium(VI)-free Defect Etching Solutions for Application on Engineered Silicon Substrates, ECS Trans. **16**, (6)309-320 (2008)
8. J. Mähliß, A. Abbadie and B. O. Kolbesen,  
A Comparison of the Etching Behaviour of the FS Cr-free SOI with that of the Secco Etching Solution on Silicon-On-Insulator Substrates, *Materials Science & Engineering B*, DOI information: 10.1016/j.mseb.2008.09.008 (2008)
9. K. Mayer, A. Fell, S. Hopman, D. Kray, B. O. Kolbesen  
Liquid Etchants for Deep Cutting of Silicon by Means of Laser Chemical Processing (LCP), JES-08-1008
10. M. Lommel, E. Mankel, B. O. Kolbesen  
Preparation and Characterisation of Self-Assembled Monolayers on Germanium Surfaces  
*The Electrochemical Society ECS Transactions* **11** (20) 83-90 (2008)  
DOI:10.1149/1.2912051 ([Abstract](#))
11. V.A. Matylitskaya, W. Bock, B.O. Kolbesen  
"Nitridation of niobium oxide films by rapid thermal processing",  
*Anal Bioanal Chem* **390**, 1507-1515 (2008) DOI 10.1007/s00216-008-1830-5
12. R. Mertens, W. Bock, B. Lommel and B. O. Kolbesen "Annealing of thin B/Nb<sub>2</sub>N bilayers, B/Nb bilayers and Nb/B/Nb trilayers via rapid thermal processing (RTP)" *Anal. Bioanal. Chem.* **390**, 1517-1525 (2008) DOI 10.1007/s00216-007-1672-6 ([Abstract](#))
13. B. O. Kolbesen, J. Mähliß and D. Possner  
"Delineation of Crystalline Defects in Semiconductor Substrates and Thin Films by Chemical Etching Techniques"  
*The Electrochemical Society ECS Transactions* **11** (3) 195-206 (2007)

14. D. Possner, B. O. Kolbesen, H. Cerva, V. Klüppel  
"Organic Peracid Etches: a new class of chromium free etch solutions for the delineation of defects in different semiconducting materials"  
The Electrochemical Society ECS Transactions **10** (1) 21-31 (2007)
15. M. Guder, B. O. Kolbesen, C. Delattre, C. Fischer, H. Schier, G. Wagner  
Selective etching of SiGe/Si layer systems with peracetic acid (Poster - 209th ECS Spring Meeting Denver 2006)  
Meet. Abstr. - Electrochem. Soc. **601** 345 (2006)
16. M. Guder, B. O. Kolbesen, C. Delattre, C. Fischer, H. Schier, G. Wagner  
"Peracetic Acid as Active Species in Mixtures for Selective Etching of SiGe/Si Layer Systems  
- Aspects of Chemistry and Analytics"  
Solid State Phenomena **134** (2008) 79-82  
doi:10.4028/3-908451-46-9.79
17. R. Mertens, W. Bock, B. Lommel, B. O. Kolbesen  
"Thin niobium/boron, bilayers and multilayers annealed via Rapid Thermal Processing (RTP)"  
Phys. Stat. Sol. (c) **4**, 6, 1852 (2007) ([Abstract](#))
18. J. Mähliß, A. Abbadie, B. O. Kolbesen  
"A Chromium-free Defect Etching Solution for Application on SOI"  
ECS Trans. **6** (4) 271 (2007) ([Abstract](#))
19. V. A. Matylitskaya, O. Brunkahl, G. Kothleitner, W. Bock, B. O. Kolbesen  
"Annealing of evaporated and sputtered niobium films in oxygen and nitrogen rich atmospheres by Rapid Thermal Processing (RTP)"  
Phys. Stat. Sol. (c) **4** No. 6, 1802 - 1816 (2007), DOI 10.1002/pssc. 200675231  
([Abstract](#))
20. O. Brunkahl, R. Mertens, W. Bock, K. Thoma, B. O. Kolbesen  
"Nitridation of Niobium Films by Rapid Thermal Processing: Different Behaviour of Films on Oxidized Silicon and Monocrystalline Sapphire Substrates"  
Microchim. Acta **156**, 39-51 (2007) ([Abstract](#))
21. V. A. Matylitskaya, W. Bock, K. Thoma, B. O. Kolbesen;  
Oxidation and Nitridation of Niobium Films by Rapid Thermal Processing  
Microchim. Acta **156**, 33-37 (2007) ([Abstract](#))
22. C. Carrer, M. Stolz, E. Lewitzki, C. Rittmeyer, B. O. Kolbesen, E. Grell  
"Removing coordinated metal ions from proteins: a fast and mild method in aqueous solution"  
Anal. Bioanal. Chem **385**, 8, 1409 (2006) ([Abstract](#))
23. O. Doll, S. Metzger and B. O. Kolbesen  
"Degradation of Chelating Agents in Hydrogen Peroxide and APM+ Solutions"  
"Cleaning Technology in Semiconductor Device Manufacturing"  
Electrochem. Soc. Transactions **1**, 3, 97-104 (2005)
24. S. Metz and B. O. Kolbesen  
"VPD-DSE-studies of metal impurities on silicon: a comparison of different contamination methods"  
"Crystalline Defects and Contamination: Their Impact and Control in Device Manufacturing III, DECON 2001",  
B. O. Kolbesen, C. Claeys, P. Stallhofer, F. Tardif (Editors),  
PV 2005-10 The Electrochemical Soc., Pennington, NJ (2005), p. 123
25. M. Rogers, G. Kothleitner, A. Berendes, W. Bock and B. O. Kolbesen  
"Focused Ion Beam Preparation and EFTEM/EELS Studies on Vanadium Nitride Thin

Films"

Prakt. Met. 42 (2005), 172-187

26. G.Kothleitner, M.Rogers, A.Berendes, W.Bock and B.O.Kolbesen  
"A Combined SNMS and EFTEM/EELS Study on Focused Ion Beam Prepared Vanadium Nitride thin Films"  
Appl. Surf. Science, 252, 1, 66-76 (2005)
27. O.Doll, B.O.Kolbesen  
"Application of UV/VIS-Spectroscopy for Determination of Complexing Agent Stability in APM and like Mixtures thereof"  
Solid State Phenomena, Vols. 103-104, p 55 (2005)
28. S. Metzger, B.O. Kolbesen  
"Application of HPLC for the Analysis of Organic Additives in Cleaning Chemicals and Cleaning Mixtures"  
Solid State Phenomena, Vols. 103-104, p 221 (2005)
29. O.Brunkahl, W.Bock, K.Thoma, B.O.Kolbesen  
"Comparing the Chemical Properties of Evaporated and Sputtered Niobium Films on Oxidized Si- (100)-Wafers – Preparation of Oxynitride Films"  
Appl. Surf. Science, 252, 1, 177-182 (2005)
30. V.A.Matylitskaya, W.Bock, K.Thoma, B.O.Kolbesen  
"Formation of Niobium Oxynitrides by Rapid Thermal Processing (RTP)"  
Appl. Surf. Science, 252, 1, 205-210 (2005)