

## List of Publications

- [1] M. Kildemo and B. Dréville, "Real time monitoring of the growth of transparent thin films by spectroscopic ellipsometry," *Appl. Phys. Lett.* **67**, 918-920 (1995).
- [2] M. Kildemo and B. Dréville, "Real time monitoring of the growth of transparent thin films by spectroscopic ellipsometry," *Rev. Sci. Instrum.* **67**, 1956-1960 (1996).
- [3] M. Kildemo, S. Deniau P. Bulkin and B. Dréville, "Real time control of silicon alloy multilayers by multiwavelength ellipsometry," *Thin Solid Films*, **290-291**, 46-50 (1996).
- [4] M. Kildemo, P. Bulkin, S. Deniau and B. Dréville, "Real time control of plasma deposited multilayers by multiwavelength ellipsometry," *Appl. Phys. Lett.*, **68**, 3395-3397 (1996).
- [5] M. Kildemo, P. Bulkin, B. Dréville and O. Hunderi, «Real time control by multiwavelength ellipsometry of plasma deposited multilayers on glass using incoherent reflection model,» *Appl. Opt.* **36**, 6352-6359 (1997).
- [6] M. Kildemo, O. Hunderi and B. Dréville, "Approximation of the reflection coefficient for rapid real time calculation of inhomogeneous films," *J. Opt. Soc. Am. A*, **14**, 931-939 (1997).
- [7] M. Kildemo, S. Deniau, P. Bulkin, B. Dréville and O. Hunderi, in "Real time monitoring by multiwavelength ellipsometry of the growth of silicon alloy multilayers and gradient index structures," in *proceedings of international symposium on optical systems design and production II*, I. Reed, ed. (SPIE, Glasgow, 1996), 84-95, **2776**.
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- [9] M. Kildemo and B. Drevillon, "Real time control of the deposition of optical coatings by multiwavelength ellipsometry," *Surf. Coat. Tech.* **100-101**, (1998) 480-485.
- [10] M. Kildemo, B. Dréville and O. Hunderi, «A direct robust feedback method for growth control of optical coatings by multiwavelength ellipsometry,» *Thin Solid Films*, *Thin Solid Films*, 484-489, **313-314** (1998).
- [11] M. Kildemo, R. Ossikovski and M. Stchakovsky, «Measurement of absorption edge of thick transparent substrates using incoherent reflection model and spectroscopic UV-Visible-near IR ellipsometry,» *Thin Solid Films* **313-314**, 108-113 (1998).
- [12] R. Etemadi, C. Godet, M. Kildemo, J. E. Bourée, R. Brenot, and B. Dréville, «Dual-mode radio frequency/microwave plasma deposition of amorphous silicon oxide thin films,» *J. Non. Crys. Solids* **187**, 70 (1995).
- [13] M. Kildemo, R. Brenot and B. Dréville, «Spectroellipsometric method for process monitoring semiconductor thin films and interfaces,» *Appl. Opt.* **37**, 5145-5149 (1998).
- [14] M. Kildemo, V. Dalsrud and O. Fostad, "Measurement of physical thicknesses in micro-machined structures consisting of glass and c-Si using FTIR-reflectance," *Optical Engineering* **38**, 1542-1552 (1999).
- [15] G. R Moriarty, M. Kildemo, J. T. Beechinor, M. Murtagh, P.V. Kelly, G. M. Crean, S. W. Bland, "Optical and structural properties of InGaP heterostructures," *Thin Solid Films* **364**, 244-248 (2000).
- [16] R. Ossikovski, M. Kildemo, M. Stchakovsky and M. Mooney, "Anisotropic incoherent reflection model for spectroscopic ellipsometry of a thick semi-transparent anisotropic substrate," *Appl. Opt.* **39** (2000) 2071-2077.
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- [29] M. Kildemo, 'Optical properties of Silicon Carbide Polytypes below and around bandgap,' *Thin Solid Films*, **455-456**, (2004) 187-195
- [30] M. Kildemo, "New spark-test device for material characterization," Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, **530** (2004) 596.
- [31] M. Kildemo, S. Calatroni, M. Taborelli,"Breakdown and field emission conditioning of Cu, Mo, and W," *Phys. Rev. ST Accel. Beams* **7** (2004) 092003.
- [32] M. Kildemo\*, M. Juel and S. Raaen, "Properties of Tm-Pt(111) surface alloys," (submitted to surf. Sci. 2004)
- [33] M. Kildemo, Experimental study of the formation of the SmSiC surface alloy, To be submitted to surf. Sci. 2005.
- [34] M. Kildemo, Experimental study of the oxidation of the SmSiC alloy, to be submitted to Surf. Sci. 2005.

## **Patent**

- [1] Procédé de mesure ellipsométrique, ellipsomètre et dispositif d'élaboration de couches les mettant en oeuvre, B. Drévillon, M.kildemo and R. Benferhat, FR-56398-Fn<sup>0</sup>9502263 (deposited the 27/02/95) under extension to Europe, Japan and USA.

## **Technical Reports (unpublished)**

- [1] M. Kildemo, S. M. Nilsen and R. Ossikovski, "Investigation of measurement procedures to determine physical thickness of lightly doped epitaxial layer on doped c-Si substrates using FTIR-reflectance and ellipsometry," Internal SensoNor Technical Note.
- [2] M. Kildemo and N. Ahmed, "Review of leakage current experiments," Internal SensoNor Technical note. doc. no. 98120202 (1998).
- [3] M. Kildemo, S. Hearney, G. Gouez, G. Moriarty, "Comparison of SIMS and Spectroscopic Ellipsometry in order to study epi-layer thickness, buried interface and interface mixing layer thicknesses of In<sub>0.5</sub>Ga<sub>0.5</sub>P/GaAs structures," Internal NMRC Document 7/12-99.