

Publications

Journal publications

- *Microstructural properties of CVD-grown CuGaSe₂-based thin-film solar cells.*
D. Fuertes Marrón, A. Meeder, U. Bloeck, P. Schubert-Bischoff, N. Pfänder, R. Würz, S.M. Babu, Th. Schedel Niedrig and M.Ch. Lux-Steiner.
Thin Solid Films 431-432 (2003) pp. 237-241.
- *Formation of an interfacial MoSe₂ layer in CVD-grown CuGaSe₂-based thin-film solar cells.*
R. Würz, D. Fuertes Marrón, A. Meeder, A. Rumberg, S.M. Babu, Th. Schedel-Niedrig and M.Ch. Lux-Steiner.
Thin Solid Films 431-432 (2003) pp. 398-402.
- *Radiative recombination in CVT-grown CuGaSe₂ single crystals and thin films.*
A. Meeder, D. Fuertes Marrón, V. Tezlevan, E. Arushanov, A. Rumberg, Th. Schedel Niedrig and M.Ch. Lux-Steiner.
Thin Solid Films 431-432 (2003) pp. 214-218.
- *CuGaSe₂ solar cell cross section studied by Kelvin probe force microscopy in ultra high vacuum.*
Th. Glatzel, D. Fuertes Marrón, Th. Schedel-Niedrig, S. Sadewasser and M.Ch. Lux-Steiner.
Appl. Phys. Lett. 81 (2002) pp. 2017-2019.
- *Surface and bulk properties of CuGaSe₂ thin films.*
A. Meeder, L. Weinhardt, R. Stresing, D. Fuertes Marrón, R. Würz, S.M. Babu, Th. Schedel-Niedrig, M.Ch. Lux-Steiner, C. Heske and E. Umbach.
J. Phys. Chem. Solids, in press.
- *Photoluminescence and sub band gap absorption of CuGaSe₂ thin films.*
A. Meeder, D. Fuertes Marrón, V. Chu, J.P. Conde, A. Jäger-Waldau, A. Rumberg and M.Ch. Lux-Steiner.
Thin Solid Films 403-404 (2002) pp. 495-499.
- *Direct measurement of Urbach tail and gap state absorption in CuGaSe₂ thin films by photothermal deflection spectroscopy and the constant photocurrent method.*
A. Meeder, D. Fuertes Marrón, A. Rumberg, M.Ch. Lux-Steiner, V. Chu and J. P. Conde
J. Appl. Phys. 92(6) (2002) 3016-3020.

Conference Proceedings

- *Improvements on CVT-based CuGaSe₂ thin-film solar cells.*
D. Fuertes Marrón, A. Meeder, R. Würz, S.M. Babu, M. Rusu, Th. Schedel- Niedrig and M.Ch. Lux-Steiner.
Proc. PV in Europe, Rome (2002) pp. 421-424.
- *Characterisation of thin-film solar cells based on two-sources CVD-grown CuGaSe₂*
D. Fuertes Marrón, A. Meeder, I. Gavilanes Pérez, A. Rumberg, A. Jäger-Waldau and M.Ch. Lux-Steiner.
Proc. 17th EPVSEC, Munich (2001) pp. 1159-1162.

- *Characterization of the CuGaSe₂/ZnSe interface using Kelvin probe force microscopy.*
S. Sadewasser, Th. Glatzel, M. Rusu, A. Meeder, D. Fuertes Marrón, A. Jäger-Waldau and M.Ch. Lux-Steiner.
Mat. Res. Soc. Symp. Proc. 668 (2001) H5.4.1.
- *Optoelectronic properties of CuGaSe₂ thin films.*
A. Meeder, D. Fuertes Marrón, M.Ch. Lux-Steiner and M. Kunst
Proc. of MRS Spring-Meeting 2003, San Francisco, USA, submitted.
- *CuGaSe₂ thin films prepared by a novel CCSVT technique for photovoltaic application.*
M. Rusu, S. Wiesner, D. Fuertes Marrón, A. Meeder, S. Doka, W. Bohne, S. Lindner, Th. Schedel-Niedrig, Ch. Giesen, M. Heuken and M.Ch. Lux-Steiner
Proc. of EMRS Spring-Meeting 2003, Strasbourg, France, submitted.

Patent

- Schichtanordnung aus heteroverbundenen Halbleiterschichten mit zumindest einer zwischengelagerten Trennschicht und Verfahren zu ihrer Herstellung.
German Patent DE 10247735.3
D. Fuertes Marrón, A. Meeder, R. Würz, Th. Schedel-Niedrig and M.Ch. Lux-Steiner.