

Personal Details

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Director

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Professional Career

Since 05/2019	Honorary Professorship at the University of Cape Town, South Africa
Since 01/2018	Director Division Energy Technologies and Systems at Fraunhofer ISE (approx. 450 staff, scientists, engineers and students)
Since 04/2011	Director Division Hydrogen Technologies (approx. 100 staff, 95% external project funds)
01/2001 – 03/2011	Head of department Energy Technologies
10/1999 – 12/2005	Founder and Head of the group ‘Micro Energy Technology’ (Approx. 40 staff)
01/1992 – 10/1999	Scientist in the silicon solar cell department at Fraunhofer ISE

Education

05/2019	Honorary Professorship at the University of Cape Town, South Africa
11/1998	Ph.D. in physics, University Konstanz (“Summa Cum Laude”)
04/1993 - 10/1998	Ph.D. thesis ‘Die kristalline Silicium-Dünnschichtsolarzelle auf isolierenden Substraten‘

	‚Crystalline Silicon Thin-Film Solar Cells on Insulating Substrates‘ Fraunhofer ISE, Freiburg
04/1992	Diploma in physics
04/1991 – 09/1992	„Untersuchungen von Defekten an Solarzellenmaterial mittels Fourierspektroskopie“ „Investigations of Defects in Solar Cell Materials by Means of Fourier Spectroscopy“
10/1985 – 12/1991	Albert-Ludwigs-Universität Freiburg, Faculty of Physics
06/1982	High school graduation (Abitur)
08/1973 – 06/1982	High school (Heissenberg Gymnasium Weinheim)
08/1969 – 06/1973	Elementary school

Publications

Publication of more than 150 journal and conference papers

(Main topics: Integrated Energy Systems, Hydrogen in Sector Coupling, Crystalline Silicon Thin-Film Solar Cells, Micro-energy Technology, Power MEMS, PEM fuel cells, PEM Electrolysis, Power-to-Liquid)

- 5170 citations in total
- h-index = 29 (Jan. 2019)
- www.ise.fraunhofer.de/de/geschaeftsfelder/wasserstofftechnologien.html#conference-paper

Associations/Engagements

- Co-Speaker of the Fraunhofer ‘Hydrogen-Network’
- Board Member of the Fraunhofer Cluster of Excellence ‘Integrated Energy Systems’ (since 2018)
- Advisory Board Member of “f-cell+HFC - Impulse Summit for Hydrogen and Fuel Cells” (2019)
- International Advisory Board Member of the ‘Hydrogen South Africa’ Flagship Program of the Department of Science and Technology DST, Government of South Africa (since 2015)
- Member of the organization committee of the ‘Energy Storage Europe’ conference (since 2014)
- Head of annual Jury meeting for the ‘Green Tech Awards’ (since 2009)
- Member of the advisory board of the ‘f-cell / World of Energy Solutions’ conference (since 2001)
- Venture Advisor - EARLYBIRD Venture Capital (2010-2015)
- Founder and coordinator of the Fraunhofer Future Theme ‘Micro Energy Technology’ (coordinating nine Fraunhofer Institutes) (2003-2007)
- Conference Chair of the:
 - International Workshop 'Perspectives on Power-to-Liquids and Power-to-Chemicals' (2016/18)
 - Intern. Workshop on PEM Electrolysis (2016)
 - Solar Summits 2010 (2010)
 - Fraunhofer Symposium on Micro Energy Technology (2006, 2007)
 - PowerMEMS 2007
 - European Fuel Cell Forum, Lucerne (2005)
 - TPV6 (Thermophotovoltaic) (2005)
- Co-Chair of the ‘Indo-German Frontiers of Engineering Symposium’ (INDOGFOE) of the Alexander von Humboldt Foundation AvH, (2009, 2010, 2011 and 2012).
- Participant at the ‘German-American Frontiers of Engineering Symposium’ of the AvH (2008)
- Member of the International Steering Committee ‘PowerMEMS’ Series - ‘International Workshop on Micro and Nanotechnology for Power Generation and Energy Conversion (until 2010)

- f-cell Award in bronze (2002)
- Reviewer of national and international project proposals in the field of fuel cell /electrolysis technology, hydrogen model regions, renewable energy systems and energy storage in general.
- Three years education in the field of Gestalt Therapy:
Degree as a Gestalt Supervisor, Gestalt Therapist, Gestalt Group Leader.

Most cited papers

1. ***Photovoltaic Materials, History, Status and Outlook***
A. Goetzberger, C. Hebling, H.-W. Schock
Materials, Science and Engineering, Vol. R40 (1), pp. 1-46 (2003) 1167 citations
2. ***Visualization of Water Buildup in the Cathode of a Transparent PEM Fuel Cell***
K. Tüber, D. Pócza, C. Hebling,
Journal of Power Sources, Vol. 124, pp. 403-414 (2003) 689 citations
3. ***Photovoltaic Materials, Past, Present, Future***
A. Goetzberger, C. Hebling
Solar Energy Materials and Solar Cells, Vol. 62, pp. 1-19 (2000) 395 citations
4. ***A PEM Fuel Cell for Combined Measurement of Current Temperature Distribution and Flow Field Flooding,***
A. Hakenjos, H. Münter, U. Wittstadt, C. Hebling
Journal of Power Sources, Vol. 131, pp. 213-216 (2004) 336 citations
5. ***Fuel Cells for Low Power Applications***
A. Heinzl, C. Hebling, M. Müller, M. Zedda, C. Müller
Journal of Power Sources, Vol. 105, pp. 148-153 (2002) 260 citations
6. ***Planar Self-Breathing Fuel Cells,***
A. Schmitz, M. Tranitz, S. Wagner, R. Hahn, C. Hebling
Journal of Power Sources, Vol. 118, pp. 162-171 (2003) 154 citations
7. ***Investigation of Fractal Flow Fields in Portable PEMFC and DMFC***
K. Tüber, A. Oedegaard, C. Hebling, M. Hermann
Journal of Power Sources, Vol. 131/1-2, pp. 175-181 (2004) 127 citations
8. ***Influence of Diffusion Layer Properties on Low Temperature DMFC***
A. Oedegaard, R. Tunold, C. Hebling, A. Schmitz, S. Moller-Holst
Journal of Power Sources, Vol. 127, pp. 187-196 (2004) 114 citations
9. ***Hydrophilicity and Hydrophobicity Study of Catalyst Layers in Proton Exchange Membrane Fuel Cells***
H.M. Yu, C. Ziegler, C. Hebling, M. Oszcipok, M. Zobel
Electrochimica Acta, Vol. 51, pp. 1199-1207 (2006) 108 citations
10. ***A polymer electrolyte Membrane Fuel Cell System for Powering Portable Computers***
K. Tüber, M. Zobel, H. Schmidt, C. Hebling
Journal of Power Sources Vol. 122, pp. 1-8 (2003) 100 citations