

Stefan Christof Werner Krauter

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EDUCATION

- 5/94 – 7/98 Habilitation (qualification as university lecturer) at University of Technology Berlin (TUB), Germany; title of augural dissertation “*Energy balance of photovoltaic generators considering reduction of human-caused carbon-dioxide emissions*”.
- 4/96 – 4/98 Lectureship for “*System technology of solar energy conversion*” and “*Solar energy converters for architects and civil engineers*” at University of Technology Berlin (TUB).
- 8–10/94, 9–12/95 Post-doc studies at Prof. Dr. Richard Stephan at Federal University of Rio de Janeiro (UFRJ-COPPE-EE). Lectureship: *Photovoltaic Systems*.
7–11/96, 3–05/97
- 1/94 – 4/94 Post-doc studies at Prof. Martin Green and Prof. Stuart R. Wenham at the University of New South Wales (UNSW), Sydney, Australia.
- 1989 – 1993 Ph.D. at University of Technology Berlin (TUB) at Prof. Rolf Hanitsch; title of thesis: “*Operation model of optical, thermal and electrical parameters of photovoltaic modules*”.
- 1982 – 1988 *Electrical Engineering and Telecommunication* Master Course at University of Technology Munich (TUM); received degree: Diplom-Ingenieur.
- 1973 – 1982 “Mörike” grammar school in Göppingen, Baden-Württemberg, Germany.

EMPLOYMENT HISTORY

- since 01/07 Member of the Board of Photovoltaic Institute Berlin.
- since 02/05 Professor for Photovoltaic Energy Systems at University of Technology Berlin.
- since 10/03 Visiting Professor at the State University of Ceará (UECE), Brazil; founder of the Alternative Energy Department.
- 03/03 – 02/05 General Chairman of *RIO 3 & RIO 5* congresses and Latin America Renewable Energy Fairs (*LAREF 2003/05*).
- since 01/00 Director of Rio Solar Ltd. (Planning and set-up of renewable energy power plants in Latin America; promotion of renewable energies)
- 03/98 – 03/03 Visiting Professor at the Federal University of Rio de Janeiro (UFRJ-COPPE), Brazil: Set-up of Laboratory for Renewable Energies.

- 10/96 – 01/98 Foundation and set-up of the joint-stock company SOLON AG for production of solar energy systems, Berlin. CTO, head of R&D.
- 04/96 – 03/98 Lectureships “*Solar Energy Technology*” and “*Use of Patent Data Bases*” at University of Technology Berlin.
- 07/96 – 10/96 Set-up of a Laboratory for Solar Energy at UFRJ-COPPE, Rio de Janeiro, Lectureship “*Photovoltaic Systems*” at the UFRJ-COPPE-EE.
- 04/96 – 07/96 Lectureship “*Solar Energy Systems for Civil Engineers and Architects*” at the Department of Electrical Engineering at the University of Technology Berlin.
- 11/95 – 12/95 Organizer at *Energy Saving* workshops of GTZ/TUB/UFRJ/CEPEL in Rio.
- 01/95 – 10/95 Chair of project: *Optical Calculation of the Reference Sun Simulator* at TÜV Rheinland (official national quality surveillance organization).
- 09/94 – 10/94 Visiting Professor at the Federal State University of Rio de Janeiro (UFRJ), Brazil. Lectures on “*Photovoltaic Solar Energy Systems*”.
- 10/91 – 09/94 Scientific assistant at the Department of Electrical Engineering at University of Technology: Set-up, head of laboratory “*Practical for Photovoltaic Energy Systems*”.
- 10/89 – 10/91 University of Technology Berlin: Organizer and lecturer at the reforming study project “*Project-orientated Electronic Laboratory*”.
- 12/85 – 05/86 University of Technology Munich, Institute for Electro-Acoustics: “*Construction of a 24 channel Multiplexer for Psychoacoustic Visualization*” (shown at the Hannover Industrial Fair 1986).
- 08/84 – 10/84 Max-Planck-Institute for Plasma Physics (IPP), Garching near Munich: *Calibration of Thermal Radiation Sensors for the Joint European Torus*.

Foreign languages: English: fluent (verbal and written)
 French: working knowledge (verbal and written)
 German: native language
 Portuguese: fluent (verbal), full working (written)
 Spanish: working knowledge (verbal and written)

Foundation member: *International Solar Center, Berlin, Germany*
 Foundation member: *Alternative Energy Center of the State of Ceará, Brazil.*
 Foundation member: *SOLON AG, joint stock company for PV, Berlin.*
 Foundation member: *Photovoltaic Institute Berlin, Germany*
 Awards: Green Price of the Americas 2006, Berlin Solar Award 1995.

Rio de Janeiro, 1st of January 2007



List of Publications of Stefan Krauter

- 1 Krauter, S.: *Solar Electric Power Generation*. Springer: Berlin, Heidelberg, New York (2006).
- 2 Kissel, J. and S. Krauter: *Adaptations of renewable energy policies to unstable macroeconomic situations—Case study: Wind power in Brazil*. In: *Energy Policy*, Volume 34, Issue 18, December 2006, pp. 3591–3598.
- 3 Krauter, S. and P. Grunow: *Optical Simulation to Enhance PV Module Encapsulation*. 21st European Photovoltaic Solar Energy Conference and Exhibition, Dresden (Germany), September, 4–8, 2006.
- 4 Krauter, S. and P. Grunow: *Optical modelling and simulation of PV Module encapsulation to improve structure and material properties for maximum energy yield*. Proceedings of the 4th World Conference on Photovoltaic Energy Conversion (Joint congress of IEEE/PVSEC/EUPVC), Waikoloa, Hawaii (USA), May, 8–12, 2006.
- 5 Grunow, P. and S. Krauter: *Modelling the encapsulation factors for photovoltaic modules*. Proceedings of the 4th World Conference on Photovoltaic Energy Conversion (Joint congress of IEEE/PVSEC/EUPVC), Waikoloa, Hawaii (USA), May, 8–12 May 2006.
- 6 Krauter, S. and J. Kissel: *Wind Power in Brazil*. In: *International Journal of Distributed Energy Resources* Vol. 1 No. 3 (2005) pp. 213–225.
- 7 Krauter, S. and R. Hanitsch: *How to Carry Out PV-Projects in the Tropics*, Proceedings of the 20th European Photovoltaic Solar Energy Conference and Exhibition, Barcelona (Spain), June 6–10, 2005, pp. 2985–2988.
- 8 Krauter, S.: *Further Development of the Integrated Solar Home System (I-SHS)*, Proceedings of the 20th European Photovoltaic Solar Energy Conference and Exhibition, Barcelona (Spain), June 6–10, 2005, pp. 2235–2238.
- 9 Knecht, K. and S. Krauter: *First Steps towards a People's University*. In: *D+C*, Vol. 32, 5/2005, pp. 210–211.
- 10 Knecht, K. and S. Krauter: *Erste Schritte zur Volksuniversität*. In: *E+Z*, Vol. 46, 5/2005, pp. 210–211.
- 11 Krauter, S. (Ed.): *Book of Proceedings of RIO 5 – World Climate & Energy Event*, Imprinta, Rio de Janeiro, Brazil, ISBN 85-902710-3-X, 524 pages, February 2005.
- 12 Krauter, S. and J. Kissel: *RE in Latin America – Actual State and Potential of Renewable Energies in the Region*. In: *REfocus*, Elsevier, January/February 2005, pp. 20–26.
- 13 Krauter, S.: *Future Visions*. In: *Words into Action – The International Conference for Renewable Energies – Bonn 2004*, Faircount, London (UK), pp. 175.
- 14 Krauter, S. and J. Kissel: *Renewable Energy in Latin America*. In: *Renewable Energy World*, James & James, London (UK), July–August 2004, pp. 260–267.
- 15 Krauter, S.: *Enhanced Integrated Solar Home System*, Proceedings of the 19th European Photovoltaic Solar Energy Conference and Exhibition, Paris (France), June 7–11, 2004, pp. 2399–2402.
- 16 Krauter, S.: *Photovoltaics in the Context of Carbon Trading*, Proceedings of the 19th European Photovoltaic Solar Energy Conference and Exhibition, Paris (France), June 7–11, 2004, pp. 3523–3526.
- 17 Krauter, S. and T. Depping: *Cost Reduction and Increase of Reliability for Remote PV-Systems by Satellite*, Proceedings of the 19th European Photovoltaic Solar Energy Conference and Exhibition, Paris (France), June 7–11, 2004, pp. 3527–3530.

- 18 Krauter, S., Calvacante, F.S.A.; Cunha, M.S. and L.C. de Lima: *PV in Combination with Micro Wind Turbines for Rural Household Electrification in the Northeast of Brazil*, Proceedings of the 19th European Photovoltaic Solar Energy Conference and Exhibition, Paris (France), June 7–11, 2004, pp. 3532.
- 19 Krauter, S.: *Renewable Energies in Latin America*. Proceedings of the Second World Renewable Energy Forum, Eurosolar, Bonn (Germany), May 29–31, 2004.
- 20 Krauter, S.: *Activities concerning the set-up of an International University for Renewable Energy*, Proceedings of the International Seminar on Hydrogen Technologies, Buenos Aires (Argentina), September 7–9, 2004.
- 21 Krauter, S. and T. Depping: *Remote PV-System monitored via satellite*. In: *Solar Cells & Solar Energy Materials*, 82 (2004) 139–150.
- 22 Krauter, S. and F. Ochs: *Development of an integrated solar home system*. In: *Solar Cells & Solar Energy Materials*, 82 (2004) 119–130.
- 23 Krauter, S. and U. Schmid: *Increased electrical yield via water flow over the front of photovoltaic panels*. In: *Solar Cells & Solar Energy Materials*, 82 (2004) 131–137.
- 24 Krauter, S. and R. Ruether: *Considerations for the Calculation of Greenhouse Gas Reduction by Photovoltaic Solar Energy*. In: *Renewable Energy* Vol. 29 Issue. 3 (Mar. 2004) 345–355.
- 25 Krauter, S. and F. Ochs: *Integrated solar home system*. In: *Renewable Energy* Vol. 29 Issue 2 (Feb. 2004) 153–164.
- 26 Krauter, S. (Ed.): *Book of Proceedings of RIO 3 – World Climate & Energy Event*, Imprinta, Rio de Janeiro, Brasilien, ISBN 85-902710-2-1, 520 pp., 2003.
- 27 Krauter, S.: *Rural Electrification by PV in terms of Carbon Trading*. Proceedings of RIO 3 – World Climate & Energy Event, Rio de Janeiro (Brazil), December 1–5, 2003, pp. 129–136.
- 28 Krauter, S. and T. Depping: *Remote PV Power Supply Monitored via Satellite*. Proceedings of RIO 3 – World Climate & Energy Event, Rio de Janeiro (Brazil), December 1–5, 2003, pp. 121–128.
- 29 Krauter, S.: *Greenhouse Gas Reduction by Photovoltaic Power Plants*. Proceedings of the ISES Solar World Congress 2003, Göteborg (Sweden), June 14–19, 2003.
- 30 Krauter, S. and T. Depping: *Remote PV-System Monitored via Satellite*. Proceedings of the ISES Solar World Congress 2003, Göteborg (Sweden), June 14–19, 2003.
- 31 Krauter, S. and F. Ochs: *Integrated Solar Home System*. Proceedings of the ISES Solar World Congress 2003, Göteborg (Sweden), June 14–19, 2003.
- 32 Krauter, S.: *Greenhouse Gas Reduction by PV*. Proceedings of the 3rd World Conference of Photovoltaic Energy Conversion, Osaka (Japan), May 12–16, 2003.
- 33 Krauter, S. and T. Depping: *Monitoring of Remote PV-Systems via Satellite*. Proceedings of the 3rd World Conference of Photovoltaic Energy Conversion, Osaka (Japan), May 12–16, 2003, pp. 2202–2205.
- 34 Krauter, S. and F. Ochs: *The Integrated Solar Home System: The solution for cost-effective rural electrification*. Proceedings of the 3rd World Conference of Photovoltaic Energy Conversion, Osaka (Japan), May 12–16, 2003, p. 2333–2336.
- 35 Krauter, S.: *An Integrated Solar Home System – History*. Proceedings of the 3rd World Conference of Photovoltaic Energy Conversion, Osaka (Japan), May 12–16, 2003, pp. 2094–2097.

- 36 Krauter, S. and T. Depping: *Sistemas Fotovoltaicos em lugares remotas com monitoramento via satélite*. 3º Seminário Energia na Agricultura. Uberaba/MG (Brazil), November 27–29, 2002, pp. III-18–19.
- 37 Krauter, S. and F. Ochs: *Sistema Solar Fotovoltaico Híbrido Integrado*. 3º Seminário Energia na Agricultura. Uberaba/MG (Brazil), November 27–29, 2002, pp. III-10–17.
- 38 Krauter, S.: *Eletrificação rural através de sistemas fotovoltaicos: básicos, atividades no Brasil, aplicações, desenvolvimentos atuais (Rural electrification with PV systems: basics, applications, actual developments)*. 3º Seminário Energia na Agricultura. Uberaba/MG (Brazil), November 27–29, 2002, pp. III-1–9.
- 39 Krauter, S. and F. Ochs: *Integrated Solar Home System*. Proceedings of “PV in Europe – From PV Technology to Energy Solutions” Conference and Exhibition, Rome (Italy), October 7–11, 2002, pp. 846–849.
- 40 Krauter, S. and T. Depping: *Monitoring of Remote PV-Systems by Satellite*. Proceedings of “PV in Europe – From PV Technology to Energy Solutions” Conference and Exhibition, Rome (Italy), October 7–11, 2002, pp. 1177–1180.
- 41 Feldmann, F., Rosa, L. P. and S. Krauter: *Declaration of RIO 02*. Proceedings of the World Summit on Sustainable Development (Rio Earth Summit +10), August 26 – September 6, 2002, Johannesburg (South Africa).
- 42 Krauter, S., Rosa, L. P. and P. T. Landsberg: *Proceedings of RIO 02 – World Climate and Energy Event*, Editors: S. Krauter and L. P. Rosa, (book and CD) Imprinta Press, Rio de Janeiro (Brazil), August 2002.
- 43 Krauter, S.: *Eletrificação rural através de sistemas fotovoltaicos autônomos: básicos, atividades no Brasil, aplicações, novos desenvolvimentos. (Rural electrification by PV Systems: Basics, Applications, new developments)*. Proceedings of 2nd “Forum de Energia Limpa”, Rio de Janeiro (Brazil), July 29–30, 2002.
- 44 Krauter, S.: *Use of PV Systems for Carbon Dioxide Reduction – a comparison of on- and off-grid systems in Brazil and Germany*. Proceedings of the World Renewable Energy Congress VII, Cologne (Germany), June 29 – July 5, 2002, (book and CD) Pergamon Press, London (UK).
- 45 Krauter, S. and F. Ochs: *All-in-one Solar Home System*. Proceedings of the 29th IEEE Photovoltaic Specialists Conference, New Orleans (USA), May 22–25, 2002, pp. 1668–1671.
- 46 Krauter, S. and T. Depping: *Satellite Monitoring of Remote PV Systems*. Proceedings of the 29th IEEE Photovoltaic Specialists Conference, New Orleans (USA), May 22–25, 2002, pp.1714–1717.
- 47 Rosa, L. P., S. Krauter, J. L. Nascimento, M. Sampaio, N. F. Silva, M. P. Araújo, and R. C. Petersen: *O Laboratório de Fontes Alternativas de Energia da UFRJ – LAFAE (The Laboratory for Alternative Energy Sources at UFRJ)*. IX Congresso Brasileiro de Energia, Rio de Janeiro (Brazil), May 21–22, 2002, Vol. 4, pp. 1780–1785.
- 48 Krauter, S. and F. Ochs: *An All-in one Solar Home System*. Proceedings of RIO 02 – World Climate & Energy Event, Rio de Janeiro (Brazil), January 6–11, 2002, Vol. 1, pp. 101–108.
- 49 Krauter, S., and T. Depping: *Satellite Monitoring of Remote PV-Systems*. Proceedings of RIO 02 – World Climate & Energy Event, Rio de Janeiro (Brazil), January 6–11, 2002, Vol. 1, pp. 109–114.
- 50 Koehler, M., M. Schmidt, U. Wachsmann, S. Krauter, and M. Laar. 2002. *Photovoltaics on Greened Roofs – A positive interaction between two elements of sustainable architecture*. Proceedings of RIO 02 – World Climate & Energy Event, Rio de Janeiro (Brazil), January 6–11, 2002, Vol. 1, pp. 151–158.

- 51 Krauter, S. and F. Ochs: *All-in-one Solar Home System*. Proceedings of the ISES 2001 Solar World Congress, Adelaide (Australia), November 25–30, 2001.
- 52 Krauter, S., and F. Ochs: *A Satellite Monitoring System for Remote Renewable Energy Systems in Brazil*. Proceedings of the ISES 2001 Solar World Congress, Adelaide (Australia), November 25–30, 2001.
- 53 Krauter, S.: *Rio02 – World Climate and Energy Event*. Proceedings of the ISES 2001 Solar World Congress, Adelaide (Australia), November 25–30, 2001.
- 54 Ochs, F. and S. Krauter: *Online Energy Monitoring and Control of a School Building*. Proceedings of the 18th Conference on Passive and Low Energy Architecture, Florianópolis (Brazil), 7–9 November 2001, Vol. 2, pp. 917–919.
- 55 Krauter, S.: *Façade Elements for Combined Photovoltaic –Solar Thermal Energy Generation and Building Insulation*. Proceedings of the 18th Conference on Passive and Low Energy Architecture, Florianópolis (Brazil), 7–9 November 2001, Vol. 1, pp. 275–262.
- 56 Krauter, S. and G. Valentin: *Software for Simulation of Photovoltaic Systems in Buildings*. Proceedings of the 18th Conference on Passive and Low Energy Architecture, Florianópolis (Brazil), 7–9 November 2001, Vol. 1, pp. 283–285.
- 57 Krauter, S.: *Rio02 – The World Energy and Climate Event*. Proceedings of the 18th Conference on Passive and Low Energy Architecture, Florianópolis (Brazil), 7–9 November 2001, Vol. 2, pp. 1049–1052.
- 58 Krauter, S.: *Combined Photovoltaic and Solar Thermal Systems for Façade Integration and Building Insulation*. Proceedings of the 7th International Building Performance Simulation Association Conference, Rio de Janeiro (Brazil), August 13–15, 2001, pp. 619–626.
- 59 Krauter, S.: *Sistemas híbridos termo-solares/fotovoltaicos*. Proceedings of Workshop “Formas Não-Convencionais de Geração e Uso Racional de Energia”, UFSC, Florianópolis, Santa Catarina (Brazil), November 9–11, 2000.
- 60 Krauter, S.; Araújo, R. G.; Schroer, S.; Salhi, M.; Lemoine, R; Triebel, C. and R. Hanitsch: *Combined PV and Solar Thermal Systems for Facade Integration and Building Insulation*. In: *Solar Energy*, Vol. 67, No 4–6 (2000), pp. 230–248.
- 61 Krauter, S. and R.G. Araújo: *New Power Conditioning Unit Incorporating Charge Controller, Energy Flow Monitor, Data Logger, DC/AC Converter for Stand-Alone and Combined PV-Diesel Operation*. Proceedings of the 16th European Photovoltaic Solar Energy Conference, Glasgow (UK), May 1–5, 2000.
- 62 Krauter, S. and H. Herold: *PV in Brazil*. Proceedings of the 16th European Photovoltaic Solar Energy Conference, Glasgow (UK), May 1–5, 2000.
- 63 Krauter, S.: *Combined Solar-Thermal/Photovoltaic Systems*. Proceedings of Workshop “Energias Alternativas para Produção de Calor, Frio e Geração e Conservação de Energia Elétrica”, UFSC, Florianópolis, Santa Catarina (Brazil), December 6–9, 1999.
- 64 Krauter, S. and U. Schmid: *Optical and Thermal Improvements of PV Performance by a Flowing Film of Water at the Frontside of PV Generators*. Proceedings of the 9th Sede Boquer Symposium on Solar Electricity Production, Sede Boquer (Israel), July 12–13, 1999, pp. 123–126.

- 65 Krauter, S., Stephan, R. and L. Bastos: *Set-up of a Laboratory for Research and Education in Solar Energy in Rio de Janeiro*. Proceedings of the ISES Solar World Congress, Jerusalem (Israel), July 4–9, 1999, Vol.2, pp. 288–292.
- 66 Krauter, S. and U. Schmid: *Cooling and Less Reflections at Photovoltaic Modules by a Frontside Water Film*. Proceedings of the ISES Solar World Congress, Jerusalem (Israel), July 4–9, 1999.
- 67 Krauter, S.: *The Use of Solar Energy: Considerations for Calculations of Greenhouse Gas Reduction by Photovoltaics*. Proceedings of the ISES Solar World Congress, Jerusalem (Israel), July 4–9, 1999, Vol. 2, pp. 375–378.
- 68 Salhi, M. J.; Krauter, S.; Lemoine, R.; Triebel, C.; Schroer, S. and R. G. Araújo: *Combined Photovoltaic and Solar Thermal Systems for Facade Integration and Building Insulation*. Proceedings of the ISES Solar World Congress, Jerusalem (Israel), July 4–9, 1999, Vol. 2, pp. 88–91.
- 69 Krauter, S.; Schroer, S.; Araújo, R. G. and R. Stephan: *Thermisch aktive PV-Module zur Fassadenintegration*. Elfte Internationales Sonnenforum, July 26–30, 1998, Cologne (Germany), pp. 368–375.
- 70 Krauter, S.; Araujo, R. G.; Stephan, R.; Hanitsch, R.; Onneken, K.; Schroer and V. Quaschnig: *Aufbau einer universitären Ausbildungsmöglichkeit für photovoltaische Energiesysteme in Rio de Janeiro*. Elfte Internationales Sonnenforum, July 26–30, 1998, Cologne (Germany), pp. 868–872.
- 71 Krauter, S. and R. Stephan: *Establishing PV-Education in Rio de Janeiro*. In: *International Journal of Electrical Engineering Education*, Vol. 35/2, pp. 139–146 (1998).
- 72 Salhi, M. J.; Triebel, C.; Lemoine, R.; Krauter, S., Schroer, S. and R. G. Araújo: *Hybrid Thermal Insulating PV Facade Elements*. Proceedings of the 2nd World Conference on Photovoltaic Energy Conversion, Vienna (Austria), 3–7 June 1998, pp. 2591–2594.
- 73 Krauter, S.: *Energetische Bilanzierung von Photovoltaik-Kraftwerken unter Berücksichtigung der Reduktion des anthropogenen CO₂-Ausstoßes*. Fortschritts-Berichte, VDI-Press, Düsseldorf (Germany), 1998.
- 74 Krauter, S.: *Lernen über das World-Wide-Web am Beispiel der Sonnenenergienutzung* In: *Telelearning: Aufgabe und Chance für Bildung und Gesellschaft*, Eds.: Günther, W. and Mandl, H., German Telecom AG, Economica Press, Bonn (Germany) 1997, pp. 146–150.
- 75 Kerst, U.; Krauter, S. and R. Hanitsch: *Reflection-Losses at Structured PV-Modules*. Proceedings of the 14th European Photovoltaic Solar Energy Conference, Barcelona (Spain), 30 June – 4 July, 1997, pp. 232–235.
- 76 Krauter, S. and H. Duwe: *Das ECO-PV-System*, Zwölftes Nationales Symposium für Photovoltaische Energiewandlung, Staffelstein (Germany), February 26–28, 1997, pp. 297–302.
- 77 Krauter, S.: *Lernen im Internet am Beispiel der Solarenergie*. In: „*Bildung im Netz*“, Eds.: Beste, D. and Kälke, M., VDI-Verlag, Düsseldorf (Germany), 1996, pp. 115–120.
- 78 Krauter, S.; R. Hanitsch and L. Moreira: *New Optical and Thermal Enhanced PV Modules Performing 12 % Better under True Module Rating Conditions*. Proceedings of the 25th IEEE-PV-Specialists Conference, Washington D.C. (USA), May 13–19, 1996, pp. 1323–1326.

- 79 Krauter, S.: *Sonneneinstrahlung*. In: *Solarenergie für Europa*, Ed.: Schneider, A., Birkhäuser Press: Basel, Boston, New York, 1996, pp. 30–31.
- 80 Krauter, S. and R. Hanitsch: *Actual Optical and Thermal Performance of PV Modules*. In: *Solar Energy Materials and Solar Cells* 41/42 (1996) pp. 557–574.
- 81 Krauter, S.: *Thermal and Optical Enhanced PV-Modules*. Proceedings of the 13th European Photovoltaic Solar Energy Conference, Nice (France), October 23–27, 1995, pp. 2306–2309.
- 82 Krauter, S.: *Actual Optical and Thermal Performance of PV-Modules*. Proceedings of the ISES Solar World Congress 1995, Harare (Zimbabwe), September 11–15, 1995.
- 83 Onneken, K. and S. Krauter: *STOPV: A Development Tool for Thermal and Optical Optimization of PV module Encapsulation*. Proceedings of the 1995 ISES Solar World Congress, Harare (Zimbabwe), September 11–15, 1995.
- 84 Krauter, S.: *Solar Electricity up to 30% Less Expensive by Optical and Thermal Enhanced PV-Modules*. Proceedings of the ISES Solar World Congress 1995, Harare (Zimbabwe), September 11–15, 1995.
- 85 Krauter, S.: *Actual Optical and Thermal Performance of PV-Modules*. Proceedings of the 1st World Conference on Photovoltaic Energy Conversion, Waikoloa, Hawaii (USA), December 5–9, 1994, Vol. 1, pp. 734–737.
- 86 Krauter, S.; R. Hanitsch and S.R. Wenham: *Simulation of Thermal and Optical Performance of PV Modules*. Proceedings of the 3rd World Renewable Energy Congress, Reading (UK), September 11–16, 1994.
- 87 Krauter, S. and R. Hanitsch: *Einfluß optischer und thermischer Parameter auf den Tageswirkungsgrad von photovoltaischen Modulen*. Neuntes Internationales Sonnenforum, Berlin (Germany), June 28 – July 1, 1994, pp. 495–502.
- 88 Strauß, Ph., K. Onneken, S. Krauter and R. Hanitsch: *Simulation Tool for Prediction and Optimization of Output Power Considering Thermal and Optical Parameters of PV Module Encapsulation*. Proceedings of the 12th European Photovoltaic Solar Energy Conference, Amsterdam (The Netherlands), April 11–15, Vol. 2, pp. 1194–1197.
- 89 Krauter, S., R. Hanitsch, P. Campbell and S.R. Wenham: *Optical Modelling, Simulation and Improvement of PV Module Encapsulation*. Proceedings of the 12th European Photovoltaic Solar Energy Conference, Amsterdam (The Netherlands), April 11–15, 1994, Vol. 2, pp. 1198–1201.
- 90 Krauter, S.: *Betriebsmodell der optischen, thermischen und elektrischen Parameter von PV-Modulen (Operation model considering the optical, thermal and electrical parameters of PV modules)*. Berlin (Germany): Köster Press, 1993.
- 91 Krauter, S. and R. Hanitsch: *Optical and Thermal Parameters of PV-Module Encapsulation Improving Output Power*. Proceedings of the ISES Solar World Congress 1993, Budapest (Hungary), August 23–27, 1993, Vol. 3, pp. 249–254.
- 92 Krauter, S. and R. Hanitsch: *Calculating the Influence of Skylight-Polarization on the Transmission of Encapsulations of PV-Modules*. Proceedings of the Cairo International Conference of Renewable Energy Sources, Cairo (Egypt), December 30, 1992 – January 2, 1993.

- 93 Krauter, S. and R. Hanitsch: *Performance of a Partly Structured Surface at a PV-Module*. Proceedings of the 11th European Photovoltaic Solar Energy Conference and Exhibition, Montreux (Switzerland), October 12–16, 1992, pp. 1351–1354.
- 94 Krauter, S.; Hanitsch, R. and N. Diwisch: *Measuring the Heat-Transfer Coefficient of PV-Modules*. Proceedings of the 2nd World Renewable Energy Congress, Reading (UK), September 13–18, 1992, pp. 562–566.
- 95 Krauter, S. and R. Hanitsch: *Reflexionsverringern an PV-Modulen durch partiell strukturierte Deckgläser*. Achtes Internationales Sonnenforum, Berlin (Germany), June 30 – July 3, 1992, pp. 736–741.
- 96 Krauter, S.: *Hinweise zur Modellbildung und Simulation des Strahlungseinfalls in PV-Module*. Proc. of the Solar Energy Simulation Workshop of the German Section of the International Solar Energy Society, Oldenburg (Germany), June 15–16, 1992, pp. 1–19.
- 97 Krauter, S. and R. Hanitsch: *Improvement of PV-Performance by Partly Structured Surfaces*. Proceedings of the 6th Photovoltaic Science and Engineering Conference, New Delhi (India), February 10–14, 1992, pp. 1110.
- 98 Krauter, S.; Hanitsch, R. and Ph. Strauß: *Simulation-Program for Selecting Efficiency Improving Strategies of PV-Module-Encapsulations under Operating Conditions*. Proceedings of "Renewable Energy Sources '91", Prague (CFSR), July 1–4, 1991, Vol. 3, pp. 48–53.
- 99 Krauter, S. and R. Hanitsch: *The Influence of the Capsulation on the Efficiency of PV-Modules*. Proceedings of the 1st World Renewable Energy Congress, Reading (UK), September 23–28, 1990, Vol. 1, pp. 141–144.