

Dr. Arnulf Jäger-Waldau

November 2021

## Curriculum Vitae

### Job History

Since May 2001	European Commission, Joint Research Centre, Ispra, Italy Institute for Environment and Sustainability (2001 – 01/2007) Senior Scientist and Action Leader Institute for Energy and Transport (2/2007 – 06/2016) Senior Scientist, Action Leader and Project Leader Directorate C: Energy Transport and Climate (since 07/2016) Senior Scientist and Project Leader (2016 – 2019) Scientific Mentor (since 2019)
August/Sep. 1999:	Re-invitation programme of the Alexander von Humboldt-Stiftung Shinshu University, Nagano, Japan
May 1996:	Specialists Invitation Programme for Solar Energy (Japan – EU Centre for Industrial Cooperation, Tokyo, Japan)
1996 – April 2001:	Hahn-Meitner-Institut, (now Helmholtz Centre) Berlin Senior Scientist and project manager

1994 - 1995

Scientist at the Universität Konstanz

May 94 - May 95

JSPS-Fellow (Alexander v. Humboldt-Stiftung)  
Shinshu University, Nagano, Japan

1990 - 1993

Scientific employee at the Universität Konstanz

### Education

May 1993:

Ph.D. in Physics (Promotion; Dr. rer. nat.) Universität Konstanz

Oct. 1989:

Diploma in Physics (Diplom-Physiker)

1987 – 1989

Universität Konstanz, Department of Physics, research student

1985 – 1989:

Universität Konstanz, Department of Physics (graduate studies)

1984/85:

Fellowship of the Rutgers University, New Brunswick, NJ, USA  
Department of Physics

1982 – 1984

Universität Konstanz, Department of Physics  
(undergraduate studies)

### Publications

almost 300 publications in peer reviewed journals, conference proceedings, books and reports ranging from materials research for PV and solar cell development to market studies and policy evaluations for Renewable Energies and Energy Efficiency.

### Patents

international patents on semiconductor material deposition for thin film solar cells and solar module design

## International Projects

- Review Editor for the Technical Summary of the IPCC 6<sup>th</sup> Assessment Report (2019 – 2022)
- Reviewer of Special Report on 1.5°C of the IPCC (2017 – 2019)
- IEA Photovoltaic Power System Implementation Agreement European Commission Representative in the following Tasks:
  - Strategic PV Analysis & Outreach
  - High-Penetration of PV Systems in Electricity Grids
- Reviewer of the Renewables Market Report of the IEA
- Reviewer of the Global Renewable Status Report published by UNECE and REN21
- Reviewer of the 5<sup>th</sup> and 6<sup>th</sup> IPCC Assessment Report (2014, 2022)
- Reviewer Editor for the Technical Summary AR6 (2021/22)
- Lead Author for Solar Energy of the Special Report of the IPCC on Renewable Energy and Climate Change Mitigation, approved by the General Assembly of the IPCC in May 2011
- Reviewer for the Global Energy Assessment Report (GEA) 2012

## Committees

- Appointed to the editorial board of Springer Nature journal “Green Technology, Resilience and Sustainability” (2021)
- Foreign Member of the Advisory Committee "Energy and Energy Efficiency" at the Board of Trustees of the Bulgarian Academy of Sciences
- Member of the Advisory Board of the Polish PV Centre Warsaw
- Vice Chair Academic Committee, Asian Photovoltaic Industry Association (APVIA), Singapore (2010 – 2016)
- Member of the Advisory Board of the 6<sup>th</sup> EU Framework Programme Integrated Project "ATHLET" with a budget of EUR 11 million (2006 – 2009)
- Member of the Executive Committee of the E-MRS (2005 to 2013)

## Publications

### Publications in Journals and Conference Proceedings

1. Critique of the paper: “*Through the Eye of a Needle: An Eco-Heterodox Perspective on the Renewable Energy Transition*”, Vasilis Fthenakis, Marco Raugei, Christian Breyer, Subhamoy Bhattacharya, Michael A. Carbajales-Dale, Michael J. Ginsberg, Arnulf Jäger-Waldau, Enrica Leccisi, Daniel Linquot, , David Murphy, Parikhit Sinha, Angus Rockett, Sascha Sadewasser, Billy J. Stanberry, Richard Swanson, Pierre Verlinden, submitted to energies
2. Impact of climatic conditions on prospects of vehicle-integrated photovoltaics for electro-mobility, Christian Thiel, Ana Gracia Amillo, Alessandro Tansini, Anastasios Tsakalidis, Georgios Fontaras, Ewan Dunlop, Nigel Taylor, Arnulf Jäger-Waldau, Kenji Araki, Kensuke Nishioka, Yasuyuki Ota, Masafumi Yamaguchi, submitted to Applied Energy
3. PV as an ancillary service provider -Laboratory and field experiences from IEA PVPS countries, M. Kraiczy, S. Siegl, J. Schütt, G. Arnold, S. Wende von Berg, D. Mende, M. Braun, R. Bründlinger, G. Heilscher, S. Chen, M. Cauz, L. Perret, R. Guerrero Lemus, N. Lal, A. Knobloch, D. Premm, C. Bucher, I. MacGill, A. Jäger-Waldau, G. Adinolfi, G. Graditi, Proceedings of the 11<sup>th</sup> Solar & Storage Integration Workshop (2021)
4. True Cost of Solar Hydrogen – Levelised Cost of Hydrogen in Europe 2021 - 2050, Eero Vartiainen, Christian Breyer, David Moser, Eduardo Román Medina, Chiara Busto, Gaetan Masson, Elina Bosch, Arnulf Jäger-Waldau, Proceedings of the 38<sup>th</sup> EUPVSEC (2021)
5. A Snapshot of Global PV Markets - The Latest Survey Results on PV Markets and Policies from the IEA PVPS Programme in 2020, Gaëtan Masson, Arnulf Jaeger-Waldau, Izumi Kaizuka, José Donoso, Proceedings of the 38<sup>th</sup> EUPVSEC (2021)
6. Green hydrogen for industrial use in the European Union, Arnulf Jäger-Waldau, Georgia Kakoulaki, Nigel Taylor, European Energy Innovation, Autumn 2021
7. True Cost of Solar Hydrogen, Eero Vartiainen, Christian Breyer, David Moser, Eduardo Román Medina, Chiara Busto, Gaetan Masson, Elina Bosch, Arnulf Jäger-Waldau, Solar RRL (2021), doi 10.1002/solr.202100487

8. Development of high-efficiency solar cell modules for PV-powered vehicles, Masafumi Yamaguchi, Ryo Ozaki, Kyotaro Nakamura, Kan-Hua Lee, Nobuaki Kojima, Yoshio Ohshita, Taizo Masuda, Kenichi Okumura, Akinori Satou, Takashi Nakado, Kazumi Yamada, Kenji Araki, Yasuyuki Ota, Kensuke Nishioka, Tatsuya Takamoto, Yusuke Zushi, Tsutomu Tanimoto, Christian Thiel, Anastasios Tsakalidis, Arnulf Jäger-Waldau, Solar RRL (2021), doi: 10.1002/solr.202100429
9. Analysis for temperature coefficient and their effect on efficiency of solar cell modules for photovoltaics-powered vehicles , Masafumi Yamaguchi, Kenji Araki, Yasuyuki Ota, Kensuke Nishioka, Tatsuya Takamoto, Taizo Masuda, Christian Thiel, Anastasios Tsakalidis, Arnulf Jäger-Waldau, Kenichi Okumura, Takashi Nakado, Kazumi Yamada, Yusuke Zushi, Tsutomu Tanimoto, Kyotaro Nakamura, Ryo Ozaki, Nobuaki Kojima and Yoshio Ohshita, Journal of Physics D – Applied Physics (2021), doi: 10.1088/1361-6463/ac1ef8
10. Solar photovoltaics is ready to power a sustainable future, Marta Victoria, Nancy Haegel, Ian Marius Peters, Ron Sinton, Arnulf Jäger-Waldau, Carlos del Cañizo, Christian Breyer, Matthew Stocks, Andrew Blakers, Izumi Kaizuka, Keiichi Komoto, Arno Smets, Joule, 2021, <https://doi.org/10.1016/j.joule.2021.03.005>
11. The Role of Photovoltaics in the Response of the European Member States to the European Green Deal; Arnulf Jäger-Waldau Georgia Kakoulaki, Nigel Taylor, Proceedings of the 48<sup>th</sup> IEEE PVSC
12. The role of photovoltaics for the European Green Deal and the recovery plan, Ioannis Kougias, Nigel Taylor, Georgia Kakoulaki, Arnulf Jäger-Waldau, Renewable and Sustainable Energy Reviews, Volume 144, 2021, 111017, <https://doi.org/10.1016/j.rser.2021.111017>
13. Snapshot of Photovoltaics – March 2021, Arnulf Jäger-Waldau, EPJ Photovoltaics, 2021, doi: 10.1051/epjpv/2021002
14. Rocio Gonzalez Sanchez, Ioannis Kougias, Magda Moner-Girona, Fernando Fahl, Arnulf Jäger-Waldau, Assessment of floating solar photovoltaics potential in existing hydropower reservoirs in Africa, Renewable Energy, Volume 169, 2021, Pages 687-699, <https://doi.org/10.1016/j.renene.2021.01.041>
15. The Green Hydrogen Transition: Feasibility of Substituting Existing Production with Electrolysis Powered by Local Renewable Energy Sources, Kakoulaki G., Kougias K., Taylor N., F. Dolci F., Moya J., Jäger-Waldau A., Energy Conversion and Management, Volume 228, 15 January 2021, 113649, <https://doi.org/10.1016/j.enconman.2020.113649>
16. The Untapped Area Potential for Photovoltaic Power in the European Union, Arnulf Jäger-Waldau, Clean Technol. 2020, 2, 440–446; doi:10.3390/cleantechol2040027

17. How photovoltaics can contribute to GHG emission reductions of 55% in the EU by 2030, Arnulf Jäger-Waldau, Ioannis Kougias, Nigel Taylor, Christian Thiel, Renewable and Sustainable Energy Reviews, Volume 126, July 2020, 109836, <https://doi.org/10.1016/j.rser.2020.109836>
18. Self-consumption of electricity produced with photovoltaic systems in apartment buildings - Update of the situation in various IEA PVPS countries, Arnulf Jäger-Waldau, Giovanna Adinolfi, Alexandra Batlle, Martin Braun, Christof Bucher, Alice Detollenaere, Kenn H.B. Frederiksen, Giorgio Graditi, Ricardo Guerrero Lemus, Johan Lindahl, Gerd Heilscher, Markus Kraiczy, Gaëtan Masson, Barry Mather, Christoph Mayr, Diana Moneta, Daniel Mugnier, John Nikoletatos, Gregory Neubourg, Glenn Platt, Angèle Reinders, Mike B. Roberts and Yuzuru Ueda, Proceedings of the IEEE PVSC-47, 15 June – 21 August, 2020, Virtual Meeting
19. Benefits for cities and recovery of the local economies Arnulf Jäger-Waldau, European Energy Innovation, Summer 2020, p 42 -45
20. Material research for photovoltaics - from lab to market, Arnulf Jäger-Waldau, Proc. SPIE 11387, Energy Harvesting and Storage: Materials, Devices, and Applications X, 1138708 (23 April 2020); <https://doi.org/10.1117/12.2559342>
21. Snapshot of Global PV Markets 2020, Alice Detollenaere, July Van Wetter, Gaetan Masson, Izumi Kaizuka, Arnulf Jäger-Waldau, José Donoso, PVPS Task 1 Strategic PV Analysis and Outreach, (2020) 10.13140/RG.2.2.24096.74248, ISBN 978-3-906042-94-7
22. Will Electric Vehicles Be Killed (again) or Are They the Next Mobility Killer App?, Christian Thiel, Anastasios Tsakalidis, Arnulf Jäger-Waldau, Energies 2020, 13, 1828; doi:10.3390/en13071828
23. Snapshot of Photovoltaics—February 2020, Arnulf Jäger-Waldau, *Energies* 2020, 13, 930, <https://doi.org/10.3390/en13040930>
24. A high-resolution geospatial assessment of the rooftop solar photovoltaic potential in the European Union, Katalin Bódis, Ioannis Kougias, Arnulf Jäger-Waldau, Nigel Taylor, Sándor Szabó, Renewable and Sustainable Energy Reviews, Volume 114, October 2019, 109309, <https://doi.org/10.1016/j.rser.2019.109309>
25. The New European Renewable Energy Directive Opportunities and Challenges for Photovoltaics, Arnulf Jäger-Waldau, Katalin Bodis, Ioannis Kougias, Sandor Szabo, Proceedings of the IEEE PVSC-46, 16 – 21 June 2019, Chicago, IL, USA, DOI: 10.1109/PVSC40753.2019.8980694
26. Electricity produced from photovoltaic systems in apartment buildings and self-consumption - Comparison of the situation in various IEA PVPS countries, Arnulf Jäger-Waldau, Giovanna Adinolfi, Alexandra Batlle, Martin Braun, Christof Bucher,

- Alice Detollenaire, Kenn H.B. Frederiksen, Giorgio Graditi· Ricardo Guerrero Lemus, Johan Lindahl, Gerd Heilscher, Markus Kraiczy, Gaëtan Masson, Barry Mather, Christoph Mayr, Diana Moneta, Daniel Mugnier, John Nikoletatos, Gregory Neubourg, Glenn Platt and Mike B. Roberts, Proceedings of the IEEE PVSC-46, 16 – 21 June 2019, Chicago, IL, USA,
- 27. A Snapshot of Global PV Markets - The Latest Survey Results on PV Markets and Policies from the IEA PVPS Programme in 2018, Gaëtan Masson, Izumi Kaizuka, Johan Lindahl, Arnulf Jaeger-Waldau, Gregory Neubourg, José Donoso, Francesca Tilli, Proceedings of the IEEE PVSC-46, 16 – 21 June 2019, Chicago, IL, USA, doi 10.1109/PVSC40753.2019.8981142
  - 28. Solar Photovoltaic Electricity Generation: a Lifeline for the European Coal Regions in Transition, K. Bódis, I. Koulias, N. Taylor, A. Jäger-Waldau, Sustainability 2019, 11(3), DOI: 10.3390/su11133703
  - 29. Snapshot of Photovoltaics – February 2019, A. Jäger-Waldau, *Energies* **2019**, *12*(5), 769; <https://doi.org/10.3390/en12050769>
  - 30. Diversifying Land-Use Options for the Future Large Scale European PV Deployment, Thomas Huld, Nigel Taylor, Arnulf Jäger-Waldau, Sandor Szabo, Katalin Bódis, Proceedings of the 34<sup>th</sup> European Conference on Photovoltaic Power Conversion and Exhibition, September 2018, Brussels, Belgium
  - 31. Rooftop PV and Self Consumption of Electricity in Europe – Benefits for the Climate and Local Economies, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2018, 16 - 20 p
  - 32. Photovoltaics in Europe after the Paris Agreement, Arnulf Jäger-Waldau., Thomas Huld, Katalin Bódis and Sandor Szabo, In Proceedings of the 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion, WCPEC 2018—A Joint Conference of 45th IEEE PVSC, 28th PVSEC and 34th EU PVSEC26, Waikoloa Village; HI, USA, 10–15 June 2018; pp. 3835–3837, doi: 10.1109/PVSC.2018.8547634.
  - 33. Self-consumption of electricity produced from PV systems in apartment buildings - Comparison of the situation in Australia, Austria, Denmark, Germany, Greece, Italy, Spain, Switzerland and the USA, Arnulf Jäger-Waldau, Christof Bucher, Kenn H.B. Frederiksen, Ricardo Guerro-Lemus, Gaëtan Masson, Barry Mather, Christoph Mayr, Diana Moneta, John Nikoletatos and Mike B. Roberts, In Proceedings of the 2018 IEEE 7th World Conference on Photovoltaic Energy Conversion, WCPEC 2018—A Joint Conference of 45th IEEE PVSC, 28th PVSEC and 34th EU PVSEC26, Waikoloa Village; HI, USA, 10–15 June 2018; pp. 1424–1430, doi:10.1109/PVSC.2018.8547583.

34. A Snapshot of Global PV Markets-The Latest Survey Results on PV Markets and Policies from the IEA PVPS Programme in 2017, Gaëtan Masson, Izumi Kaizuka, Johan Lindahl, Arnulf Jäger-Waldau, Gregory Neubourg, Peter Ahm, José Donoso, Francesca Tilli, Proceedings of the 7<sup>th</sup> World Conference on Photovoltaic Power Conversion, June 2018, Waikaloa, USA
35. Snapshot of Photovoltaics – February 2018, A. Jäger-Waldau, EPJ Photovoltaics 9, 6 (2018)
36. The Rooftop Potential for PV Systems in the European Union to deliver the Paris Agreement Thomas Huld, Katalin Bodis, Irene Pinedo Pascua, Ewan Dunlop, Nigel Taylor, Arnulf Jäger-Waldau, European Energy Innovation, Spring 2018, 12 - 15 p
37. Photovoltaics and wind status in the European Union after the Paris Agreement, Roberto Lacal Arantegui, Arnulf Jäger-Waldau, January 2018, Renewable and Sustainable Energy Reviews 81:2460 - 2471
38. Why Europe needs to install more PV Systems to deliver the Paris Agreement, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2017, 48 -51 p
39. Residential Photovoltaic Electricity Generation in the European Union 2017 - Opportunities and Challenges, Arnulf Jäger-Waldau, Thomas Huld, Sandor Szabo, Proceedings of the 44<sup>th</sup> IEEE PVSC, Washington, DC, 26 to 30 June 2017
40. Snapshot of Photovoltaics – March 2017, Arnulf Jäger-Waldau, Sustainability 2017, 9, 78
41. A methodology for maximizing the benefits of solar landfills on closed sites, Sándor Szabó, Katalin Bódis, Ioannis Kougias, Magda Moner-Girona, Arnulf Jäger-Waldau, Gábor Barton, László Szabó, Renewable and Sustainable Energy Reviews 76 (March 2017) 1291-1300
42. Energy Return on Energy Invested (ERoEI) for photovoltaic solar systems in regions of moderate insolation: A comprehensive response, Marco Raugei, Sgouris Sgouridis, David Murphy, Vasilis Fthenakis, Rolf Frischknecht, Christian Breyer, Ugo Bardi, Charles Barnhart, Alastair Buckley, Michael Carbajales-Dale, Denes Csala, Mariska de Wild-Scholten, Garvin Heath, Arnulf Jäger-Waldau, Christopher Jones, Arthur Keller, Enrica Leccisi, Pierluigi Mancarella, Nicola Pearsall, Adam Siegel, Wim Sinke, Philippe Stoltz, Energy Policy 102 (2017) 377–384
43. Costs and Economics of Electricity from Residential PV Systems in Europe, Arnulf Jäger-Waldau, European energy innovation, Winter 2016, p. 29 – 32
44. The potential of water infrastructure to accommodate solar PV systems in Mediterranean islands, Ioannis Kougias, Sandor Szabo, Katalin Bodis, Arnulf Jäger-Waldau, Magda Moner-Girona, Fabio Monforti-Ferrario, Heinz Ossenbrink, Solar Energy Volume 136, 15 October 2016, Pages 174–182

45. A Snapshot of Global PV Markets -The latest survey results on markets and policies from the IEA PVPS programme, Gaëtan Masson, Pius Hüser, Izumi Kaizuka, Johan Lindahl, Arnulf Jaeger-Waldau, Angelo Baggini, Francesca Tilli, Guastella Salvatore, Peter Ahm, Grégory Neubourg, José Donoso, Chinho Park, Vicente Salas, Jero Ahola, Proceedings of the 32<sup>nd</sup> EUPVSEC, 20 – 24 June 2016, München, Germany
46. Exploiting existing dams for solar PV system installations, Ioannis Kougias, Katalin Bódis, Arnulf Jäger-Waldau, Fabio Monforti-Ferrario, Sándor Szabó, Progress in Photovoltaics Research and Applications DOI:10.1002/pip.2640, Volume 24, Issue 2, 1 February 2016, Pages 229-239
47. Deployment Pathways for Photovoltaics in the EU Towards 2020: Comparing Economic Factors with Policies at Municipal Level, Nigel Taylor, Sandor Szabò, Albana Kona, Giulia Melica, A. Jäger-Waldau, Heinz Ossenbrink, Proceedings of the 31<sup>st</sup> EUPVSEC, 14 – 18 September 2015, Hamburg, Germany
48. Towards a European Union of Photovoltaic Solar Electricity, H. Ossenbrink, A. Jäger-Waldau, N. Taylor, S. Szabo, T. Huld, E. Dunlop, Proceedings of the 31<sup>st</sup> EUPVSEC, 14 – 18 September 2015, Hamburg, Germany
49. Does Europe abandon photovoltaics?, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2015, 59 – 62
50. The applicability of the Stratics model on industrial level - the case of the PV industry in the scope of European electricity markets, Hrvoje Mederac, Arnulf Jäger-Waldau, Manjola Banja, Fabio Monforti-Ferrario, 12th International CIRCLE Conference for Consumer Behaviour and Retailing Research p. 139-140, ISBN 978-0-9932345-0-7
51. European Photovoltaic Market Contracts in a Rapid Expanding Global Market, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2014, 52 – 56
52. Renewable government policies versus model predictions, Sándor Szabó, Arnulf Jäger-Waldau, Marta Szabó, Fabio Monforti-Ferrario Lazlo Szabó and Heinz Ossenbrink, Energy Strategy Review, 2 (2014) 257–264
53. Mapping the cost of electricity from grid-connected and off-grid PV systems in Africa, Thomas Huld, Arnulf Jäger-Waldau and Sándor Szabó, Proceedings of the 1<sup>st</sup> Africa PVSEC, 27 – 29 March 2014, Durban, South Africa
54. Installing Solar Systems on the face of existing African dams for additional energy production, Kougias Ioannis, Bódis Katalin, Jäger-Waldau Arnulf, Szabó Sándor, Proceedings of the 1<sup>st</sup> Africa PVSEC, 27 – 29 March 2014, Durban, South Africa
55. Lessons learnt from the AFRETEP for the African PV sector development, Sandor Szabó, Katalin Bódis; Thomas Huld, Irene Irene Pinedo-Pascua, Arnulf Jäger-Waldau, Proceedings of the 1<sup>st</sup> Africa PVSEC, 27 – 29 March 2014, Durban, South Africa

56. How Competitive is Photovoltaic Electricity, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2013, 14 – 17
57. Techno-Economic Optimisation of Limited Resources in Steam Biomass Plants – Croatian Case Study, H. Mederac, A. Jäger-Waldau F. Monforti Ferrario, N. Scarlat, S. Szabo, Proceedings of the 21<sup>st</sup> European Biomass Conference and Exhibition, 3 to 7 Jun2 2013, Copenhagen, Denmark
58. Realising Solar Power's Potential in the European Union, G. De Santi, A. Jaeger-Waldau, N. Taylor, H. Ossenbrink, Phil. Trans. R. Soc. A, 2013 371 1996 20120391; doi:10.1098/rsta.2012.0391 (published 1 July 2013) 1471-2962
59. The Future of PV, Arnulf Jäger-Waldau, International Sustainable Energy Review, Vol 6, Issue 4 (2012) 10 – 13
60. New Opportunities for PV Systems, H. Ossenbrink, A. Jäger-Waldau, T. Huld, N. Taylor, Proceedings of the 27<sup>th</sup> European Photovoltaic Energy Conference and Exhibition, 24 to 28 September 2012, Frankfurt, Germany
61. Photovoltaics and our Future Energy Supply, Arnulf Jäger-Waldau, European Energy Innovation, Autumn 2012, 13 – 15
62. Thin Film Photovoltaics: Markets and Industry, A. Jäger-Waldau, International Journal of Photoenergy, 2012 Article ID 768368, 6 pages; doi:10.1155/2012/768368
63. PV Snapshot, A. Jäger-Waldau, QualEnergia (n. 1, febbraio-marzo 2012), pp 10 -14
64. A bright 2012, Arnulf Jäger-Waldau, Heinz Ossenbrink, International Sustainable Energy Review, 5 (2012) 41 – 44
65. Photovoltaics: Status and Perspectives until 2020, A. Jäger-Waldau, Green, Vol. 1 (2011), pp. 277–290
66. Quo Vadis Photovoltaics 2011, A. Jäger-Waldau, EPJ Photovoltaics 2, 20801 (2011), doi: 10.1051/epjpv/2011005
67. Europe must boost investment in solar power, Arnulf Jäger-Waldau, PS Public Service Europe, 2011, Online  
<http://www.publicserviceeurope.com/article/948/europe-must-boost-investment-in-solar-power>
68. Status of Photovoltaics in 2011, A. Jäger-Waldau, Intelligent Glass Solutions, Issue 3 (2011) 18 – 22

69. Renewable Electricity in Europe, Arnulf Jäger-Waldau, Marta Szabó, Nicolae Scarlat and Fabio Monforti-Ferrario, *Renewable & Sustainable Energy Reviews* 15 (2011) 3703– 3716
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72. The Risk Adjusted Financial Cost of Photovoltaics, Sándor Szabó, Arnulf Jäger-Waldau, Laszlo Szabó, *Energy Policy*, Volume 38, Issue 7, July 2010, Pages 3807-3819
73. Current Status of Photovoltaics and Market Developments, Arnulf Jäger-Waldau, *InterPV*, June 2010
74. The Risk Adjusted Financial Cost of PV, Sándor Szabó, Arnulf Jäger-Waldau, Laszlo Szabó, Proceedings of the 24th European Photovoltaic Solar Energy Conference, Hamburg, Germany (2009)
75. Thin Film Photovoltaic Technology and Developments, Arnulf Jäger-Waldau, *European Sustainable Energy Review*, Issue 3, 2008, p.34 – 37
76. More Competition: Threat or Chance to Financing Renewable Electricity?, Sándor Szabó, Arnulf Jäger-Waldau, *Energy Policy* Volume 36, Issue 4, April 2008, Pages 1436-1447
77. Photovoltaics and Renewable Energies in Europe  
Arnulf Jäger-Waldau  
*Renewable & Sustainable Energy Reviews*, Volume 11, Issue 7, September 2007, Pages 1414-1437
78. Potential of Electricity from Photovoltaics and other Renewable Energies - Status in the European Union  
Arnulf Jäger-Waldau  
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79. Increasing the share of Photovoltaics – Is it an obstacle or imminent for a competitive European electricity market?  
Sándor Szabó, Arnulf Jäger-Waldau  
Proc. of the 21<sup>st</sup> European Photovoltaic Solar Energy Conference, Dresden, Germany, (2006)
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Arnulf Jäger-Waldau, Marcel Suri, Ewan Dunlop, Heinz Ossenbrink, Thomas Huld, Tomas Cebecauer  
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81. European Photovoltaics in World Wide Comparison  
Arnulf Jäger-Waldau  
Journal of Non Crystalline Solids, Volume 352, Issues 9-20, 15 June 2006, Pages 1922-1927
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Arnulf Jäger-Waldau  
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Arnulf Jäger Waldau  
Technical Digest of the 15<sup>th</sup> International Photovoltaic Science and Engineering Conference (PVSEC-15), Shanghai China, 10 – 15 October 2005, p. 353-354
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J.J. Bloem, A. Jäger-Waldau, A. Colli  
Proc. of the 20<sup>th</sup> European Photovoltaic Solar Energy Conference, Barcelona, Spain, (2005) 3107-3110
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M.J. de Wild-Scholten K. Wambach E.A. Alsema A. Jäger-Waldau  
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K. Wambach, S. Schlenker, A. Jäger-Waldau  
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Arnulf Jaeger Waldau  
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in the EU  
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A. Jäger-Waldau; Solar Energy 77 (2004) 667-678
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Proceedings of the 31<sup>st</sup> IEEE Photovoltaics Specialists Conference, Orlando, USA,  
January 2005
91. Silicon Heterojunction Cell R&D in Europe  
F. Roca, J. Cárabe and A. Jäger-Waldau  
Proc. of the 19<sup>th</sup> European Photovoltaic Solar Energy Conference, Paris France,  
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