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Adam P. Plesniak

Editor

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Contents

v	Conference Committee
vii	Introduction

SESSION 1 LUMINESCENT SOLAR CONCENTRATORS

- 8821 02 **Fiber luminescent solar concentrator with 5.7% conversion efficiency (Invited Paper)** [8821-1]
E.-H. Banaei, A. F. Abouraddy, CREOL, The College of Optics & Photonics, Univ. of Central Florida (United States)
- 8821 03 **Monte Carlo ray-tracing simulations of luminescent solar concentrators for building integrated photovoltaics** [8821-2]
S. W. Leow, C. Corrado, M. Osborn, S. A. Carter, Univ. of California, Santa Cruz (United States)
- 8821 04 **Exploration of parameters influencing the self-absorption losses in luminescent solar concentrators with an experimentally validated combined ray-tracing/Monte-Carlo model** [8821-4]
Z. Krumer, W. G. J. H. M. van Sark, C. de Mello Donegá, R. E. I. Schropp, Utrecht Univ. (Netherlands)

SESSION 2 HOLOGRAPHIC SOLAR CONCENTRATORS

- 8821 06 **Grating-over-lens concentrating photovoltaic spectrum splitting systems with volume holographic optical elements** [8821-6]
J. M. Russo, D. Zhang, M. Gordon, S. D. Vorndran, Y. Wu, R. K. Kostuk, The Univ. of Arizona (United States)
- 8821 07 **Experimental verification of spectral grating interference in multiplexed volume holograms employed as broadband dispersive elements for solar concentrators** [8821-7]
G. B. Ingersoll, D. Lin, J. R. Leger, Univ. of Minnesota Twin Cities (United States)

SESSION 3 SPECTRUM SPLITTING CONCENTRATORS

- 8821 08 **Single element point focus spectral splitting concentrator with CIGS multiple bandgap solar cells** [8821-8]
M. Stefancich, A. Zayan, M. Chiesa, Masdar Institute of Science & Technology (United Arab Emirates); S. Rampino, CNR, Istituto dei Materiali per l' Elettronica ed il Magnetismo (Italy); C. Maragliano, Masdar Institute of Science & Technology (United Arab Emirates)
- 8821 0A **Concentrating and spectrum splitting optical device in high efficiency CPV module with five bandgaps** [8821-10]
J. Y. Taudien, L. A. Kern IV, Vertex Solar (United States)

SESSION 4 HIGH CONCENTRATION SYSTEMS

- 8821 0C **Solar internal lighting system with an automated solar tracker for daylight harvesting**
[8821-12]
U. Kumar, R. Raj, A. Aryan, K. K. Gopalan, V. P. N. Nampoori, Cochin Univ. of Science and Technology (India)
- 8821 0D **An introduction to the Amonix 8700 Solar Power Generator (Invited Paper)** [8821-13]
A. Plesniak, V. Garboushian, M. Liu, R. Gordon, W. Bagienski, Amonix Inc. (United States)
- 8821 0E **Concept and initial design of a stationary concentrator photovoltaic system based on a mirror array** [8821-14]
T. Kamimura, R. Amano, I. Fujieda, Ritsumeikan Univ. (Japan)

SESSION 5 HIGH CONCENTRATION OPTICS

- 8821 0F **9-fold Fresnel-Köhler concentrator for increased uniform irradiance on high concentrations**
[8821-15]
J. Mendes-Lopes, Univ. Politécnica de Madrid (Spain); P. Benítez, Univ. Politécnica de Madrid (Spain) and LPI-LLC (United States); P. Zamora, Univ. Politécnica de Madrid (Spain); J. C. Miñano, Univ. Politécnica de Madrid (Spain) and LPI-LLC (United States)
- 8821 0G **Development and characterization of an FK photovoltaic concentrator for maximum conversion efficiency** [8821-16]
P. Zamora, Univ. Politécnica de Madrid (Spain); M. Hernández, J. Vilaplana, LPI-LLC (United States); P. Benítez, Univ. Politécnica de Madrid (Spain) and LPI-LLC (United States); R. Mohedano, LPI-LLC (United States); J. C. Miñano, Univ. Politécnica de Madrid (Spain) and LPI-LLC (United States)
- 8821 0H **Thin solar concentrator with high concentration ratio** [8821-17]
J.-S. Lin, C.-W. Liang, National Central Univ. (Taiwan)
- 8821 0I **Solar spectral variations and their influence on concentrator solar cell performance**
[8821-18]
L. Z. Broderick, B. R. Albert, B. S. Pearson, L. C. Kimerling, J. Michel, Massachusetts Institute of Technology (United States)

Author Index

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- 1 Luminescent Solar Concentrators
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- 2 Holographic Solar Concentrators
Raymond K. Kostuk, The University of Arizona (United States)
- 3 Spectrum Splitting Concentrators
Adam P. Plesniak, Amonix Inc. (United States)
- 4 High Concentration Systems
Raymond K. Kostuk, The University of Arizona (United States)
- 5 High Concentration Optics
Pablo Benítez, Universidad Politécnica de Madrid (Spain) and Light
Prescriptions Innovators, LLC (United States)

Introduction

While turbulence in the solar energy industry continued into 2013, I am pleased to report that research on the topics of high and low concentrator systems for solar electric generation is strong. Novel topics such as luminescent, holographic and spectrum splitting solar concentrators continue to press forward with experts coming to SPIE from around the world to share research, ideas, and results. Traditional topics including high concentration systems and high concentration optics also reported exciting levels of innovation for this past year. Here are a few highlights from the 2013 program:

- The conference started with a presentation from Esmail-Hooman Banaei on a novel luminescent solar concentrator design with strong promise for easy manufacturing and low cost.
- Three Ph.D candidates, Sunita Darbe, Emily Kosten and Carissa Eisler, from Harry Atwater's research group at Caltech presented exciting work on three different spectrum splitting concentrators, each with promise to reach drastically higher efficiencies than currently achievable with CPV.
- Juan Russo updated the conference on progress in spectrum splitting with holographic optical elements under development at Raymond Kostuk's lab at the University of Arizona.
- Joao Mendes-Lopes and Professor, SPIE Fellow and A.E. Conrady Award winner Juan Carlos Minano updated the conference on progress with Fresnel Kohler optical designs for concentrator systems.

Overall, concentrator research continues to show strong promise for improving performance and lowering the cost of solar energy systems in the near future. I encourage readers to review all of the manuscripts in this year's program, contact authors and get involved in taking these exciting research topics to the next level.

In addition to this year's strong program, a few changes are in store for the 2014 program. First, the conference name will be officially changed to High and Low Concentrator Systems for Solar Energy Applications IX to be more inclusive of optical concentration technologies for purpose of solar energy collection, not just solar energy collection for the purpose of photovoltaic electricity generation. This includes technology and optical research from groups working with concentrating solar power (CSP). The conference leadership believes that SPIE Optics and Photonics is the perfect forum for discussion of mutual interests on the topic of concentrator optics for CPV and CSP, starting in 2014.

Thanks to all of our authors and presenters for a successful 2013 program. I look forward to seeing all of you again next year!

Adam P. Plesniak