

Journal of Photonics for Energy

SPIDigitalLibrary.org/jpe

Guest Editorial: High and Low Concentrator Systems for Solar Electric Applications

Kaitlyn VanSant

Guest Editorial: High and Low Concentrator Systems for Solar Electric Applications

Kaitlyn VanSant

National Renewable Energy Laboratory, 15013 Denver West Parkway, Golden,
Colorado 80401

Concentrating photovoltaics (CPV) technology includes a diverse array of module and system designs that vary according to the geometry, concentration ratio, and the types of cells and optics used. Research and development (R&D) in CPV is active and highly inventive, resulting in both the highest efficiency solar cells and modules currently available across the PV industry (Solar Junction's triple junction GaAs-based cell: 43.5%; Semprius' CPV module: 33.9%). Despite extremely challenging market conditions, CPV installations have recently flourished, and researchers are avidly pursuing new applications. This special section in the *Journal of Photonics for Energy* provides insight into some of the new and exciting areas of CPV R&D and conveys the extraordinary level of innovation underway in today's CPV community.