Space-based solar laser system simulation to transfer power onto the Earth

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A simulation model of a space-based solar laser system to transfer the power onto the earth is carried out. The system consists of a solar pumped laser by a concentration system set on a satellite. The resulted laser is directed onto the earth surface, where it can be used to generate power. The intensity and the divergence of the laser are calculated in order to obtain the optimal solar laser system as a payload on the satellite and the optimal terrestrial applications in Egypt.

Biography

Yasser A Abdel-Hadi has completed his PhD in 2005 from the Technical University of Berlin, Institute of Optics and Atomic Physics. He is an Associate Professor and staff member at the Solar and Space Research Department of the National Research Institute of Astronomy and Geophysics (NRIAG). He has published more than 38 papers in reputed journals and has been organized many conferences and workshops in Egypt and Germany.

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