Steam power generation and solar power generation

This paper describes the influence of the solar multiple on the annual performance of parabolic trough solar thermal power plants with direct steam generation (DSG). The reference system ...

In direct steam generation (DSG) concentrating solar power (CSP) plants, water is used as heat transfer fluid (HTF). This technology is commercially available today and it has ...

2018. Parabolic trough power plants have been developed in the integrated solar combined cycle system (ISCCS) and the direct steam generation (DSG),each concept has their configuration ...

A low cost, highly flexible and environmentally friendly water generation method known as interfacial solar steam generation (SSG) has recently been popularized by many researchers due to the continuously ...

Solar power generation is a burgeoning new industry. Two drivers for this new industry are a) the sun is a source of free, abundant (although cyclical and diffused), non-polluting energy, and b ...

Acknowledging that concentrated solar power (CSP) installations using direct steam generation (DSG) how better efficiency compared to those that use heat transfer fluids ...

The rapid development of photothermal materials and their integrated systems has fostered recent technology breakthroughs in solar evaporation for both steam and power generation. Here, we discuss this new and emerging area that ...

Concerns arising from the environmental impacts of fossil-fuel power generation and the finite nature of these resources have acted as drivers for the development of renewable energy ...