

SOLAR ENERGY

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EDITED BY
RADU D. RUGESCU

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Preface

The present book on “Solar Energy” is entitled to reveal some of the latest concepts and research in the direct exploitation of solar energy and incorporates eighteen chapters, authored by fifty-two selected, international contributors. All these contributions are developed in the two of the areas that we believe to be the most promising and efficient in solar energy: the new generation of PV cells and the solar array-gravity draught accelerators. From new advances in the Material Science to provide high efficiency photocells, up to the airborne solar “chimney” and the closed-circuit chimney gravitational accelerator for use on Mars and Moon, the original authors explain the new concepts in a high-level, first-hand presentation, which characterizes the entire book. The chapters are designed to gradually attract the interest of the reader by means of their content. Despite the small space available, or rather surely due to this constraint, the stories of the new technologies are presented in a very synthetic and easy-to-read manner, a necessary quality for time saving today.

The present “Solar Energy” science book hopefully opens a series of other firsthand texts in new technologies with practical impact and subsequent interest. They might include the ecological combustion of fossil fuels, space technology in the benefit of local and remote communities, new trends in the development of secure Internet Communications on an interplanetary scale, new breakthroughs in the propulsion technology and others. The editors will be pleased to see that the present book is open to debate and they will wait for the readers’ reaction with great interest. Critics and proposals will be equally welcomed.

The editor addresses special thanks to the contributors for their high quality and courageous initiative, and to the Technical Corp. of editors that conveyed the text into a pleasant and cozy presentation.

Bucharest, January 18, 2010

Editor

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