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Autore	Sangster Alan J
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Nota di contenuto	Chapter 1 Energy from Ancient and Modern Sunshine -- chapter 2 Electromagnetic Fields and Waves -- chapter 3 Classical Radiation Theory -- chapter 4 Aperture Antennas for Solar Systems -- chapter 5 Array Antennas for Solar Systems -- chapter 6 Solar Radiation and Scattering: Waves or Particles? -- chapter 7 Solar Photovoltaics -- chapter 8 Concentrated Solar Power (CSP) -- chapter 9 Solar Power Satellites (SPS) -- chapter 10 Optical Antennas (Nantennas).
Sommario/riassunto	This text seeks to illuminate, mainly for the electrical power engineers of the future, the topic of large scale solar flux gathering schemes, which arguably represent the major source of renewable power available. The aim of the content is to impart, from an electromagnetic perspective, a deep and sound understanding of the topic of solar flux collection, ranging from the characteristics of light to the properties of

antennas. To do this five chapters are employed to provide a thorough grounding in relevant aspects of electromagnetism and electromagnetic waves including optics, electromagnetic radiation and reception, aperture antennas and array antennas, and the quantum electrodynamics aspects of optical absorption, as it relates to photovoltaic techniques. The principles developed in these chapters are then used to underpin and elucidate the main chapters on photovoltaic collectors, concentrated solar power collectors, satellite based collection systems and optical nantennas. To establish the novel and transformative renewable technologies, which civilisation will soon require, in order to achieve sustainability quickly and effectively, the availability of professional engineers and scientists with a thorough and commanding grasp of the fundamental science is an absolutely essential prerequisite. This book provides this for solar power generating systems.