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This book describes recent breakthroughs that promise major cost reductions in solar energy production in a clear and highly accessible manner. The authors address the three key areas that have commonly resulted in criticism of solar energy in the past: cost, availability, and variability. Coverage includes cutting-edge information on recently developed 40% efficient solar cells, which can produce double the power of currently available commercial cells. The discussion also highlights the potentially transformative emergence of opportunities for integration of solar energy storage and natural gas combined heat and power systems. Solar energy production in the evening hours is also given fresh consideration via the convergence of low cost access to space and the growing number of large terrestrial solar electric power fields around the world.

- Provides highly-accessible guide to modern, low-cost, solar electric power;
- Addresses three key areas for typical criticism of solar energy;
- Discusses solar cells, modules and systems, including newest solar cells.

Fraas · O'Neill

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