

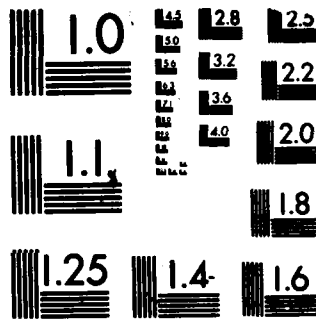
AD-A142 087 SOLAR CELLS(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON 1 /  
AFB OH 31 MAY 84 FTD-ID(RS)T-0616-84

UNCLASSIFIED

F/G 10/1 NL



END  
DATE  
FILMED  
7 - 9  
DTIC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

2

FTD-ID(RS)T-0616-84

AD-A142 087

# FOREIGN TECHNOLOGY DIVISION



SOLAR CELLS



DTIC FILE COPY

**DTIC**  
**ELECTE**  
**S** JUN 15 1984 **D**  
**D**

Approved for public release;  
distribution unlimited.



84 06 14 043

# EDITED TRANSLATION

FTD-ID(RS)T-0616-84

31 May 1984

MICROFICHE NR: FTD-84-C-000554

SOLAR CELLS

English pages: 1

Source: Mechanik, Nr. 8, 1978, pp. 448

Country of origin: Poland

Translated by: LEO KANNER ASSOCIATES  
F33657-81-D-0264

Requester: FTD/TQTD

Approved for public release; distribution unlimited.

|                    |                                     |
|--------------------|-------------------------------------|
| Accession For      |                                     |
| NTIS GRA&I         | <input checked="" type="checkbox"/> |
| DTIC TAB           | <input type="checkbox"/>            |
| Unannounced        | <input type="checkbox"/>            |
| Justification      |                                     |
| By                 |                                     |
| Distribution/      |                                     |
| Availability Codes |                                     |
| Avail and/or       |                                     |
| Dist               | Special                             |
| A-1                |                                     |

THIS TRANSLATION IS A RENDITION OF THE ORIGINAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DIVISION.

PREPARED BY:

TRANSLATION DIVISION  
FOREIGN TECHNOLOGY DIVISION  
WP-AFB, OHIO.



**GRAPHICS DISCLAIMER**

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available.

## SOLAR CELLS

Solar cells--photoelectric generators--are devices in which the energy of solar radiation is converted into electrical energy. The most diffuse and the only one suited for industry is the silicon cell. The application of semiconductor material has allowed an output amounting to 13.5 percent to be achieved. These cells are used mainly in astronautical technology.

The best properties are possessed by generators with structures using GaAs (gallium-arsenic) material. Their output amounts to 17.5 percent. In this respect, gallium-arsenic cells will be better suited for solar powerplants than silicon, which cannot operate at temperatures exceeding 150°C.