



Growth and Evaluation of Multicrystalline Silicon

Guest Editors:

Prof. Dr. Kozo Fujiwara

Institute for Materials Research,
Tohoku University, Sendai, Japan

Prof. Dr. Chung-wen Lan

Department of Chemical
Engineering, National Taiwan
University, Taipei, Taiwan

Prof. Dr. Koichi Kakimoto

Research Institute for Applied
Mechanics, Kyushu University, 6-1
Kasuga-koen, Kasuga Fukuoka
816-8580, Japan

Deadline for manuscript
submissions:

closed (15 July 2018)

Message from the Guest Editors

Multicrystalline silicon (mc-Si) is widely used for substrates of solar cells. It is well understood that there is an advantage in the production cost in a mc-Si ingot in comparison to a single crystal Si, although the quality of mc-Si ingot should be improved further.

To realize a high energy conversion efficiency of mc-Si solar cells, the development of crystal growth technology is required. Furthermore, the fundamental understanding of crystal growth mechanism of mc-Si, mechanism of defects formation, and evaluation of mc-Si wafers are crucial.

We invite investigators to submit papers which discuss the development of high quality multicrystalline Si for solar cells, including bulk ingots and thin films.

The potential topics include:

- Crystal growth of mc-Si ingot
- Crystal growth of mc-Si thin films
- Crystal growth mechanisms of mc-Si
- Defects formation and their property in mc-Si
- Evaluation of mc-Si wafers
- Property of solar cells based on mc-Si
- Crystal growth of new materials based on Si





crystals



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, Italy

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](#)