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Front Matter: Volume 7995

, "Front Matter: Volume 7995," Proc. SPIE 7995, Seventh International Conference on Thin Film Physics and Applications, 799501 (5 March 2011); doi: 10.1117/12.889047

SPIE.

Event: Seventh International Conference on Thin Film Physics and Applications, 2010, Shanghai, China

PROCEEDINGS OF SPIE

Seventh International Conference on ***Thin Film Physics and Applications***

Junhao Chu
Zhanshan Wang
Editors

24–27 September 2010
Shanghai, China

Organized and Sponsored by
Department of Physics, Tongji University (China)
Key Laboratory of Advanced Microstructure Materials, Tongji University,
Ministry of Education (China)
Shanghai Key Laboratory of Special Artificial Microstructure Materials
and Technology, Tongji University (China)
National Natural Science Foundation of China (China)
Science and Technology Commission of Shanghai Municipality (China)
Chinese Physical Society (China)
Shanghai Physical Society (China)

Published by
SPIE

Volume 7995

Proceedings of SPIE, 0277-786X, v. 7995

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Seventh International Conference on Thin Film Physics and Applications*, edited by Junhao Chu, Zhanshan Wang, Proceedings of SPIE Vol. 7995 (SPIE, Bellingham, WA, 2011) Article CID Number.

ISSN 0277-786X

ISBN 9780819485687

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) • Fax +1 360 647 1445

SPIE.org

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Introduction

It is with great pleasure that we present these proceedings from the Seventh Conference on Thin Film Physics and Application, held 24–27 September 2010 in Shanghai, China.

This conference (TFPA2010) is intended to report on the latest advances and innovations in thin film from growth, characterization, and physics, to the applications and associated devices; as well as to serve as a discussion forum for exchanging information about the development, application, and experimental results from thin film systems by bringing together researchers, academics, manufacturers and students working in the field. The event aims to cover the most up-to-date and diverse thin films such as nanostructure films, ferroelectric and piezoelectric films, magnetic films, superconductor films, organic and polymer films, micro/nano-fabrications and characterizations, photonics and MEMS devices, solar cells, and others.

The conference was very successful with over 110 contributed papers (as oral or poster presentations) together with 31 invited talks delivered from authors of diverse international affiliations (i.e., United States, Japan, China, France, Germany, Russia, and others). By organizing TFPA2010, it is our sincere hope to help promote and broaden the diffusion of the research activities in the thin film field.

We would like to express our sincere appreciation to the program committee and session chairs, to colleagues who participated in the conference, to the SPIE staff, and to all our hosts and meeting sponsors whose contributions were all essential to the success of this conference.

Junhao Chu
Zhanshan Wang