PROCEEDINGS OF SPIE

Advances in Optical Thin Films VII

Michel Lequime Detlev Ristau Editors

13–17 September 2021 Online Only, Spain

Sponsored by SPIE

Cooperating Organisation SEDOPTICA

Supporting Organisation INEUSTAR/INDUCIENCIA (Spain)

Published by SPIE

Volume 11872

Proceedings of SPIE 0277-786X, V. 11872

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIEDigital Library.org.

The papers reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from these proceedings: Author(s), "Title of Paper," in Advances in Optical Thin Films VII, edited by Michel Lequime, Detlev Ristau, Proc. of SPIE 11872, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 0277-786X ISSN: 1996-756X (electronic)

ISBN: 9781510645882 ISBN: 9781510645899 (electronic)

Published by **SPIE** P.O. Box 10, Bellingham, Washington 98227-0010 USA Telephone +1 360 676 3290 (Pacific Time) SPIE.org Copyright © 2021 Society of Photo-Optical Instrumentation Engineers (SPIE).

Copying of material in this book for internal or personal use, or for the internal or personal use of specific clients, beyond the fair use provisions granted by the U.S. Copyright Law is authorized by SPIE subject to payment of fees. To obtain permission to use and share articles in this volume, visit Copyright Clearance Center at copyright.com. Other copying for republication, resale, advertising or promotion, or any form of systematic or multiple reproduction of any material in this book is prohibited except with permission in writing from the publisher.

Printed in the United States of America by Curran Associates, Inc., under license from SPIE.

Publication of record for individual papers is online in the SPIE Digital Library.



Paper Numbering: A unique citation identifier (CID) number is assigned to each article in the Proceedings of SPIE at the time of publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online and print versions of the publication. SPIE uses a seven-digit CID article numbering system structured as follows:

• The first five digits correspond to the SPIE volume number.

• The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B ... 0Z, followed by 10-1Z, 20-2Z, etc. The CID Number appears on each page of the manuscript.

Contents

	DESIGN
11872 06	Optimization of micro-cavities for huge enhancement patterns in free-space and modal space [11872-3]
11872 08	Non-polarizing narrow bandpass and other filters at angles [11872-5]
	CHARACTERIZATION
11872 OC	Giant saturable absorption in thin Sb2Te3 layers: development and characterization [11872-9]
	DEPOSITION PROCESSES I
11872 OE	Conformal antireflection coating on polycarbonate domes (Invited Paper) [11872-11]
11872 OF	Ion beam sputtering of large scale dichroic mirror for fifth-harmonic separation [11872-12]
11872 0G	Applying sacrificial substrate technology to miniaturized precision optical thin-film coatings [11872-13]
11872 Ol	Sputtered SiOxNy thin films: improving optical efficiency of liquid crystal diffuser elements in multi-focal near-to-eye display architecture [11872-15]
	DEPOSITION PROCESSES II
11872 OJ	Properties of new transparent polymers for optical applications (Invited Paper) [11872-16]
11872 OK	Xanthine: a promising organic material for the development of nanostructured anti-reflective layers [11872-17]
11872 OL	Enhanced durable silver mirrors with ion beam assisted deposition [11872-18]
11872 OM	Fabrication of phosphorescent oxide coatings using the aerosol deposition technique [11872-19]
11872 ON	A study on sputtered ultrathin chromium films for optical applications [11872-20]

OPTICAL MONITORING

11872 00 **Optical monitoring of coating production: correlation of errors and errors self-compensation** [11872-23]

LIGHT SCATTERING STUDIES AT INSTITUT FRESNEL

11872 0S Characterization of light backscattered from optical components using balanced low coherence interferometry [11872-25]

HIGH-POWER LASER APPLICATIONS

- 11872 0X Highly resistant all-silica polarizers for normal incidence applications (Invited Paper) [11872-30]
- 11872 0Z Photo-induced thermal radiation within multilayers optics [11872-33]
- 11872 10 Sculptured thin film based all-silica mirrors for high power lasers [11872-34]