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Front Matter: Volume 9254

, "Front Matter: Volume 9254," Proc. SPIE 9254, Emerging Technologies in Security and Defence II; and Quantum-Physics-based Information Security III, 925401 (1 December 2014); doi: 10.1117/12.2081410

SPIE.

Event: SPIE Security + Defence, 2014, Amsterdam, Netherlands

PROCEEDINGS OF SPIE

Emerging Technologies in Security and Defence II; and Quantum-Physics-based Information Security III

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**22–23 September 2014
Amsterdam, Netherlands**

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Published by
SPIE

Volume 9254

Proceedings of SPIE 0277-786X, V. 9254

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

Emerging Technologies in Security and Defence II; and Quantum-Physics-based Information Security III, edited by
M. T. Gruneisen, M. Dusek, J. G. Rarity, K. L. Lewis, R. C. Hollins, T. J. Merlet, A. Toet, Proc. of SPIE
Vol. 9254, 925401 · © 2014 SPIE · CCC code: 0277-786X/14/\$18 · doi: 10.1117/12.2081410

Proc. of SPIE Vol. 9254 925401-1

The CID Number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages. Numbers in the index correspond to the last two digits of the six-digit CID Number.

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Author(s), "Title of Paper," in *Emerging Technologies in Security and Defence II; and Quantum-Physics-based Information Security III*, edited by M. T. Gruneisen, M. Dusek, J. G. Rarity, K. L. Lewis, R. C. Hollins, T. J. Merlet, A. Toet, Proceedings of SPIE Vol. 9254 (SPIE, Bellingham, WA, 2014) Article CID Number.

ISSN: 0277-786X
ISBN: 9781628413175

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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Printed in the United States of America.

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Keith L. Lewis, Sciovis Ltd. (United Kingdom)

Introduction to Part B: Emerging Technologies

This conference brought together emerging activities in photonic technologies, including discriminative imaging, computational imaging, micro- and nanotechnology sensors, photonic micro-devices, spectroscopic technologies and energy harvesting techniques, within the context of their associated defence exploitation as well as their potential civilian application. To help focus interest, the conference sessions were deliberately organised around a group of four keynote presentations, highlighting the growing impact of plasmonic technologies, the relevance of bio-inspiration for sensors, as well as accounts of selected programs being supported by DARPA's Strategic Technology Office and a review of active electro-optic (EO) imaging recently carried out by the National Research Council of the US Academies. Other papers covered research on EO detectors for the SWIR and MWIR bands, CMOS-MEMS integration, quaternary laser diodes for the blue spectral band and the exploitation of photonics in radar systems and for data/power transmission.

Keith L. Lewis
Richard C. Hollins
Thomas J. Merlet
Alexander Toet

