## PROCEEDINGS OF SPIE

## **Photonics for Quantum 2021**

12-16 July 2021 Online Only, United States

Sponsored and Published by SPIE

**Volume 11844** 

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 SPIEDigitalLibrary.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 *Photonics for Quantum 2021*, Proc. of SPIE 11844, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510645264

ISBN: 9781510645271 (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

## POSTER SESSION

11844 OW	Effect of phase and spatial distinguishability of photon pairs on the entanglement fidelity [11844-9]
11844 OX	Quantum computers based on rare-earth compounds and PT- and anti-PT symmetric qubits [11844-8]
11844 0Y	All-optical ultrawide-bandwidth quantum buffer [11844-7]
11844 10	Towards quantum 3D imaging devices [11844-5]
11844 11	Implementation of Grover's algorithm on the IBMQ: constraints and error assessment [11844-4]
11844 12	Quantum deep learning in remote sensing: achievements and challenges [11844-3]
11844 13	Virtual motionless photoacoustic microscopy for large-scale and high-resolution imaging based on K-Wave [11844-16]
11844 14	High-speed virtual simulation platform of BP compressed sensing photoacoustic tomography using k-wave [11844-15]
11844 15	Photoacoustic microscopy simulation platform based on K-Wave simulation toolbox [11844-14]
11844 16	Research on photoacoustic effect of picosecond laser pulse with tissue based on finite element method [11844-13]
11844 18	Spectroscopic analysis of defect centers in hBN [11844-11]
11844 19	Correlation plenoptic microscopy [11844-10]
11844 1A	Sensing fields with ion in a dark state [11844-1]