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Publications

ALL ARTICLE IN JOURNAL (73) ACADEMIC DISSERTATION (18) BOOK (5) CONFERENCE (108) PEER REVIEWED (182) 2017

Determining the group velocity dispersion by field analysis for the LP0X, LP1X, and LP2X mode groups independently of the fiber length: applications to step-index fibers

[Israelsen, Stine Møller](#) ; [Usuga Castaneda, Mario A.](#) ; [Rottwitt, Karsten](#)

in journal: Journal of the Optical Society of America B: Optical Physics (ISSN: 0740-3224) (DOI: <http://dx.doi.org/10.1364/JOSAB.34.000007>), vol: 34, issue: 1, pages: 7-11, 2017

Type: Journal article (Peer reviewed)

Status: Published | Year: 2017 | DOI: <http://dx.doi.org/10.1364/JOSAB.34.000007>


All-fiber photon-pair source at telecom wavelengths

[Christensen, Erik Nicolaj](#) ; [Usuga Castaneda, Mario A.](#) ; [Rottwitt, Karsten](#)

part of: Proceedings of SPIE, 2017, SPIE - International Society for Optical Engineering, Presented at: Advances in Photonics of Quantum Computing, Memory, and Communication X, 2017, San Francisco

Type: Article in proceedings (Peer reviewed)

Status: Published | Year: 2017 | DOI: <http://dx.doi.org/10.1117/12.2252019>


Flexible cross-correlated (C2) imaging method for the modal content characterization in a broad range of wavelengths

[Muliar, Olena](#) ; [Usuga Castaneda, Mario A.](#) ; [Michieletto, Mattia](#) ; [Kristensen, Torben](#) ; [Alkeskjold, Thomas T.](#) ; [Rottwitt, Karsten](#) ; [Lægsgaard, Jesper](#)

in journal: Optics Express (ISSN: 1094-4087) (DOI: <http://dx.doi.org/10.1364/OE.25.005521>), vol: 25, issue: 5, pages: 5521-5535, 2017

Type: Journal article (Peer reviewed)

Status: Published | Year: 2017 | DOI: <http://dx.doi.org/10.1364/OE.25.005521>

Effects of Raman scattering and attenuation in silica fiber-based parametric frequency conversion

Friis, Søren Michael Mørk ; Andersen, Lasse Mejling ; Rottwitt, Karsten

in journal: Optics Express (ISSN: 1094-4087) (DOI: <http://dx.doi.org/10.1364/OE.25.007324>), vol: 7, issue: 3, pages: 7324-7337, 2017

Type: Journal article (Peer reviewed)

Status: Published | Year: 2017 | DOI: <http://dx.doi.org/10.1364/OE.25.007324>



High precision Cross-correlated imaging in Few-mode fibers

Muliar, Olena ; Usuga Castaneda, Mario A. ; Kristensen, Torben ; Alkeskjold, Thomas Tanggaard ; Rottwitt, Karsten ; Lægsgaard, Jesper

part of: Proceedings of SPIE (ISBN: 9781510607019), 2017, SPIE - International Society for Optical Engineering,

Presented at: Next-Generation Optical Communication: Components, Sub-Systems, and Systems V, 2016, San Francisco, CA

Type: Article in proceedings (Peer reviewed)

Status: Published | Year: 2017 | DOI: <http://dx.doi.org/10.1117/12.2250532>

2016

Light interaction with nano-structured diatom frustule, from UV-A to NIR

Maibohm, Christian ; Nielsen, Josefine Holm ; Rottwitt, Karsten

in journal: MRS Advances (DOI: <http://dx.doi.org/10.1557/adv.2015.15>), vol: 1, issue: 57, pages: 3811-3816, 2016

Presented at: 2015 MRS Fall Meeting and Exhibit, 2015, Boston

Type: Conference article (Peer reviewed)

Status: Published | Year: 2016 | DOI: <http://dx.doi.org/10.1557/adv.2015.15>

Detailed phase matching characterization of inter-modal four-wave mixing in a two-mode fiber

Friis, Søren Michael Mørk ; Jung, Y. ; Begleris, I. ; Horak, P. ; Rottwitt, Karsten ; Petropoulos, P. ; Richardson, D.J. ; Parmigiani, F.

part of: CLEO: Science and Innovations 2016 (ISBN: 978-1-943580-11-8), 2016, Optical Society of America,

Presented at: Conference on Lasers and Electro-Optics 2016, 2016, San Jose, California

Type: Article in proceedings (Peer reviewed)

Status: Published | Year: 2016 | DOI: http://dx.doi.org/10.1364/CLEO_AT.2016.JTu5A.49

The fascinating diatom frustule—can it play a role for attenuation of UV radiation?

Ellegaard, Marianne ; Lenau, Torben Anker ; Lundholm, Nina ; Maibohm, Christian ; Friis, Søren Michael Mørk ; Rottwitt, Karsten ; Su, Yanyan

in journal: Journal of Applied Phycology (ISSN: 0921-8971) (DOI: <http://dx.doi.org/10.1007/s10811-016-0893-5>), vol: 28, issue: 6, pages: 3295–3306, 2016

Type: Journal article (Peer reviewed)

Status: Published | Year: 2016 | DOI: <http://dx.doi.org/10.1007/s10811-016-0893-5>



Temporally uncorrelated photon-pair generation by dual-pump four-wave mixing

Christensen, Jesper Bjerre ; McKinstrie, C. J. ; Rottwitt, Karsten

in journal: Physical Review A (ISSN: 2469-9926) (DOI: <http://dx.doi.org/10.1103/PhysRevA.94.013819>), vol: 94, issue: 1, 2016

Type: Journal article (Peer reviewed)

Status: Published | Year: 2016 | DOI: <http://dx.doi.org/10.1103/PhysRevA.94.013819>

Higher order mode optical fiber Raman amplifiers

[Rottwitt, Karsten](#) ; [Friis, Søren Michael Mørk](#) ; [Usuga Castaneda, Mario A.](#) ; [Christensen, Erik Nicolai](#) ; [Koefoed, Jacob Gade](#)

part of: Proceedings of 2016 18th International Conference on Transparent Optical Networks (ISBN: 978-1-5090-1467-5), 2016, IEEE,

Presented at: 18th International Conference on Transparent Optical Networks, 2016, Trento

Type: Article in proceedings (Peer reviewed)

Status: Published | Year: 2016 | DOI: <http://dx.doi.org/10.1109/ICTON.2016.7550315>

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