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CLEO: Science and Innovations, CLEO-SI 2015

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CLEO: Science and Innovations, CLEO-SI 2015; San Jose; United States; 10 May 2015 through 15 May 2015

Kerr nonlinear switching in a core-shell microspherical resonator fabricated from the silicon fiber platform (Conference Paper)Suhailin, F.H.^{ab}, Healy, N.^a, Sumetsky, M.^c, Ballato, J.^d, Dibbs, A.N.^e, Gibson, U.^e, Peacock, A.C.^a^a Optoelectronics Research Centre, University of Southampton, United Kingdom^b School of Fundamental Science, Universiti Malaysia Terengganu, Kuala Terengganu, Malaysia^c Engineering and Applied Science, Aston University, United Kingdom[View additional affiliations](#)

Abstract

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We investigate the **Kerr** nonlinearity in a **core-shell microspherical resonator fabricated from a silicon fiber**. By exploiting the ultrafast wavelength shifting, sub-picosecond modulation is demonstrated. © OSA 2015.

ISBN: 978-155752968-8 **Source Type:** Conference Proceeding **Original language:** EnglishDOI: 10.1364/CLEO_SI.2015.STh10.2 **Document Type:** Conference Paper**Sponsors:** **Publisher:** Optical Society of America (OSA)

References (5)

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 Pöllinger, M., Rauschenbeutel, A.
1 **All-optical signal processing at ultra-low powers in bottle microresonators using the Kerr effect**(2010) *Optics Express*, 18 (17), pp. 17764-17775. Cited 46 times.http://www.opticsinfobase.org/view_article.cfm?gotourl=http%3A%2F%2Fwww%2Eopticsinfobase%2Eorg%2FdirectPDFAccess%2FADF0FB6C%2D0513%2DFF3F%2DF907E32F9D9FA3B5%5F204834%2Epdf%3Fda%3D1%26id%3D204834%26seq%3D0%26mobile%3Dno&org=doi: 10.1364/OE.18.017764[View at Publisher](#)
 Nordstrand, E.F., Dibbs, A.N., Eraker, A.J., Gibson, U.J.
2 **Alkaline oxide interface modifiers for silicon fiber production**(2013) *Optical Materials Express*, 3 (5), pp. 651-657. Cited 9 times.http://www.opticsinfobase.org/DirectPDFAccess/D1DE5B28-066D-30EC-6A2868C14D6B3BDD_252977/ome-3-5-651.pdf?da=1&id=252977&seq=0&mobile=no

doi: 10.1364/OME.3.000651

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 Vukovic, N., Healy, N., Horak, P., Sparks, J.R., Sazio, P.J.A., Badding, J.V., Peacock, A.C.
3 **Ultra-smooth microcylindrical resonators fabricated from the silicon optical fiber platform**(2011) *Applied Physics Letters*, 99 (3), art. no. 031117. Cited 17 times.

doi: 10.1063/1.3615689

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 Suhailin, F.H., Healy, N., Sumetsky, M., Xiao, L., Ballato, J., Dibbs, A., Gibson, U., (...), Peacock, A.C.

4 (2014) , p. SoM2B.3.

Advanced Photonics, Barcelona

 Vukovic, N., Healy, N., Suhailin, F.H., Mehta, P., Day, T.D., Badding, J.V., Peacock, A.C.
5 **Ultrafast optical control using the Kerr nonlinearity in hydrogenated amorphous silicon microcylindrical resonators**(2013) *Scientific Reports*, 3, art. no. 2885. Cited 19 times.

doi: 10.1038/srep02885

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