

## PRODUCTION SCIENTIFIQUE 2009-2010

### Articles dans des revues avec comité de lecture

#### OPTOELECTRONIQUE

1. **"Giant dispersive wave generation through soliton collision"**, M. Erkintalo, G. Genty, J.M. Dudley, Optics Letters, Vol. 35, n° 5, pages 658-660, (2010)
2. **"High aspect ratio taper-free microchannel fabrication using femtosecond Bessel beams"**, M.K. Bhuyan, F. Courvoisier, P.-A. Lacourt, M. Jacquot, L. Furfaro, M.J. Withford, and J.M. Dudley, Optics Express, Vol. 18, n° 2, pages 566-574, (2010)
3. **"Selection of extreme events generated in raman fiber amplifiers through spectral offset filtering"**, C. Finot, K. Hammani, J. Fatome, J.M. Dudley, G. Millot, IEEE Journal of Quantum Electronics, Vol. 46, n° 2, pages 205-213, (2010)
4. **"Collisions and turbulence in optical rogue wave formation"**, G. Genty, C. M. de Sterke, O. Bang, F. Dias, N. Akhmediev, J.M. Dudley, Physics Letters A, Vol. 374, n° 7, pages 989-996, (2010).
5. **"Determination of phase noise spectra in optoelectronic microwave oscillators: A langevin approach"**, Y.K. Chembo, K. Volyanskyi, L. Larger, E. Rubiola, P. Colet, IEEE Journal of Quantum Electronics, Vol. 45, n° 1-2, pages 178-186, (2009)
6. **"Generation of ultralow jitter optical pulses using optoelectronic oscillators with time-lens soliton-assisted compression"**, Y.K. Chembo, A. Hmima, P.A. Lacourt, L. Larger, J.M. Dudley, Journal of Lightwave and Technology, Vol. 27, n° 22, pages 5160-5167, (2009)
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9. **"Determination of local refractive index variations in thin films by heterodyne interferometric scanning near-field optical microscopy"**, S. Diziain, J.-M. Merolla, M. Spajer, G. Benvenuti, A. Dabirian, Y. Kuzminykh, P. Hoffmann, M.-P. Bernal, Review of Scientific Instruments, Vol. 80, n° 9, Art. n° 093706, (2009)

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11. **“Routes to chaos and multiple time scale dynamics in broadband bandpass nonlinear delay electro-optic oscillators”**, M. Peil, M. Jacquot, Y.K Chembo, L. Larger, T. Erneux, Physical Review E, **Vol. 79**, n° 2, Art. n° 026208, (2009)
12. **“Spatiotemporal Nonlinear Optical Self-Similarity in Three Dimensions”**, S.H Chen, J.M. Dudley, Physical Review Letters, **Vol. 102**, n° 23, Art. n° 233903, (2009)
13. **“Soliton and rogue wave statistics in supercontinuum generation in photonic crystal fibre with two zero dispersion wavelengths”**, B. Kibler, C. Finot, J.M. Dudley, European Physical Journal Special Topics, **Vol. 173**, n° 1, pages 289-295, (2009)
14. **“Optical rogue wave statistics in laser filamentation”**, J. Kasparian, P. Bejot, J.P. Wolf, J.M. Dudley, Optics Express, **Vol. 17**, n° 14, pages 12070-12075, (2009)
15. **“Rogue-wave-like characteristics in femtosecond supercontinuum generation”**, M. Erkintalo, G. Genty, J.M. Dudley, Optics Letters, **Vol. 34**, n° 16, pages 2468-2470, (2009)
16. **“Route to Coherent Supercontinuum Generation in the Long Pulse Regime”**, G. Genty, J.M. Dudley, IEEE Journal of Quantum Electronics, **Vol. 45**, n° 11, pages 1331-1335, (2009)
17. **“Modulation instability, Akhmediev Breathers and continuous wave supercontinuum generation”**, J.M. Dudley, G. Genty, F. Dias, B. Kibler, N. Akhmediev, Optics Express, **Vol. 17**, n° 24, pages 21497-21508, (2009)
18. **“Surface nanoprocessing with nondiffracting femtosecond Bessel beams”**, F. Courvoisier, P.-A. Lacourt, M. Jacquot, M.K. Bhuyan, L. Furfaro, J.M. Dudley, Optics Letters, **Vol. 34**, n° 20, pages 3163-3165, (2009)
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20. **“Ten years of nonlinear optics in photonic crystal fibre”**, J.M. Dudley, J.R. Taylor, Nature Photonics, **Vol. 3**, n° 2, pages 85-90, (2009)
21. **“Modulation control and spectral shaping of optical fiber supercontinuum generation in the picosecond regime”**, G. Genty, J.M. Dudley, B.J. Eggleton, Applied Physics B - Lasers and Optics, **Vol. 94**, n° 2, pages 187-194, (2009)
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23. ***“Interests and limitations of chalcogenide films”***, M. Cathelinaud, V. Nazabal, F. Charpentier, J.L. Adam, K. Fedus, G. Boudebs, M. Chauvet, G. Fanjoux, K. P. Huy, S.-P. Gorza, T. Billeton, W. D Shen, **acceptée**, Chinese Optics Letters (2010)
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25. ***“Dynamics of second-harmonic generation in a photovoltaic photorefractive quadratic medium”***, F. Pettazzi, V. Coda, M. Chauvet, E. Fazio, Journal of Optics Soc. Am. B, Vol. 27, pages 1-9, (2010)
26. ***“Luminescence-Induced Photorefractive Spatial Solitons”***, E. Fazio, M. Alonzo, F. Devaux, A. Toncelli, M. Bazzan, C. Sada, M. Chauvet, , Applied Physics Letters, acceptée, (2010)
27. ***“Two photoactive centers model applied to photorefractive self-focusing in biased LiNbO<sub>3</sub>”***, F. Devaux, J. Safioui, M. Chauvet, R. Passier, **à paraître dans Phys. Rev. A (2010)**
28. ***“Reversal of degradation of information masks in lithium niobate”***. D. Sando, E. Jaatinen, F. Devaux, Applied Optics, **Vol 48**, n° 24, pages 4676-4682, (2009)
29. ***“Polarization and configuration dependence of beam self-focusing in photorefractive LiNbO<sub>3</sub>”***, J. Safioui, M. Chauvet, F. Devaux, V. Coda, F. Pettazzi, M. Alonzo, E. Fazio, Journal of the Optical Society of America B, **Vol. 26**, n° 3, pages 487-492, (2009)
30. ***“Pyroliton: Pyroelectric spatial solitons”***, J. Safioui, F. Devaux, M. Chauvet, Optics Express, **Vol. 17**, art. n° 22209, (2009)
31. ***“Complete spatial and temporal locking in phase-mismatched second-harmonic generation”***, E. Fazio, F. Pettazzi, M. Centini, M. Alonzo, M. Centini, M. Chauvet, A. Belardini, M. Alonzo, C. Sibilia, M. Bertolotti, M. Scalora, Optics Express, **Vol.17**, pages 3141-3147, (2009)
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33. ***“Kerr spatial solitons in chalcogenide waveguides”***, M.Chauvet, G. Fanjoux, K.P. Huy, V. Nazabal, F. Charpentier, T. Billeton, G. Boudebs, M. Cathelinaud, S.-P. Gorza, Optics Letters, **Vol. 34**, n° 12, pages 1804-1806, (2009)
34. ***“All-optical tunable pulse frequency chirp via slow light”***, G. Fanjoux, T. Sylvestre, Optics Letters, **Vol. 34**, n° 24, pages 3824-3826 (2009)
35. ***“Parametric amplification and wavelength conversion in the 1040–1090 nm band by use of a photonic crystal fiber”***, T. Sylvestre, A. Kudlinski, A. Mussot, J. F. Gleyze, A. Jolly, H. Maillotte, L. Apages, Applied Physics Letters, **Vol. 94**, Art. n° 111104 (2009)

36. ***“Continuous wave photon pair generation in silicon-on-insulator waveguides and ring resonators”***, S. Clemmen, K.P. Huy, W. Bogaerts, R.G. Baets, Ph. Emplit, S. Massar, Optics Express, **Vol. 17**, n° 19, pages 16558-16570, (2009)
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38. ***“Analyzing ab initio infrared spectra and electronic properties of polyethylenimine water complexes in the solid state”***, G. Herlem, T. Gharbi, N. Ben Sedrine, Journal of Molecular Structure: THEOCHEM, In Press, **Acceptée, (2010)**
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49. ***“Radially Polarized Conical Beam from an Embedded Etched Fiber”***, D.Kalaidji, M. Spajer, N. Marthouret, T. Grosjean, Optics Letters, Vol. 34, n°12, pages 1780-1782, (2009)
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55. ***“Determination of local refractive index variations in thin films by heterodyne interferometric scanning near-field optical microscopy”***, S. Diziain, J.-M. Merolla, M. Spajer, G. Benvenuti, A. Dabirian, Y. Kuzminykh, P. Hoffmann, M.-P. Bernal, Review of Scientific Instruments, Vol. 80, n° 9, Art. n° 093706, (2009)
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