

1. Aslund ML, Jovanovic N, Canning J, Jackson SD, Marshall GD, Fuerbach A, Withford MJ, "Rapid Decay of Type-II Femtosecond Laser Inscribed Gratings Within Q-switched Yb³⁺-Doped Fiber Lasers," *IEEE PHOTONICS TECHNOLOGY LETTERS* **22**, 504-506 (2010)
2. Barrio J, Lamela J, Ródenas A, Zhou G, Lifante G, Jaque F, Jaque D, and Gu M, "Near-field local enhancement by ordered arrays of sub-wavelength scattering centers fabricated by femtosecond ablation," *APPLIED PHYSICS B: LASERS AND OPTICS*, doi: 10.1007/s00340-010-4218-0 (2010)
3. Bedoya AC, Mahmoodian S, Monat C, Tomljenovic-Hanic S, Grillet C, Domachuk P, Magi EC, Eggleton BJ, van der Heijden RW "Liquid crystal dynamics in a photonic crystal cavity created by selective microfluidic infiltration," *OPTICS EXPRESS* **18** 27280-27290 (2010)
4. Bhuyan MK, Courvoisier F, Lacourt PA, Jacquot M, Furfaro L, Withford MJ, Dudley JM "High aspect ratio taper-free microchannel fabrication using femtosecond Bessel beams," *OPTICS EXPRESS* **18** 566-574 (2010)
5. Brownless JS, Mahmoodian S, Dossou KB, Lawrence FJ, Botten LC, and de Sterke CM, "Coupled waveguide modes in hexagonal photonic crystals," *OPTICS EXPRESS*, **18** 25346-25360 (2010)
6. Buso D, Nicoletti E, Li JF, Gu M "Engineering the refractive index of three-dimensional photonic crystals through multilayer deposition of CdS films" *OPTICS EXPRESS* **18** 3013-3013 (2010)
7. Clarke AM, Williams D G, Roelens MAF, Eggleton BJ, "Reconfigurable Optical Pulse Generator Employing a Fourier-Domain Programmable Optical Processor," *JOURNAL OF LIGHTWAVE TECHNOLOGY* **28**, 97-103 (2010)
8. Chen PY, McPhedran RC, de Sterke CM, Poulton CG, Asatryan AA, Botten LC, Steel MJ, "Group velocity in lossy periodic structured media," *Phys. Rev. A* **82**, 053825:1-11 (2010)
9. Choi DY, Madden S, Bulla DA, Wang R, Rode A, Luther-Davies B "Submicrometer-Thick Low-Loss As₂S₃ Planar Waveguides for Nonlinear Optical Devices" *IEEE PHOTONICS TECHNOLOGY LETTERS* **22** 495-497 (2010)
10. Choi DY, Madden S, Bulla D, Wang RP, Rode A, Luther-Davies B "Thermal annealing of arsenic tri-sulphide thin film and its influence on device performance" *JOURNAL OF APPLIED PHYSICS* **107** 053106:1-6 (2010)
11. Corcoran, B, Vo, TD, Pelusi, MD, Monat, C, Xu, DX, Densmore, A, Ma, RB, Janz, S, Moss, DJ, Eggleton, BJ "Silicon nanowire based radio-frequency spectrum analyser" *OPTICS EXPRESS* **18** 20190-20200 (2010)
12. Corcoran B, Monat C, Pelusi M, Grillet C, White TP, O'Faolain L, Krauss TF, Eggleton BJ, Moss DJ "Optical signal processing on a silicon chip at 640Gb/s using slow-light" *OPTICS EXPRESS* **18** 7770-7781 (2010)
13. Corcoran B, Monat C, Pudo D, Eggleton BJ, Krauss TF, Moss DJ, O'Faolain L, Pelusi M, White TP "Nonlinear loss dynamics in a silicon slow-light photonic crystal waveguide" *OPTICS LETTERS* **35** 1073-1075 (2010)
14. Dekker P, Ams M, Marshall GD, Little DJ, Withford MJ "Annealing dynamics of waveguide Bragg gratings: evidence of femtosecond laser induced colour centres" *OPTICS EXPRESS* **18** 3274-3283 (2010)
15. Duchesne D, Peccianti M, Lamont MRE, Ferrera M, Razzari L, Legare F, Morandotti R, Chu S, Little BE, Moss DJ "Supercontinuum generation in a high index doped silica glass spiral waveguide" *OPTICS EXPRESS* **18** 923-930 (2010)
16. Eilenberger F, de Sterke CM, Eggleton BJ "Soliton mediated optical quantization in the transmission of one-dimensional photonic crystals" *OPTICS EXPRESS* **18** 12708-12718 (2010)
17. Gai X, Han T, Prasad A, Madden S, Choi DY, Wang R, Bulla D, Luther-Davies B, "Progress in optical waveguides fabricated from chalcogenide glasses," *OPTICS EXPRESS* **18**, 26635-26646 (2010).
18. Gai X, Madden S, Choi DY, Bulla D, and Luther-Davies B, "Dispersion engineered Ge_{11.5}As₂₄Se_{64.5} nanowires with a nonlinear parameter of 136W-1m-1 at 1550nm," *OPTICS EXPRESS* **18**, 18866-18874 (2010).
19. Grillet C, Monat C, Smith CL, Lee MW, Tomljenovic-Hanic S, Karnutsch C, Eggleton BJ "Reconfigurable photonic crystal circuits" *LASER & PHOTONICS REVIEWS* **4** 192-204 (2010)
20. Grujic T, Kuhlmeiy BT, Argyros A, Coen S, and de Sterke CM, "Solid-core fiber with ultra-wide bandwidth transmission window due to inhibited coupling," *OPTICS EXPRESS* **18**, 25556-25566 (2010)
21. Gu M, Jia BH, Li JF, Ventura MJ "Fabrication of three-dimensional photonic crystals in quantum-dot-based materials" *LASER & PHOTONICS REVIEWS* **4** 414-431 (2010)
22. Ha S, Sukhorukov AA, Lavrinenko AV, Kivshar YS "Cavity mode control in side-coupled periodic waveguides: Theory and experiment" *PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS* **8** 310-317 (2010)
23. Han T, Madden S, Bulla D, Luther-Davies B, "Low loss chalcogenide glass waveguides by thermal nano-imprint lithography," *OPTICS EXPRESS* **18**, 19286-19291 (2010).
24. Handmer CJ, de Sterke CM, McPhedran RC, Botten LC, Steel MJ, Rahmani A "Blazing evanescent grating orders: a spectral approach to beating the Rayleigh limit" *OPTICS LETTERS* **35** 2846-2848 (2010)
25. Handmer CJ, de Sterke CM, McPhedran RC, Botten LC, Steel MJ, Rahmani A "Stacked dielectric gratings for sub-wavelength surface field synthesis" *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS* **27** 2580-2594 (2010)
26. Hossain MM, Chen GY, Jia BH, Wang XH, Gu M "Optimization of enhanced absorption in 3D-woodpile metallic photonic crystals" *OPTICS EXPRESS* **18** 9048-9054 (2010)
27. Jesacher A, Marshall GD, Wilson T, Booth MJ, "Adaptive optics for direct laser writing with plasma emission aberration sensing," *OPTICS EXPRESS*, **18** 15399-15399 (2010)
28. Jia BH, Buso D, van Embden J, Li JF, Gu M "Highly Non-Linear Quantum Dot Doped Nanocomposites for Functional Three-Dimensional Structures Generated by Two-Photon Polymerization" *ADVANCED MATERIALS*

- 22** 2463–2467 (2010)
29. Judge AC, Dekker SA, Pant R, de Sterke CM, and Eggleton BJ, “Soliton self-frequency shift performance in As₂S₃ waveguides,” *OPTICS EXPRESS* **18**, 14960-14968 (2010)
30. Kabakova IV, de Sterke CM, Eggleton BJ, “Bistable switching and reshaping of optical pulses in a Bragg grating cavity,” *J OPT SOC AM B* **27**, 2648-2653 (2010)
31. Kabakova IV, Walsh T, de Sterke CM, and Eggleton BJ, “Performance of field-enhanced optical switching in fiber Bragg gratings,” *J OPT SOC AM B* **27**, 1343-1351 (2010)
32. Kan DJ, Asatryan AA, Poulton CG, Botten LC “Multipole method for modeling linear defects in photonic woodpiles” *J OPT SOC AM B* **27** 246-258 (2010)
33. Lawrence FJ, Botten LC, Dossou KB, McPhedran, de Sterke CM, “Photonic crystal surface modes found from impedances,” *PHYS REV A* **82**, 053840:1-8 (2010)
34. Lee MW, Grillet C, Monat C, Mägi E, Tomljenovic-Hanic S, Gai X, Madden S, Choi DY, Bulla D, Luther-Davies B, Eggleton BJ, “Photosensitive and thermal nonlinear effects in chalcogenide photonic crystal cavities,” *OPTICS EXPRESS* **18**, 26695-26703 (2010)
35. Li F, Pelusi M, Xu DX, Densmore A, Ma R, Janz S, Moss DJ “Error-free all-optical demultiplexing at 160Gb/s via FWM in a silicon nanowire” *OPTICS EXPRESS* **18** 3905-3910 (2010)
36. Li JF, Hossain MDM, Jia BH, Buso D, Gu M “Three-dimensional hybrid photonic crystals merged with localized plasmon resonances” *OPTICS EXPRESS* **18** 4491-4498 (2010)
37. Li JF, Hossain MM, Jia BH, Gu M “Rectangular-cavity resonances enhanced absorption in metallic-nanoshelled 2D rod arrays and 3D photonic crystals” *NEW JOURNAL OF PHYSICS* **12** 043012:1-7 (2010)
38. Little DJ, Ams M, Dekker P, Marshall GD, Withford MJ “Mechanism of femtosecond-laser induced refractive index change in phosphate glass under a low repetition-rate regime” *JOURNAL OF APPLIED PHYSICS* **108** 033110 (2010)
39. Luan F, Erps JV, Pelusi MD, Magi E, Iredale T, Thienpont H, Eggleton BJ “High-resolution optical sampling of 640 Gbit/s data using dispersion-engineered chalcogenide photonic wire,” *ELECTRONICS LETTERS* **46** 231-232 (2010)
40. Mahmoodian S, Sukhorukov AA, Ha S, Lavrinenko AV, Poulton CG, Dossou KB, Botten LC, McPhedran RC, de Sterke CM, “Paired modes of heterostructure cavities in photonic crystal waveguides with split band edges,” *OPTICS EXPRESS* **18** 25693-25701 (2010)
41. Marshall GD, Williams RJ, Jovanovic N, Steel MJ, Withford MJ “Point-by-point written fiber-Bragg gratings and their application in complex grating designs” *OPTICS EXPRESS* **18** 19844-19859 (2010)
42. McPhedran RC, Nicorovici NA, Botten LC, “Resonant cloaking and local density of states,” *METAMATERIALS* **4**, 149-152 (2010)
43. Miroshnichenko AE, Brasselet E, Krimer DO, Kivshar YS “Optomechanics of liquid crystals for dynamical optical response of photonic structures” *JOURNAL OF OPTICS* **12** 124006:1-6 (2010)
44. Miroshnichenko, AE, Flach, S, Kivshar, YS Fano resonances in nanoscale structures *REVIEWS OF MODERN PHYSICS* **82** 2257-2298 (2010)
45. Miroshnichenko AE, Brasselet E, Kivshar YS “Reversible optical nonreciprocity in periodic structures with liquid crystals” *APPLIED PHYSICS LETTERS* **96** 063002:1-3 (2010)
46. Monat C, de Sterke M, Eggleton BJ “Slow light enhanced nonlinear optics in periodic structures” *JOURNAL OF OPTICS* **12** 104003:1-17 (2010)
47. Monat C, Grillet C, Corcoran B, Moss DJ, Eggleton BJ, White TP, Krauss TF “Investigation of phase matching for third-harmonic generation in silicon slow light photonic crystal waveguides using Fourier optics” *OPTICS EXPRESS* **18** 6831-6840 (2010)
48. Monat C, Ebnali-Heidari M, Grillet C, Corcoran B, Eggleton BJ, White TP, O’Faolain L, Li J, Krauss TF “Four-wave mixing in slow light engineered silicon photonic crystal waveguides” *OPTICS EXPRESS* **18** 22915-22927 (2010)
49. Monat C, Corcoran B, Pudo D, Ebnali-Heidari M, Grillet C, Pelusi MD, Moss DJ, Eggleton BJ, White TP, O’Faolain L, Krauss TF “Slow Light Enhanced Nonlinear Optics in Silicon Photonic Crystal Waveguides” *IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS* **16** 344-356 (2010)
50. Nicorovici NAP, McPhedran RC, Botten LC, Poulton CG, Asatryan AA “Green’s functions and relative local density of states in two-dimensional lossy structured systems” *WAVES IN RANDOM AND COMPLEX MEDIA* **20** 656-677 (2010)
51. Nicorovici NAP, McPhedran RC, Botten LC, “Relative local density of states for homogeneous lossy materials,” *PHYSICA B:CONDENSED MATTER* **405** 2915-2919 (2010)
52. Pant R, Xiong C, Madden S, Luther Davies B, Eggleton BJ, “Investigation of all-optical analog-to-digital quantization using a chalcogenide waveguide: A step towards on-chip analog-to-digital conversion,” *OPTICS COMMUNICATIONS* **283** 2258-2262 (2010)
53. Pasquazi A, Park Y, Azana J, Legare F, Morandotti R, Little BE, Chu ST, Moss DJ “Efficient wavelength conversion and net parametric gain via Four Wave Mixing in a high index doped silica waveguide” *OPTICS EXPRESS* **18** 7634-7641 (2010)
54. Pasquazi A, Ahmad R, Rochette M, Lamont M, Little BE, Chu ST, Morandotti R, Moss DJ “All-optical wavelength conversion in an integrated ring resonator” *OPTICS EXPRESS* **18** 3858-3863 (2010)
55. Peccianti M, Ferrera M, Razzari L, Morandotti R, Little BE, Chu ST, Moss DJ “Subpicosecond optical pulse compression via an integrated nonlinear chirper” *OPTICS EXPRESS* **18** 7625-7633 (2010)
56. Pelusi MD, Fu A, Eggleton BJ “Multi-channel in-band OSNR monitoring using Stimulated Brillouin Scattering” *OPTICS EXPRESS* **18** 9435-9446 (2010)
57. Pelusi MD, Luan F, Madden S, Choi DY, Bulla DA, Luther-Davies B, Eggleton BJ “Wavelength Conversion of High-Speed Phase and Intensity Modulated Signals Using a Highly Nonlinear Chalcogenide Glass Chip,” *IEEE PHOTONICS TECHNOLOGY LETTERS* **22** 3-5 (2010)

58. Pelusi MD, Luan F, Choi DY, Madden SJ, Bulla DAP, Luther-Davies B, and Eggleton BJ "Optical phase conjugation by an As_2S_3 glass planar waveguide for dispersion-free transmission of WDM-DPSK signals over fiber," OPTICS EXPRESS **18**, 26686-26694 (2010)
59. Pelusi MD, Vo TD, Eggleton BJ, "Accuracy of Waveform Spectrum Analysis for Ultrashort Optical Pulses," IEEE TRANS MICROWAVE THEORY AND TECHNIQUES **58** 3059-3070 (2010)
60. Perrins WT, McPhedran RC, "Metamaterials and the homogenization of composite materials," METAMATERIALS **4** 24-31 (2010)
61. Poulton CG, McPhedran RC, Movchan NV, Movchan AB Convergence properties and flat bands in platonic crystal band structures using the multipole formulation WAVES IN RANDOM AND COMPLEX MEDIA **20** 702-716 (2010)
62. Schroder J, Wang F, Clarke A, Ryckeboer E, Pelusi M, Roelens MAF, Eggleton BJ "Aberration-free ultra-fast optical oscilloscope using a four-wave mixing based time-lens" OPTICS COMMUNICATIONS **283** 2611-2614 (2010)
63. Schroder J, Brasier O, Vo TD, Roelens MAF, Frisken S, Eggleton BJ "Simultaneous multi-channel OSNR monitoring with a wavelength selective switch" OPTICS EXPRESS **18** 22299-22304 (2010)
64. Scheuer J, Sukhorukov AA, Kivshar YS, "All-optical switching of dark states in nonlinear coupled microring resonators," OPTICS LETTERS **35** 3712-3714 (2010).
65. Sivan V, Holland A, O'Mullane AP, Mitchell A "Investigation of the physical origins of etching $LiNbO_3$ during Ti indiffusion" APPLIED PHYSICS LETTERS **96** 121913:1-3 (2010)
66. Sobhan MA, Ams M, Withford MJ, Goldys EM "Ultrafast laser ablative generation of gold nanoparticles: the influence of pulse energy, repetition frequency and spot size" JOURNAL OF NANOPARTICLE RESEARCH **12** 2831-2842 (2010)
67. Steel MJ, Marks B, Rahmani A "Properties of sub-diffraction limited focusing by optical phase conjugation" OPTICS EXPRESS **18** 1487-1500 (2010)
68. Sukhorukov AA "Reflectionless potentials and cavities in waveguide arrays and coupled-resonator structures" OPTICS LETTERS **35** 989-91 (2010)
69. Szameit A, Garanovich IL, Heinrich M, Sukhorukov AA, Dreisow F, Pertsch T, Nolte S, Tunnermann A, Longhi S, Kivshar YS "Observation of Two-Dimensional Dynamic Localization of Light" PHYSICAL REVIEW LETTERS **104** 223903-4 (2010)
70. Tomljenovic-Hanic S, de Sterke CM "Design of ultrahigh-Q photoinduced cavities in defect-free photonic crystal slabs" OPTICS EXPRESS **18** 21397-21403 (2010)
71. Turner MD, Hossain MM, Gu M "The effects of retardation on plasmon hybridization within metallic nanostructures" NEW JOURNAL OF PHYSICS **12** 083062:1-16 (2010)
72. Van Erps J, Schröder J, Vo TD, Pelusi MD, Madden S, Choi Dy, Bulla DA, Luther-Davies B, Eggleton BJ, "Automatic dispersion compensation for 1.28Tb/s OTDM signal transmission using photonic-chip-based dispersion monitoring," OPTICS EXPRESS **18** 25415-25421 (2010)
73. Van Erps J, Luan F, Pelusi MD, Iredale T, Madden S., Choi DY, Bulla DA, Luther-Davies B, Thienpont H, Eggleton B J, "High-resolution Optical Sampling of 640-Gb/s Data Using Four-Wave Mixing in Dispersion-Engineered Highly Nonlinear As_2S_3 Planar Waveguides," JOURNAL OF LIGHTWAVE TECHNOLOGY **28** 209-215 (2010)
74. Vieweg M, Gissibl T, Pricking S, Kuhlmeiy BT, Wu DC, Eggleton BJ, and Giessen H, "Ultrafast nonlinear optofluidics in selectively liquid-filled photonic crystal fibers," OPTICS EXPRESS **18** 25232-25240 (2010)
75. Vo TD, Schröder J, Pelusi MD, Madden SJ, Choi DY, Bulla DAP, Luther-Davies B, Eggleton BJ, "Photonic Chip based Simultaneous Multi-impairment Monitoring for Phase-modulated Optical Signals," JOURNAL OF LIGHTWAVE TECHNOLOGY **28** 3176-3183 (2010)
76. Vo TD, Hu H, Galili M, Palushani E, Xu J, Oxenløwe LK, Madden SJ, Choi DY, Bulla DAP, Pelusi MD, Schröder J, Luther-Davies B, Eggleton BJ "Photonic chip based transmitter optimization and receiver demultiplexing of a 1.28 Tbit/s OTDM signal," OPTICS EXPRESS **18**, 17252-17261 (2010)
77. Vo TD, Pelusi MD, Schroder J, Luan F, Madden SJ, Choi DY, Bulla DAP, Luther-Davies B, Eggleton BJ "Simultaneous multi-impairment monitoring of 640 Gb/s signals using photonic chip based RF spectrum analyser" OPTICS EXPRESS **18** 3938-3945 (2010)
78. Vo TD, Pelusi MD, Schroder J, Corcoran B, Eggleton BJ "Multi-Impairment Monitoring at 320 Gb/s Based on Cross-Phase Modulation Radio-Frequency Spectrum Analyzer" PHOTONICS TECHNOLOGY LETTERS **22** 428 (2010)
79. Williams RJ, Jovanovic N, Marshall GD, Withford MJ "All-optical, actively Q-switched fiber laser" OPTICS EXPRESS **18** 7714-7723 (2010)
80. Xiong C, Helt LG, Judge AC, Marshall GD, Steel MJ, Sipe JE, Eggleton BJ "Quantum-correlated photon pair generation in chalcogenide As_2S_3 waveguides" OPTICS EXPRESS **18** 16206-16216 (2010)
81. Zhang MG, Du JL, Shi HF, Yin SY, Xia LP, Jia BH, Gu M, Du CL "Three-dimensional Nanoscale Far-field Focusing of Radially Polarized Light by Scattering the SPPs with an Annular Groove" OPTICS EXPRESS **18** 14664-14670 (2010)
82. Zhang QM, Lin H, Jia BH, Xu L, Gu M "Nanogratings and nanoholes fabricated by direct femtosecond laser writing in chalcogenide glasses" OPTICS EXPRESS **18** 6885-6890 (2010)

Other articles in archival journals

83. Duchesne D, Razzari L, Ferrera M, Morandotti R, Chu ST, Little BE, Moss DJ "CMOS-Compatible Integrated Multiple Wavelength Laser" OPTICS & PHOTONICS NEWS **21** 36-36 (2010)
84. Eggleton BJ, "Chalcogenide photonics: Fabrication, devices and applications introduction," Optics Express **18**, 26632-26634 (2010)
85. Shalaev VM, Litchinitser NM, Engheta N, McPhedran R, Shamonina E, Klar T "Introduction to the Special Issue on Metamaterials" IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS **16** 363-366 (2010)