

Publications related to this thesis

Journal articles

E. Xifré-Pérez, T. Trifonov, J. Pallarès, and L.F. Marsal "One-dimensional porous silicon photonic crystals for visible and NIR applications", *Physica Status Solidi c*, **2** (9), 3466-3470 (2005).

E. Xifré-Pérez, L.F. Marsal, J. Pallarès, and J. Ferré-Borrull, "Porous silicon mirrors with enlarged omnidirectional band gap", *Journal of Applied Physics*, **97** (6), 064503 (1-5) (2005).

E. Xifré-Pérez, L.F. Marsal, J. Ferré-Borrull, and J. Pallarès, "Confinement in a planar waveguide with porous silicon omnidirectional mirrors as confining walls", *Journal of Luminescence*, **121** (2), 301-303 (2006).

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E. Xifré-Pérez, J. Pallarès, J. Ferré-Borrull, T. Trifonov, and L.F. Marsal, "Low refractive index porous silicon multilayer with a high reflection band", *Physica Status Solidi c*, **4** (6), 2034-2038 (2007).

E. Xifré-Pérez, E. Garcia-Caurel, J. Pallarès, J. Ferré-Borrull, and L.F. Marsal, "Wide-band reflection porous silicon mirrors with ellipsometric investigation of the material monolayer components", (*submitted to Materials Science and Engineering B*)

E. Xifré-Pérez, E. Garcia-Caurel, J. Ferré-Borrull, L.F. Marsal, and J. Pallarès, "Spectroscopic ellipsometry of porous silicon monolayers and multilayers: study of the anisotropy and characterization", (*submitted to Physica Status Solidi c*)

E. Xifré-Pérez, L.F. Marsal, J. Ferré-Borrull, and J. Pallarès, "Suitability of porous silicon omnidirectional mirrors for planar waveguide applications", (*submitted to IEEE J. of Lightwave Technology*)

Communications to international conferences

E. Xifré-Pérez, J. Pallarès, T. Trifonov, and L.F. Marsal, "One-dimensional porous silicon photonic crystal for visible and NIR applications", *Porous semiconductors science and technology, International Conference*, (14-19 March 2004, Cullera, Spain).

E. Xifré-Pérez, J. Ferré-Borrull, J. Pallarès, and L.F. Marsal, "Design elements of porous silicon omnidirectional mirrors", *International Symposium on Optical Systems Design 2005. Advances in Optical Thin Films II*, (12-16 September 2005, Jena, Germany).

E. Xifré-Pérez, J. Pallarès, J. Ferré-Borrull, T. Trifonov, and L.F. Marsal, "Fabrication and characterization of porous silicon multilayer structures", *Porous Semiconductors Science and Technology, International Conference*, (12-17 March 2006, Sitges, Spain).

E. Xifré-Pérez, L.F. Marsal, J. Ferré-Borrull, and J. Pallarès, "Porous silicon waveguides using photonic crystals as confining walls", *E-MRS IUMRS ICEM 2006 Spring Meeting (symposium D: Silicon-based Photonics)*, (29 May-2 June 2006, Nice, France)

E. Xifré-Pérez, L.F. Marsal, J. Ferré-Borrull, T. Trifonov, J. Pallarès, "Reflectivity spectrum of a porous silicon Fabry-Pérot filter under different humidity conditions", *E-MRS IUMRS ICEM 2006 Spring Meeting (symposium D: Silicon-based Photonics)* (29 May-2 June 2006, Nice, France).

E. Xifré-Pérez, E. Garcia-Caurel, J. Pallarès, J. Ferré-Borrull, and L.F. Marsal, "Wide-band reflection porous silicon mirrors with ellipsometric investigation of the material monolayer components", *EMRS 2007 Spring Meeting (Symposium B: Semiconductor Nanostructures towards Electronic and Optoelectronic Device Applications)* (28 May-1 June 2007, Strasbourg, France), (*Oral presentation*).

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E. Xifré Pérez, J. Pallarès, J. Ferré-Borrull, and L.F. Marsal, "Applications of One-Dimensional Porous Silicon Photonic Crystals", *Nanoelectronic and Photonic Systems Workshop*, (21-22 June 2004, Tarragona, Spain).

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