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Página 1 (Registros 1 -- 47)
[1]

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Registro 1 de 47

Por: Cano-Contreras, M (Cano-Contreras, M.); Guzman-Chavez, AD (Guzman-Chavez, A. D.); Vargas-Rodriguez, E (Vargas-Rodriguez, E.); Gallegos-Arellano, E (Gallegos-Arellano, E.); Jauregui-Vazquez, D (Jauregui-Vazquez, D.); Mata-Chavez, RI (Mata-Chavez, R. I.); Torres-Cisneros, M (Torres-Cisneros, M.); Rojas-Laguna, R (Rojas-Laguna, R.)

Título: Refractive index sensing setup based on a taper and an intrinsic micro Fabry-Perot interferometer

Fuente: JOURNAL OF THE EUROPEAN OPTICAL SOCIETY-RAPID PUBLICATIONS

Volumen: 10

Número de artículo: 15039

DOI: 10.2971/jeos.2015.15039

Fecha de publicación: 2015

Resumen: In this work, a refractive index sensor setup based on a biconically tapered fiber (BTF) concatenated to an intrinsic all-fiber micro Fabry-Perot interferometer (MFPI) is presented. Here, the power of the MFPI spectral fringes decreases as the refractive index interacts with the evanescent field of the BTF segment. Furthermore, it is demonstrated that the RI sensitivity can be enhanced by bending the BTF segment. Finally, it is shown that by using this sensing arrangement, at similar to 1.53 mu m wavelength, it is possible to detect refractive index changes within the measurement range of 1.3 to 1.7 RIU, with a sensitivity of 39.92 dB/RIU and a RI resolution of 2.5 . 10(3) RIU with a curvature of C = 18.02 m(-1).

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

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Veces citado en SciELO Citation Index: 0

Total de veces citado: 0

ISSN: 1990-2573

Número de acceso: WOS:000359703700001

Registro 2 de 47

Por: Arteaga-Sierra, FR (Arteaga-Sierra, F. R.); Milian, C (Milian, C.); Torres-Gomez, I (Torres-Gomez, I.); Torres-Cisneros, M (Torres-Cisneros, M.); Molto, G (Molto, G.); Ferrando, A (Ferrando, A.)

Título: Supercontinuum optimization for dual-soliton based light sources using genetic algorithms in a grid platform

Fuente: OPTICS EXPRESS

Volumen: 22

Número: 19

Páginas: 23686-23693

DOI: 10.1364/OE.22.023686

Fecha de publicación: SEP 22 2014

Resumen: We present a numerical strategy to design fiber based dual pulse light sources exhibiting two predefined spectral peaks in the anomalous group velocity dispersion regime. The frequency conversion is based on the soliton fission and soliton self-frequency shift occurring during supercontinuum generation. The optimization process is carried out by a genetic algorithm that provides the optimum input pulse parameters: wavelength, temporal width and peak power. This algorithm is implemented in a Grid platform in order to take advantage of distributed computing. These results are useful for optical coherence tomography applications where bell-shaped pulses located in the second near-infrared window are needed. (C) 2014 Optical Society of America

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Veces citado en BIOSIS Citation Index: 0

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Veces citado en Russian Science Citation Index: 0

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Total de veces citado: 0

ISSN: 1094-4087

Número de acceso: WOS:000342756500139

ID de PubMed: 25321835

Registro 3 de 47

Por: Arteaga-Sierra, FR (Arteaga-Sierra, F. R.); Milian, C (Milian, C.); Torres-Gomez, I (Torres-Gomez, I.); Torres-Cisneros, M (Torres-Cisneros, M.); Ferrando, A (Ferrando, A.); Davila, A (Davila, A.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Chen, Ru	A-5105-2015	

Título: Multi-peak-spectra generation with Cherenkov radiation in a non-uniform single mode fiber

Fuente: OPTICS EXPRESS

Volumen: 22

Número: 3

Páginas: 2451-2458

DOI: 10.1364/OE.22.002451

Fecha de publicación: FEB 10 2014

Resumen: We propose, by means of numerical simulations, a simple method to design a non-uniform standard single mode fiber to generate spectral broadening in the form of "ad-hoc" chosen peaks from dispersive waves. The controlled multi-peak generation is possible by an on/off switch of Cherenkov radiation, achieved by tailoring the fiber dispersion when decreasing the cladding diameter by segments. The interplay between the fiber dispersion and the soliton self-frequency shift results in discrete peaks of efficiently emitted Cherenkov radiation from low order solitons, despite the small amount of energy contained in a pulse. These spectra are useful for applications that demand low power bell-shaped pulses at specific carrier wavelengths. (C) 2014 Optical Society of America
Veces citado en la Colección principal de Web of Science: 8
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
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Veces citado en SciELO Citation Index: 0
Total de veces citado: 8
ISSN: 1094-4087
Número de acceso: WOS:000332518100029
ID de PubMed: 24663536

Registro 4 de 47
Inventor(es): CISNEROS M T; GOMEZ E A; GALVAN LOPEZ H M; GUTIERREZ RIVERA M E; RAMIREZ I M
Título: Device for removing the seeds of fruits and vegetables, comprises blades having a special shape for removing the seeds, without removing the rind of the fruits and vegetables
Número de patente: MX2012013990-A1
Cesionario de patente: UNIV GUANAJUATO
Resumen: NOVELTY - The device comprises blades having a special shape for removing the seeds, without removing the rind of the fruits and vegetables.

USE - Device for removing the seeds of fruits and vegetables.

ADVANTAGE - Reduces the wastage of pulp.
Total de veces citado: 0
Número de acceso: DIIDW:2014P35314

Registro 5 de 47
Por: Guzman-Sepulveda, JR (Rafael Guzman-Sepulveda, Jose); Ruiz-Perez, VI (Ivan Ruiz-Perez, Victor); Torres-Cisneros, M (Torres-Cisneros, Miguel); Sanchez-Mondragon, JJ (Javier Sanchez-Mondragon, Jose); May-Arrioja, DA (Alberto May-Arrioja, Daniel)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Fiber Optic Sensor for High-Sensitivity Salinity Measurement
Fuente: IEEE PHOTONICS TECHNOLOGY LETTERS
Volumen: 25
Número: 23
Páginas: 2323-2326
DOI: 10.1109/LPT.2013.2286132
Fecha de publicación: DEC 1 2013
Resumen: A highly sensitive salinity sensor based on a two-core optical fiber is demonstrated for both high-and low-concentration regimes. Salinity of several aqueous solutions is measured in the ranges from 0 to 5 mol/L and from 0 to 1 mol/L with sensitivities of 14.0086 and 12.0484 nm/(mol/L), respectively. The achieved sensitivity is similar to 19 times higher than that recently reported for polymide-coated photonic crystal fibers.
Veces citado en la Colección principal de Web of Science: 7
Veces citado en BIOSIS Citation Index: 0
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Total de veces citado: 7
ISSN: 1041-1135
eISSN: 1941-0174
Número de acceso: WOS:000326983800013

Registro 6 de 47
Por: Guzman-Sepulveda, JR (Rafael Guzman-Sepulveda, Jose); Guzman-Cabrera, R (Guzman-Cabrera, Rafael); Torres-Cisneros, M (Torres-Cisneros, Miguel); Sanchez-Mondragon, JJ (Javier Sanchez-Mondragon, Jose); May-Arrioja, DA (Alberto May-Arrioja, Daniel)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: A Highly Sensitive Fiber Optic Sensor Based on Two-Core Fiber for Refractive Index Measurement
Fuente: SENSORS
Volumen: 13
Número: 10
Páginas: 14200-14213

DOI: 10.3390/s131014200

Fecha de publicación: OCT 2013

Resumen: A simple and compact fiber optic sensor based on a two-core fiber is demonstrated for high-performance measurements of refractive indices (RI) of liquids. In order to demonstrate the suitability of the proposed sensor to perform high-sensitivity sensing in a variety of applications, the sensor has been used to measure the RI of binary liquid mixtures. Such measurements can accurately determine the salinity of salt water solutions, and detect the water content of adulterated alcoholic beverages. The largest sensitivity of the RI sensor that has been experimentally demonstrated is 3,119 nm per Refractive Index Units (RIU) for the RI range from 1.3160 to 1.3943. On the other hand, our results suggest that the sensitivity can be enhanced up to 3485.67 nm/RIU approximately for the same RI range.

Veces citado en la Colección principal de Web of Science: 2

Veces citado en BIOSIS Citation Index: 0

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Total de veces citado: 2

ISSN: 1424-8220

Número de acceso: WOS:000328625300084

ID de PubMed: 24152878

Registro 7 de 47

Por: Torres-Cisneros, M (Torres-Cisneros, M.); Avina-Cervantes, JG (Avina-Cervantes, J. G.); Perez-Careta, E (Perez-Careta, E.); Ambriz-Colin, F (Ambriz-Colin, F.); Tinoco, V (Tinoco, Veronica); Ibarra-Manzano, OG (Ibarra-Manzano, O. G.); Plascencia-Mora, H (Plascencia-Mora, H.); Aguilera-Gomez, E (Aguilera-Gomez, E.); Ibarra-Manzano, MA (Ibarra-Manzano, M. A.); Guzman-Cabrera, R (Guzman-Cabrera, R.); Debeir, O (Debeir, Olivier); Sanchez-Mondragon, JJ (Sanchez-Mondragon, J. J.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Guzman-Cabrera, Rafael	L-1158-2013	0000-0002-9320-7021

Título: Fast and Accurate Cell Tracking by a Novel Optical-Digital Hybrid Method

Fuente: INTERNATIONAL JOURNAL OF THERMOPHYSICS

Volumen: 34

Número: 8-9

Número especial: SI

Páginas: 1435-1443

DOI: 10.1007/s10765-013-1453-8

Fecha de publicación: SEP 2013

Resumen: An innovative methodology to detect and track cells using microscope images enhanced by optical cross-correlation techniques is proposed in this paper. In order to increase the tracking sensibility, image pre-processing has been implemented as a morphological operator on the microscope image. Results show that the pre-processing process allows for additional frames of cell tracking, therefore increasing its robustness. The proposed methodology can be used in analyzing different problems such as mitosis, cell collisions, and cell overlapping, ultimately designed to identify and treat illnesses and malignancies.

Veces citado en la Colección principal de Web of Science: 0

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Número de acceso: WOS:000325815500010

Registro 8 de 47

Por: Guzman-Cabrera, R (Guzman-Cabrera, R.); Guzman-Sepulveda, JR (Guzman-Sepulveda, J. R.); Torres-Cisneros, M (Torres-Cisneros, M.); May-Arrioja, DA (May-Arrioja, D. A.); Ruiz-Pinales, J (Ruiz-Pinales, J.); Ibarra-Manzano, OG (Ibarra-Manzano, O. G.); Avina-Cervantes, G (Avina-Cervantes, G.); Parada, AG (Gonzalez Parada, A.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Digital Image Processing Technique for Breast Cancer Detection

Fuente: INTERNATIONAL JOURNAL OF THERMOPHYSICS

Volumen: 34

Número: 8-9

Número especial: SI

Páginas: 1519-1531

DOI: 10.1007/s10765-012-1328-4

Fecha de publicación: SEP 2013

Resumen: Breast cancer is the most common cause of death in women and the second leading cause of cancer deaths worldwide. Primary prevention in the early stages of the disease becomes complex as the causes remain almost unknown. However, some typical signatures of this disease, such as masses and microcalcifications appearing on mammograms, can be used to improve early diagnostic techniques, which is critical for women's quality of life. X-ray mammography is the main test used for screening and early diagnosis, and its analysis and processing are the keys to improving breast cancer prognosis. As masses and benign glandular tissue typically appear with low contrast

and often very blurred, several computer-aided diagnosis schemes have been developed to support radiologists and internists in their diagnosis. In this article, an approach is proposed to effectively analyze digital mammograms based on texture segmentation for the detection of early stage tumors. The proposed algorithm was tested over several images taken from the digital database for screening mammography for cancer research and diagnosis, and it was found to be absolutely suitable to distinguish masses and microcalcifications from the background tissue using morphological operators and then extract them through machine learning techniques and a clustering algorithm for intensity-based segmentation.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

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Número de acceso: WOS:000325815500021

Registro 9 de 47

Por: Guzman-Cabrera, R (Guzman-Cabrera, R.); Guzman-Sepulveda, JR (Guzman-Sepulveda, J. R.); Torres-Cisneros, M (Torres-Cisneros, M.); May-Arrioja, DA (May-Arrioja, D. A.); Ruiz-Pinales, J (Ruiz-Pinales, J.); Ibarra-Manzano, OG (Ibarra-Manzano, O. G.); Avina-Cervantes, G (Avina-Cervantes, G.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Guzman-Cabrera, Rafael	L-1158-2013	0000-0002-9320-7021

Título: Pattern Recognition in Photoacoustic Dataset

Fuente: INTERNATIONAL JOURNAL OF THERMOPHYSICS

Volumen: 34

Número: 8-9

Número especial: SI

Páginas: 1638-1645

DOI: 10.1007/s10765-013-1452-9

Fecha de publicación: SEP 2013

Resumen: In photoacoustic imaging, optical absorption properties of matter are imaged by detecting the ultrasound that is produced when the material is illuminated by a laser. For medical imaging, photoacoustics is a useful tool since matter in the human body has different optical absorption properties. In this study, pattern recognition systems are used to study a set of medical images for tumor identification and extraction-to detect the specific area in which the tumor is present. The objective is to incorporate this information into real-time image acquisition systems to improve medical diagnosis. Preliminary results obtained by studying the image dataset demonstrated the interchangeability of the proposed system. A system of automatic classification was constructed, using a set of images with and without cancerous tumors to evaluate the proposed method. The training set used was manually labeled, and the test set was never seen by the training set. The results helped us determine the feasibility of the proposed system.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

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Registro 10 de 47

Por: Capilla-Gonzalez, G (Capilla-Gonzalez, Gustavo); Plascencia-Mora, H (Plascencia-Mora, Hector); Torres-Cisneros, M (Torres-Cisneros, Miguel); Aguilera-Cortes, LA (Antonio Aguilera-Cortes, Luz); Diosdado-De la Pena, JA (Angel Diosdado-De la Pena, Jose)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: TOPOLOGICAL OPTIMIZATION OF AN SLAB OF POLYSTYRENE FOAM WITH MIX OF DENSITIES

Fuente: DYNA

Volumen: 88

Número: 4

Páginas: 444-452

DOI: 10.6036/5445

Fecha de publicación: JUL-AUG 2013

Resumen: The traditional manufacturing processes to fabricate slabs of polystyrene foam (EPS) are limited to produce them with an uniform density within the work piece from certain length; this slabs are widely used in the construction of dwellings in Mexico. However, when the loading conditions of the slab are analyzed, it is evident that there are zones of material that have low stress values. Recently, new technologies as the continuous molding to manufacture pieces with mixed densities localized at different areas have been developed, which has led to consider perform an optimization to provide information about the optimal distribution of the materials of different densities in order to decrease the amount of raw material used without affecting the overall mechanical strength required from the piece.
The topological optimization is one of the methods used in the aerospace, automotive and in the construction industry. To perform this optimization process is necessary to

know accurately the mechanical properties of the material forming the piece. The behavior of the EPS slab used in the construction industry is analyzed in this work. This constructive element operates under bending loads and fails due tensile stresses at the bottom of the piece. Uniaxial tensile tests were performed to determine the mechanical properties of each density. Based on the stress-strain curves tendency an elastic-multilinear model was used to analyze the slab using the finite element method (FEM). The EPS slabs are currently made with a density of 12 kg/m(3). The topological optimization using the Optimal Criteria method (OC) is presented. Using this procedure, a 15% saving in material was obtained, preserving the mechanical strength of the initial slab.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

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Registro 11 de 47

Por: Cruz-Aceves, I (Cruz-Aceves, I.); Avina-Cervantes, JG (Avina-Cervantes, J. G.); Lopez-Hernandez, JM (Lopez-Hernandez, J. M.); Garcia-Hernandez, MG (Garcia-Hernandez, M. G.); Torres-Cisneros, M (Torres-Cisneros, M.); Estrada-Garcia, HJ (Estrada-Garcia, H. J.); Hernandez-Aguirre, A (Hernandez-Aguirre, A.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Automatic Image Segmentation Using Active Contours with Univariate Marginal Distribution

Fuente: MATHEMATICAL PROBLEMS IN ENGINEERING

Número de artículo: 419018

DOI: 10.1155/2013/419018

Fecha de publicación: 2013

Resumen: This paper presents a novel automatic image segmentation method based on the theory of active contour models and estimation of distribution algorithms. The proposed method uses the univariate marginal distribution model to infer statistical dependencies between the control points on different active contours. These contours have been generated through an alignment process of reference shape priors, in order to increase the exploration and exploitation capabilities regarding different interactive segmentation techniques. This proposed method is applied in the segmentation of the hollow core in microscopic images of photonic crystal fibers and it is also used to segment the human heart and ventricular areas from datasets of computed tomography and magnetic resonance images, respectively. Moreover, to evaluate the performance of the medical image segmentations compared to regions outlined by experts, a set of similarity measures has been adopted. The experimental results suggest that the proposed image segmentation method outperforms the traditional active contour model and the interactive Tseng method in terms of segmentation accuracy and stability.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

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Número de acceso: WOS:000328031800001

Registro 12 de 47

Por: Cruz-Aceves, I (Cruz-Aceves, I.); Avina-Cervantes, JG (Avina-Cervantes, J. G.); Lopez-Hernandez, JM (Lopez-Hernandez, J. M.); Rostro-Gonzalez, H (Rostro-Gonzalez, H.); Garcia-Capulin, CH (Garcia-Capulin, C. H.); Torres-Cisneros, M (Torres-Cisneros, M.); Guzman-Cabrera, R (Guzman-Cabrera, R.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Guzman-Cabrera, Rafael	L-1158-2013	0000-0002-9320-7021
Garcia Capulin, Carlos Hugo		0000-0002-1631-0738

Título: Multiple Active Contours Guided by Differential Evolution for Medical Image Segmentation

Fuente: COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE

Número de artículo: UNSP 190304

DOI: 10.1155/2013/190304

Fecha de publicación: 2013

Resumen: This paper presents a new image segmentation method based on multiple active contours guided by differential evolution, called MACDE. The segmentation method uses differential evolution over a polar coordinate system to increase the exploration and exploitation capabilities regarding the classical active contour model. To evaluate the performance of the proposed method, a set of synthetic images with complex objects, Gaussian noise, and deep concavities is introduced. Subsequently, MACDE is applied on datasets of sequential computed tomography and magnetic resonance images which contain the human heart and the human left ventricle, respectively. Finally, to obtain a quantitative and qualitative evaluation of the medical image segmentations compared to regions outlined by experts, a set of distance and similarity metrics has been adopted. According to the experimental results, MACDE outperforms the classical active contour model and the interactive Tseng method in terms of efficiency and robustness for obtaining the optimal control points and attains a high accuracy segmentation.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 0
ISSN: 1748-670X
Número de acceso: WOS:000322661000001

Registro 13 de 47
Inventor(es): AGUILERA-GOMEZ E; TORRES-CISNEROS M; PLASCENCIA MORA H; CONTRERAS GONZALEZ J B; PEREZ-PANTOJA E
Título: Method for testing thin-filament tension, involves utilizing device and clamping system for measuring properties of natural fibers
Número de patente: MX2010010322-A1
Cesionario de patente: UNIV GUANAJUATO
Resumen: NOVELTY - The method involves utilizing device and a clamping system for measuring properties of natural fibers.

USE - Method for testing thin-filament tension.

ADVANTAGE - The method performs testing in a simple manner by using simple and inexpensive device.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus for testing thin-filament tension.
Total de veces citado: 0
Número de acceso: DIIDW:2012F27778

Registro 14 de 47
Por: Arronche, Luciana; La Saponara, Valeria; Martínez Ramírez, Israel; Ledesma Orozco, Elías; Gutiérrez Rivera, Miguel Ernesto; Torres Cisneros, Miguel
Título: Análisis Numérico-Experimental de Desempeño de Compuesto Híbrido Bajo Impacto
Fuente: Ingeniería mecánica, tecnología y desarrollo
Volumen: 4
Número: 3
Páginas: 103-113
Fecha de publicación: 2012
Resumen: The main goal of this work is to show the efficiency of two different geometries made of hybrid composite material under impact load. Two different designs and one baseline were manufactured and tested. In the case of the baseline which has a plane and rectangular geometry, a simulation of the impact phenomena was developed through commercial software of explicit finite element method. The two geometries designed were inspired in the geometry of bistable links. A bistable link is made of two components: the "main link" and "waiting link". The main link is designed to break first and was manufactured of a brittle woven carbon/epoxy composite. The waiting link was made of a more ductile woven polyethylene/epoxy composite. Finally a comparison was done through the analysis of the Inelastic Energy Curves.
Resumen: El objetivo de este trabajo es mostrar la eficiencia de dos geometrías diferentes, hechas de material compuesto híbrido, en carga de impacto respecto a una muestra de referencia. Dos diferentes diseños y una muestra de referencia fueron manufacturados y probados. En el caso de la muestra de referencia, la cual es una placa plana y rectangular de material compuesto híbrido, se realizó una simulación del impacto por medio del método explícito del elemento finito (software comercial Ansys/ls-dyna®). Los dos diseños hechos fueron inspirados en la geometría de la unión biestable, la cual está formada de dos partes: el enlace principal y el enlace de espera. El enlace principal es diseñado para fallar primero y fue manufacturado de un material compuesto frágil de fibra de carbón tejida/epoxi mientras que el enlace de espera fue hecho de fibra dúctil tejida de polietileno/epoxi. Finalmente se realiza una comparación entre los diseños mediante la elaboración de curvas inelásticas de energía.
Veces citado en la Colección principal de Web of Science: 0
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
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ISSN: 1665-7381
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Registro 15 de 47
Inventor(es): AGUILERA GOMEZ E; LEDESMA OROZCO E R; MARTINEZ A L; MARTINEZ CASTRO J G; PACHECO SANTAMARIA J S; PLASCENCIA MORA H; SALAS SEGOVIANO R C; TORRES CISNEROS M; OJEDA CASTANEDA J; TORRES-CISNEROS M
Título: Variable field depth optical system optical system for capturing image of three-dimensional object, has pair of lenses, which includes one and another lenses
Número de patente: US2011292516-A1 US8159753-B2 MX2010005792-A1 MX311247-B
Cesionario de patente: UNIV GUANAJUATO
Resumen: NOVELTY - The variable field depth optical system has a pair of lenses (1,2), which includes one and another lenses, where former lens has a complex amplitude transmittance which generates an optical path difference equivalent to a surface having a profile. The profile follows a symmetrical mathematical function, where the complex amplitude transmittance of latter lens is a conjugate complex of the former lens.

USE - Variable field depth optical system for capturing an image of a three-dimensional object.

ADVANTAGE - The variable field depth optical system has a pair of lenses, which includes one and another lenses, where former lens has a complex amplitude transmittance which generates an optical path difference equivalent to a surface having a profile, and hence enables extending the depth of field of another optical system without altering either the resolution or luminous capture of an optical lens in a controlled manner.

DESCRIPTION Of DRAWING(S) - The drawing shows a schematic side view of a variable field depth optical system.Lenses (1,2)Telecentric optical systems (3,5)Pupil (4)
Total de veces citado: 0
Número de acceso: DIIDW:2011P85535

Registro 16 de 47

Inventor(es): CASTANEDA J O; GOMEZ E A; MORA H P; CISNEROS M T; OROZCO E R L; MARTINEZ A L; SANTAMARIA J S P; CASTRO J G M; SEGOVIANO R C S; LEDESMA OROZCO E R; LEON MARTINEZ A; PACHECO SANTAMARIA J S; MARTINEZ CASTRO J G; SALAS SEGOVIANO R C

Título: Optical system is provided with depth of variable field, where optical lens is provided in controlled form without modifying its resolution and optical lens is provided for capturing light

Número de patente: MX2010005792-A1 MX311247-B

Cesionario de patente: UNIV GUANAJUATO

Resumen: NOVELTY - The optical system is provided with a depth of variable field. An optical lens is provided in a controlled form without modifying its resolution. The optical lens is provided for capturing the light that helps in extending the length of field of the optical system. The optical lens produces an optical path difference with a symmetrical distribution.

USE - Optical system.

ADVANTAGE - The optical system is provided with a depth of variable field, where an optical lens is provided in a controlled form without modifying its resolution, and thus ensures to capture the images with out loss of modulation and help in extending the depth of field without reducing resolution.

Total de veces citado: 0

Número de acceso: DIIDW:2011Q55788

Registro 17 de 47

Inventor(es): AGUILERA GOMEZ E; MORA H P; CASTANEDA J O; CISNEROS M T; PANTOJA E P

Título: Method for obtaining closed-cell cellular structure that has thermoacoustic insulation feature, involves using closed container that has confine cell wall that has impermeability to wall for fluids

Número de patente: MX2009014166-A1

Cesionario de patente: UNIV GUANAJUATO

Resumen: NOVELTY - The method involves using a closed container that has confine cell wall, where the container system is processed at ambient temperature system in order to provide desired impermeability to wall for fluids. Pressure is applied inside the container for certain time. The impermeability of container wall against fluid material is also achieved by applying an external coating to the treated material.

USE - Method for obtaining closed-cell cellular structure that has thermoacoustic insulation feature.

ADVANTAGE - The closed-cell cellular structure obtaining method enables to produce a structure that has acoustic, thermal and dynamic stiffness features.

Veces citado en SciELO Citation Index: 0

Total de veces citado: 0

Número de acceso: DIIDW:2011K77098

Registro 18 de 47

Por: Herrera-May, AL (Herrera-May, A. L.); Aguilera-Cortes, LA (Aguilera-Cortes, L. A.); Garcia-Ramirez, PJ (Garcia-Ramirez, P. J.); Plascencia-Mora, H (Plascencia-Mora, H.); Torres-Cisneros, M (Torres-Cisneros, M.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Herrera-May, Agustin	M-3501-2014	0000-0002-7373-9258

Título: Modeling of the intrinsic stress effect on the resonant frequency of NEMS resonators integrated by beams with variable cross-section

Fuente: MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS

Volumen: 16

Número: 12

Páginas: 2067-2074

DOI: 10.1007/s00542-010-1134-5

Fecha de publicación: DEC 2010

Resumen: Nano-electro-mechanical systems (NEMS) resonators integrated by a double clamped beam with variable cross-section are used in several applications such as chemical and biological detectors, high-frequency filters, and signal processing. The structure of these resonators can experience intrinsic stresses produced during their fabrication process. We present an analytical model to estimate the first bending resonant frequency of NEMS resonators based on a double clamped beam with three cross-sections, which considers the intrinsic stress effect on the resonant structure. This model is obtained using the Rayleigh and Macaulay methods, as well as the Euler-Bernoulli beam theory. We applied the analytical model to a silicon carbide (SiC) resonator of 186 nm thickness reported in the literature. This resonator has a total length ranking from 80 to 258 mu m and is subjected to a tensile intrinsic stress close to 110 MPa. Results from this model show good agreement with experimental results. The analytic frequencies have a maximum relative difference less than 6.3% respect to the measured frequencies. The tensile intrinsic stress on the resonant structure causes a significantly increase on its bending resonant frequency. The proposed model provides an insight into the study of the intrinsic stress influence on the resonant frequency of this nanostructure. In addition, this model can estimate the frequency shift due to the variations of the resonator geometrical parameters.

Veces citado en la Colección principal de Web of Science: 3

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 1

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

Total de veces citado: 4

ISSN: 0946-7076

Número de acceso: WOS:000283512300009

Registro 19 de 47

Por: Ledesma Orozco, Sergio; Cerda Villafaña, Gustavo; Aviña Cervantes, Gabriel; Hernández Fusilier, Donato; Torres Cisneros, Miguel

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Analysis of LRD Series with Time-Varying Hurst Parameter

Título: Análisis de Series LRD con Parámetro de Hurst Variante en el Tiempo

Fuente: Computación y Sistemas

Volumen: 13

Número: 3

Páginas: 295-312

Fecha de publicación: 2010-03

Resumen: It has been previously shown that actual network traffic exhibits long-range dependence. The Hurst parameter captures the degree of long-range dependence; however, because of the nature of computer network traffic, the Hurst parameter may not remain constant over a long period of time. An iterative method to compute the value of the Hurst parameter as a function of time is presented and analyzed. Experimental results show that the proposed method provides a good estimation of the Hurst parameter as a function of time. Additionally, this method allows the detection on changes of the Hurst parameter for long data series. The proposed method is compared with traditional methods for Hurst parameter estimation. Actual and synthetic traffic traces are used to validate our results. The proposed method allows detecting the changing points on the Hurst parameter, and better results can be obtained when modeling self-similar series using several values of the Hurst parameter instead of only one for the entire series. A new graphical tool to analyze long-range dependent series is proposed. Because of the nature of this plot, it is called the transition-variance plot. This tool may be helpful to distinguish between LAN and WAN traffic. Finally, the software LRD Lab* is deployed to analyze and synthesize long-range dependent series. The LRD Lab includes a simple interface to easily generate, analyze, visualize and save long-range dependent series.

Resumen: Ha sido previamente propuesto que el tráfico real de redes de computadoras exhibe dependencia de rango amplio. El parámetro de Hurst captura la cantidad de dependencia de rango amplio; sin embargo, debido a la naturaleza del tráfico en redes de computadoras, el parámetro de Hurst puede no permanecer constante durante un periodo largo de tiempo. Un método iterativo para calcular el valor del parámetro de Hurst como una función del tiempo es presentado y analizado. Los resultados experimentales demuestran que el método propuesto proporciona una buena estimación del parámetro de Hurst como una función del tiempo. Adicionalmente, este método permite la detección de cambios en el parámetro de Hurst para series largas. El método propuesto es comparado con métodos tradicionales para estimar el parámetro de Hurst. Series de datos reales y sintéticas son usadas para validar los resultados. El método propuesto permite detectar los puntos de cambio del parámetro de Hurst, y mejores resultados pueden ser obtenidos al modelar series similares a sí mismas usando varios valores del parámetro de Hurst en lugar de solamente uno para toda la serie. Una nueva herramienta gráfica para analizar series con dependencia de rango amplio es propuesta. Debido a la naturaleza de esta gráfica, ésta se llama gráfica de transición de varianza. Esta herramienta puede ser usada para distinguir entre tráfico LAN y WAN. Finalmente, el software LRD Lab* es desarrollado para analizar y sintetizar series con dependencia de rango amplio. El LRD Lab incluye una interfase sencilla para generar, analizar, visualizar y almacenar series con dependencia de rango amplio.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

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ISSN: 1405-5546

Número de acceso: SCIELO:S1405-55462010000100005

Registro 20 de 47

Por: Aguilera-Cortés, L.A.; Herrera-May, A.L.; Torres-Cisneros, M.; González-Palacios, M.A.; González-Galván, E.J.

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Estudio acústico-estructural de la cabina de un vehículo automotriz

Título: Acoustic-Structural Study for the Cabin of an Automotive Vehicle

Fuente: Ingeniería, investigación y tecnología

Volumen: 11

Número: 1

Páginas: 73-86

Fecha de publicación: 2010-03

Resumen: An acoustic-structural study of a cabin for an automotive vehicle through a new 3D finite element model is presented. This model, which is developed with software ANSYS, has a simple geometrical configuration to provide the uncoupled and coupled acoustic-structural modes of the cabin with computing minimum time. In addition, the model easily obtains the results of interior sound pressure and stress in the cabin caused by a harmonic excitation. The results of the first coupled-system modes are of rigid type and they have frequencies smaller than 5 Hz. However, the main acoustic modes are present for frequencies greater than 87 Hz, with the exception of Helmholtz mode (0 Hz). The highest acoustic pressure (in the range from 2 to 400 Hz) is 107.8 dB for a harmonic excitation of 1 N. The structure of the cabin registers a maximum stress of 1.85 MPa to 51 Hz. The model proposed significantly contributes in the evaluation of noise level and stress for an automotive vehicle.

Resumen: El estudio acústico-estructural acoplado de una cabina tipo automóvil mediante un nuevo modelo de elementos finitos en 3D es presentado. Este modelo, desarrollado con el software ANSYS, tiene una configuración geométrica sencilla que proporciona los modos de vibración acústico, estructural y acoplado de la cabina en un tiempo mínimo de cómputo. Además, el modelo obtiene fácilmente las respuestas del cambio en la presión acústica del fluido interior y los esfuerzos en la estructura de la cabina, provocados por una perturbación armónica. Los resultados de los primeros modos de vibración del sistema acoplado son del tipo rígido y con frecuencias menores a 5 Hz. En cambio, los principales modos acústicos se presentan a frecuencias mayoresde87 Hz, a excepción del modo Helmholtz (0Hz). La máxima presión acústica en el rango de 2a 400 Hz es de 108.70 dB para una excitación armónica de 1 N. La estructura de la cabina registra un esfuerzo máximo de 1.85 MPa en la frecuencia de 51 Hz. El modelo propuesto contribuye significativamente en la evaluación de zonas potencialmente críticas de ruido y esfuerzos en la cabina convencional de un vehículo automotriz.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0
Total de veces citado: 0
ISSN: 1405-7743
Número de acceso: SCIELO:S1405-77432010000100008

Registro 21 de 47
Por: Cortes-Perez, AR (Cortes-Perez, Angel R.); Herrera-May, AL (Leobardo Herrera-May, Agustin); Aguilera-Cortes, LA (Aguilera-Cortes, Luz A.); Gonzalez-Palacios, MA (Gonzalez-Palacios, Max A.); Torres-Cisneros, M (Torres-Cisneros, Miguel)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Herrera-May, Agustin	M-3501-2014	0000-0002-7373-9258

Título: Performance optimization and mechanical modeling of uniaxial piezoresistive microaccelerometers
Fuente: MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS
Volumen: 16
Número: 3
Páginas: 461-476
DOI: 10.1007/s00542-009-0942-y
Fecha de publicación: MAR 2010
Resumen: The acceleration measurements in automotive, navigation, biomedical and consumer applications demand high-performance microaccelerometers. This paper presents an optimization model to maximize the bandwidth of uniaxial piezoresistive microaccelerometers based on cantilever-type beams. The proposed model provides a high sensitivity as well as normal stress levels lower than the material rupture stress of these microaccelerometers. This model uses the Rayleigh method to determine the objective function of the bandwidth and the maximum-normal-stress failure theory to obtain a stress constraint that guarantees safe operation for the microaccelerometer structure. The Box-Complex optimization method is used to solve the optimization model due to its easy programming algorithm. Finite element models (FE) are developed to determine the mechanical behavior of the optimized piezoresistive microaccelerometers. The results of the FE models agree well with those of the optimization model. The optimization model can be easily used by designers to find the optimum geometrical dimensions of piezoresistive microaccelerometers to maximize their performance.
Veces citado en la Colección principal de Web of Science: 3
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 3
ISSN: 0946-7076
Número de acceso: WOS:000273034700014

Registro 22 de 47
Por: May-Arrioja, DA (May-Arrioja, D. A.); Bickel, N (Bickel, N.); Alejo-Molina, A (Alejo-Molina, A.); Torres-Cisneros, M (Torres-Cisneros, M.); Sanchez-Mondragon, JJ (Sanchez-Mondragon, J. J.); Likamwa, P (LiKamWa, P.)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Intermixing of InP-based multiple quantum wells for integrated optoelectronic devices
Fuente: MICROELECTRONICS JOURNAL
Volumen: 40
Número: 3
Páginas: 574-576
DOI: 10.1016/j.mejo.2008.06.070
Fecha de publicación: MAR 2009
Resumen: The intermixing characteristics of three widely used combinations of InP-based quantum wells (QW) are investigated using the impurity-free vacancy disordering (IFVD) technique. We demonstrate that the bandgap energy shift is highly dependent on the concentration gradient of the as-grown wells and barriers, as well as the thickness of the well, with thinner wells more susceptible to interdiffusion at the interface between the barrier and well. According to our results, the InGaAsP/InGaAsP and InGaAs/InP are well suited for applications requiring a wide range of bandgap values within the same wafer. In the case of the InGaAs/InGaAsP system, its use is limited due to the significant broadening of the photoluminescence spectrum that was observed. The effect of the top InGaAs layer over the InP cladding is also investigated, which leads to a simple way to obtain three different bandgaps in a single intermixing step. (C) 2008 Elsevier Ltd. All rights reserved.
Título de la conferencia: Workshop on Recent Advances on Low Dimensional Structures and Devices
Fecha de la conferencia: APR 07-09, 2008
Ubicación de la conferencia: Univ Nottingham, Nottingham, ENGLAND
Organizador de la conferencia: Univ Nottingham
Veces citado en la Colección principal de Web of Science: 5
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
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Veces citado en SciELO Citation Index: 0
Total de veces citado: 5
ISSN: 0026-2692
Número de acceso: WOS:000264694700054

Registro 23 de 47

Por: Torres-Cisneros, M (Torres-Cisneros, M.); Velasquez-Ordonez, C (Velasquez-Ordonez, C.); Sanchez-Mondragon, J (Sanchez-Mondragon, J.); Campero, A (Campero, A.); Ibarra-Manzano, OG (Ibarra-Manzano, O. G.); May-Arrioja, DA (May-Arrioja, D. A.); Plascencia-Mora, H (Plascencia-Mora, H.); Espinoza-Calderon, A (Espinoza-Calderon, A.); Sukhoivanov, I (Sukhoivanov, I.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Synthesis and optical characterization of Ag-0 nanoparticles

Fuente: MICROELECTRONICS JOURNAL

Volumen: 40

Número: 3

Número especial: SI

Páginas: 618-620

DOI: 10.1016/j.mejo.2008.06.043

Fecha de publicación: MAR 2009

Resumen: The results of chemical synthesis and optical behavior of silver nanoparticles with sizes ranging from 2-10 nm which were obtained by reduction of Ag+ are reported. The material morphology was examined by transmission electron microscopy (TEM) and physical properties were studied by photoluminescence in the range of 400-550 nm using two different excitation wavelengths (320 and 380 nm). The signature provided by the silver plasmon is readily noticed in the silver nanoparticles. The nonlinear optical properties were obtained using a Z-scan setup and agree with previous results obtained by other methods and preparation of samples. In particular, a positive nonlinear refractive index of 5.0115 x 10(-10) m(2)/W Was obtained for a broad sample of silver nanoparticles between 2 and 10 nm. The agreement between the properties of the thin film sample and the nanoparticles give emphasis to the Z-scan technique for nonlinearity measurements of much more complex metal-dielectric structures. (C) 2008 Elsevier Ltd. All rights reserved.

Título de la conferencia: Workshop on Recent Advances on Low Dimensional Structures and Devices

Fecha de la conferencia: APR 07-09, 2008

Ubicación de la conferencia: Univ Nottingham, Nottingham, ENGLAND

Organizador de la conferencia: Univ Nottingham

Veces citado en la Colección principal de Web of Science: 1

Veces citado en BIOSIS Citation Index: 1

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Total de veces citado: 1

ISSN: 0026-2692

Número de acceso: WOS:000264694700067

Registro 24 de 47

Por: Torres-Cisneros, M (Torres-Cisneros, M.); Yanagihara, N (Yanagihara, Naohisa); Gonzalez-Rolon, B (Gonzalez-Rolon, B.); Meneses-Nava, MA (Meneses-Nava, M. A.); Ibarra-Manzano, OG (Ibarra-Manzano, O. G.); May-Arrioja, DA (May-Arrioja, D. A.); Sanchez-Mondragon, J (Sanchez-Mondragon, J.); Aguilera-Gomez, E (Aguilera-Gomez, E.); Aguilera-Cortes, LA (Aguilera-Cortes, L. A.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Synthesis and nonlinear optical behavior of Ag nanoparticles in PMMA

Fuente: MICROELECTRONICS JOURNAL

Volumen: 40

Número: 3

Páginas: 621-623

DOI: 10.1016/j.mejo.2008.06.044

Fecha de publicación: MAR 2009

Resumen: in this work we have synthesized silver nanoparticles in Poly (methyl methacrylate) (PMMA). This was achieved by polymerizing the mixture of monomer and corresponding metal compound, followed by post-heating treatment. The linear absorption coefficient of the samples was measured using a spectrophotometer, where an absorption peak at 420 nm was observed. This peak grows up and shifts as a function of the concentration of the radical initiator. The linear refractive index was measured using the Fresnel equations and agrees with previous reported results. The nonlinear properties were obtained using the single lens Z-scan method, where the nonlinear absorption coefficient (Delta alpha) was found between 5.5975514 and 17.9483493 cm(-1). The nonlinear refractive index coefficient (Delta eta) was found to be negative and its value oscillates between 12.9099 E-06 and 22.4276 E-06. Finally, the third-order coefficient (chi((3))) was calculated in the range of 233-787 E-9esu. (C) 2008 Elsevier Ltd. All rights reserved.

Título de la conferencia: Workshop on Recent Advances on Low Dimensional Structures and Devices

Fecha de la conferencia: APR 07-09, 2008

Ubicación de la conferencia: Univ Nottingham, Nottingham, ENGLAND

Organizador de la conferencia: Univ Nottingham

Veces citado en la Colección principal de Web of Science: 5

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 1

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

Total de veces citado: 6
ISSN: 0026-2692
Número de acceso: WOS:000264694700068

Registro 25 de 47

Por: Meneses-Nava, MA (Meneses-Nava, M. A.); Barbosa-Garcia, O (Barbosa-Garcia, O.); Maldonado, JL (Maldonado, J. L.); Ramos-Ortiz, G (Ramos-Ortiz, G.); Pichardo, JL (Pichardo, J. L.); Torres-Cisneros, M (Torres-Cisneros, M.); Garcia-Hernandez, M (Garcia-Hernandez, M.); Garcia-Murillo, A (Garcia-Murillo, A.); Carrillo-Romo, FJ (Carrillo-Romo, F. J.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Carrillo Romo, Felipe	A-6644-2011	
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Yb3+ quenching effects in co-doped polycrystalline BaTiO3:Er3+, Yb3+
Fuente: OPTICAL MATERIALS
Volumen: 31
Número: 2
Páginas: 252-260
DOI: 10.1016/j.optmat.2008.04.002
Fecha de publicación: OCT-DEC 2008
Resumen: Luminescent properties of single and co-doped samples of sol-gel polycrystalline BaTiO3 with trivalent Er3+ and Yb3+ ions are reported. Under 520 nm pumping, visible radiative emission from H-2(7/2), S-4(3/2) -> I-4(15/2), and F-4(9/2) -> I-4(15/2); and near infrared emission from S-4(3/2) -> I-4(13/2), I-4(11/2) -> I-4(15/2) and I-4(13/2) -> I-4(15/2) of Er3+ and from F-2(5/2) -> F-2(7/2) of Yb3+ ions were measured. For single Er3+ doped samples, concentration quenching was observed from the S-4(3/2) State, whereas emissions in the 1.0 and 1.5 mu m regions increase with concentration due to the cross-relaxation mechanism S-4(3/2) + I-4(15/2) -> I-4(9/2) + I-4(13/2). Upon addition of Yb3+ ions quenching is enhanced, as corroborated by the luminescence decay time curves and emission spectra. This is so because an additional non-radiative energy transfer process from the thermally coupled states (H-2(11/2), S-4(3/2)) of Er3+ to the F-2(7/2) state of Yb3+ takes place. (C) 2008 Elsevier B.V. All rights reserved.
Veces citado en la Colección principal de Web of Science: 11
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 1
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 1
Total de veces citado: 12
ISSN: 0925-3467
Número de acceso: WOS:000261822200028

Registro 26 de 47

Por: Sukhoivanov, IA (Sukhoivanov, I. A.); Guryev, IV (Guryev, I. V.); Lucio, JAA (Lucio, J. A. Andrade); Mendez, EA (Mendez, E. Alvarado); Trejo-Duran, M (Trejo-Duran, M.); Torres-Cisneros, M (Torres-Cisneros, M.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Guryev, Igor	A-7868-2011	0000-0001-6014-5912
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Photonic density of states maps for design of photonic crystal devices
Fuente: MICROELECTRONICS JOURNAL
Volumen: 39
Número: 3-4
Páginas: 685-689
DOI: 10.1016/j.mejo.2007.07.091
Fecha de publicación: MAR-APR 2008
Resumen: In this work, it has been investigated whether photonic density of states maps can be applied to the design of photonic crystal-based devices. For this reason, comparison between photonic density of states maps and transmittance maps was carried out. Results of comparison show full correspondence between these characteristics. Photonic density of states maps appear to be preferable for the design of photonic crystal devices, than photonic band gap maps presented earlier and than transmittance maps shown in the paper. (c) 2007 Elsevier Ltd. All rights reserved.
Título de la conferencia: 6th International Conference on Low Dimensional Structures and Devices (LDSD 2007)
Fecha de la conferencia: APR 15-20, 2007
Ubicación de la conferencia: San Andres, COLOMBIA
Patrocinador(es): Cinvestav; Conacyt; Intercovamex; Univ Valle; CENM; Banco Republ Colombia
Veces citado en la Colección principal de Web of Science: 2
Veces citado en BIOSIS Citation Index: 1
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 2
ISSN: 0026-2692
Número de acceso: WOS:000255600600093

Registro 27 de 47

Por: Zamudio-Lara, A (Zamudio-Lara, A.); Sanchez-Mondragon, JJ (Sanchez-Mondragon, J. J.); Torres-Cisneros, M (Torres-Cisneros, M.); Escobedo-Alatorre, JJ (Escobedo-Alatorre, J. J.); Ordonez, CV (Velasquez Ordonez, C.); Basurto-Pensado, MA (Basurto-Pensado, M. A.); Aguilera-Cortes, LA (Aguilera-Cortes, L. A.)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Characterization of metal-dielectric photonic crystals

Fuente: OPTICAL MATERIALS

Volumen: 29

Número: 1

Páginas: 60-64

DOI: 10.1016/j.optmat.2006.03.026

Fecha de publicación: OCT 2006

Resumen: We discuss a new photonic crystal structure that arise out of including extremely thin metallic inserts in a standard dielectric photonic crystal (DPC). We had denominated dielectric-metallic photonic crystal (DMPC) to these combined structures to distinguish them from the metal dielectric photonic crystal (MDPC) with a single dielectric substrates and DPC, even when they preserve features from both, they have features of their own as a metal-dielectric structure. In this work, we numerically analyze a dielectric-metallic photonic crystal in a microsphere arrangement, characterizing the corresponding Bragg frequency and the dielectric and metallic stopgaps. In particular, we are interested in the dependence of the dielectric width sigma(D) and the metallic width sigma(M) respectively, as functions of the refraction index difference and the metal thickness d. We also discuss the structural flexibility introduced by the dielectric-metallic photonic crystal in the stopgaps pattern. (c) 2006 Elsevier B.V. All rights reserved.

Título de la conferencia: 2nd Topical Meeting on Nanostructured Materials and Nanotechnology

Fecha de la conferencia: SEP 19-21, 2005

Ubicación de la conferencia: UNAM, Cent Cienc Mat Condensada, Ensenada, MEXICO

Organizador de la conferencia: UNAM, Cent Cienc Mat Condensada

Veces citado en la Colección principal de Web of Science: 6

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 2

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

Total de veces citado: 8

ISSN: 0925-3467

Número de acceso: WOS:000241087200013

Registro 28 de 47

Por: Torres-Cisneros, M (Torres-Cisneros, M); Haus, JW (Haus, JW); Powers, P (Powers, P); Bojja, P (Bojja, P); Scalora, M (Scalora, M); Bloemer, N (Bloemer, N); Akozbek, N (Akozbek, N); Aguilera-Cortes, LA (Aguilera-Cortes, LA); Guzman-Cabrera, R (Guzman-Cabrera, R); Castro-Sanchez, R (Castro-Sanchez, R); Meneses-Nava, MA (Meneses-Nava, MA); Andrade-Lucio, JA (Andrade-Lucio, JA); Sanchez-Mondragon, JJ (Sanchez-Mondragon, JJ)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Guzman-Cabrera, Rafael	L-1158-2013	0000-0002-9320-7021

Título: Parametric conversion in a non-lineal photonic crystal

Fuente: REVISTA MEXICANA DE FISICA

Volumen: 51

Número: 3

Páginas: 258-264

Fecha de publicación: JUN 2005

Resumen: In this work we present a novel coherent source of millimeter wavelength waves based On parametric down-conversion in an one-dimensional photonic crystal. Our proposal is based either on the band edge or on defect-mode field enhancement phenomena near a photonic band gap, The numerical results have been showed that a wide range of' intensities and bandwidths of colicrent radiation can be obtained as we vary either the number periods or the refraction index contrast between layers of the crystal array.

Veces citado en la Colección principal de Web of Science: 0

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

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Veces citado en SciELO Citation Index: 0

Total de veces citado: 0

ISSN: 0035-001X

Número de acceso: WOS:000230102300006

Registro 29 de 47

Por: Escobedo-Alatorre, J (Escobedo-Alatorre, J); Sanchez-Mondragon, J (Sanchez-Mondragon, J); Torres-Cisneros, M (Torres-Cisneros, M); Selvas-Aguilar, R (Selvas-Aguilar, R); Basurto-Pensado, M (Basurto-Pensado, M)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: A device approach to propagation in nonlinear photonics crystal
Fuente: OPTICAL MATERIALS
Volumen: 27
Número: 7
Páginas: 1260-1265
DOI: 10.1016/j.optmat.2004.11.021
Fecha de publicación: APR 2005
Resumen: We discuss the propagation in a nonlinear photonic crystal NPC by introducing an effective nonlinear dielectric constant (ENDC). We successfully produce the expected prediction of bistability. switching and changes in the photonic bandgap in a Stack with a Kerr nonlinearity. We demonstrate that the expected nonlinear chirping is not only a characteristic of a nonlinear slab, but of a nonlinear stack as a whole. This ENDC method is quite flexible and susceptible to problems that have a linear solution, as shown with some examples. (c) 2004 Elsevier B.V. All rights reserved.
Título de la conferencia: 1st Topical Meeting on Nanostructured Materials and Nanotechnology (CIO 2004)
Fecha de la conferencia: SEP 22-24, 2004
Ubicación de la conferencia: Leon, MEXICO
Veces citado en la Colección principal de Web of Science: 7
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
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Veces citado en SciELO Citation Index: 0
Total de veces citado: 7
ISSN: 0925-3467
Número de acceso: WOS:000228791300014

Registro 30 de 47
Por: Torres-Cisneros, M (Torres-Cisneros, M); Aguilera-Cortes, LA (Aguilera-Cortes, LA); Meneses-Nava, MA (Meneses-Nava, MA); Sanchez-Mondragon, JJ (Sanchez-Mondragon, JJ); Torres-Cisneros, GE (Torres-Cisneros, GE)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Mechanisms of crossing for an X-junction based on dark spatial solitons
Fuente: JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS
Volumen: 6
Número: 5
Páginas: S430-S435
Número de artículo: PII S1464-4266(04)71455
DOI: 10.1088/1464-4266/6/5/034
Fecha de publicación: MAY 2004
Resumen: We present a fundamental study on the capability of a crossing of two optical waveguides based on dark spatial solitons to act as a controllable optical beam splitter. Our study is based on the fact that the guided beam is diffracted at the waveguide crossing by an effective phase screen formed by the soliton collision profile. We find that when the two dark solitons are immersed into the same finite bright background, the energy of a guided beam can be split into the desired optical channel according to the collision angle. We also found that even the corresponding phase diffractive screen possesses a quite different structure in the bright and dark soliton cases; the physics involved is the same.
Veces citado en la Colección principal de Web of Science: 0
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 1
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Veces citado en SciELO Citation Index: 0
Total de veces citado: 1
ISSN: 1464-4266
Número de acceso: WOS:000221920000035

Registro 31 de 47
Por: Haus, JW (Haus, JW); Powers, P (Powers, P); Bojja, P (Bojja, P); Torres-Cisneros, MT (Torres-Cisneros, MT); Scalora, M (Scalora, M); Bloemer, MJ (Bloemer, MJ); Akozbek, N (Akozbek, N); Meneses-Nava, MA (Meneses-Nava, MA)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Enhanced tunable terahertz generation in photonic band-gap structures
Fuente: LASER PHYSICS
Volumen: 14
Número: 5
Páginas: 635-642

Fecha de publicación: MAY 2004

Resumen: We analyze a novel coherent source of millimeter-wavelength waves based on parametric down conversion in a photonic crystal. Our design is based on the band-edge or defect-mode field enhancement phenomena near a photonic hand gap. The numerical results show that a wide range of intensities and bandwidths of coherent radiation can he obtained as we vary either the number periods or the index contrast between layers of the crystal array. Calculations demonstrate narrow-band, continuous and tunable THz sources from sub-THz to more than 12 THz.

Veces citado en la Colección principal de Web of Science: 8

Veces citado en BIOSIS Citation Index: 0

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Veces citado en SciELO Citation Index: 0

Total de veces citado: 8

ISSN: 1054-660X

Número de acceso: WOS:000221596000003

Registro 32 de 47

Por: Estudillo-Ayala, JM (Estudillo-Ayala, JM); Ruiz-Pinales, J (Ruiz-Pinales, J); Rojas-Laguna, R (Rojas-Laguna, R); Andrade-Lucio, JA (Andrade-Lucio, JA); Ibarra-Manzano, OG (Ibarra-Manzano, OG); Alvarado-Mendez, E (Alvarado-Mendez, E); Torres-Cisneros, M (Torres-Cisneros, M); Ibarra-Escamilla, B (Ibarra-Escamilla, B); Kuzin, EA (Kuzin, EA)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Ruiz Pinales, Jose	A-1990-2009	
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Analysis of a Sagnac interferometer with low-birefringence twisted fiber

Fuente: OPTICS AND LASERS IN ENGINEERING

Volumen: 39

Número: 5-6

Páginas: 635-643

Número de artículo: PII S0143-8166(02)00049-0

DOI: 10.1016/S0143-8166(02)00049-0

Fecha de publicación: MAY-JUN 2003

Resumen: The fiber Sagnac interferometer of low birefringence and twist is analyzed numerically in the linear region. A novel method for measurement of the birefringence of the fiber and the angle of rotation of the axes inside the fiber loop of the interferometer is also presented. (C) 2002 Elsevier Science Ltd. All rights reserved.

Veces citado en la Colección principal de Web of Science: 9

Veces citado en BIOSIS Citation Index: 0

Veces citado en Chinese Science Citation Database: 0

Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

Total de veces citado: 9

ISSN: 0143-8166

Número de acceso: WOS:000181912200013

Registro 33 de 47

Por: Shmaliy, YS (Shmaliy, YS); Shkvarko, YV (Shkvarko, YV); Torres-Cisneros, M (Torres-Cisneros, M); Rojas-Laguna, R (Rojas-Laguna, R); Ibarra-Manzano, OG (Ibarra-Manzano, OG)

Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: A stochastic analysis of an anharmonic sensor phase response

Fuente: IEEE SENSORS JOURNAL

Volumen: 3

Número: 2

Páginas: 158-163

DOI: 10.1109/JSEN.2003.812626

Fecha de publicación: APR 2003

Resumen: The probability density function (pdf) of a modulo 2pi phase response slope of an intrinsic anharmonic sensor of a crystal oscillator is studied in detail. It is noted that without an external drive, the sensor is excited by the oscillator noise floor with a signal-to-noise ratio (SNR) of around unity. The slope pdf is provided both in the rigorous integral form and in the T-distribution-based approximation. It is shown that the slope mean value is estimated to be zero with SNR = 0. It then gradually tends toward actual value as SNR rises so that with SNR > 2 the bias of slope estimates is almost negligible. With 0 less than or equal to SNR < 0.7, the slope variance stays at a maximum and then asymptotically diminishes toward zero as the SNR rises. The importance of these studies resides in a shown fact that, practically, having SNR < 2 in anharmonic sensors may result in substantial bias and variance for phase response slope mod 2pi estimates.

Veces citado en la Colección principal de Web of Science: 6

Veces citado en BIOSIS Citation Index: 0

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Veces citado en Russian Science Citation Index: 0

Veces citado en SciELO Citation Index: 0

Total de veces citado: 6
ISSN: 1530-437X
Número de acceso: WOS:000187435200003

Registro 34 de 47
Por: Andrade-Lucio, JA (Andrade-Lucio, JA); Ibarra-Manzano, OG (Ibarra-Manzano, OG); Alvarado-Mendez, E (Alvarado-Mendez, E); Rojas-Laguna, R (Rojas-Laguna, R); Estudillo-Ayala, JM (Estudillo-Ayala, JM); Torres-Cisneros, M (Torres-Cisneros, M); Alvarez-Jamie, JA (Alvarez-Jamie, JA); Gutierrez-Martin, H (Gutierrez-Martin, H); Iturbe-Castillo, MD (Iturbe-Castillo, MD); Ramos-Garcia, R (Ramos-Garcia, R)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Optical switches based on coherent collusion of spatial solitons in a photorefractive crystal
Fuente: REVISTA MEXICANA DE FISICA
Volumen: 47
Número: 5
Páginas: 431-434
Fecha de publicación: OCT 2001
Resumen: We show experimentally and numerically results about the coherent collision of one-dimensional spatial bright solitons in a photorefractive SBN61:Ce crystal under drift nonlinearity. Depending on the relative phase of the solitons and their intersecting angle, effects such as fusion, energy exchange and soliton birth have been observed. The experimental and numerical results are in good agreement.
Veces citado en la Colección principal de Web of Science: 0
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 0
ISSN: 0035-001X
Número de acceso: WOS:000171901900007

Registro 35 de 47
Por: Meneses-Nava, MA (Meneses-Nava, MA); Barbosa-Garcia, O (Barbosa-Garcia, O); Diaz-Torres, LA (Diaz-Torres, LA); Chavez-Cerda, S (Chavez-Cerda, S); Torres-Cisneros, M (Torres-Cisneros, M); King, TA (King, TA)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
diaz-torres, Luis Armando	K-3436-2012	
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945
Diaz-Torres, Luis Armando		0000-0002-1281-9916

Título: Effect of PMMA impregnation on the fluorescence quantum yield of sol-gel glasses doped with quinine sulfate
Fuente: OPTICAL MATERIALS
Volumen: 17
Número: 3
Páginas: 415-418
DOI: 10.1016/S0925-3467(01)00060-X
Fecha de publicación: AUG 2001
Resumen: The fluorescence quantum yield of quinine sulfate: in sol-gel and PMMA impregnated glasses is measured. The observed quantum yield improvement in the sol-gel matrix, compared to ethanol, is interpreted as a reduction of nonradiative relaxation channels by isolation of the molecules by the cage of the glass. PMMA impregnated sol-gel glasses show an extra improvement of the fluorescence yield, which is interpreted as a reduction of the free space and the rigid fixation of the molecules to the matrix. (C) 2001 Elsevier Science B.V. All rights reserved.
Veces citado en la Colección principal de Web of Science: 5
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
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Veces citado en SciELO Citation Index: 0
Total de veces citado: 5
ISSN: 0925-3467
Número de acceso: WOS:000169997400007

Registro 36 de 47
Por: Ostrovskii, IV (Ostrovskii, IV); Korotchenkov, OA (Korotchenkov, OA); Olikh, OY (Olikh, OY); Podolyan, AA (Podolyan, AA); Chupryna, RG (Chupryna, RG); Torres-Cisneros, M (Torres-Cisneros, M)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Acoustically driven optical phenomena in bulk and low-dimensional semiconductors
Fuente: JOURNAL OF OPTICS A-PURE AND APPLIED OPTICS

Volumen: 3
Número: 4
Páginas: S82-S86
Fecha de publicación: JUL 2001
Resumen: The purpose of this paper is to present new acousto-optical effects in semiconductors. Here we discuss acoustically driven carrier diffusion length and photovoltaic effect in Si and SiGe heterostructures, acoustically driven radiative recombination kinetics in ZnSe/ZnS quantum wells and acousto-photo-reflectance from GaAs epitaxial layers. We argue that acoustic driving can significantly affect the carrier dynamics in bulk and low-dimensional semiconductors.
Título de la conferencia: 5th International Meeting of the European Acousto-Optical Club
Fecha de la conferencia: MAY 25-26, 2000
Ubicación de la conferencia: BRUGGE, BELGIUM
Veces citado en la Colección principal de Web of Science: 2
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 2
ISSN: 1464-4258
Número de acceso: WOS:000170571700029

Registro 37 de 47
Por: Shkvarko, YV (Shkvarko, YV); Shmaliy, YS (Shmaliy, YS); Jaime-Rivas, R (Jaime-Rivas, R); Torres-Cisneros, M (Torres-Cisneros, M)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: System fusion in passive sensing using a modified hopfield network
Fuente: JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS
Volumen: 338
Número: 4
Páginas: 405-427
DOI: 10.1016/S0016-0032(00)00084-3
Fecha de publicación: JUL 2001
Resumen: We address a new approach to the problem of improving the quality of remote-sensing images obtained with several passive systems, in which case we propose to exploit the idea of neural-network-based imaging system fusion. The fusion problem is stated and treated as an aggregate inverse problem of restoration of the original image from the degraded data provided by several image-formation systems. The non-parametric maximum entropy regularization methodology is applied to solve the restoration problem with the control of balance between the gained spatial resolution and noise suppression in the resulting image. The restoration and fusion are performed by minimizing the energy function of the multistate Hopfield-type neural network, which integrates the model parameters of all sensor systems incorporating a priori and measurement information. Simulation examples are presented to illustrate the good overall performance of the fused restoration achieved with the proposed neural network algorithm. (C) 2001 The Franklin Institute. Published by Elsevier Science Ltd. All rights reserved.
Veces citado en la Colección principal de Web of Science: 31
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 31
ISSN: 0016-0032
Número de acceso: WOS:000169368800002

Registro 38 de 47
Por: Alvarado-Mendez, E (Alvarado-Mendez, E); Rojas-Laguna, R (Rojas-Laguna, R); Avina-Cervantes, JG (Avina-Cervantes, JG); Torres-Cisneros, M (Torres-Cisneros, M); Andrade-Lucio, JA (Andrade-Lucio, JA); Pedraza-Ortega, JC (Pedraza-Ortega, JC); Kuzin, EA (Kuzin, EA); Sanchez-Mondragon, JJ (Sanchez-Mondragon, JJ); Vysloukh, V (Vysloukh, V)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Total internal reflection of spatial solitons at interface formed by a nonlinear saturable and a linear medium
Fuente: OPTICS COMMUNICATIONS
Volumen: 193
Número: 1-6
Páginas: 267-276
DOI: 10.1016/S0030-4018(01)01240-8
Fecha de publicación: JUN 15 2001
Resumen: We study numerically and experimentally the reflection of spatial solitons at the interface between a nonlinear saturable-type medium and a linear one. We emphasize on determining the physical conditions under which the reflected beam at the interface conserve its nondiffracting properties. Depending on the incidence angle, we find three critical regions for spatial soliton conservation after reflection. We numerically show that the nonlinear Goos-Hanchen shift can have a dramatic effect on the diffracting properties of the reflected beam. (C) 2001 Published by Elsevier Science B.V.

Veces citado en la Colección principal de Web of Science: 19
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 19
ISSN: 0030-4018
eISSN: 1873-0310
Número de acceso: WOS:000169546400034

Registro 39 de 47
Por: Alvarado-Mendez, E (Alvarado-Mendez, E); Torres-Cisneros, M (Torres-Cisneros, M); Gutierrez-Hernandez, DA (Gutierrez-Hernandez, DA); Andrade-Lucio, JA (Andrade-Lucio, JA); Rojas-Laguna, R (Rojas-Laguna, R); Pedraza-Ortega, JC (Pedraza-Ortega, JC); Torres-Cisneros, GE (Torres-Cisneros, GE); Sanchez-Mondragon, JJ (Sanchez-Mondragon, JJ); Flores-Alvarado, G (Flores-Alvarado, G)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Optical interruptors based on total internal reflection of spatial solitons in saturable nonlinear interfaces
Fuente: REVISTA MEXICANA DE FISICA
Volumen: 47
Número: 3
Páginas: 264-270
Fecha de publicación: JUN 2001
Resumen: We study the reflection of one-dimensional spatial soliton at the nonlinear interface between a saturable type medium and linear medium. Our study makes emphasis on determining the physical conditions under which the beam reflected by the interface is still a spatial soliton. Depended the incidence angle we find,three critical regions for spatial solitons in the interface. We observed nonlinear Goos-Hanchen shift is determined if reflection angle are conserved. Finally, we present preliminar experimental results in SBN61:Ce of the total internal reflection of one dimensional beam.
Veces citado en la Colección principal de Web of Science: 0
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 0
ISSN: 0035-001X
Número de acceso: WOS:000169476800010

Registro 40 de 47
Por: Andrade-Lucio, JA (Andrade-Lucio, JA); Alvarado-Mendez, B (Alvarado-Mendez, B); Rojas-Laguna, R (Rojas-Laguna, R); Ibarra-Manzano, OG (Ibarra-Manzano, OG); Torres-Cisneros, M (Torres-Cisneros, M); Jaime-Rivas, R (Jaime-Rivas, R); Kuzin, EA (Kuzin, EA)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Optical switching by coherent collision of spatial solitons
Fuente: ELECTRONICS LETTERS
Volumen: 36
Número: 16
Páginas: 1403-1405
DOI: 10.1049/el:20001018
Fecha de publicación: AUG 3 2000
Resumen: The authors study experimentally the coherent collision of two one-dimensional spatial bright solitons in a photorefractive crystal. Depending on the relative phase of the solitons and their intersecting angle, effects such as fusion, energy exchange and soliton birth have been observed. The experimental and numerical results are in good agreement.
Veces citado en la Colección principal de Web of Science: 5
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 5
ISSN: 0013-5194
Número de acceso: WOS:000088762800048

Registro 41 de 47
Por: Kuzin, EA (Kuzin, EA); Beltran-Perez, G (Beltran-Perez, G); Basurto-Pensado, MA (Basurto-Pensado, MA); Rojas-Laguna, R (Rojas-Laguna, R); Andrade-Lucio, JA (Andrade-Lucio, JA); Torres-Cisneros, M (Torres-Cisneros, M); Alvarado-Mendez, E (Alvarado-Mendez, E)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Stimulated Raman scattering in a fiber with bending loss
Fuente: OPTICS COMMUNICATIONS
Volumen: 169
Número: 1-6
Páginas: 87-91
DOI: 10.1016/S0030-4018(99)00430-7
Fecha de publicación: OCT 1 1999
Resumen: Stimulated Raman scattering is investigated in a 100-m long single mode fiber with bend-induced loss which has a steep wavelength dependence. The wavelength dependent loss can be used to suppress the second Stokes conversion resulting in an increased first Stokes intensity. Our experiments with a Q-switch Nd:YAG laser produced a rectangular first Stokes pulse at the fiber output. (C) 1999 Published by Elsevier Science B.V. All rights reserved.
Veces citado en la Colección principal de Web of Science: 16
Veces citado en BIOSIS Citation Index: 0
Veces citado en Chinese Science Citation Database: 0
Veces citado en Russian Science Citation Index: 0
Veces citado en SciELO Citation Index: 0
Total de veces citado: 16
ISSN: 0030-4018
Número de acceso: WOS:000083095000014

Registro 42 de 47
Por: Alvarado-Mendez, E (Alvarado-Mendez, E); Torres-Cisneros, GE (Torres-Cisneros, GE); Torres-Cisneros, M (Torres-Cisneros, M); Sanchez-Mondragon, JJ (Sanchez-Mondragon, JJ); Vysloukh, V (Vysloukh, V)
Identificadores de autores:

Autor	Número de ResearcherID	Número ORCID
Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: Internal reflection of one-dimensional bright spatial solitons
Fuente: OPTICAL AND QUANTUM ELECTRONICS
Volumen: 30
Número: 7-10
Páginas: 687-696
DOI: 10.1023/A:1006915616104
Fecha de publicación: OCT 1998
Resumen: We study the reflection of one-dimensional spatial solitons at the non-linear interface between a Kerr-type medium and a linear medium. Our study places emphasis on determining the physical conditions under which the beam reflected by the non-linear interface is still a spatial soliton. We find that for small angles of incidence an elastic internal reflection takes place, in the sense that the reflected soliton is essentially the same as the incident one. For incidence angles near a critical angle, the reflected soliton becomes less intense and its reflection angle is smaller than the angle of incidence. Finally, for spatial solitons with input angles well above the critical angle, the main part of the energy is transmitted to the linear medium, and no soliton is internally reflected.
Veces citado en la Colección principal de Web of Science: 9
Veces citado en BIOSIS Citation Index: 0
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Registro 43 de 47
Por: TORRESCISNEROS, GE (TORRESCISNEROS, GE); SANCHEZMONDRAGON, JJ (SANCHEZMONDRAGON, JJ); ITURBECASTILLO, MD (ITURBECASTILLO, MD); GARCIAQUIRINO, GS (GARCIAQUIRINO, GS); TORRESCISNEROS, M (TORRESCISNEROS, M); TREVINOPALACIOS, C (TREVINOPALACIOS, C)
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Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: OPTICAL WAVE-GUIDES GENERATED BY SPATIAL SOLITONS
Fuente: REVISTA MEXICANA DE FISICA
Volumen: 41
Número: 5
Páginas: 662-694
Fecha de publicación: OCT 1995

Resumen: We present a detailed review of the recently discovered optical waveguide properties of spatial solitons; a subject of growing interest in our country. The aim of this work is the study of the practical considerations needed to produce optical spatial solitons, as well as the description of the potential applications of spatial solitons in the development of all-optical logic gates and interconnecting devices. The review is supported by numerical simulations and experimental results carried out in nonlinear dye solutions and in photorefractive crystals.

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Registro 44 de 47

Por: ITURBECASTILLO, MD (ITURBECASTILLO, MD); TORRESCISNEROS, M (TORRESCISNEROS, M); SANCHEZMONDRAGON, JJ (SANCHEZMONDRAGON, JJ); CHAVEZCERDA, S (CHAVEZCERDA, S); STEPANOV, SI (STEPANOV, SI); VYSLOUKH, VA (VYSLOUKH, VA); TORRESCISNEROS, GE (TORRESCISNEROS, GE)

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Título: EXPERIMENTAL-EVIDENCE OF MODULATION INSTABILITY IN A PHOTOREFRACTIVE BI12TIO20 CRYSTAL

Fuente: OPTICS LETTERS

Volumen: 20

Número: 18

Páginas: 1853-1855

DOI: 10.1364/OL.20.001853

Fecha de publicación: SEP 15 1995

Resumen: We present experimental results on the propagation of an interference pattern of two He-Ne laser beams of unequal amplitudes through a photorefractive Bi12TiO20 crystal in the presence of drift nonlinearity. The phenomenon that we have observed is the focusing of the fringes as the nonlinearity of the crystal is increased. We show that such a phenomenon can be quantitatively interpreted in the framework of modulation instability theory. (C) 1995 Optical Society of America

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Registro 45 de 47

Por: VYSLOUKH, VA (VYSLOUKH, VA); TORRESCISNEROS, M (TORRESCISNEROS, M); SANCHEZMONDRAGON, JJ (SANCHEZMONDRAGON, JJ); MARTIPANAMENO, E (MARTIPANAMENO, E); TORRESCISNEROS, GE (TORRESCISNEROS, GE)

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Título: SOLITON-SOLUTIONS IN OPTICAL-FIBER DEVICES POSSESSING PERIODICAL HIGH-GAIN PROFILES

Fuente: REVISTA MEXICANA DE FISICA

Volumen: 41

Número: 1

Páginas: 72-84

Fecha de publicación: FEB 1995

Resumen: We study the behavior of optical pulses propagating in optical fibers possessing periodical gain profiles which do not satisfy the adiabatic amplification conditions. We demonstrate that it is possible to obtain first and higher order soliton solutions, and we predict their final asymptotic amplitudes and widths as well as some of their transient characteristics. These predictions agree with results of numerical simulations and allow to describe the global behavior of optical fiber devices that use periodical gain profiles, such as high gain doped fiber amplifiers.

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Registro 46 de 47

Por: RAMOSGARCIA, R (RAMOSGARCIA, R); SANCHEZMONDRAGON, JJ (SANCHEZMONDRAGON, JJ); TORRESCISNEROS, M (TORRESCISNEROS, M); TORRESCISNEROS, GE (TORRESCISNEROS, GE)

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Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: RESONANT PULSE-PROPAGATION IN THE PRESENCE OF DIFFUSION EFFECTS

Fuente: REVISTA MEXICANA DE FISICA

Volumen: 39

Número: 4

Páginas: 569-580

Fecha de publicación: AUG 1993

Resumen: We present a study on the effects of the diffusion of the atomic inversion in the coherent resonant pulse propagation. We present the solution of the corresponding Maxwell-Bloch equations obtained by a perturbative technique based in the McCall and Hahn area theorem. The solutions correspond to a modification of the npi stationary trajectories of such a theorem. The new stability points depend on the radius of the field wavefront and also on the diffusion coefficient. The McCall y Hahn's results for the transversal averaged area of the same pulse in the presence of absorption are reproduced at the center of a gaussian wavefront propagating in the presence of diffusion. The asintotic perfil accounts for the experimental results already explained using rate equations.

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Registro 47 de 47

Por: TORRESCISNEROS, GE (TORRESCISNEROS, GE); SANCHEZMONDRAGON, JJ (SANCHEZMONDRAGON, JJ); NABIEV, RF (NABIEV, RF); RAMOSGARCIA, R (RAMOSGARCIA, R); TORRESCISNEROS, M (TORRESCISNEROS, M); DIAZTORRES, LA (DIAZTORRES, LA)

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Torres-Cisneros, Miguel	B-4969-2014	0000-0002-2408-4945

Título: LIMITS TO THE ADIABATICAL COHERENT AMPLIFICATION OF SOLUTIONS IN ACTIVE DOPED OPTICAL FIBERS

Fuente: REVISTA MEXICANA DE FISICA

Volumen: 38

Número: 5

Páginas: 691-700

Fecha de publicación: OCT 1992

Resumen: We make a numerical study of the initial stage of the coherent soliton adiabatic amplification in active doped optical fibers in the general case of finite inhomogeneous decay time. We are interested in adiabatic amplification because it can recover and reshape the original input pulse, in opposition to fast amplification. Our results show that it is possible to obtain closer adiabatic amplification of optical solitons by increasing the width of the inhomogeneous atomic line, as expected, and define its limits for finite linewidth. For short enough propagation distances, we give an analytical description of the amplification process based on the assumption that the general dynamics can be separated into two parts: the pure amplification due to the resonant atoms and the pure self-phase modulation due to the fiber itself. Such description is useful for obtaining a quantitative estimation of the propagation distance after which the amplification process will deviate from the adiabaticity condition. In other words, it may represent the physical length of the amplifier, avoiding lay in the fast amplification region.

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