

Stanford

Michel Digonnet

Professor (Research) of Applied Physics

Bio

ACADEMIC APPOINTMENTS

- Professor (Research), Applied Physics

Teaching

COURSES

2023-24

- Optics and Electronics Seminar: APPPHYS 483 (Aut)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Chun Wei Chen

Doctoral Dissertation Advisor (AC)

Hongxiang Jia, Adele Zawada

Publications

PUBLICATIONS

- **Predictive comparison of anti-Stokes fluorescence cooling in oxide and non-oxide fiber hosts doped with Er³⁺ or Yb³⁺**

Balliu, E., Thontakudi, A., Knall, J. M., Digonnet, M. F., Seletskiy, D. V., Epstein, R. I., SheikBahae, M.
SPIE-INT SOC OPTICAL ENGINEERING.2019

- **Experimental investigations of spectroscopy and anti-Stokes fluorescence cooling in Yb-doped silicate fibers**

Knall, J. M., Arora, A., Dragic, P., Ballato, J., Cavillon, M., Hawkins, T., Jiang, S., Luo, T., Bernier, M., Digonnet, M., Seletskiy, D. V., Epstein, R. I., SheikBahae, et al
SPIE-INT SOC OPTICAL ENGINEERING.2019

- **High-resolution slow-light fiber Bragg grating temperature sensor with phase-sensitive detection** *OPTICS LETTERS*

Arora, A., Esmaelpour, M., Bernier, M., Digonnet, M. F.
2018; 43 (14): 3337–40

- **Double-Ring Resonator Optical Gyroscopes** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Grant, M. J., Digonnet, M. F.
2018; 36 (13): 2708–15

- **In-situ fiber temperature sensor for anti-Stokes cooling measurements in doped fibers**

Arora, A., Esmaelpour, M., Knall, J. M., Freniere, J., Boilard, T., Bernier, M., Digonnet, M. F., Epstein, R. I., Seletskiy, D. V., SheikBahae, M.
SPIE-INT SOC OPTICAL ENGINEERING.2018

- **Double-ring optical resonator gyroscopes using 3x3 fiber couplers**

Grant, M. J., Digonnet, M. F., Shahriar, S. M., Scheuer, J.

SPIE-INT SOC OPTICAL ENGINEERING.2018

● **Model of anti-Stokes cooling in a Yb-doped fiber**

Knall, J., Esmaeelpour, M., Digonnet, M., Epstein, R. I., Seletskiy, D. V., SheikBahae, M.
SPIE-INT SOC OPTICAL ENGINEERING.2018

● **Photonics sensing at the thermodynamic limit** *OPTICS LETTERS*

Skolianos, G., Arora, A., Bernier, M., Digonnet, M. J.
2017; 42 (10): 2018-2021

● **Aircraft-navigation-grade laser-driven FOG with Gaussian-noise phase modulation** *OPTICS LETTERS*

Chamoun, J., Digonnet, M. J.
2017; 42 (8): 1600-1603

● **Observation of thermodynamic phase noise using a slow-light resonance in a fiber Bragg grating**

Skolianos, G., Arora, A., Bernier, M., Digonnet, M., Shahriar, S. M., Scheuer, J.
SPIE-INT SOC OPTICAL ENGINEERING.2017

● **Pseudo-random-bit-sequence phase modulation for reduced errors in a fiber optic gyroscope** *OPTICS LETTERS*

Chamoun, J., Digonnet, M. J.
2016; 41 (24): 5664-5667

● **Slow light in fiber Bragg gratings and its applications** *JOURNAL OF PHYSICS D-APPLIED PHYSICS*

Skolianos, G., Arora, A., Bernier, M., Digonnet, M.
2016; 49 (46)

● **Observation of Unique Coupling-Independent Resonances in Coupled Spiral Resonators** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Guo, W., Digonnet, M. J.
2016; 34 (13): 3087-3093

● **Haltere-Like Optoelectromechanical Gyroscope** *IEEE SENSORS JOURNAL*

Kilic, O., Ra, H., Akkaya, O. C., Digonnet, M. J., Solgaard, O.
2016; 16 (11): 4274-4280

● **Photonic-Crystal-Based Fiber Hydrophone With Sub-100 mu Pa/root Hz Pressure Resolution** *IEEE PHOTONICS TECHNOLOGY LETTERS*

Jan, C., Jo, W., Digonnet, M. J., Solgaard, O.
2016; 28 (2): 123-126

● **Highly Sensitive Phase-Front-Modulation Fiber Acoustic Sensor** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Jo, W., Kilic, O., Digonnet, M. J.
2015; 33 (20)

● **Fiber-feedback optical parametric oscillator for half-harmonic generation of sub-100-fs frequency combs around 2??μm.** *Optics letters*

Ingold, K. A., Marandi, A., Digonnet, M. J., Byer, R. L.
2015; 40 (18): 4368-4371

● **High Purcell factor in fiber Bragg gratings utilizing the fundamental slow-light mode** *OPTICS LETTERS*

Skolianos, G., Arora, A., Bernier, M., Digonnet, M. J.
2015; 40 (15): 3440-3443

● **Noise and Bias Error Due to Polarization Coupling in a Fiber Optic Gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Chamoun, J. N., Digonnet, M. J.
2015; 33 (13): 2839-2847

● **Effect of periodic modulation of the coupling ratios on the sensitivity of a CROW gyroscope** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*

Aghaie, K. Z., Digonnet, M. J.
2015; 32 (6): 1120-1124

● **Slowing down light to 300 km/s in a deuterium-loaded fiber Bragg grating** *OPTICS LETTERS*

Skolianos, G., Arora, A., Bernier, M., Digonnet, M. J.

2015; 40 (7): 1524-1527

- **Sensitivity limit of a coupled-resonator optical waveguide gyroscope with separate input/output coupling** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*
Aghaie, K. Z., Digonnet, M. J.
2015; 32 (2): 339-344
- **Strong Slow-Light Resonances in Apodized Deuterium-Loaded Femtosecond Fiber Bragg Gratings** *Conference on Slow Light, Fast Light, and Opto-Atomic Precision Metrology VIII*
Skolianos, G., Arora, A., Bernier, M., Digonnet, M. J.
SPIE-INT SOC OPTICAL ENGINEERING.2015
- **Rotation sensitivity analysis of a two-dimensional array of coupled resonators** *Conference on Slow Light, Fast Light, and Opto-Atomic Precision Metrology VIII*
Aghaie, K. Z., Vigneron, P., Digonnet, M. J.
SPIE-INT SOC OPTICAL ENGINEERING.2015
- **Advances in 2-mu m Tm-doped mode-locked fiber lasers** *OPTICAL FIBER TECHNOLOGY*
Rudy, C. W., Digonnet, M. J., Byer, R. L.
2014; 20 (6): 642-649
- **Coupled Spiral Interferometer Gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Guo, W., Digonnet, M. J.
2014; 32 (22): 4360-4364
- **Coupled Spiral Interferometers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Guo, W., Digonnet, M. J.
2014; 32 (21): 4162-4168
- **Piconewton force measurement using a nanometric photonic crystal diaphragm** *OPTICS LETTERS*
Jo, W., Digonnet, M. J.
2014; 39 (15): 4533-4536
- **Thermal Sensitivity of the Birefringence of Air-Core Fibers and Implications for the RFOG** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Zhao, X., Louveau, J., Chamoun, J., Digonnet, M. J.
2014; 32 (14)
- **Observation of similar to 20 ns group delay in a low-loss apodized fiber Bragg grating** *OPTICS LETTERS*
Skolianos, G., Bernier, M., Vallee, R., Digonnet, M. J.
2014; 39 (13): 3978-3981
- **Thermal phase noise in Fabry-Perot resonators and fiber Bragg gratings** *PHYSICAL REVIEW A*
Skolianos, G., Wen, H., Digonnet, M. J.
2014; 89 (3)
- **Sensitivity analysis of linear CROW gyroscopes and comparison to a single-resonator gyroscope** *Conference on Advances in Slow and Fast Light VII*
Zamani-Aghaie, K., Digonnet, M. J.
SPIE-INT SOC OPTICAL ENGINEERING.2014
- **Low noise and low drift in a laser-driven fiber optic gyroscope with a 1-km coil** *23rd International Conference on Optical Fibre Sensors*
Chamoun, J. N., Evans, A., Mosca, F. A., Digonnet, M. J.
SPIE-INT SOC OPTICAL ENGINEERING.2014
- **Miniature fiber acoustic sensors using a photonic-crystal membrane** *OPTICAL FIBER TECHNOLOGY*
Jo, W., Akkaya, O. C., Solgaard, O., Digonnet, M. J.
2013; 19 (6): 785-792
- **Time-Division-Multiplexed Interferometric Sensor Arrays** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Akkaya, O. C., Digonnet, M. J., Kino, G. S., Solgaard, O.
2013; 31 (16): 3001-3008

- **Modeling Coherent Backscattering Errors in Fiber Optic Gyroscopes for Sources of Arbitrary Line Width** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Lloyd, S. W., Digonnet, M. J., Fan, S.
2013; 31 (13): 2070-2078
- **Experimental Observation of Low Noise and Low Drift in a Laser-Driven Fiber Optic Gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Lloyd, S. W., Fan, S., Digonnet, M. J.
2013; 31 (13): 2079-2085
- **Slow-Light Fiber-Bragg-Grating Strain Sensor With a 280-femtostrain/root Hz Resolution** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Wen, H., Skolianos, G., Fan, S., Bernier, M., Vallee, R., Digonnet, M. J.
2013; 31 (11): 1804-1808
- **Amplified 2-mu m Thulium-Doped All-Fiber Mode-Locked Figure-Eight Laser** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Rudy, C. W., Urbanek, K. E., Digonnet, M. J., Byer, R. L.
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- **Experimental Assessment of the Accuracy of an Advanced Photonic-Bandgap-Fiber Model** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Aghaie, K. Z., Digonnet, M. J., Fan, S.
2013; 31 (7): 1015-1022
- **Modeling Loss and Backscattering in a Photonic-Bandgap Fiber Using Strong Perturbation** *Conference on Photonic and Phononic Properties of Engineered Nanostructures III*
Aghaie, K. Z., Digonnet, M. J., Fan, S.
SPIE-INT SOC OPTICAL ENGINEERING.2013
- **Compact Coupled Resonators for Slow-Light Sensor Applications** *Conference on Advances in Slow and Fast Light VI*
Guo, W., Digonnet, M.
SPIE-INT SOC OPTICAL ENGINEERING.2013
- **Modeling and Demonstration of Thermally Stable High-Sensitivity Reproducible Acoustic Sensors** *JOURNAL OF MICROELECTROMECHANICAL SYSTEMS*
Akkaya, O. C., Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.
2012; 21 (6): 1347-1356
- **Resonant Fiber Optic Gyroscope Using an Air-Core Fiber** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Terrel, M. A., Digonnet, M. J., Fan, S.
2012; 30 (7): 931-937
- **Sensing With Slow Light in Fiber Bragg Gratings** *IEEE SENSORS JOURNAL*
Wen, H., Terrel, M., Fan, S., Digonnet, M.
2012; 12 (1): 156-163
- **Improving fiber optic gyroscope performance using a laser and photonic-bandgap fiber** *22nd International Conference on Optical Fiber Sensors (OFS)*
Lloyd, S., Fan, S., Digonnet, M. J.
SPIE-INT SOC OPTICAL ENGINEERING.2012
- **Slow Light in Fiber Sensors** *Conference on Advances in Slow and Fast Light V*
Digonnet, M. J., Wen, H., Terrel, M. A., Fan, S.
SPIE-INT SOC OPTICAL ENGINEERING.2012
- **Rotation Sensitivity of Gyroscopes Based on Distributed-Coupling Loop Resonators** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Digonnet, M. J.
2011; 29 (20): 3048-3053
- **Miniature photonic-crystal hydrophone optimized for ocean acoustics** *JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA*
Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.
2011; 129 (4): 1837-1850
- **Slow Light in Fiber Bragg Gratings** *Conference on Advances in Slow and Fast Light IV*
Wen, H., Skolianos, G., Fan, S., Digonnet, M.

SPIE-INT SOC OPTICAL ENGINEERING.2011

- **Tactical-grade interferometric fiber optic gyroscope driven with a narrow-linewidth laser** *21st International Conference on Optical Fiber Sensors*
Lloyd, S. W., Digonnet, M. J., Fan, S.

SPIE-INT SOC OPTICAL ENGINEERING.2011

- **Near shot-noise-limited performance of an open-loop laser-driven interferometric fiber optic gyroscope** *21st International Conference on Optical Fiber Sensors*
Lloyd, S. W., Digonnet, M. J., Fan, S.

SPIE-INT SOC OPTICAL ENGINEERING.2011

- **Fabry-Perot Fiber Sensors with Reproducible Displacement Sensitivities** *16th International Conference on Optical MEMS and Nanophotonics (OMN)*
Akkaya, O. C., Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.

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- **Optimization of the splice loss between photonic-bandgap fibers and conventional single-mode fibers** *OPTICS LETTERS*
Aghaie, K. Z., Digonnet, M. J., Fan, S.
2010; 35 (12): 1938-1940

- **Birefringence Analysis of Photonic-Bandgap Fibers Using the Hexagonal Yee's Cell** *IEEE JOURNAL OF QUANTUM ELECTRONICS*
Aghaie, K. Z., Fan, S., Digonnet, M. J.
2010; 46 (6): 920-930

- **Measurement of reduced backscattering noise in laser-driven fiber optic gyroscopes** *OPTICS LETTERS*
Lloyd, S. W., Dangui, V., Digonnet, M. J., Fan, S., Kino, G. S.
2010; 35 (2): 121-123

- **Coupled resonator gyroscopes: what works and what does not** *Conference on Advances in Slow and Fast Light III*
Terrel, M. A., Digonnet, M. J., Fan, S.
SPIE-INT SOC OPTICAL ENGINEERING.2010

- **High-Sensitivity Thermally Stable Acoustic Fiber Sensor** *2010 IEEE Sensors Conference*
Akkaya, O. C., Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.
IEEE.2010: 1148–1151

- **Asymmetrical Spectral Response in Fiber Fabry-Perot Interferometers (vol 27, pg 5648, 2009)** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.
2010; 28 (1): 188-188

- **Asymmetrical Spectral Response in Fiber Fabry-Perot Interferometers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Kilic, O., Digonnet, M. J., Kino, G. S., Solgaard, O.
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- **Ring-coupled Mach-Zehnder interferometer optimized for sensing** *APPLIED OPTICS*
Terrel, M., Digonnet, M. J., Fan, S.
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- **Performance comparison of slow-light coupled-resonator optical gyroscopes** *LASER & PHOTONICS REVIEWS*
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- **Modeling of the Propagation Loss and Backscattering in Air-Core Photonic-Bandgap Fibers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Dangui, V., Digonnet, M. J., Kino, G. S.
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- **Classification of the Core Modes of Hollow-Core Photonic-Bandgap Fibers** *IEEE JOURNAL OF QUANTUM ELECTRONICS*
Aghaie, K. Z., Dangui, V., Digonnet, M. J., Fan, S., Kino, G. S.
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- **Measurements of the Birefringence and Verdet Constant in an Air-Core Fiber** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Wen, H., Terrel, M. A., Kim, H. K., Digonnet, M. J., Fan, S.

2009; 27 (15): 3194-3201

● **Laser-driven photonic-bandgap fiber optic gyroscope with negligible Kerr-induced drift** *OPTICS LETTERS*

Dangui, V., Digonnet, M. J., Kino, G. S.

2009; 34 (7): 875-877

● **Performance Limitation of a Coupled Resonant Optical Waveguide Gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Terrel, M. A., Digonnet, M. J., Fan, S.

2009; 27 (1-4): 47-54

● **High-Power Yb³⁺-Doped Phosphate Fiber Amplifier** *IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS*

Lee, Y., Digonnet, M. J., Sinha, S., Urbanek, K. E., Byer, R. L., Jiang, S.

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● **Coupled resonator optical waveguide sensors: sensitivity and the role of slow light** *Conference on Fiber Optic Sensors and Applications VI*

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SPIE-INT SOC OPTICAL ENGINEERING.2009

● **Room-Temperature Stable Generation of 19 Watts of Single-Frequency 532-nm Radiation in a Periodically Poled Lithium Tantalate Crystal** *JOURNAL OF LIGHTWAVE TECHNOLOGY*

Sinha, S., Hum, D. S., Urbanek, K. E., Lee, Y., Digonnet, M. J., Fejer, M. M., Byer, R. L.

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● **Controlling uncoupled resonances in photonic crystals through breaking the mirror symmetry** *OPTICS EXPRESS*

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● **Self-phase-locked degenerate femtosecond optical parametric oscillator** *OPTICS LETTERS*

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● **Measurement of high photodarkening resistance in heavily Yb³⁺-doped phosphate fibres** *ELECTRONICS LETTERS*

Lee, Y. W., Sinha, S., Digonnet, M. J., Byer, R. L., Jiang, S.

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● **10-Watt, Single-mode, Single-frequency, 1.03 μm Yb³⁺-doped Phosphate Fiber Amplifier** *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference (CLEO/QELS 2008)*

Lee, Y. W., Sinha, S., Digonnet, M. J., Byer, R. L., Jiang, S.

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● **Laser-driven fiber optic gyroscope with reduced noise** *19th International Conference on Optical Fibre Sensors*

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● **Photonic-crystal-diaphragm-based fiber-tip hydrophone optimized for ocean acoustics** *19th International Conference on Optical Fibre Sensors*

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● **External fibre Fabry-Perot acoustic sensor based on a photonic-crystal mirror** *18th International Conference on Optical Fibre Sensors*

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● **Sensitivity and stability of an air-core fibre-optic gyroscope** *18th International Conference on Optical Fibre Sensors*

Digonnet, M., Blin, S., Kim, H. K., Dangui, V., Kino, G.

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● **Noise analysis of an air-core fiber optic gyroscope** *IEEE PHOTONICS TECHNOLOGY LETTERS*

Blin, S., Digonnet, M. J., Kino, G. S.

2007; 19 (17-20): 1520-1522

● **Linearly polarized, 3.35 W narrow-linewidth, 1150 nm fiber master oscillator power amplifier for frequency doubling to the yellow** *OPTICS LETTERS*

- Sinha, S., Urbanek, K. E., Hum, D. S., Digonnet, M. J., Fejer, M. M., Byer, R. L.
2007; 32 (11): 1530-1532
- **Polarization controller for hollow-core fiber** *OPTICS LETTERS*
Terrel, M., Digonnet, M. J., Fan, S.
2007; 32 (11): 1524-1526
 - **Determination of the mode reflection coefficient in air-core photonic bandgap fibers** *OPTICS EXPRESS*
Dangui, V., Digonnet, M. J., Kino, G. S.
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 - **Observation of mode coupling in bitapered air-core photonic bandgap fibers** *OPTICS COMMUNICATIONS*
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2007; 25 (3): 861-865
 - **Quasi-phase-matched grating characterization using minimum-phase functions** *OPTICS COMMUNICATIONS*
Ozcan, A., Digonnet, M. J., Kino, G. S.
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 - **Measurement of the stimulated Brillouin scattering gain coefficient of a phosphate fiber** *Conference on Optical Components and Materials IV*
Lee, Y. W., Urbanek, K. E., Digonnet, M. J., Byer, R. L., Jiang, S.
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 - **2.6-watt average-power mode-locked ceramic Nd : YAG laser** *Conference on Optical Components and Materials IV*
Wisdom, J. A., Hum, D. S., Digonnet, M. J., Ikesue, A., Fejer, M. M., Byer, R. L.
SPIE-INT SOC OPTICAL ENGINEERING.2007
 - **20 W single-mode Yb³⁺-doped phosphate fiber laser** *OPTICS LETTERS*
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 - **Silicon-nanocrystal-coated silica microsphere thermooptical switch** *IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS*
Tewary, A., Digonnet, M. J., Sung, J., Shin, J. H., Brongersma, M. L.
2006; 12 (6): 1476-1479
 - **Air-core photonic-bandgap fiber-optic gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Kim, H. K., Digonnet, M. J., Kino, G. S.
2006; 24 (8): 3169-3174
 - **Pickup suppression in Sagnac-based fiber-optic acoustic sensor array** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
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 - **Modeling and measurement of the acoustic lead sensitivity in Sagnac fiber sensor arrays** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Digonnet, M. J., Bishop, M., Kino, G. S.
2006; 24 (7): 2877-2888
 - **Minimum-phase-function-based processing in frequency-domain optical coherence tomography systems** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION*
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2006; 23 (7): 1669-1677
 - **Bending-induced birefringence of optical fiber cladding modes** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
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- **A fast and accurate numerical tool to model the modal properties of photonic-bandgap fibers** *OPTICS EXPRESS*
Dangui, V., Digonnet, M. J., Kino, G. S.
2006; 14 (7): 2979-2993
- **A new iterative technique to characterize and design transmission fiber Bragg gratings** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Ozcan, A., Digonnet, M. J., Lablonde, L., Pureur, D., Kino, G. S.
2006; 24 (4): 1913-1921
- **Characterization of fiber Bragg gratings using spectral interferometry based on minimum-phase functions** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Ozcan, A., Digonnet, M. J., Kino, G. S.
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- **Efficient yellow-light generation by frequency doubling a narrow-linewidth 1150 nm ytterbium fiber oscillator** *OPTICS LETTERS*
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- **Characterization of fiber Bragg gratings using spectral interferometry based on minimum-phase functions** *Conference on Optical Components and Materials III*
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- **Frequency-domain optical coherence tomography based on minimum-phase functions** *Conference on Coherence Domain Optical Methods and Optical Coherence Tomography in Biomedicine X*
Ozcan, A., Digonnet, M. J., Kino, G. S.
SPIE-INT SOC OPTICAL ENGINEERING.2006
- **Silicon-nanocrystal-coated silica microsphere then-nooptical switch** *Conference on Silicon Photonics*
Tewary, A., Digonnet, M. J., Brongersma, M. L.
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- **Measurement of the nonlinear coefficient profile of quasi-phase-matched gratings using iterative error-reduction algorithms** *Conference on Nonlinear Frequency Generation and Conversion - Materials, Devices and Applications V*
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- **Understanding air-core photonic-bandgap fibers: Analogy to conventional fibers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Digonnet, M. J., Kim, H. K., Kino, G. S., Fan, S. H.
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