

# Stanford

---

## Michel Digonnet

Professor (Research) of Applied Physics

### Bio

---

#### ACADEMIC APPOINTMENTS

- Professor (Research), Applied Physics

### Teaching

---

#### STANFORD ADVISEES

##### Doctoral Dissertation Reader (AC)

Chris Sarabalis, Stephen Wolf

##### Postdoctoral Faculty Sponsor

Pierre Baptiste Vigneron

##### Doctoral Dissertation Advisor (AC)

Matt Grant, Behrad Habib Afshar, Jenny Knall, Therice Morris

##### Doctoral (Program)

Grace Woods

### Publications

---

#### PUBLICATIONS

- **Predictive comparison of anti-Stokes fluorescence cooling in oxide and non-oxide fiber hosts doped with Er<sup>3+</sup> or Yb<sup>3+</sup>**  
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., Esmacelpour, 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., Esmacelpour, 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., Esmaelpour, 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
  - **Haltre-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  $\mu\text{Pa}/\sqrt{\text{Hz}}$  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  $2\mu\text{m}$ .** *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.  
2013; 31 (11): 1809-1812
  - **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.  
IEEE.2011: 191–192
- **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.  
2009; 27 (24): 5648-5656
- **Ring-coupled Mach-Zehnder interferometer optimized for sensing** *APPLIED OPTICS*  
Terrel, M., Digonnet, M. J., Fan, S.  
2009; 48 (26): 4874-4879
- **Performance comparison of slow-light coupled-resonator optical gyroscopes** *LASER & PHOTONICS REVIEWS*  
Terrel, M., Digonnet, M. J., Fan, S.  
2009; 3 (5): 452-465
- **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.  
2009; 27 (17): 3783-3789
- **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.  
2009; 45 (9): 1192-1200

- **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 Yb<sup>3+</sup>-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.  
2009; 15 (1): 93-102
- **Coupled resonator optical waveguide sensors: sensitivity and the role of slow light** *Conference on Fiber Optic Sensors and Applications VI*  
Terrel, M. A., Digonnet, M. J., Fan, S.  
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.  
2008; 26 (21-24): 3866-3871
- **Controlling uncoupled resonances in photonic crystals through breaking the mirror symmetry** *OPTICS EXPRESS*  
Kilic, O., Digonnet, M., Kino, G., Solgaard, O.  
2008; 16 (17): 13090-13103
- **Self-phase-locked degenerate femtosecond optical parametric oscillator** *OPTICS LETTERS*  
Wong, S. T., Plettner, T., Vodopyanov, K. L., Urbanek, K., Digonnet, M., Byer, R. L.  
2008; 33 (16): 1896-1898
- **Measurement of high photodarkening resistance in heavily Yb<sup>3+</sup>-doped phosphate fibres** *ELECTRONICS LETTERS*  
Lee, Y. W., Sinha, S., Digonnet, M. J., Byer, R. L., Jiang, S.  
2008; 44 (1): 14-15
- **10-Watt, Single-mode, Single-frequency, 1.03  $\mu$ m Yb<sup>3+</sup>-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.  
IEEE.2008: 230-231
- **Laser-driven fiber optic gyroscope with reduced noise** *19th International Conference on Optical Fibre Sensors*  
Dangui, V., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2008
- **Photonic-crystal-diaphragm-based fiber-tip hydrophone optimized for ocean acoustics** *19th International Conference on Optical Fibre Sensors*  
Kilic, O., Digonnet, M., Kino, G., Solgaard, O.  
SPIE-INT SOC OPTICAL ENGINEERING.2008
- **External fibre Fabry-Perot acoustic sensor based on a photonic-crystal mirror** *18th International Conference on Optical Fibre Sensors*  
Kilic, O., Digonnet, M., Kino, G., Solgaard, O.  
IOP PUBLISHING LTD.2007: 3049-54
- **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.  
IOP PUBLISHING LTD.2007: 3089-97
- **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.  
2007; 15 (9): 5342-5359
- **Observation of mode coupling in bitapered air-core photonic bandgap fibers** *OPTICS COMMUNICATIONS*  
Ozcan, A., Tewary, A., Digonnet, M. J., Kino, G. S.  
2007; 271 (2): 391-395
- **Reduced thermal sensitivity of a fiber-optic gyroscope using an air-core photonic-bandgap fiber** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Blin, S., Kim, H. K., Digonnet, M. J., Kino, G. S.  
2007; 25 (3): 861-865
- **Quasi-phase-matched grating characterization using minimum-phase functions** *OPTICS COMMUNICATIONS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2007; 269 (1): 199-205
- **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.  
SPIE-INT SOC OPTICAL ENGINEERING.2007
- **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 Yb<sup>3+</sup>-doped phosphate fiber laser** *OPTICS LETTERS*  
Lee, Y. W., Sinha, S., Digonnet, M. J., Byer, R. L., Jiang, S.  
2006; 31 (22): 3255-3257
- **Silicon-nanocrystal-coated silica microsphere thermo-optical 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*  
Blin, S., Bishop, M., Parameswaran, K., Digonnet, M. J., Kino, G. S.  
2006; 24 (7): 2889-2897
- **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*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2006; 23 (7): 1669-1677
- **Bending-induced birefringence of optical fiber cladding modes** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Block, U. L., Digonnet, M. J., Fejer, M. M., Dangui, V.

2006; 24 (6): 2336-2339

- **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.  
2006; 24 (4): 1739-1757
- **Efficient yellow-light generation by frequency doubling a narrow-linewidth 1150 nm ytterbium fiber oscillator** *OPTICS LETTERS*  
Sinha, S., Langrock, C., Digonnet, M. J., Fejer, M. M., Byer, R. L.  
2006; 31 (3): 347-349
- **Origin of apparent resonance mode splitting in bent long-period fiber gratings** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Block, U. L., Dangui, V., Digonnet, M. J., Fejer, M. M.  
2006; 24 (2): 1027-1034
- **Characterization of fiber Bragg gratings using spectral interferometry based on minimum-phase functions** *Conference on Optical Components and Materials III*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2006
- **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-noptical switch** *Conference on Silicon Photonics*  
Tewary, A., Digonnet, M. J., Brongersma, M. L.  
SPIE-INT SOC OPTICAL ENGINEERING.2006
- **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*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2006
- **Transmission properties of tapered air-core photonic bandgap fibers** *Conference on Active and Passive Optical Components for Communication VI*  
Ozcan, A., Tewary, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2006
- **A polarization controller for air-core photonic-bandgap fiber** *Conference on Optical Fiber Communications/National Fiber Optic Engineers Conference*  
Terrel, M., Digonnet, M., Fan, S.  
OPTICAL SOC AMERICA.2006: 681-683
- **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.  
2005; 23 (12): 4169-4177
- **Phase sensitivity to temperature of the fundamental mode in air-guiding photonic-bandgap fibers** *OPTICS EXPRESS*  
Dangui, V., Kim, H. K., Digonnet, M. J., Kino, G. S.  
2005; 13 (18): 6669-6684
- **Ultra-short pulse characterization using a reference laser pulse** *Conference on Laser Resonators and Beam Control VIII*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2005: 140-150



- **Thermally poled germanosilicate films with high secondorder nonlinearity** *Conference on Lasers and Electro-Optics (CLEO)*  
Ozcan, A., Digonnet, M. J., Kino, G. S., Ay, F., Aydinli, A.  
OPTICAL SOC AMERICA.2005: 2097–2099
- **Excitation of non-degenerate resonances through breaking of mirror symmetry in photonic crystal slabs** *Conference on Lasers and Electro-Optics (CLEO)*  
Kilic, O., Kim, S., Digonnet, M., Kino, G., Solgaard, O.  
OPTICAL SOC AMERICA.2005: 828–830
- **Dependence of the induced optical second-order nonlinearity profile of poled silica samples on poling conditions** *Conference on Optical Components and Materials II*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2005: 187–197
- **Detailed analysis of inverse Fourier transform techniques to uniquely infer second-order nonlinearity profile of thin films** *JOURNAL OF APPLIED PHYSICS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2005; 97 (1)
- **SIMBA: A new technique for ultrashort pulse characterization** *Digest of the LEOS Summer Topical Meeting*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
IEEE.2005: 215–216
- **Fiber-optic gyroscope using an air-core photonic-bandgap fiber** *17th International Conference on Optical Fibre Sensors*  
Kim, H. K., Dangui, V., Digonnet, M., Kino, G.  
SPIE-INT SOC OPTICAL ENGINEERING.2005: 198–201
- **Ultrabroadband single-mode long-period fiber gratings using high-order cladding modes** *JOURNAL OF APPLIED PHYSICS*  
Dangui, V., Digonnet, M. J., Kino, G. S.  
2004; 96 (11): 5987-5991
- **Characterization of thermally poled germanosilicate thin films** *OPTICS EXPRESS*  
Ozcan, A., Digonnet, M. J., Kino, G. S., Ay, F., Aydinli, A.  
2004; 12 (20): 4698-4708
- **Group delay recovery using iterative processing of amplitude of transmission spectra of fibre Bragg gratings** *ELECTRONICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2004; 40 (18): 1104-1106
- **Simulations of the effect of the core ring on surface and air-core modes in photonic bandgap fibers** *OPTICS EXPRESS*  
Kim, H. K., Digonnet, M. J., Kino, G. S., Shin, J. W., Fan, S. H.  
2004; 12 (15): 3436-3442
- **Iterative processing of second-order optical nonlinearity depth profiles** *OPTICS EXPRESS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2004; 12 (15): 3367-3376
- **Simple geometric criterion to predict the existence of surface modes in air-core photonic-bandgap fibers** *OPTICS EXPRESS*  
Digonnet, M. J., Kim, H. K., Shin, J., Fan, S. H., Kino, G. S.  
2004; 12 (9): 1864-1872
- **Designing air-core photonic-bandgap fibers free of surface modes** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Kim, H. K., Shin, J., Fan, S. H., Digonnet, M. J., Kino, G. S.  
2004; 40 (5): 551-556
- **Simplified inverse Fourier transform technique to measure optical nonlinearity profiles using reference sample** *ELECTRONICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2004; 40 (9): 551-552
- **Improved technique to determine second-order optical nonlinearity profiles using two different samples** *APPLIED PHYSICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.

2004; 84 (5): 681-683

- **Ceramic lasers: Ready for action** *PHOTONICS SPECTRA*  
Wisdom, J., Digonnet, M., Byer, R. L.  
2004; 38 (2): 50-?
- **Acoustic fiber sensor arrays** *2nd European Workshop on Optical Fibre Sensors*  
Digonnet, M. J., Vakoc, B. J., Hodgson, C. W., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2004: 39-50
- **Comparison of three inverse Fourier transform techniques to determine the second-order optical nonlinearity profile of thin films** *Conference Optics and Photonic Integrated Circuits*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2004: 304-310
- **Cylinder-assisted Maker-fringe technique to probe second-order optical nonlinearity profiles** *Conference on Optical Components and Materials*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.2004: 109-114
- **Demonstration of a folded Sagnac sensor array immune to polarization-induced signal fading** *APPLIED OPTICS*  
Vakoc, B. J., Digonnet, M. J., Kino, G. S.  
2003; 42 (36): 7132-7136
- **Cylinder-assisted maker-fringe technique** *ELECTRONICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2003; 39 (25): 1834-1836
- **Er-doped superfluorescent fiber source with a +/- 0.5-ppm long-term mean-wavelength stability** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Park, H. G., Digonnet, M., Kino, G.  
2003; 21 (12): 3427-3433
- **Inverse Fourier transform technique to determine second-order optical nonlinearity spatial profiles (vol 82, pg 1362, 2003)** *APPLIED PHYSICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2003; 83 (8): 1679-1679
- **Inverse Fourier transform technique to determine second-order optical nonlinearity spatial profiles** *APPLIED PHYSICS LETTERS*  
Ozcan, A., Digonnet, M. J., Kino, G. S.  
2003; 82 (9): 1362-1364
- **Fundamental limitations of the McCumber relation applied to Er-doped silica and other amorphous-host lasers** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Digonnet, M. J., Murphy-Chutorian, E., Falquier, D. G.  
2002; 38 (12): 1629-1637
- **Polarization-independent mechanically induced long-period fiber gratings** *Conference on Optical Devices for Fiber Communication III*  
Block, U. L., Ozcan, A., Digonnet, M. J., Fejer, M. M.  
SPIE-INT SOC OPTICAL ENGINEERING.2002: 72-76
- **Passive WDM channel power equalization with cascaded nonlinear amplifying loop mirrors** *Conference on Optical Devices for Fiber Communication III*  
Block, U. L., Vakoc, B. J., Digonnet, M. J., Fejer, M. M.  
SPIE-INT SOC OPTICAL ENGINEERING.2002: 52-57
- **Feature section on fiber lasers and amplifiers** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Digonnet, M. J.  
2001; 37 (9): 1109-1109
- **Measurement of the dc Kerr and electrostrictive phase modulation in silica** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*  
Liu, A. C., Digonnet, M. J., Kino, G. S.  
2001; 18 (2): 187-194
- **Measurement of the electrostrictive constants of silica and their impact on poled silica devices** *Conference on Optical Devices for Fiber Communication II*

- 
- Liu, A. C., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOCIETY OPTICAL ENGINEERING.2001: 119–128
- **A depolarized Er-doped superfluorescent fiber source with improved long-term polarization stability** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
Falquier, D. G., Digonnet, M. J., Shaw, H. J.  
2001; 13 (1): 25-27
  - **A polarization-based folded Sagnac fiber-optic sensor array for acoustic waves** *Conference on Fiber Optic Sensor Technology and Applications*  
Kino, G. S., Vakoc, B., Digonnet, M. J.  
SPIE-INT SOC OPTICAL ENGINEERING.2001: 336–345
  - **A polarization-stable Er-doped superfluorescent fiber source including a Faraday rotator mirror** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
Falquier, D. G., Digonnet, M. J., Shaw, H. J.  
2000; 12 (11): 1465-1467
  - **A folded configuration of a fiber Sagnac-based sensor array** *OPTICAL FIBER TECHNOLOGY*  
Vakoc, B. J., Digonnet, M. J., Kino, G. S.  
2000; 6 (4): 388-399
  - **Tunable mechanically induced long-period fiber gratings** *OPTICS LETTERS*  
Savin, S., Digonnet, M. J., Kino, G. S., Shaw, H. J.  
2000; 25 (10): 710-712
  - **Improved nonlinear coefficient (0.7 pm/V) in silica thermally poled at high voltage and temperature** *ELECTRONICS LETTERS*  
Liu, A. C., Digonnet, M. J., Kino, G. S., Knystautas, E. J.  
2000; 36 (6): 555-556
  - **Measurements of thermal effects in fibers doped with cobalt and vanadium** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Davis, M. K., Digonnet, M. J.  
2000; 18 (2): 161-165
  - **A novel fiber-optic sensor array based on the Sagnac interferometer** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Vakoc, B. J., Digonnet, M. J., Kino, G. S.  
1999; 17 (11): 2316-2326
  - **Nanosecond thermal fiber switch using a Sagnac interferometer** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
Davis, M. K., Digonnet, M. J.  
1999; 11 (10): 1256-1258
  - **A novel fiber optic sensor array based on the Sagnac interferometer** *SPIE Conference on Fiber Optic Sensor Technology and Applications*  
Vakoc, B. J., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.1999: 276–284
  - **Improved polarization stability of the output mean wavelength in an Er-doped superfluorescent fiber source incorporating a Faraday rotator mirror** *Conference on Optical Devices for Fiber Communication*  
Falquier, D. G., Digonnet, M. J., Shaw, H. J.  
SPIE-INT SOC OPTICAL ENGINEERING.1999: 10–15
  - **Demonstration of a folded configuration of a fiber Sagnac-based sensor array** *SPIE Conference on Fiber Optic Sensor Technology and Applications*  
Vakoc, B. J., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.1999: 538–542
  - **Polarized superfluorescent fiber sources** *OPTICAL FIBER TECHNOLOGY*  
Falquier, D. G., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1998; 4 (4): 453-470
  - **Phase-sensitivity measurement of a 10-sensor array with erbium-doped fiber amplifier telemetry** *OPTICS LETTERS*  
Vakoc, B. J., Hodgson, C. W., Digonnet, M. J., Kino, G. S., Shaw, H. J.  
1998; 23 (16): 1313-1315

- **Large-scale interferometric fiber sensor arrays incorporating multiple optical switches** *OPTICAL FIBER TECHNOLOGY*  
Hodgson, C. W., Digonnet, M. J., Shaw, H. J.  
1998; 4 (3): 316-327
- **Thermal effects in doped fibers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Davis, M. K., Digonnet, M. J., PANTELL, R. H.  
1998; 16 (6): 1013-1023
- **Experimental and theoretical analysis of the resonant nonlinearity in ytterbium-doped fiber** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Arkwright, J. W., Elango, P., Atkins, G. R., Whitbread, T., Digonnet, M. J.  
1998; 16 (5): 798-806
- **Absolute measurement of the second-order nonlinearity profile in poled silica** *OPTICS LETTERS*  
Pureur, D., Liu, A. C., Digonnet, M. J., Kino, G. S.  
1998; 23 (8): 588-590
- **Optimization of large-scale fiber sensor arrays incorporating multiple optical amplifiers - Part II: Pump power** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Hodgson, C. W., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1998; 16 (2): 224-231
- **A mueller matrix formalism for modeling polarization effects in erbium-doped fiber** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Wagener, J. L., Falquier, D. G., Digonnet, M. J., Shaw, H. J.  
1998; 16 (2): 200-206
- **Optimization of large-scale fiber sensor arrays incorporating multiple optical amplifiers - Part I: Signal-to-noise ratio** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Hodgson, C. W., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1998; 16 (2): 218-223
- **DC Kerr coefficient in silica: theory and experiment** *Conference on Doped Fiber Devices II*  
Liu, A., Digonnet, M., Kino, G.  
SPIE - INT SOC OPTICAL ENGINEERING.1998: 102-107
- **Polarization dependence of the mean wavelength of Er-doped superfluorescent fiber sources** *Conference on Doped Fiber Devices II*  
Falquier, D. G., Digonnet, M. J., Kino, G. S., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1998: 26-29
- **Advances in the measurement of the poled silica nonlinear profile** *Conference on Doped Fiber Devices II*  
Liu, A. C., Digonnet, M. J., Kino, G. S.  
SPIE - INT SOC OPTICAL ENGINEERING.1998: 115-119
- **Large-scale interferometric fiber sensor arrays with multiple optical amplifiers** *OPTICS LETTERS*  
Hodgson, C. W., Digonnet, M. J., Shaw, H. J.  
1997; 22 (21): 1651-1653
- **A high-stability fiber amplifier source for the fiber optic gyroscope** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1997; 15 (9): 1689-1694
- **Novel fiber sensor arrays using erbium-doped fiber amplifiers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Wagener, J. L., Hodgson, C. W., Digonnet, M. J., Shaw, H. J.  
1997; 15 (9): 1681-1688
- **Polarized superfluorescent fiber source** *OPTICS LETTERS*  
Falquier, D. G., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1997; 22 (3): 160-162
- **Experimental evidence for strong UV transition contribution in the resonant nonlinearity of doped fibers** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Digonnet, M. J., Sadowski, R. W., Shaw, H. J., PANTELL, R. H.

1997; 15 (2): 299-303

- **Resonantly enhanced nonlinearity in doped fibers for low-power all-optical switching: A review** *OPTICAL FIBER TECHNOLOGY*  
Digonnet, M. J., Sadowski, R. W., Shaw, H. J., PANTELL, R. H.  
1997; 3 (1): 44-64
- **Basis for a polarized superfluorescent fiber source with increased efficiency** *OPTICS LETTERS*  
Falquier, D. G., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
1996; 21 (23): 1900-1902
- **Switching power reduction using a pumped nonlinear directional coupler** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
Davis, M. K., Digonnet, M. J.  
1996; 8 (10): 1328-1330
- **All-optical switching using color centers in an irradiated phosphorus-doped fiber** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
Sadowski, R. W., Digonnet, M. J., PANTELL, R. H., Shaw, H. J., Simpson, J. R., Yan, M.  
1996; 8 (7): 897-899
- **Parametric analysis of semiconductor-doped classes for all-optical switching** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Mayweather, D., Digonnet, M. J., PANTELL, R. H.  
1996; 14 (4): 601-610
- **A DC Kerr measurement in a silica channel waveguide** *Conference on Doped Fiber Devices*  
Liu, A. C., Digonnet, M. J., Kino, G. S.  
SPIE-INT SOC OPTICAL ENGINEERING.1996: 209-218
- **Highly efficient polarized Er-doped superfluorescent fiber source** *Conference on Doped Fiber Devices*  
Falquier, D. G., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
SPIE-INT SOC OPTICAL ENGINEERING.1996: 35-41
- **Contribution of UV transitions to the strong third-order nonlinearity of doped fibers** *Conference on Doped Fiber Devices*  
Digonnet, M. J., Sadowski, R. W., Shaw, H. J., PANTELL, R. H.  
SPIE-INT SOC OPTICAL ENGINEERING.1996: 183-188
- **Kramers-Kronig analysis of the absorption change in fiber gratings** *Conference on Doped Fiber Devices*  
Digonnet, M. J.  
SPIE-INT SOC OPTICAL ENGINEERING.1996: 109-120
- **CHARACTERIZATION OF CLUSTERS IN RARE-EARTH-DOPED FIBERS BY TRANSMISSION MEASUREMENTS** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Davis, M. K., Digonnet, M. J., PANTELL, R. H.  
1995; 13 (2): 120-126
- **ELECTROOPTIC PHASE MODULATION IN A SILICA CHANNEL WAVE-GUIDE** *OPTICS LETTERS*  
Liu, A. C., Digonnet, M. J., Kino, G. S.  
1994; 19 (7): 466-468
- **MODELING OF ION-PAIRS IN ERBIUM-DOPED FIBER AMPLIFIERS** *OPTICS LETTERS*  
Wagener, J. L., WYSOCKI, P. F., Digonnet, M. J., Shaw, H. J.  
1994; 19 (5): 347-349
- **A MODEL OF NONLINEAR ALL-OPTICAL SWITCHING IN DOPED FIBERS** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
PANTELL, R. H., Digonnet, M. J.  
1994; 12 (1): 149-156
- **STATUS OF BROAD-BAND RARE-EARTH-DOPED FIBER SOURCES FOR FOG APPLICATIONS** *Conference on Fiber Optic and Laser Sensors XI*  
Digonnet, M. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 113-131
- **NOVEL TECHNIQUES TO CHARACTERIZE CLUSTERING IN ND-DOPED FIBERS** *Conference on Fiber Laser Sources and Amplifiers V*  
Davis, M. K., Digonnet, M. J., Sadowski, R. W., PANTELL, R. H.

- SPIE - INT SOC OPTICAL ENGINEERING.1994: 50–64
- **EFFECTS OF ER<sup>3+</sup> PAIRS ON THE GAIN AND NOISE-FIGURE OF EDFAS** *Conference on Fiber Laser Sources and Amplifiers V*  
Wagener, J. L., WYSOCKI, P. F., Digonnet, M. J., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 86–91
  - **CHARACTERIZATION OF THE 2ND-ORDER NONLINEARITY IN POLED FUSED-SILICA** *Conference on Doped Fiber Devices and Systems*  
Liu, A. C., Digonnet, M. J., Kino, G. S.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 194–206
  - **MEASUREMENTS AND MODELING OF THE OUTPUT POLARIZATION OF ER-DOPED FIBER LASERS** *Conference on Doped Fiber Devices and Systems*  
FALQUIER, D., Lande, D., Wagener, J. L., Digonnet, M. J., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 24–40
  - **EFFECT OF COMPOSITION ON CLUSTERING IN ER-DOPED FIBER LASERS** *Conference on Fiber Laser Sources and Amplifiers V*  
Wagener, J. L., Digonnet, M. J., WYSOCKI, P. F., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 14–19
  - **ALL-OPTICAL SWITCHING USING COLOR-CENTERS IN IRRADIATED SILICA FIBERS** *Conference on Doped Fiber Devices and Systems*  
Sadowski, R. W., Digonnet, M. J., PANTELL, R. H., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 110–116
  - **POWER AND LENGTH REQUIREMENTS FOR ALL-OPTICAL SWITCHING IN SEMICONDUCTOR-DOPED GLASS WAVE-GUIDES** *Conference on Doped Fiber Devices and Systems*  
Mayweather, D. T., Digonnet, M. J., PANTELL, R. H., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 125–133
  - **SUB-MICROSECOND ALL-OPTICAL SWITCHING IN NEODYMIUM-DOPED FIBER** *Conference on Fiber Laser Sources and Amplifiers V*  
Sadowski, R. W., Digonnet, M. J., PANTELL, R. H., Shaw, H. J.  
SPIE - INT SOC OPTICAL ENGINEERING.1994: 166–171
  - **EFFECTS OF CONCENTRATION AND CLUSTERS IN ERBIUM-DOPED FIBER LASERS** *OPTICS LETTERS*  
Wagener, J. L., WYSOCKI, P. F., Digonnet, M. J., Shaw, H. J., DiGiovanni, D. J.  
1993; 18 (23): 2014-2016
  - **ANALYSIS OF NONLINEAR-OPTICAL SWITCHING IN AN ERBIUM-DOPED FIBER** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
PANTELL, R. H., Digonnet, M. J., Sadowski, R. W., Shaw, H. J.  
1993; 11 (9): 1416-1424
  - **MICROSECOND OPTICAL SWITCHING IN A NEODYMIUM-DOPED 2-MODE FIBER** *OPTICS LETTERS*  
Sadowski, R. W., Digonnet, M. J., PANTELL, R. H., Shaw, H. J.  
1993; 18 (11): 927-929
  - **FABRICATION, CHARACTERIZATION AND INDEX PROFILE MODELING OF HIGH-DAMAGE RESISTANCE ZN-DIFFUSED WAVE-GUIDES IN CONGRUENT AND MGO - LITHIUM-NIOBATE** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Young, W. M., Fejer, M. M., Digonnet, M. J., Marshall, A. F., Feigelson, R. S.  
1992; 10 (9): 1238-1246
  - **LASER-DIODE-PUMPED NONLINEAR SWITCH IN ERBIUM-DOPED FIBER** *OPTICS LETTERS*  
PANTELL, R. H., Sadowski, R. W., Digonnet, M. J., Shaw, H. J.  
1992; 17 (14): 1026-1028
  - **PHOTOREFRACTIVE-DAMAGE-RESISTANT ZN-DIFFUSED WAVE-GUIDES IN MGO-LINBO<sub>3</sub>** *OPTICS LETTERS*  
Young, W. M., Feigelson, R. S., Fejer, M. M., Digonnet, M. J., Shaw, H. J.  
1991; 16 (13): 995-997
  - **WAVELENGTH STABILITY OF A HIGH-OUTPUT, BROAD-BAND, ER-DOPED SUPERFLUORESCENT FIBER SOURCE PUMPED NEAR 980-NM** *OPTICS LETTERS*  
WYSOCKI, P. F., Digonnet, M. J., Kim, B. Y.  
1991; 16 (12): 961-963

- **STABLE FIBER-SOURCE GYROSCOPES** *OPTICS LETTERS*  
FESLER, K. A., Digonnet, M. J., Kim, B. Y., Shaw, H. J.  
1990; 15 (22): 1321-1323
- **CLOSED-FORM EXPRESSIONS FOR THE GAIN IN 3-LEVEL AND 4-LEVEL LASER FIBERS** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Digonnet, M. J.  
1990; 26 (10): 1788-1796
- **NONINVASIVE SWITCHABLE ACOUSTOOPTIC TAPS FOR OPTICAL FIBER** *OPTICAL FIBER COMMUNICATIONS CONF ( OFC 90 )*  
Patterson, D. B., Howell, M. D., Digonnet, M., Kino, G. S., KHURIYAKUB, B. T.  
IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC.1990: 1304-12
- **BROAD-SPECTRUM, WAVELENGTH-SWEPT, ERBIUM-DOPED FIBER LASER AT 1.55-MU-M** *OPTICS LETTERS*  
WYSOCKI, P. F., Digonnet, M. J., Kim, B. Y.  
1990; 15 (16): 879-881
- **SPECTRUM STABILITY OF A BROAD-BAND 1060 NM ND-DOPED FIBER LASER** *ELECTRONICS LETTERS*  
FESLER, F., Digonnet, M., Liu, K., Kim, B. Y., Shaw, H. J.  
1990; 26 (13): 870-872
- **CHARACTERIZATION AND OPTIMIZATION OF THE GAIN IN ND-DOPED SINGLE-MODE FIBERS** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Digonnet, M. J., Liu, K., Shaw, H. J.  
1990; 26 (6): 1105-1110
- **ELECTRONICALLY TUNABLE, 1.55-MUM ERBIUM-DOPED FIBER LASER** *OPTICS LETTERS*  
WYSOCKI, P. F., Digonnet, M. J., Kim, B. Y.  
1990; 15 (5): 273-275
- **SPECTRAL CHARACTERISTICS OF HIGH-POWER 1.5 MU-M BROAD-BAND SUPERLUMINESCENT FIBER SOURCES** *IEEE PHOTONICS TECHNOLOGY LETTERS*  
WYSOCKI, P. F., Digonnet, M. J., Kim, B. Y.  
1990; 2 (3): 178-180
- **ANALYSIS OF A 1060-NM ND-SIO2 SUPERFLUORESCENT FIBER LASER** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Digonnet, M. J., Liu, K.  
1989; 7 (7): 1009-1015
- **BROAD-BAND DIODE-PUMPED FIBER LASER** *ELECTRONICS LETTERS*  
Liu, K., Digonnet, M., FESLER, K., Kim, B. Y., Shaw, H. J.  
1988; 24 (14): 838-840
- **SINGLE-MODE FIBRE-OPTIC COMPONENTS** *JOURNAL OF THE INSTITUTION OF ELECTRONIC AND RADIO ENGINEERS*  
Digonnet, M. J., Kim, B. Y.  
1988; 58 (5): S66-S78
- **ND-MGO-LINBO3 CONTINUOUS-WAVE LASER PUMPED BY A LASER DIODE** *OPTICS LETTERS*  
CORDOVAPLAZA, A., Fan, T. Y., Digonnet, M. J., Byer, R. L., Shaw, H. J.  
1988; 13 (3): 209-211
- **PULSE CHARACTERISTICS OF Q-SWITCHED FIBER LASERS** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Gaeta, C. J., Digonnet, M. J., Shaw, H. J.  
1987; 5 (12): 1645-1651
- **10MW SUPERFLUORESCENT SINGLE-MODE FIBER SOURCE AT 1060-NM** *ELECTRONICS LETTERS*  
Liu, K., Digonnet, M., Shaw, H. J., Ainslie, B. J., Craig, S. P.  
1987; 23 (24): 1320-1321
- **MINIATURE CW AND ACTIVE INTERNALLY Q-SWITCHED ND-MGO-LINBO3 LASERS** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
CORDOVAPLAZA, A., Digonnet, M. J., Shaw, H. J.

1987; 23 (2): 262-266

- **THEORY OF SUPERFLUORESCENT FIBER LASERS** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Digonnet, M. J.  
1986; 4 (11): 1631-1639
- **THEORY AND IMPLEMENTATION OF A RAMAN ACTIVE FIBER DELAY-LINE** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Desurvire, E., Digonnet, M. J., Shaw, H. J.  
1986; 4 (4): 426-443
- **1.064-MU-M AND 1.32-MU-M ND - YAG SINGLE-CRYSTAL FIBER LASERS** *JOURNAL OF LIGHTWAVE TECHNOLOGY*  
Digonnet, M. J., Gaeta, C. J., Shaw, H. J.  
1986; 4 (4): 454-460
- **GENERATION OF 22 MW OF 532-NM RADIATION BY FREQUENCY DOUBLING IN TI-MGO-LINBO3 WAVE-GUIDES** *OPTICS LETTERS*  
Fejer, M. M., Digonnet, M. J., Byer, R. L.  
1986; 11 (4): 230-232
- **ND-MGO-LINBO3 SPECTROSCOPY AND LASER DEVICES** *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS*  
Fan, T. Y., CORDOVA PLAZA, A., Digonnet, M. J., Byer, R. L., Shaw, H. J.  
1986; 3 (1): 140-148
- **RAMAN AMPLIFICATION OF RECIRCULATING PULSES IN A REENRANT FIBER LOOP** *OPTICS LETTERS*  
Desurvire, E., Digonnet, M., Shaw, H. J.  
1985; 10 (2): 83-85
- **CHARACTERIZATION OF PROTON-EXCHANGED WAVE-GUIDES IN MGO-LINBO3** *OPTICS LETTERS*  
Digonnet, M., Fejer, M., Byer, R.  
1985; 10 (5): 235-237
- **MEASUREMENT OF THE CORE PROXIMITY IN POLISHED FIBER SUBSTRATES AND COUPLERS** *OPTICS LETTERS*  
Digonnet, M. J., FETH, J. R., STOKES, L. F., Shaw, H. J.  
1985; 10 (9): 463-465
- **THEORETICAL-ANALYSIS OF OPTICAL FIBER LASER-AMPLIFIERS AND OSCILLATORS** *APPLIED OPTICS*  
Digonnet, M. J., Gaeta, C. J.  
1985; 24 (3): 333-342
- **WAVELENGTH MULTIPLEXING IN SINGLE-MODE FIBER COUPLERS** *APPLIED OPTICS*  
Digonnet, M., Shaw, H. J.  
1983; 22 (3): 484-491
- **SINGLE-MODE FIBEROPTIC COMPONENTS** *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS*  
BERGH, R. A., Digonnet, M. J., LEFEVRE, H. C., Newton, S. A., Shaw, H. J.  
1982; 326: 137-142
- **ANALYSIS OF A TUNABLE SINGLE-MODE OPTICAL FIBER COUPLER** *IEEE JOURNAL OF QUANTUM ELECTRONICS*  
Digonnet, M. J., Shaw, H. J.  
1982; 18 (4): 746-754