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K. Kishida, C. H. Li, Neubrex Co. Ltd. (Japan); K. Nishiguchi, Osaka Univ. (Japan); Y. Yamauchi, A. Guzik, T. Tsuda, Neubrex Co. Ltd. (Japan)

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- 8421 2H **Development of an optical fiber transducer applied to the measurement of finger movements** [8421-13]
E. Fujiwara, Y. T. Wu, M. F. M. Santos, C. K. Suzuki, State Univ. of Campinas (Brazil)
- 8421 2I **Monitoring drying process of acrylic varnish with heterogeneous optical sensor** [8421-15]
F. A. M. Saccon, F. M. D. R. de Oliveira, M. Muller, J. L. Fabris, Federal Univ. of Technology, Paraná (Brazil)
- 8421 2J **Intrinsic, multiplexable sensors for electric field strength using structural slow light in phase-shifted fibre Bragg gratings** [8421-3]
P. Orr, P. Niewczas, Univ. of Strathclyde (United Kingdom)
- 8421 2K **Multiplexing tapered optical fibres using coherent optical frequency domain reflectometry** [8421-32]
R. Jarzebinska, E. Chehura, S. W. James, R. P. Tatam, Cranfield Univ. (United Kingdom)
- 8421 2L **High pressure discrimination based on optical fiber microsphere cavity Fizeau interferometer** [8421-47]
O. R. Ranjbar, M. I. Zibaii, S. Nouri, Z. Chenari, L. Mehrvar, M. H. Ghezelaigh, H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of)
- 8421 2M **Design and fabrication of SU-8 MEMS electrostatically tunable optical Fabry-Perot cavity based on photolithography technique** [8421-55]
L. Mehrvar, S. Nouri, M. Taghavi, F. Beygi Azar, M. Sadegh Cheri, M. I. Zibaii, M. H. Ghezelaigh, H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of)
- 8421 2N **Varifocal imaging using an ultrasonic optical lens with viscoelastic material** [8421-57]
D. Koyama, Doshisha Univ. (Japan); R. Isago, K. Nakamura, Tokyo Institute of Technology (Japan)
- 8421 2O **Polarization-dependent bending sensor with temperature insensitivity** [8421-67]
O.-J. Kwon, H.-J. Kim, Hanyang Univ. (Korea, Republic of); J. Kim, Kyongbuk National Univ. (Korea, Republic of); B. Rho, Korea Photonics Technology Institute (Korea, Republic of); C.-S. Kim, M.-Y. Jeong, Pusan National Univ. (Korea, Republic of); Y.-G. Han, Hanyang Univ. (Korea, Republic of)
- 8421 2P **Compact and high sensitivity curvature sensor based on twin core fiber coupler** [8421-86]
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- 8421 2Q **Highly sensitive hydrostatic-pressure measurement with a fiber grating laser embedded in a composite structure** [8421-96]
Z. Quan, L. Jin, Y.-L. Chang, B.-O. Guan, Jinan Univ. (China)
- 8421 2R **A double-fiber F-P displacement sensor based on direct phase demodulation** [8421-136]
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- 8421 2S **A curvature sensor using a novel side-leakage photonic crystal fiber based Sagnac interferometer** [8421-142]
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- 8421 2T **Characterization of longitudinal acoustic waves in a fiber using an extrinsic Fabry-Perot interferometer** [8421-157]
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- 8421 2U **Optical electric-field sensor using single β -BaB₂O₄ crystal** [8421-170]
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- 8421 2V **Temperature sensor based on fiber optic pyrometer in material removal processes** [8421-184]
A. Tapetado, C. Vázquez, X. Soldani, H. Miguélez, D. S. Montero, Carlos III Univ. of Madrid (Spain)
- 8421 2W **Simultaneous measurement of partial pressure of O₂ and CO₂ using hybrid interferometer** [8421-220]
P. A. R.. Tafulo, L. Coelho, INESC Porto (Portugal) and Univ. do Porto (Portugal);
P. A. S. Jorge, INESC Porto (Portugal); J. L. Santos, INESC Porto (Portugal) and Univ. do Porto (Portugal); K. Schuster, J. Kobelke, Institute of Photonic Technology (Germany); O. Frazão, INESC Porto (Portugal)
- 8421 2X **Interrogation system based on "figure-of-eight" fiber loop mirror** [8421-221]
R. M. Silva, INESC Porto (Portugal) and Univ. do Porto (Portugal); A. Layeghi, M. I. Zibaii, H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of); J. L. Santos, INESC Porto (Portugal) and Univ. do Porto (Portugal); A. B. Lobo Ribeiro, Univ. Fernando Pessoa (Portugal); O. Frazão, INESC Porto (Portugal)
- 8421 2Y **POF vibration sensor based on speckle pattern changes** [8421-241]
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- 8421 30 **A liquid level sensor based on fiber optic array and magnetic coupling** [8421-262]
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- 8421 31 **Multi-monitoring system based on erbium doped fiber ring laser for measurement of radiation dose and strain** [8421-304]
Y. B. Shim, H.-J. Kim, Hanyang Univ. (Korea, Republic of); Y. Ji, Korea Institute of Radiological and Medical Science (Korea, Republic of); Y.-G. Han, Hanyang Univ. (Korea, Republic of)
- 8421 32 **Embedded pressure sensor based on birefringent photonic crystal fiber** [8421-311]
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- 8421 33 **Measurement of tunnel-ceiling and side-wall displacements using arc-shaped beam and fiber Bragg grating sensors** [8421-319]
H. Naruse, S. Furukawa, T. Nishino, Mie Univ. (Japan)

- 8421 34 **Acoustic emission detection using a fiber laser array** [8421-336]
W. Zhang, Institute of Semiconductors (China); W. Huang, Institute of Semiconductors (China) and Shijiazhuang Tiedao Univ. (China); H. Ma, Shijiazhuang Tiedao Univ. (China); F. Li, Institute of Semiconductors (China)
- 8421 35 **Fiber optic push-pull accelerometer based on two cantilevers** [8421-349]
W. Zhang, F. Li, Institute of Semiconductors (China)
- 8421 36 **High-sensitivity PCF sensing head for strain measurement** [8421-363]
S. Rota-Rodrigo, M. Bravo, A. M. R. Pinto, M. López-Amo, Univ. Pública de Navarra (Spain)
- 8421 37 **New spatial optical filters for gas refractometry** [8421-383]
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- 8421 38 **Sensitivity characteristics of high-birefringence Sagnac interferometer sensors** [8421-401]
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- 8421 39 **A weak feedback effect based fiber laser sensor demodulated by a phase generated carrier scheme** [8421-411]
J. Zhang, Harbin Engineering Univ. (China) and Univ. of New South Wales (Australia); Z. Yu, Q. Hao, Q. Chai, Q. Li, W. Sun, L. Yuan, Harbin Engineering Univ. (China); G. D. Peng, Univ. of New South Wales (Australia)
- 8421 3A **Development of a polarimetric vibration sensor for quasi-distributed measurements** [8421-431]
N. Linze, P. Tihon, O. Verlinden, P. Mégret, M. Wuilpart, Univ. of Mons (Belgium)
- 8421 3B **Multimode interference in tapered single mode-multimode-single mode fiber structures for strain sensing applications** [8421-451]
R. M. André, INESC Porto (Portugal) and Univ. do Porto (Portugal); C. R. Biazoli, Univ. Estadual de Campinas (Brazil); S. O. Silva, M. B. Marques, INESC Porto (Portugal) and Univ. do Porto (Portugal); C. M. B. Cordeiro, Univ. Estadual de Campinas (Brazil); O. Frazão, INESC Porto (Portugal)
- 8421 3C **Magnetic field sensor with Terfenol-D thin-film coated FBG** [8421-453]
R. M. Silva, INESC Porto (Portugal) and Univ. do Porto (Portugal); G. Chesini, INESC Porto (Portugal) and Univ. Estadual de Campinas (Brazil); C. J. Gouveia, INESC Porto (Portugal) and Univ. da Madeira (Portugal); A. B. Lobo Ribeiro, Univ. Fernando Pessoa (Portugal); O. Frazão, INESC Porto (Portugal); C. M. B. Cordeiro, Univ. Estadual de Campinas (Brazil); P. A. S. Jorge, INESC Porto (Portugal)
- 8421 3D **Unbalanced nulling interferometer with four-quadrant phase mask** [8421-459]
T. Kobayashi, Tokyo Univ. of Agriculture and Technology (Japan) and National Astronomical Observatory of Japan (Japan); J. Nishikawa, National Astronomical Observatory of Japan (Japan); Y. Tanaka, T. Kurokawa, K. Kashiwagi, Tokyo Univ. of Agriculture and Technology (Japan); N. Murakami, N. Baba, Hokkaido Univ. (Japan); N. Hashimoto, Citizen Holdings Co., Ltd. (Japan)

- 8421 3E **Towed vector fiber optic sensor used in ocean seismic exploration** [8421-494]
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- 8421 3F **Integration of ultralow-noise single-frequency lasers with extrinsic seismic sensors using optical transducers** [8421-542]
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- 8421 3G **Conventional optical fiber current measurements improved by a high accuracy artificial neural network algorithm** [8421-547]
A. C. Zimmermann, Univ. Federal de Santa Catarina (Brazil); M. Besen, Univ. do Estado de Santa Catarina (Brazil); L. S. Encinas, Univ. Federal de Santa Catarina (Brazil); C. M. B. Cordeiro, UNICAMP (Brazil)
- 8421 3H **Optical bidirectional force sensor using optical planar waveguide** [8421-561]
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- 8421 3I **Fiber optic bend and temperature sensing in femtosecond laser-structured POF** [8421-567]
S. Liehr, BAM Federal Institute for Materials Research and Testing (Germany); J. Burgmeier, Fraunhofer Heinrich Hertz Institute (Germany); K. Krebber, BAM Federal Institute for Materials Research and Testing (Germany); W. Schade, Fraunhofer Heinrich Hertz Institute (Germany)
- 8421 3J **The characteristics of DFB fiber laser with weak feedback** [8421-591]
T. Amine, Y. Zhao, Harbin Engineering Univ. (China); J. Zhang, Harbin Engineering Univ. (China) and The Univ. of New South Wales (Australia); W. Sun, Harbin Engineering Univ. (China); G. D. Peng, The Univ. of New South Wales (Australia)
- 8421 3L **Sensitivity analysis and temperature performance of the fiber Bragg grating (FBG) acceleration sensor** [8421-9]
J.-Y. Wang, Key Lab. of Optical Fiber Sensing Technology of Shandong Province (China) and Shandong Academy of Sciences (China); H. Jie, Shandong Micro-Sensor Photonics, Ltd. (China); G.-D. Song, C. Wang, Key Lab. of Optical Fiber Sensing Technology of Shandong Province (China) and Shandong Academy of Sciences (China); T.-Y. Liu, Key Lab. of Optical Fiber Sensing Technology of Shandong Province (China) and Shandong Academy of Science (China) and Shandong Micro-Sensor Photonics, Ltd. (China)
- 8421 3M **Toward track component condition monitoring using optical fibre Bragg grating sensors** [8421-34]
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- 8421 3N **Design of a fiber Bragg grating sensor interrogation system using volume phase grating and CCD detection** [8421-50]
Z. Cai, J. Hao, B. Dong, J. Phua, T. M. Chiam, Institute for Infocomm Research (Singapore)

- 8421 3O **An integrated polarization-holding fiber polarizing grating based on side-polishing and metal film coating techniques** [8421-36]
L. Ma, National Univ. of Defense Technology (China) and National and Provincial United Lab. of Fiber Information Engineering Technology (China); N. Jiang, H. Lin, National Univ. of Defense Technology (China); Z. Hu, H. Yang, Y. Hu, National Univ. of Defense Technology (China) and National and Provincial United Lab. of Fiber Information Engineering Technology (China)
- 8421 3P **Strain measurement inside a strong pulsed magnet based on embedded fiber Bragg gratings** [8421-52]
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Z. Li, Virginia Tech (United States) and Beijing Jiaotong Univ. (China); L. Pei, Beijing Jiaotong Univ. (China); B. Dong, C. Ma, A. Wang, Virginia Tech (United States)
- 8421 3R **Optical fiber sensing with chirped FBG Fabry-Perot interferometer: vibration measurement** [8421-59]
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- 8421 3S **Development of micro-tapered long-period fiber gratings written in tapered fibers with different diameters for enhancement of strain sensitivity** [8421-64]
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- 8421 3T **Enhanced sensitivity of gold modified tapered long period fiber grating for refractive index measurement** [8421-70]
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- 8421 3U **Long distance fiber Bragg grating strain sensor interrogation using high speed Raman-based Fourier domain mode-locked fiber laser with recycled residual Raman pump** [8421-79]
S. Kim, O.-J. Kwon, Y.-G. Han, Hanyang Univ. (Korea, Republic of)
- 8421 3V **Metal packaged fiber Bragg grating accelerometer** [8421-87]
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- 8421 3W **A miniature fiber Bragg grating pressure sensor for in-vivo sensing applications** [8421-99]
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- 8421 3X **Distributed monitoring of fiber Bragg gratings under local lateral loads using optical frequency domain reflectometry** [8421-100]
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- 8421 3Y **Intensity-based LPG vibration sensor array using FBG and broadband optical source** [8421-104]
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- 8421 40 **Micro-ridge long-period fiber gratings inscribed on a polarization-maintaining fiber for measurement of strain** [8421-123]
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- 8421 42 **Detecting mode hopping in fiber ring lasers by anisotropic dynamic gratings** [8421-159]
P. Xu, National Univ. of Defense Technology (China); Z. Hu, National Univ. of Defense Technology (China) and National and Provincial United Lab of Fiber Information Engineering Technology for Complicated Environment (China); N. Jiang, M. Ma, National Univ. of Defense Technology (China); Y. Hu, National Univ. of Defense Technology (China) and National and Provincial United Lab of Fiber Information Engineering Technology for Complicated Environment (China)
- 8421 43 **Ultra-long distance fiber Bragg grating sensor system based on self-heterodyne detection** [8421-169]
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- 8421 44 **The fiber-optic displacement sensor based on the DBR fiber laser** [8421-173]
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- 8421 45 **Comparison between PMMA and PVAC coated fiber Bragg grating sensors for relative humidity measurements** [8421-187]
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- 8421 46 **High multiplexing capability and ultrahigh resolution interrogation for optical fiber Bragg grating sensing system** [8421-188]
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- 8421 47 **High alternating current sensor based on FBGs and magnetic coupling** [8421-189]
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- 8421 48 **Based on fiber grating the high sensitivity all optical fiber CTD** [8421-199]
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- 8421 49 **Remote sensing based on reflective bandpass long-period fiber grating and fiber ring laser** [8421-211]
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- 8421 4C **Fiber-optic thermal anemometer based on metallic coated fiber Bragg grating** [8421-229]
J. Cheng, Zhejiang Province Institute of Metrology (China); Y. Zhou, Zhejiang Province Institute of Metrology (China) and China Jiliang Univ. (China); X. Dong, China Jiliang Univ. (China); W. Zhou, China Jiliang Univ. (China) and Carleton Univ. (Canada)
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- 8421 4E **Pipe flow speed sensor based on fiber Bragg gratings** [8421-238]
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- 8421 4F **Determination of chewing patterns in goats using fiber Bragg gratings** [8421-275]
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- 8421 4G **Dual-polarization DBR fiber laser sensor for liquid-level measurement** [8421-281]
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- 8421 4H **Novel acoustic emission sensor system based on two cascaded phase-shifted fiber Bragg gratings** [8421-288]
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- 8421 4J **Gap FBG and its application in tunable narrow linewidth fiber laser** [8421-314]
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- 8421 4K **Thickness influence on the polarization dependency of tilted fiber Bragg gratings coated by zinc oxide thin films** [8421-317]
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- 8421 4L **Effect of high temperature on the properties of long-period gratings written in non-hydrogenated fibers with UV and electric arc** [8421-325]
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- 8421 4N **Nonlinear response in polymer optical fibre Bragg grating based sensors** [8421-354]
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- 8421 4O **Strain response of POF sensors** [8421-361]
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- 8421 4P **Temperature level optical fiber sensor using shape memory alloy wires** [8421-365]
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- 8421 4Q **Ultra-high resolution real-time optical fiber strain sensor using a sideband interrogation method** [8421-371]
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- 8421 4R **Quasidistributed fiber sensor for precast concrete structures monitoring** [8421-374]
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- 8421 4S **Distributed transverse load sensing with tilted fiber Bragg gratings using optical frequency domain reflectometry** [8421-380]
Y. Zhang, Carleton Univ. (Canada); T. Sun, Nanjing Univ. of Information Science & Technology (China); L. Xiong, M. Z. Alam, J. Albert, Carleton Univ. (Canada)
- 8421 4T **Temperature compensated microfiber Bragg gratings** [8421-386]
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G. C. B. Lee, Aston Univ. (United Kingdom); K. Kalli, C. Koutsides, Cyprus Univ. of Technology (Cyprus); Z. Yan, D. Adebayo, Aston Univ. (United Kingdom); M. Komodromos, Frederick Univ. (Cyprus); K. Sugden, Aston Univ. (United Kingdom)
- 8421 4W **Post-processing techniques for enhancing mode-coupling in long period fiber gratings** [8421-414]
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- 8421 4X **Long period grating made by rocking a single mode fiber** [8421-416]
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M. Bocciolone, L. Comolli, P. Crosio, Politecnico di Milano (Italy)
- 8421 50 **On the time delays in swept laser FBG interrogators for control systems applications** [8421-440]
G. Cazzulani, S. Cinquemani, L. Comolli, Politecnico di Milano (Italy)
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- 8421 52 **Corrosion of Fe-C coated FBG sensor and rebars: a comparative study** [8421-454]
W. Hu, X. Chen, H. Cai, M. Yang, W. Chen, Wuhan Univ. of Technology (China)
- 8421 53 **Highly sensitive type IA fiber Bragg gratings as sensors in radiation environments** [8421-464]
A. Faustov, SCK CEN (Belgium) and Univ. of Mons (Belgium); P. Saffari, Aston Univ. (United Kingdom); C. Koutsides, Aston Univ. (United Kingdom) and Cyprus Univ. of Technology (Cyprus); A. Gusarov, SCK CEN (Belgium); M. Wuilpart, P. Mégret, Univ. of Mons (Belgium); L. Zhang, Aston Univ. (United Kingdom); K. Kalli, Cyprus Univ. of Technology (Cyprus)
- 8421 54 **Refractometer based on a superimposed optical fiber grating** [8421-466]
J. Zheng, X. Dong, C. Zhao, S. Jin, China Jiliang Univ. (China)
- 8421 55 **Bragg gratings in few-mode Er/Al/Bi/P Co-doped germanosilicate ring-core fibre** [8421-470]
K. Cook, Univ. of Sydney (Australia); L.-Y. Shao, Univ. of Sydney (Australia) and The Hong Kong Polytechnic Univ. (Hong Kong, China); J. Canning, Univ. of Sydney (Australia); T. Wang, Univ. of Sydney (Australia) and Beijing Jiaotong Univ. (China); Y. Luo, G.-D. Peng, Univ. of New South Wales (Australia)
- 8421 56 **Acousto-optic modulation in a microstructured plastic optical fibre Bragg grating** [8421-472]
L. Bilro, C. A. F. Marques, Instituto de Telecomunicações (Portugal); L. Khan, Aston Institute of Photonic Technologies (United Kingdom); R. A. Oliveira, Volvo 3P-PD Advanced Engineering (Brazil); D. J. Webb, Aston Institute of Photonic Technologies (United Kingdom); R. N. Nogueira, Instituto de Telecomunicações (Portugal)
- 8421 57 **Fiber optic anemometer based on distributed Bragg reflector fiber laser** [8421-481]
Y. Liu, W. Peng, X. Zhang, X. Zhou, Q. Yu, Dalian Univ. of Technology (China)
- 8421 58 **Focal beam position detection in a laser induced breakdown spectroscopy system by using a fiber Bragg grating sensor** [8421-485]
F. Anabitarte, L. Rodriguez-Cobo, C. Galindez, A. Ullán, A. Cobo, Univ. of Cantabria (Spain)

- 8421 59 **Dynamic temperature compensation interrogation technique for liquid level sensors array based on single-longitudinal-mode DBR fiber laser** [8421-498]
C. Jia, B. Liu, H. Zhang, Nankai Univ. (China); Y. Miao, Tianjin Univ. of Technology (China)
- 8421 5A **UV sensor based on azobenzene-polymer-coated FBG** [8421-499]
I.-S. Song, C.-Y. Kim, H.-K. Kim, Chosun Univ. (Korea, Republic of); S. N. Lee, Optonest Inc. (Korea, Republic of); T.-J. Ahn, Chosun Univ. (Korea, Republic of)
- 8421 5B **Real-time activity identification in a smart FBG-based fiber-optic perimeter intrusion detection system** [8421-511]
H. Wu, X. Lu, S. Li, Y. Wu, Y. Rao, Univ. of Electronic Science and Technology of China (China)
- 8421 5C **Long-distance fiber-optic point-sensing systems based on the second-order random fiber laser** [8421-517]
Z. Wang, Y. Rao, H. Wu, P. Li, W. Zhang, Univ. of Electronic Science and Technology of China (China)
- 8421 5D **Strain and temperature sensitivity of chiral long period fiber gratings** [8421-521]
H.-X. Xu, L. Yang, Univ. of Science and Technology of China (China)
- 8421 5E **Thermal characteristics of silver-recoated regenerated grating sensors for high-temperature sensing** [8421-525]
Y. Tu, S.-T. Tu, Y.-H. Qi, East China Univ. of Science and Technology (China)
- 8421 5F **A 1.65 μm region external cavity laser diode using an InP gain chip and a fibre Bragg grating** [8421-538]
F. Chen, J. Hodgkinson, S. E. Staines, S. W. James, R. P. Tatam, Cranfield Univ. (United Kingdom)
- 8421 5G **Intensity-independent fiber coupled interrogation technique for fiber Bragg gratings by fiber Bragg gratings** [8421-540]
J. Burgmeier, J. Koch, W. Schade, Fraunhofer-Institut für Nachrichtentechnik Heinrich-Hertz-Institut (Germany) and Technische Univ. Clausthal (Germany)
- 8421 5H **Designing sensing properties of the long-period fiber gratings coated with the LC layers** [8421-573]
A. Czaplá, W. J. Bock, Univ. du Québec en Outaouais (Canada); T. R. Woliński, Warsaw Univ. of Technology (Poland)
- 8421 5I **Study and application of CFBG vibration sensor with symmetrical push-pull configuration** [8421-45]
Q. Nan, Wuhan Univ. of Technology (China)
- 8421 5J **A PGC demodulation based on differential-cross-multiplying (DCM) and arctangent (ATAN) algorithm with low harmonic distortion and high stability** [8421-355]
X. Yang, Z. Chen, J. H. Ng, Institute for Infocomm Research (Singapore); V. Pallayil, U. K. C., National Univ. of Singapore (Singapore)

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SENSOR MULTIPLEXING**

- 8421 5K **Study of antibacterial effect of nanosilver particle by tapered optical fiber sensor** [8421-22]
Z. Saeedian, M. I. Zibaii, S. M. Hosseini, H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of)
- 8421 5L **Label free detection of quadruplex formation of peroxidase-like DNAzyme by tapered fiber optic biosensor** [8421-69]
Z. Bagheri, Tarbiat Modares Univ. (Iran, Islamic Republic of) and Shahid Beheshti Univ. (Iran, Islamic Republic of); Z. Chenari, Shahid Beheshti Univ. (Iran, Islamic Republic of); Z. Karami, Tarbiat Modares Univ. (Iran, Islamic Republic of); M. I. Zibaii, Shahid Beheshti Univ. (Iran, Islamic Republic of); B. Ranjbar, Tarbiat Modares Univ. (Iran, Islamic Republic of); H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of)
- 8421 5M **DNA detection using molecular beacon in soft-glass microstructured optical fibers** [8421-95]
L. V. Nguyen, S. C. Warren-Smith, A. Cooper, T. M. Monro, The Univ. of Adelaide (Australia)
- 8421 5N **Optical coherence tomography for endoscopes, using imaging fibre bundles and a conical mirror** [8421-293]
H. D. Ford, R. P. Tatam, Cranfield Univ. (United Kingdom)
- 8421 5O **Instantaneous spectroscopic SS-OCT imaging using a simultaneous dual-band swept laser and common-path fiber probe** [8421-301]
Y. Mao, S. Chang, C. Flueraru, E. Murdock, National Research Council Canada (Canada)
- 8421 5P **Temperature compensation fiber-optic refractive index sensor based on single-mode fiber core-offset attenuator** [8421-309]
H. Cheng, Z. Jing, P. Wei, C. Xing, Dalian Univ. of Technology (China)
- 8421 5Q **Label-free DNA biosensor based on cladding-etched thin-core fiber modal interferometer** [8421-381]
G. Ma, A. P. Zhang, G. Yan, Y. Bai, Zhejiang Univ. (China) and Joint Research Lab. of Optics of Zhejiang Normal Univ. and Zhejiang Univ. (China); Y. Hu, Zhejiang Univ. (China) and Zhejiang Univ. of Technology (China); X. Ye, Zhejiang Univ. (China)
- 8421 5R **A novel biosensor based on a coupled surface plasmon nanostructure** [8421-390]
Y. Ma, G. Farrell, Y. Semenova, Dublin Institute of Technology (Ireland); H. P. Chan, City Univ. of Hong Kong (Hong Kong, China); Q. Wu, Dublin Institute of Technology (Ireland)
- 8421 5S **Dual-band wavelength-swept active mode locking laser for multi-band fiber-optic sensors** [8421-421]
H. D. Lee, C. S. Kim, M. Y. Jeong, Pusan National Univ. (Korea, Republic of); Z. Chen, Pusan National Univ. (Korea, Republic of) and Univ. of California, Irvine (United States)
- 8421 5T **Dispersion-tuned wavelength-swept fiber laser using a chirped FBG and a reflective SOA for OCT applications** [8421-426]
Y. Takubo, S. Yamashita, The Univ. of Tokyo (Japan)

- 8421 5U **Fabrication and characterization of fiber-optic dosimeters for diagnostic radiology usages** [8421-479]
W. J. Yoo, S. H. Shin, K.-T. Han, D. Jeon, J.-Y. Park, Konkuk Univ. (Korea, Republic of); B. G. Park, Soonchunhyang Univ. (Korea, Republic of); B. Lee, Konkuk Univ. (Korea, Republic of)
- 8421 5V **A label-free antigen-antibody immunosensor based on a special double cladding fiber** [8421-520]
W. Cao, F. Pang, N. Chen, Z. Chen, T. Wang, Shanghai Univ. (China)
- 8421 5W **Strain monitoring of the periodontal ligament in pig's mandibles** [8421-527]
L. Z. Karam, Federal Univ. of Technology, Paraná (Brazil); M. S. Milczewski, Federal Univ. of Technology, Paraná (Brazil) and Brazilian Dentistry Association (Brazil); H. J. Kalinowski, Federal Univ. of Technology, Paraná (Brazil)
- 8421 5X **Sensing biodiesel and biodiesel-petrodiesel blends** [8421-5]
M. S. Kawano, T. K. M. Cardoso, G. R. C. Possetti, R. C. Kamikawachi, J. L. Fabris, M. Muller, Federal Univ. of Technology, Paraná (Brazil)
- 8421 5Y **Structure optimization of slotted photonic crystal waveguide for gas sensor** [8421-44]
Y. Zhao, Y.-N. Zhang, D. Wu, Q. Wang, Northeastern Univ. (China)
- 8421 5Z **Effect of the clad transparency condition in POF humidity sensors with the swelling polymer clad** [8421-71]
S. Kato, M. Morisawa, Univ. of Yamanashi (Japan)
- 8421 60 **Study of ring-down signal processing for fiber-loop ring-down sensing technology** [8421-114]
D. Fan, Wuhan Univ. of Technology (China) and Virginia Tech (United States); J. Gong, A. Wang, Virginia Tech (United States)
- 8421 61 **An optical fibre salinity sensor based on fluorescence quenching mechanism** [8421-158]
T. H. Nguyen, City Univ. London (United Kingdom); Y. Zhao, Northeastern Univ. (China); T. Sun, K. T. V. Grattan, City Univ. London (United Kingdom)
- 8421 62 **Comparison of side-polished fiber Bragg grating hydrogen sensors sputtered with Pd/Ag and Pd/Y composite films** [8421-164]
J. Dai, M. Yang, Z. Yang, Wuhan Univ. of Technology (China); X. Yu, Huazhong Univ. of Science and Technology (China); K. Cao, J. Liao, P. Zhang, Science and Technology on Surface Physics and Chemistry Lab. (China)
- 8421 63 **Long period grating inscribed by femtosecond laser for refractive index measurements in aqueous environments** [8421-180]
L. B. Melo, F. Ahmed, M. Jun, P. Wild, Univ. of Victoria (Canada)
- 8421 64 **Real-time monitoring of fermentation process applied to sugarcane bioethanol production** [8421-228]
E. Fujiwara, E. Ono, The State Univ. of Campinas (Brazil); C. K. Yamakawa, J. L. Ienczak, C. E. V. Rossell, Brazilian Bioethanol Science and Technology Lab. (Brazil); C. K. Suzuki, The State Univ. of Campinas (Brazil)

- 8421 65 **A fiber-optic methane gas sensor system with improved accuracy using absorption-spectrum matched comb filter** [8421-236]
D. Liu, M. Tang, Z. Zhao, S. Fu, D. Liu, P. Shum, Huazhong Univ. of Science and Technology (China) and Wuhan National Lab. for Optoelectronics (China)
- 8421 66 **Enhanced RI sensor using a combination of a long period fiber grating and a small core singlemode fiber (SCSMF) structure** [8421-251]
Q. Wu, Y. Ma, Y. Semenova, P. Wang, Dublin Institute of Technology (Ireland); H. P. Chan, City Univ. of Hong Kong (Hong Kong, China); G. Farrell, Dublin Institute of Technology (Ireland)
- 8421 67 **Numerical modeling and performance optimization of QEPAS spectrophone** [8421-266]
Y. Cao, W. Jin, H. L. Ho, The Hong Kong Polytechnic Univ. (Hong Kong, China)
- 8421 68 **Coating based fiber Bragg grating humidity sensor array** [8421-269]
L.-K. Cheng, A. Boersma, R. Jansen, TNO (Netherlands)
- 8421 69 **Using optical fiber sidewall to capture light from an adjustable depth** [8421-326]
J. Ma, Y. Chiniforooshan, W. J. Bock, Univ. du Québec en Outaouais (Canada)
- 8421 6A **Fiber optic pH sensor with self-assembled multilayer nanocoatings on tilted FBG** [8421-329]
L. Y. Shao, China Jiliang Univ. (China) and The Hong Kong Polytechnic Univ. (Hong Kong, China); M. J. Yin, H. Y. Tam, The Hong Kong Polytechnic Univ. (Hong Kong, China); J. Albert, Carleton Univ. (Canada)
- 8421 6B **SnO₂ based optical fiber refractometers** [8421-393]
P. Sánchez, C. R. Zamarreño, M. Hernaez, I. Del Villar, I. R. Matias, F. J. Arregui, Public Univ. of Navarra (Spain)
- 8421 6C **Miniature photonic crystal optical fiber humidity sensor based on polyvinyl alcohol** [8421-409]
W. C. Wong, C. C. Chan, Nanyang Technological Univ. (Singapore); T. Li, China Jiliang Univ. (China); L. H. Chen, J. Boo, K. X. Lee, Nanyang Technological Univ. (Singapore); K. C. Leong, GLOBALFOUNDRIES Singapore Pte Ltd. (Singapore)
- 8421 6D **High finesse interferometric hydrogen sensor based on fiber-optic Fabry-Perot cavity modulations** [8421-418]
Y. H. Kim, C. Lee, J. H. Kwon, Y.-T. Lee, B. H. Lee, Gwangju Institute of Science and Technology (Korea, Republic of)
- 8421 6E **An evaluation of the distribution of metal ions in otherwise uniform titania sol-gel layers designed for optical sensing using laser ablation inductive coupled plasma mass spectroscopy** [8421-420]
G. Huyang, J. Canning, Univ. of Sydney (Australia); D. Bishop, A. McDonagh, Univ. of Technology (Australia); M. J. Crossley, Univ. of Sydney (Australia)
- 8421 6F **Highly sensitive temperature-independent refractive index sensor based on compact highly birefringent microfiber loop** [8421-424]
L. Sun, J. Li, Y. Tan, X. Shen, X. Xie, S. Gao, B.-O. Guan, Jinan Univ. (China)

- 8421 6G **Suppression of long distance instability on remote sensing signal of pulse correlation measurement in optical fiber sensing** [8421-425]
H. Kobayashi, T. Tsuzuki, T. Onishi, Y. Masaoka, Kochi Univ. of Technology (Japan); X. Xu, Key Lab. of State Grid Corp. of China (China); K. Nonaka, Kochi Univ. of Technology (Japan)
- 8421 6H **Tunable diode laser spectroscopy with electronically controlled background RAM nulling** [8421-467]
A. Upadhyay, V. V. Katre, A. L. Chakraborty, Indian Institute of Technology Gandhinagar (India)
- 8421 6I **Increased sensitivity of long period grating hydrogen sensors through coupling to higher order cladding modes** [8421-489]
R. M. Carter, R. R. J. Maier, Heriot-Watt Univ. (United Kingdom); P. Biswas, S. Bandyopadhyay, N. Basumallick, Central Glass and Ceramics Research Institute (India); B. J. S. Jones, S. McCulloch, Atomic Weapons Establishment (United Kingdom); J. S. Barton, Heriot-Watt Univ. (United Kingdom)
- 8421 6J **Chemical vapor sensing properties of twin-core photonic crystal fiber based in-reflection interferometer** [8421-507]
B. Kim, K. Naeem, J. Han, Y. Chung, Gwangju Institute of Science and Technology (Korea, Republic of)
- 8421 6K **Fiber carbon monoxide sensing system and its application in coal mines** [8421-519]
Y. Wei, T. Zhang, Y. Li, Y. Zhao, T. Liu, C. Wang, Shandong Academy of Sciences (China)
- 8421 6L **LPG based fiber optic sensor for carbon dioxide** [8421-532]
C. Gouveia, INESC Porto (Portugal) and Univ. da Madeira (Portugal); K. Balogh, INESC Porto (Portugal) and Univ. of Pécs (Hungary); J. M. Baptista, INESC Porto (Portugal) and Univ. da Madeira (Portugal); B. Kovacs, Univ. of Pécs (Hungary); P. A. S. Jorge, INESC Porto (Portugal)
- 8421 6M **Simultaneous measurement of refractive index and temperature based on multimode interference inside a fiber loop mirror** [8421-534]
C. Gouveia, INESC Porto (Portugal) and Univ. da Madeira (Portugal); G. Chesini, Univ. Estadual de Campinas (Brazil); J. M. Baptista, INESC Porto (Portugal) and Univ. da Madeira (Portugal); C. M. B. Cordeiro, Univ. Estadual de Campinas (Brazil); P. A. S. Jorge, INESC Porto (Portugal)
- 8421 6N **SERS properties of gold core silver shell nanoparticles self-assembled on silica substrates and optical fiber endface** [8421-554]
Q. Geng, Z. Chen, N. Chen, S. Liu, C. Qian, T. Wang, Shanghai Univ. (China)
- 8421 6O **Temperature independent refractive index measurement using white light interferometry** [8421-555]
C. Gouveia, INESC Porto (Portugal) and Univ. da Madeira (Portugal); M. Zibaii, H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of); M. J. Marques, INESC Porto (Portugal) and FCUP (Portugal); J. M. Baptista, INESC Porto (Portugal) and Univ. da Madeira (Portugal); P. A. S. Jorge, INESC Porto (Portugal)
- 8421 6P **Enhanced novel fiber-optic sensor for efficient fluorescence collection** [8421-569]
Y. Chiniforooshan, J. Ma, W. J. Bock, Univ. du Québec en Outaouais (Canada)

- 8421 6Q **Temperature independent microbending polarization maintaining photonic-crystal-fiber based microdisplacement sensor** [8421-16]
B. Dong, J. Hao, Institute for Infocomm Research (Singapore)
- 8421 6R **Liquid-core photonic crystal fiber based surface plasmon resonance refractive index sensor** [8421-72]
B. Shuai, L. Xia, D. Liu, Huazhong Univ. of Science and Technology (China)
- 8421 6S **Temperature threshold sensor based on optical switch with filled photonic crystal fiber** [8421-74]
P. Marc, P. Piliszek, Military Univ. of Technology (Poland); M. Murawski, M. Szymanski, T. Nasilowski, Military Univ. of Technology (Poland) and InPhoTech Ltd. (Poland); K. Pawlik, InPhoTech Ltd. (Poland); L. R. Jaroszewicz, Military Univ. of Technology (Poland)
- 8421 6T **Hollow-core photonic bandgap fiber Mach-Zehnder interferometer based on a long period grating and an offset-splice joint** [8421-78]
X. Yu, Heilongjiang Univ. (China); J. Ju, W. Jin, The Hong Kong Polytechnic Univ. (Hong Kong, China); J. Zhang, S. Liu, Heilongjiang Univ. (China)
- 8421 6U **An inline ultrasensitive temperature sensor based on liquid-filled photonic crystal fiber Mach-Zehnder modal interferometer** [8421-85]
Y. Geng, X. Li, Shenzhen Univ. (China); X. Tan, Ningbo Univ. (China); Y. Deng, Y. Yu, Shenzhen Univ. (China)
- 8421 6V **Sensitivity enhancement in photonic crystal fiber interferometer** [8421-129]
S. Qiu, Y. Chen, Nanjing Univ. (China)
- 8421 6W **Simultaneous measurement of strain and temperature based on clover microstructured fiber loop mirror** [8421-131]
R. A. Perez-Herrera, Univ. Pública de Navarra (Spain); R. M. André, S. F. Silva, INESC Porto (Portugal); M. Becker, K. Schuster, J. Kobelke, Institute of Photonic Technology (Germany); M. López-Amo, Univ. Pública de Navarra (Spain); J. L. Santos, O. Frazão, INESC Porto (Portugal)
- 8421 6X **Hollow core photonic crystal fiber as a viscosity sensor** [8421-140]
L. E. Horan, F. C. Garcia Gunning, Univ. College Cork (Ireland)
- 8421 6Y **Chromatic dispersion measurement in photonic crystal fiber by white-light interferometry** [8421-141]
G. Ran, J. Yi, Beijing Institute of Technology (China)
- 8421 6Z **Pressure-assisted low-loss fusion splicing between photonic crystal fibers and single-mode fiber** [8421-214]
F. Xiao, T. Zhu, L. Xu, M. Deng, Chongqing Univ. (China)
- 8421 70 **Hydrostatic pressure sensor using two-core photonic crystal fiber** [8421-216]
Z. Liu, M.-L. V. Tse, The Hong Kong Polytechnic Univ. (Hong Kong, China); D. Chen, Zhejiang Normal Univ. (China); C. Lu, H.-Y. Tam, The Hong Kong Polytechnic Univ. (Hong Kong, China)

- 8421 71 **Photonic crystal fiber-based silver-nanowires LSPR sensors with supermodes** [8421-332]
C. Zhou, Beijing Jiaotong Univ. (China) and Univ. of Jinan (China); J. Yao, Tianjin Univ. (China)
- 8421 72 **Hybrid square-lattice photonic crystal fiber with high birefringence and negative dispersion** [8421-345]
S. E. Kim, Gwangju Institute of Science and Technology (Korea, Republic of); C. G. Lee, I. Moon, Chosun Univ. (Korea, Republic of); C.-S. Kee, Gwangju Institute of Science and Technology (Korea, Republic of)
- 8421 73 **Optical fiber sensors fabricated by the focused ion beam technique** [8421-351]
W. Yuan, Singapore Institute of Manufacturing Technology (Singapore); F. Wang, Technical Univ. of Denmark (Denmark); O. Bang, Technical Univ. of Denmark (Denmark)
- 8421 74 **Surface plasmon resonance sensor based on a novel grapefruit photonic crystal fiber** [8421-408]
P. Zhang, J. Yao, L. Jing, H. Cui, Y. Lu, Tianjin Univ. (China)
- 8421 75 **Microstructured polymer optical fiber-based surface plasmon resonance sensor** [8421-410]
Y. Lu, B. Wu, X. Fu, C. Hao, X. Huang, J. Yao, Tianjin Univ. (China)
- 8421 76 **Overcoupled bending insensitive holey optical fiber coupler** [8421-428]
J. B. Eom, I. H. Shin, J. S. Park, B. I. Lee, Korea Photonics Technology Institute (Korea, Republic of)
- 8421 77 **A high sensitivity humidity sensor based on an Agarose coated photonic crystal fiber interferometer** [8421-442]
J. Mathew, Y. Semenova, G. Farrell, Dublin Institute of Technology (Ireland)
- 8421 78 **Comparison of vibration measurements in composite materials using different types of polarimetric sensors** [8421-445]
M. Ramakrishnan, Dublin Institute of Technology (Ireland); G. Rajan, The Univ. of New South Wales (Australia); Y. Semenova, Dublin Institute of Technology (Ireland); T. Woliński, Warsaw Univ. of Technology (Poland); G. Farrell, Dublin Institute of Technology (Ireland)
- 8421 79 **Inline Mach-Zehnder interferometer using liquid filled twin-core photonic crystal fiber with high strain sensitivity.** [8421-456]
K. Naeem, B. Kim, J. Han, Y. Chung, Gwangju Institute of Science and Technology (Korea, Republic of)
- 8421 7A **Brillouin scattering of a photonic crystal fiber core-offset spliced to a single mode fiber** [8421-457]
Y. Chang, H. Liang, J. Li, L. Cheng, B.-O. Guan, Jinan Univ. (China)
- 8421 7B **A Mach-Zehnder interferometer by combining a microtaper with a long period grating in an all solid photonic bandgap fiber and its temperature sensing characteristic** [8421-469]
Z. Wu, Nankai Univ. (China) and Nanyang Technological Univ. (Singapore); M. Jiang, Nanyang Technological Univ. (Singapore) and CINTRA CNRS/NTU/THALES (Singapore); Y. Liu, Z. Wang, Nankai Univ. (China); P. P. Shum, Nanyang Technological Univ. (Singapore) and CINTRA CNRS/NTU/THALES (Singapore); X. Q. Dinh, CINTRA CNRS/NTU/THALES (Singapore) and Thales Solutions Asia Pte Ltd. (Singapore)

- 8421 7C **Surface plasmon resonance sensor based on grapefruit fiber filled with silver nanowires** [8421-471]
C. Hao, Y. Lu, X. Fu, J. Yao, Tianjin Univ. (China)
- 8421 7D **Temperature and strain response of Michelson interferometer with asymmetric two-core photonic crystal fiber** [8421-473]
J. Han, B. Kim, K. Naeem, Y. Chung, Gwangju Institute of Science and Technology (Korea, Republic of)
- 8421 7E **Strain and temperature sensitivity measurement using simple microstructured fiber Mach-Zehnder interferometer** [8421-531]
M. Murawski, M. Szymanski, Military Univ. of Technology (Poland) and InPhoTech Ltd. (Poland); Z. Holdynski, Military Univ. of Technology (Poland); T. Tenderenda, L. Ostrowski, Military Univ. of Technology (Poland) and InPhoTech Ltd. (Poland); K. Pawlik, InPhoTech Ltd. (Poland); A. Lukowski, Military Univ. of Technology (Poland); H. Krisch, Krohne Messtechnik GmbH (Germany); P. Marć, L. R. Jaroszewicz, Military Univ. of Technology (Poland); T. Nasilowski, Military Univ. of Technology (Poland) and InPhoTech Ltd. (Poland)
- 8421 7F **Dispersion properties of double-clad hollow-core photonic bandgap fibers based on a circular lattice cladding** [8421-535]
H. Stawska, E. Bereś-Pawlik, Wrocław Univ. of Technology (Poland)
- 8421 7G **Birefringence responses of hybrid photonic crystal fiber to strain and temperature** [8421-544]
M. Pang, The Hong Kong Polytechnic Univ. (Hong Kong, China); L. M. Xiao, Univ. of Bath (United Kingdom); W. Jin, The Hong Kong Polytechnic Univ. (Hong Kong, China); A. C. S. Jr., National Institute of Telecommunications (Brazil)
- 8421 7H **Photonic crystal fibers as miniature monitoring platforms for petroleum characterization** [8421-548]
R. L. Patyk, C. Martelli, M. J. da Silva, R. E. M. Morales, Univ. Tecnológica Federal do Paraná (Brazil); M. Naqshbandi, J. Canning, The Univ. of Sydney (Australia)
- 8421 7I **Surface plasmon resonance sensor based on a novel grapefruit photonic crystal fiber** [8421-579]
P. Zhang, J. Yao, L. Jing, H. Cui, Y. Lu, Tianjin Univ. (China)
- 8421 7J **Selectively infiltrated photonic crystal fibers for strain measurement with ultra-high sensitivity** [8421-4]
Y. Wang, The Hong Kong Polytechnic Univ. (Hong Kong, China) and Wuhan Institute of Technology (China); D. N. Wang, The Hong Kong Polytechnic Univ. (Hong Kong, China)
- 8421 7K **Thinned fiber based Mach-Zehnder interferometer for measurements of liquid level and refractive index** [8421-14]
L. Li, L. Xia, Z. Xie, D. Liu, Huazhong Univ. of Science and Technology (China)
- 8421 7L **Multiplexed localized surface plasmon resonance sensing with suspended core fibers** [8421-42]
K. Schröder, M. Zobel, A. Csáki, A. Schwuchow, W. Fritzsche, R. Willsch, H. Bartelt, Institute of Photonic Technology (Germany)

- 8421 7M **Principle of the temperature sensor based on two mode nano-wire Silicon-on-Insulator waveguides** [8421-49]
Z. Wang, L. Zhang, J. Wang, Beijing Jiaotong Univ. (China)
- 8421 7N **In-line single-mode fiber interferometers based on peanut-shape fiber structure** [8421-77]
D. Wu, T. Zhu, D.-W. Duan, Chongqing Univ. (China); K. S. Chiang, City Univ. of Hong Kong (Hong Kong, China) and Chongqing Univ. (China); M. Deng, Chongqing Univ. (China)
- 8421 7O **Sensing characteristics of tapered high-birefringent optical fiber** [8421-127]
A. Layeghi, M. I. Zibaii, Shahid Beheshti Univ. (Iran, Islamic Republic of) and INESC Porto (Portugal); J. Sadeghi, Shahid Beheshti Univ. (Iran, Islamic Republic of); O. Frazão, P. A. S. Jorge, INESC Porto (Portugal); H. Latifi, Shahid Beheshti Univ. (Iran, Islamic Republic of)
- 8421 7P **A fast-response microfiber coupler tip high temperature sensor** [8421-150]
M. Ding, Univ. of Southampton (United Kingdom); P. Wang, Univ. of Southampton (United Kingdom) and Dublin Institute of Technology (Ireland); G. Brambilla, Univ. of Southampton (United Kingdom)
- 8421 7Q **Spectral bandwidth analysis of high sensitivity refractive index sensor based on multimode interference fiber device** [8421-160]
E. G. P. Pachon, IFGW, UNICAMP (Brazil); M. A. R. Franco, Instituto de Estudos Avançados (Brazil) and Instituto Tecnológico de Aeronautica (Brazil); C. M. B. Cordeiro, IFGW, UNICAMP (Brazil)
- 8421 7R **Optical fiber hydrogen sensor based on micro interferometer** [8421-175]
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Introduction

It gives us great pleasure to welcome you to the 22nd International Conference on Optical Fiber Sensors (OFS-22), which will be held in Beijing from 15–19 October 2012. The OFS series is acknowledged as the world's leading conference on all topics related to fiber-optic, guided-wave, and optical sensing devices, systems, theories, and techniques for research and applications. The first OFS was held in London in 1983. Since then it is held approximately every eighteen months, rotating between the Americas, Europe, and Asia/Pacific. This is the first time that China hosts the OFS conference.

The programme for OFS-22 includes 34 invited talks: nine of these are for a special workshop to celebrate the 35th anniversary of fiber optic gyros; 14 will be presented at a workshop on Industrial Progress, Commercial Systems, and Field Tests; 11 others are dispersed throughout the technical sessions, all providing up-to-date description of key areas of OFS technology and applications by experts from around the world. Our plenary speaker is Tuan Vo-Dinh, who will speak on Optical Nanosensors and Nanoprobes: From Single-Cell Exploration to Medical Diagnostics.

The programme also includes 382 contributed papers from 30 countries. These papers will be presented in 12 oral sessions and three poster sessions. 331 contributed papers are included in poster sessions. In addition, a session for post-deadline papers and a table-top exhibition are also included.

We are indebted to the members of the International Steering Committee and the International Honorary Committee for their assistance in preparing for this conference. We would particularly like to thank the members of the Technical Programme Committee for rapidly and competently referring the large number of submissions and to the Local Organising Committee for their hard work to make this conference a success.

We hope you enjoy the conference as well as the City of Beijing at its 'golden' autumn season.

Yanbiao Liao
Wei Jin
David D. Sampson
Ryozo Yamauchi
Youngjoo Chung
Kentaro Nakamura
Yunjiang Rao

Editors' Note

All contributed papers in their entirety (i.e., not merely an abstract or extract) were peer-reviewed for their significance, innovation, and quality by independent members of the Technical Programme Committee, and then rated.

