

Jacques Albert

Complete list of publications, patents, conference presentations, and talks

Papers in refereed scientific journals (inverse chronological order)

161. C. Caucheteur, T. Guo, F. Liu, B. O. Guan, and J. Albert, "Ultra-sensitive plasmonic sensing in air using optical fibre spectral combs," *Nat. Comm.* 7:13371 (Nov. 2016)
160. Y. Yuan, T. Guo, X. Qiu, J. Tang, Y. Huang, L. Zhuang, S. Zhou, Z. Li, B.-O. Guan, X. Zhang, and J. Albert, "Electrochemical Surface Plasmon Resonance Fiber-Optic Sensor: In Situ Detection of Electroactive Biofilms," *Anal. Chem.* 88, 7609-7616 (2016) DOI: 10.1021/acs.analchem.6b01314
159. D. Feng, W. Zhou, X. Qiao, and J. Albert, "High resolution fiber optic surface plasmon resonance sensors with single-sided gold coatings," *Opt. Express* 24, 16456-16464 (2016) <http://dx.doi.org/10.1364/OE.24.016456>
158. D. Feng, X. Qiao, and J. Albert, "Off-axis ultraviolet-written fiber Bragg gratings for directional bending measurements," *Opt. Lett.* 41, 1201-1204 (2016) <http://dx.doi.org/10.1364/OL.41.001201>
157. T. Guo, F. Liu, X. Liang, X. Qiu, Y. Huang, C. Xie, P. Xu, W. Mao, B.-O. Guan, and J. Albert, "Highly sensitive detection of urinary protein variations using tilted fiber grating sensors with plasmonic nanocoatings," *Biosens. Bioelectron.* 78, 221-228 (2016) <http://dx.doi.org/10.1016/j.bios.2015.11.047>
156. T. Guo, F. Liu, B. Guan, and J. Albert, "Tilted fiber grating mechanical and biochemical sensors," Invited paper, *Opt. Laser Technol.* Vol. 78, 19-33 (2016)
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153. D. J. Mandia, W. Zhou, A. Wells, J. Albert, and S. Barry, "Metallic Nanocoatings on Optical Fibers as a Sensor Platform," *ECS Trans.*, vol. 69, no. 7, pp. 171-179 (2015)
152. D. J. Mandia, W. Zhou, M. J. Ward, H. Joress, J. J. Sims, J. B. Giorgi, J. Albert, and S. T. Barry, "The effect of ALD-grown Al₂O₃ on the refractive index sensitivity of CVD gold-coated optical fiber sensors," *Nanotechnology*, vol. 26, no. 43, p. 434002, (2015)

151. A. Van Newkirk, J. E. Antonio-Lopez, A. Velazquez-Benitez, J. Albert, R. Amezcua-Correa, and A. Schülzgen, "Bending Sensor Combining Multicore Fiber with a Mode-Selective Photonic Lantern," *Opt. Lett.* 40, 5188-5191 (Nov. 2015)
150. Z. Cai, F. Liu, T. Guo, B.-O. Guan, G.-D. Peng, and J. Albert, "Evanescently coupled optical fiber refractometer based a tilted fiber Bragg grating and a D-shaped fiber," *Opt. Express* 23, 20971-20976 (3 Aug. 2015)
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149. V. Marquez-Cruz and J. Albert, "High Resolution NIR TFBG-Assisted Biochemical Sensors," Invited paper, *IEEE/OSA J. Lightwave Technol.* 33, 3363-3373 (August 2015)
148. **A. Bialiyeyu**, A. Ianoul, and J. Albert, "Polarization-resolved sensing with tilted fiber Bragg gratings: theory and limits of detection," *J. Opt.* 17, 085601 (2015)
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39. J. Albert, F. Bilodeau, D. C. Johnson, K. O. Hill, S. Mihailov, D. Stryckman, T. Kitagawa, and Y. Hibino

“Polarization-independent strong Bragg gratings in Planar Lightwave Circuits from ArF laser irradiation”

OSA Topical Meeting on Photosensitivity, Bragg gratings, and Poling in Glass fibers and waveguides, Williamsburg VA, Oct. 25-28 (1997)

38. M. Essid, J. L. Brebner, K. Awazu, and J. Albert

“Ion implantation induced photosensitivity in Ge-doped silica: Effects of induced defects on refractive index changes”

9th International conference on Radiation Effects in Insulators, Knoxville TN, Sept. 14-19 (1997)

37. Mourad Essid, John L. Brebner and Jacques Albert

“Refractive index change in Ge-doped silica waveguide after high energy ion implantation and UV irradiation”

APS 1997 March Meeting, Kansas City MO March 17-21 (1997)

36. Sjoerd Roorda, Anna Tchegotareva, Jacques Albert, and John Brebner

“Modification of the core of Ge doped optical fibres by proton ion implantation”

APS 1997 March Meeting, Kansas City MO March 17-21 (1997)

35. J. Brebner, L. B. Allard, M. Verhaegen, M. Essid, J. Albert, P. Simpson, and A. Knights

“Modification of the properties of silica glasses by ion implantation”

Photonics West '97, SPIE Conference on Integrated Optoelectronics, San Jose (1997)

34. H. Takahashi, T. Tanaka, M. Oguma, T. Hashimoto, Y. Hibino, Y. Yamada, Y. Itaya, J. Albert, and K. O. Hill

“An integrated external cavity laser composed of a UV written grating in a silica waveguide and a spot-size converted laser diode on Si”

Proceedings of the OSA Topical Meeting on Integrated Photonics Research '96, Boston, Post-deadline paper PD-1 (1996)

33. L. B. Allard, S. Roorda, A. Ait-Ouali, J. L. Brebner, and J. Albert

“Optical properties of proton implanted Ge-doped optical fibres”

Ion Beam Modification of Materials (IBMM'96), Albuquerque NM (1996)

32. S. Thériault, K. O. Hill, F. Bilodeau, D. C. Johnson, J. Albert, G. Drouin, and A. Béliveau
“High-g accelerometer based on an in-fiber Bragg grating sensor”
Eleventh Optical Fiber Sensors Conference, Sapporo JAPAN (1996)
31. F. Bilodeau, K. O. Hill, S. Thériault, B. Malo, J. Albert, and D. C. Johnson
“A broadband wavelength-selective tap using an all-fiber Mach-Zehnder interferometer and chirped photoinduced Bragg gratings”
Technical Digest, Optical Fiber Communications '96, paper WF5, pp.119-120, San Jose (1996)
30. S. Thériault, F. Bilodeau, B. Malo, D. C. Johnson, J. Albert, K. O. Hill, and L. E. Erickson
“Effect of phase mask stitching errors on the spectral response of uniform and apodized fiber Bragg grating”
Proceedings of the 1995 IEEE Lasers and Electro-Optics Society Annual meeting, San Francisco, Vol. 2, 77-78 (1995)
29. J. Albert
“Photosensitive processes in silica glass using 193 nm light”
Invited paper
OSA Technical Digest Series Volume 22, Photosensitivity and quadratic nonlinearity in glass waveguides: Fundamentals and applications, pp.229-231 Optical Society of America, Washington (1995)
28. K. O. Hill, F. Bilodeau, B. Malo, S. Thériault, T. Kitagawa, H. Takahashi, D. C. Johnson, and J. Albert
“Photosensitivity and its applications”
Proceedings of the 10th International Conference on Optics and Optical Fiber Communications (IOOC'95), Hong-Kong, June 1995
27. M. Essid, M. Verhaegen, L. B. Allard, J. L. Brebner, and J. Albert
“Ion implantation induced photosensitivity in silica and Ge-doped silica”
Proceedings of the Topical Meeting on Photosensitivity and quadratic nonlinearity in glass waveguides: Fundamentals and applications, pp.152-155 (1995)
26. M. Verhaegen, L. B. Allard, J. L. Brebner, M. Essid, S. Roorda, and J. Albert
“Photorefractive waveguides produced by ion implantation of fused silica”
9th International Conference on Ion Beam Modification of Materials, Canberra (Australia) (1995)
25. L. E. Erickson, H. G. Champion, J. Albert, K. O. Hill, B. Malo, S. Thériault, F. Bilodeau, and D. C. Johnson
“Fabrication of a variable diffraction efficiency phase mask by multiple dose ion implantation”

39th International Conference of Electron, Ion, and Photon Beam Technology and Nanofabrication, Scottsdale AZ, May 30-June 2 (1995)

24. F. Bilodeau, B. Malo, D. C. Johnson, J. Albert, S. Thériault, and K. O. Hill
“High performance wavelength division multiplexing/demultiplexing device using an all-fiber Mach-Zehnder interferometer and photoinduced Bragg gratings”
Proceedings of the 1995 Optical Fiber Communications conference (OFC'95), San Jose (California) (1995)

23. B. Malo, K. O. Hill, S. Thériault, F. Bilodeau, T. Kitagawa, D. C. Johnson, J. Albert, K. Takiguchi, T. Kataoka, and K. Hagimoto
“Dispersion compensation of a 100 km, 10 Gb/s optical fiber link using a chirped in-fiber Bragg grating compensator with a linear dispersion characteristic”
Proceedings of the 1994 European Conference on Optical Communications (ECOC'94), Firenze (Italy), Vol. 4 Post-deadline papers, pp.23-26 (1994)

22. K. O. Hill, T. Kitagawa, S. Thériault, F. Bilodeau, D. C. Johnson, B. Malo, and J. Albert
“Novel applications of photosensitivity in Ge-doped silica: Bragg grating matched filtering for optical fiber dispersion compensation and multilayer optical storage medium”
Technical digest of the 1994 IEEE/LEOS Annual meeting, Boston (1994)

21. K. O. Hill, F. Bilodeau, B. Malo, S. Thériault, D. C. Johnson, J. Albert, and T. Kitagawa
“Characterization of In-fiber Bragg Gratings”
Technical Digest of the 1994 Symposium on Optical Fiber measurements, Boulder, September (1994)

20. M. Verhaegen, J. L. Brebner, and J. Albert
“Potential applications of implanted fused silica as a photosensitive material for planar lightwave circuits”
International conference on applications of photonic technology (ICAPT'94), Toronto, June 1994
Applications of Photonic Technologies, Plenum Press, (1995)

19. J. Albert, B. Malo, F. Bilodeau, D. C. Johnson, K. O. Hill, and I. M. Templeton
“Fabrication and characterization of submicron gratings written in planar silica glass with a Focused ion beam”
Invited paper, International Symposium on Integrated optics, Lindau (Germany), SPIE Proc. Vol. 2213, 78-88 (1994)

18. T. Kitagawa, K. O. Hill, D. C. Johnson, B. Malo, J. Albert, S. Thériault, F. Bilodeau, K. Hattori, and Y. Hibino
“Photosensitivity in P₂O₅-SiO₂ waveguides and its application to Bragg reflectors in single-frequency Er³⁺-doped planar waveguide laser”

Post-deadline paper PD-17, Proceedings of the 1994 Optical Fiber Communication Conference. p.79 (1994)

17. K. O. Hill, F. Bilodeau, B. Malo, T. Kitagawa, S. Thériault, D. C. Johnson, J. Albert, and K. Takiguchi

“Aperiodic in-fiber Bragg grating for optical fiber dispersion compensation”

Post-deadline paper PD-2, Proceedings of the 1994 Optical Fiber Communication Conference, p.17 (1994)

16. P. Noutsios, G. L. Yip, and J. Albert

“A new vertical directional coupler for optimum edge-coupling to an embedded photodetector”

IEEE/OSA Topical Meeting on Integrated Photonics Research '94, San Francisco, paper ThF18 (1994)

15. F. Bilodeau, K. O. Hill, B. Malo, D. C. Johnson, and J. Albert

“High-return-loss narrowband all-fiber bandpass Bragg transmission filter”

post-deadline paper ThC 12.8, Proc. of the European Conference on Optical Communications, Montreux, Vol. 3, p. 29 (1993)

14. K. O. Hill, F. Bilodeau, B. Malo, J. Albert, and D. C. Johnson

“Optical waveguide photosensitivity”

Invited talk, LEOS'93, San Jose CA (1993)

13. B. Malo, F. Bilodeau, J. Albert, D. C. Johnson, K. O. Hill, Y. Hibino, and M. Abe

“Photosensitivity in optical fiber and silica-on-substrate waveguides”

Invited Talk, 1993 SPIE Conference on Photosensitivity and self-organization in optical fibers and waveguides, Quebec, (1993)

12. K. O. Hill, F. Bilodeau, B. Malo, J. Albert, D. C. Johnson, Y. Hibino, M. Abe, and M. Kawachi

“Application of phase masks to the photolithographic fabrication of Bragg gratings in conventional fiber/planar waveguides with enhanced photosensitivity”

Conference on Optical Fiber Communications 1993, post-deadline paper PD15, San Jose CA (1993)

11. J. Albert, K. O. Hill, B. Malo, D. C. Johnson, I. M. Templeton, and J. L. Brebner

“Direct writing of volume and surface gratings with sub-micron periods in fused silica”

in Integrated Photonics Research, Vol. 11, OSA Technical Digest Series, (Optical Society of America, Washington, DC), pp. 492-495 (1993)

10. P. C. Noutsios, G. L. Yip, and J. Albert

“Characteristics of dielectric-clad directional couplers for improved edge coupling to hybrid detectors”

in Integrated Photonics Research, Vol. 11, OSA Technical Digest Series, (Optical Society of America, Washington, DC), pp. 60-63 (1993)

9. J. Albert, B. Malo, D. C. Johnson, K. O. Hill, J. L. Brebner, Y. B. Trudeau, and G. Kajrys
“Some optical properties of waveguides made by high energy ion implantation in fused silica”
in Integrated Photonics Research, Vol. 10, OSA Technical Digest Series, (Optical Society of America, Washington, DC), pp. 4-5 (1992)
8. P. Noutsios, G. L. Yip, and J. Albert
“A novel vertical directional coupler made by graded-index ion-exchanged slab waveguides”
in Integrated Photonics Research, Vol. 10, OSA Technical Digest Series, (Optical Society of America, Washington, DC), pp. 156-157 (1992)
7. J. Albert, W. J. Wang, and S. I. Najafi
“Optical damage threshold of ion-exchanged glass waveguides at 1.06 μm ”
SPIE Conference on Integrated Optics, SPIE Proceedings Vol. 1583, 27-31 (1991)
6. S. I. Najafi, W. J. Wang, G. Orzel, J. Albert, S. Honkanen, P. Pöyhönen, and M. J. Li
“Nd and Er doped glass integrated optical amplifiers and lasers”
SPIE Conference on Integrated Optics, SPIE Proceedings Vol. 1583, 32-36 (1991)
5. P. Lefebvre, V. Shahidi, J. Albert, and S. I. Najafi
“Potassium ion-exchanged Mach-Zehnder interferometers in glass”
SPIE Conference on Integrated Optics, SPIE Proceedings Vol. 1583, 221-225 (1991)
4. M. J. Li, S. I. Najafi, J. R. Simard, A. Leung, J. Albert, and K. O. Hill
“Fabrication and characterization of ion-exchanged glass channel waveguides with etched and diffused grating taps”
SPIE Proc. Vol. 1334, Current developments in optical engineering IV, 148-52, San Diego, July (1990)
3. J. Albert and J. W. Y. Lit
“Numerical modelling of 2-D field assisted ion-exchange in glass”
SPIE Symposium on Optoelectronic and Fiber Optic Devices and Applications, Boston, September 1989;
SPIE Proceedings, vol. 1177, Integrated Optics and Optoelectronics, 192-199 (1989)
2. J. Albert and G. L. Yip
“Insertion loss between single-mode fibers and diffused channel waveguides”
SPIE proceedings, vol. 933, Symposium on Integrated Optical Circuit Engineering IV, Boston, 173-178 (1988)
1. J. Albert and G. L. Yip
“Wide-channel passive single-mode directional couplers in glass with adjustable power transfer”

Technical Digest of the 12th European Conference on Optical Communication, Barcelona (Spain) pp.373-376 (1986)

Presentations at other scientific conferences and meetings

43. J. Albert, “Random nanoplasmonics: the key for low cost, high resolution biochemical sensing?”, Invited talk, IEEE Photonics Society Ottawa Symposium on Recent advances in Photonics, NRC (Ottawa) Feb. 7th 2014

42. J. Albert, « Sensing with Plasmons on Optical fibers, » Invited talk, Nano Photonics Summer School, University of Ottawa, May 2nd, 2012

41. J. Albert, « Dispositifs optiques linéaires et nonlinéaires à base de fibres optiques, » Invited talk, Annual meeting of the Centre Optique, Photonique et Laser du Québec, Université Laval, April 30th, 2012

40. J. Albert, “Fiber gratings from a different angle,” Invited talk, Workshop on Next-Generation Optical Fiber Technology, Townes Laser Institute, Cocoa Beach FL, October 2010)

39. J. Albert , “ Capteurs optiques à base de réseaux inclinés dans les fibres optiques,” Invited seminar, Département de Génie informatique, UQO, April 17th 2009

38. J. Albert, “Novel photosensitive phenomena in phosphate glass waveguides and fibers,” *Invited talk*, Annual meeting of the Canadian Association of Physicists, Quebec (11 June 2008)

37. **Y. Shevchenko**, A. Ianoul, **C. Chen**, and J. Albert, “Realization of Surface Plasmon Resonance Sensors in Standard Optical Fibers,” Nanotechnologies and Photonics, Waterloo, (June 2007)

36. J. Albert, “New sensing modalities for self-referenced fiber Bragg grating sensors,” Invited presentation, OIDA/PTAP Photonic Sensors Workshop, Ottawa, June 7, 2007.

35. **D. Celo**, D. J. Walkey, T. Smy, **A. Froimovitch**, and J. Albert
“GLAD film applications for interferometric optical waveguide sensors”
NATO Advanced Study Institute on Optical waveguide sensing and imaging, Gatineau (Canada), Oct. 16th 2006.

34. **C. Chen**, J. Albert and A. Vincelette, “Tilted-grating-based optical fiber multiparameter sensors,” Optical Industry Development Association Workshop: “Biophotonic Sensors and Smart Fiber Optic Sensor Networks” (Aug. 17-18, 2005) Rochester, NY.

33. **C. Chen**, J. Albert and A. Vincelette, “Novel Temperature-Independent Grating-based optical fiber sensors,” 3rd Conference On Emerging Machinery And Structural Condition Monitoring Technologies For Defence Applications, Ottawa (May 30th to June 1st, 2005)

32. **M. Essid**, J. L. Brebner, and J. Albert
“Différence dans le comportement des défauts à déficience en oxygène dans la silice dopée au germanium sous l’irradiation aux lasers excimères ArF et KrF”
66^{ème} Congrès de l’ACFAS, Québec, 11-15 mai (1998)

31. **A. L. Tchegotareva**, J. L. Brebner, S. Roorda, and J. Albert
“Implantation des protons dans le coeur d’une fibre standard monomode: Effet sur la photosensibilité à la lumière UV”
66^{ème} Congrès de l’ACFAS, Québec, 11-15 mai (1998)

30. J. Albert, F. Bilodeau, S. J. Mihailov, D. Stryckman, D.C. Johnson, and K. O. Hill
“Photosensibilité et réseaux de Bragg dans les circuits optiques planaires”
Conférencier invité, 66^{ème} Congrès de l’ACFAS, Québec, 11-15 mai (1998)

29. **M. Verhaegen**, J. L. Brebner, and J. Albert
“Photosensibilité induite par implantation ionique dans la silice pure: Effets de la dose implantée et du type de dommage produit par le bombardement de silicium”
65^{ème} Congrès de l’ACFAS, Trois-Rivières, 12-16 mai (1997)

28. **A. Tchegotareva**, J. Albert, S. Roorda, and J. L. Brebner
“Les effets de l’implantation des protons dans les systemes des verres de SiO₂ et SiO₂:GeO₂”
65^{ème} Congres de l’ACFAS, Trois-Rivières , 12-16 mai (1997)

27. **M. Essid**, J. L. Brebner, and J. Albert
“Changements de l’indice de refraction de la silice dopée au germanium suite à l’implantation ionique à haute énergie et à l’illumination UV”
65^{ème} Congres de l’ACFAS, Trois-Rivières, 12-16 mai (1997)

26. J. Albert
“Photosensitivity of doped and heavy ion implanted silica glasses under excimer laser irradiation”
Invited speaker, *Glass: What's New?*, 1996 Gordon Research Conference, Tilton NH (1996)

25. **A. Ait-Ouali**, **L. B. Allard**, **M. Essid**, J. L. Brebner, and J. Albert
“Raman study of implantation effects on structural properties of silica”
Canadian Association of Physicists Annual Meeting, Ottawa, June 16-21 (1996)

24. **M. Essid**, J. L. Brebner, and J. Albert
“High energy ion implantation induced photosensitivity in Ge-doped silica”

Canadian Association of Physicists Annual Meeting, Ottawa, June 16-21 (1996)

23. **L. B. Allard**, J. Albert, and J. L. Brebner

“Luminescence and absorption studies of germanosilicate fibre preforms”

Canadian Association of Physicists Annual Meeting, Ottawa, June 16-21 (1996)

22. **M. Essid**, J. L. Brebner, and J. Albert

“Photosensibilité de Ge:SiO₂ implanté à haute énergie”

64^{ème} Congrès de l'ACFAS, Montréal, 13-17 Mai (1996)

21. **A. P. Knights**, P. J. Simpson, **L. B. Allard**, J. L. Brebner, and J. Albert

“Etude par spectroscopie d'annihilation de positrons du dommage créé par implantation ionique dans du SiO₂”

64^{ème} Congrès de l'ACFAS, Montréal, 13-17 Mai (1996)

20. **M. Verhaegen**, J. L. Brebner, and J. Albert

“Corrélation entre les variations d'indice de réfraction photoinduits et le blanchissage des bandes d'absorption dans l'ultra-violet du vide dans la silice implantée par des ions énergétiques”

64^{ème} Congrès de l'ACFAS, Montréal, 13-17 Mai (1996)

19. J. Albert

“Photosensitivity in silica glasses due to ion implantation”

Invited talk, Annual meeting of the Canadian Association of Physicists, Ottawa (1996)

18. **M. Verhaegen**, J. L. Brebner, and J. Albert

“Correlation between large photoinduced refractive index changes and bleaching of VUV absorption bands in ion-irradiated fused silica”

Spring Meeting of the Materials Research Society, San Francisco, 8-12 April (1996)

17. **M. Essid**, **M. Verhaegen**, **L. B. Allard**, J. L. Brebner, and J. Albert

“Photosensitivity induced in Ge-doped silica by high energy ion implantation”

Annual meeting of the Can. Assoc. of Physicists, Quebec, June (1995)

16. **L.B. Allard**, **M. Verhaegen**, J. L. Brebner, J. Albert, and P. J. Simpson

“Photosensitivity of ion-implanted silica”

Annual meeting of the Can. Assoc. of Physicists, Quebec, June (1995)

15. **L. B. Allard**, **M. Verhaegen**, J. L. Brebner, and J. Albert

“Photoluminescence of ion-implanted silica using ArF and KrF excimer laser excitation”

March Meeting of the American Physical Society, San Jose CA, 20-24 March (1995)

14. J. Albert

“Photosensitive planar waveguides”

Invited Paper, RANK Prize Fund Symposium on Novel Optical Effects in Glasses", Grasmere UK, 6-9 March (1995)

13. **L. B. Allard, M. Verhaegen, M. Essid, J. L. Brebner, and J. Albert**
“Optical properties of ion implanted silica irradiated with 193 nm ArF excimer laser light”
Fall Meeting of the Materials Research Society, Symposium on Optical waveguide materials, Boston, November (1994)
12. **M. Verhaegen, J. L. Brebner, and J. Albert**
“Guides d'ondes optiques par implantation d'ions lourds dans la silice”, 62^{ème} Congrès de l'ACFAS, Université du Québec à Montréal, Montréal, Mai (1994)
11. **K. O. Hill, B. Malo, D. C. Johnson, F. Bilodeau, and J. Albert**
“Photoinduced gratings in optical waveguides”
Invited presentation ThEEE2, 9th Interdisciplinary Laser Science Conference, Toronto, October (1993)
10. **S. I. Najafi, S. Honkanen, J. Martin, J. Y. Chen, P. Lefebvre, Q. He, N. Peyghambarian, C. Roux, M. Leclerc, C. L. Callender, S. J. Karnas, and J. Albert**
“Polythiophene as a nonlinear optical material for all-optical waveguide switches”
International Conference on Frontiers of Optical Systems and Materials, Padova, Italy, June (1992)
9. **J. Albert, B. Malo, K. O. Hill, D. C. Johnson, R. Leonelli, and J. L. Brebner**
“Kramers-Kronig analysis of photosensitivity in ion implanted optical waveguides”
Annual Meeting of the Canadian Association of Physics, Windsor (1992)
8. **C. L. Callender, J. Albert, C. Carere, S. J. Karnas, M. Leclerc, and G. Daoust**
“Third harmonic generation measurements on thin films of novel polythiophenes”
Annual Meeting of the Optical Society of America, San Jose CA (1991)
7. **J. Albert**
“Glass waveguide fabrication technology: A review”
Invited Talk, Annual Meeting of the Optical Society of America, Boston, November (1990)
6. **J. Albert**
“Effect of CO₂ laser radiation on ion-exchanged glass waveguides”
Annual Meeting of the Optical Society of America, Boston, November (1990)
5. **M. J. Li, J. Albert, S. I. Najafi, W. J. Wang, and K. O. Hill**
“Ion-exchanged glass waveguides with etched gratings”
Annual Meeting of the Optical Society of America, Boston, November (1990)
4. **M. J. Li, W. J. Wang, S. I. Najafi, J. Albert, and K. O. Hill**
“Glass waveguides with gratings”

First IEEE Int. Workshop on photonic networks, components, and applications, Montebello (1990)

3. J. Albert and G. L. Yip

“Theoretical analysis of single-mode channel optical waveguides made by two-step ion exchange in glass”

International IEEE AP-S Symposium and URSI Radio Science Meeting, Blacksburg VA (1987)

2. G. L. Yip and J. Albert

“Optical waveguides by K^+ -ion exchange in glass”

Sino-British joint meeting on Optical Fiber Communication, Beijing (1986)

1. J. Albert, D. Vincent, and R. Tremblay

“Hybrid bistable optical device using an acousto-optics waveguide modulator”

Annual meeting of the Optical Society of America, Chicago, Oct. (1980)

Book chapters

J. Albert

“Ion exchange from salt melts”

Chapter 2 of *Glass integrated optics*, S. I. Najafi (ed.), Artech House, Boston (1992)

Other publications

7. J. Albert and Y. Shevchenko, “PLASMONIC OPTICAL STRUCTURES: Tilted FBGs excite optical-fiber plasmons,” *Laser Focus World*, pp.71-75, January 2010

6. J. Albert

“Photosensitivity in doped silica optical fibres and waveguides using ArF excimer laser light”

DOE Reports, Vol. 2, QPS Technology Inc., Dorval (Québec) (1996)

5. J. Albert and D. C. Johnson

“Pre-feasibility study report on optical switching in the post-2000 tactical environment”

A report from the Optical Communications and Electrophotonic Technologies Directorate, COMMUNICATIONS RESEARCH CENTRE, Ottawa, July (1991)

4. J. Albert

“Optical waveguide fabrication in glass: an overview”

Optical Communications and Electrophotonic Technologies Directorate, COMMUNICATIONS RESEARCH CENTRE, Ottawa, December (1990)

3. J. Albert

“Solar illumination normalization for visual satellite pictures”

Environment Canada, Atmospheric Environment Service. Pacific Region Technical Note 83-001 (1983)

2. J. Albert

“Channeled winds in Juan de Fuca Strait. An empirical verification”

Environment Canada, Atmospheric Environment Service. Pacific Region Technical Note 82-024 (1982)

1. J. Albert

“Record rainfall at and near Vancouver?”

Environment Canada, Atmospheric Environment Service. Pacific Region Technical Note 82-002 (1982)

Invited Seminars and Workshops

18. J. Albert, “Photonic activities at the CLLIPS laboratory,” Invited seminar, Faculté Polytechnique de Mons (Mons, Belgium, April 23rd, 2008)

17. J. Albert, “Photonic activities at the CLLIPS laboratory,” Invited seminar, Draka Comtech, (Marcoussis, France, April 18th, 2008)

16. J. Albert, “Photonic activities at the CLLIPS laboratory”, Weekly seminar series, Physics Department of the University of Ottawa, March 13th 2008

15. J. Albert, C. Chen, F. Chan, A. Jafari, “Novel sensing mechanisms using tilted fiber Bragg gratings,” Invited lecture, *NATO Advanced Study Institute on Optical waveguide Sensing and Imaging*, (Gatineau, Canada, Oct. 2006)

14. J. Albert

“Novel optical fiber multi-parameter sensors and UV-written cavity mirrors for phosphate glass fiber and waveguide lasers,”

Invited Talk, McMaster University (April 20th, 2006)

13. J. Albert

“Capteurs multiparamètres et cavités lasers sur guides : Nouveaux dispositifs et nouveaux matériaux photosensibles, ”

Invited talk, Université Laval (January 26th, 2006)

12. J. Albert

“Bragg gratings in Planar lightwave circuits”

Invited talk, Alcatel SEL, Stuttgart, Germany (July 9th, 2001)

11. J. Albert
“Bragg gratings in Planar Lightwave circuits”
Invited talk, Ottawa chapter of the IEEE Lasers and Electro-optics Society, Ottawa (Dec. 2, 1998)
10. J. Albert
“Photosensitivity in silica glass: structure studies through ion implantation”
Invited talk at the inauguration of the new Ion implantation facility, Université de Montréal (April 17, 1997)
9. J. Albert
“Current trends at CRC”
Workshop on Photosensitivity in fibers and waveguides, Université de Montréal (March 15, 1996)
8. J. Albert
“Photosensitivity by ion implantation in silica”
Invited presentation for a Visiting Examining Committee of NSERC at the University of Montréal (Jan. 1995)
7. J. Albert
“Photoécriture dans la silice: Physique et technologie”
Invited Colloquium, Département de Physique, Université de Montréal (Dec. 3, 1993)
6. J. Albert
“Ion induced compaction of SiO₂”
Focussed Ion Beam users workshop, National Research Council of Canada (May 7, 1993)
5. J. Albert
“Ion implantation in glasses”
Seminar at the Nuclear Physics Laboratory, Université de Montréal (Jan. 21, 1992)
4. J. Albert
“Integrated optics in glass and applications”
Invited Lecture given for a graduate course on Lasers and Photonics in the Department of Physics, University of Toronto (March 30, 1992)
3. J. Albert
“Glass waveguide fabrication”
Workshop on Glass integrated optics, Ecole Polytechnique (Nov. 30, 1990)
2. J. Albert
“An overview of glass waveguide fabrication technologies”
Seminar at McGill University (Dec. 4, 1990)
1. J. Albert

“Guides optiques par échange d'ions dans le verre”
Seminaire invité à l'Université de Montréal (Feb. 1989)