

VICTOR GRUBSKY

8386 BLACKBURN AVE #304, LOS ANGELES, CA 90048
PHONE: (323) 655-6448 • FAX: (213) 740-6653 • E-MAIL: grubsky@d-startech.com

EDUCATION

- 9/1989 – 6/1994 Dept. of General and Applied Physics, Moscow Institute of Physics and Technology, Moscow, Russia
- 6/1995 *M.S. (Physics)*
- 9/1994 – 8/1999 Dept. Physics and Astronomy, University of Southern California, Los Angeles, California
- 8/1999 *Ph.D. (Physics)*

PROFESSIONAL EXPERIENCE

- 9/1992 – 8/1993 **Lebedev Physics Institute, Moscow, Russia**
Research in the Intracavity Laser Spectroscopy Laboratory.
- 9/1993 – 8/1994 **Institute of Physics, Kiev, Ukraine**
M.S. diploma: breaking the polarization symmetry in an optically isotropic resonator.
- 9/1994 – 8/1999 **University of Southern California, Los Angeles, California**
Research on the photosensitivity of glass and glass fibers, fiber gratings and fiber devices.
- 9/1998 – present **D-STAR Technologies, Inc., Los Angeles, California**
Research and development of fiberoptic devices.

PUBLICATIONS

1. V. Grubsky, S. MacCormack, and J. Feinberg, "All-optical three-dimensional mapping of 180° domains hidden in a BaTiO₃ crystal," *Optics Letters* **21**, 6-8 (1996).
2. V. Grubsky, S. MacCormack, and J. Feinberg, "Dynamic mapping of 180° domains hidden in photorefractive crystals," in Conference on Lasers and Electro-Optics, **9**, OSA Technical Digest Series, 302-303 (1996).
3. D. S. Starodubov, V. Grubsky, J. Feinberg, B. Kobrin, S. Juma, "Bragg grating fabrication in germanosilicate fibers by use of near-UV light: a new pathway for refractive index changes," *Optics Letters* **22** (14), 1086-1088 (July 15, 1997).
4. D. S. Starodubov, V. Grubsky, J. Feinberg, T. Erdogan, "Near-UV fabrication of ultrastrong Bragg gratings in hydrogen-loaded germanosilicate fibers," in Conference on Lasers and Electro-Optics, **11**, OSA Technical Digest Series, Postdeadline paper CPD24 (1997).
5. D. S. Starodubov, V. Grubsky, J. Feinberg, "Efficient Bragg grating fabrication in a fiber through its polymer jacket using near-UV light," *Electronics Letters* **33** (15), 1331-1333 (July 17, 1997).

6. V. Grubsky, D. S. Starodubov, J. Feinberg, "Mechanisms of index change induced by near-UV light in hydrogen-loaded fibers," in Bragg Gratings, Photosensitivity, and Poling in Glass Fibers and Waveguides: Applications and Fundamentals, 17, OSA Technical Digest Series, 98-100 (1997).
7. D. S. Starodubov, V. Grubsky, J. Feinberg, "Bragg grating fabrication in fibers by near-UV light," in Bragg Gratings, Photosensitivity, and Poling in Glass Fibers and Waveguides: Applications and Fundamentals, 17, OSA Technical Digest Series, 150-152 (1997).
8. V. Grubsky, D. S. Starodubov, J. Feinberg, "Wide range and linearity of near-UV induced index change in hydrogen-loaded fibers: applications for Bragg grating fabrication," in Bragg Gratings, Photosensitivity, and Poling in Glass Fibers and Waveguides: Applications and Fundamentals, 17, OSA Technical Digest Series, 156-158 (1997).
9. D. S. Starodubov, V. Grubsky, J. Feinberg, "Fiber Bragg gratings with reflectivity > 97% fabricated through polymer jacket using near-UV light," in Bragg Gratings, Photosensitivity, and Poling in Glass Fibers and Waveguides: Applications and Fundamentals, Postdeadline paper PDP1 (1997).
10. D. S. Starodubov, V. Grubsky, J. Feinberg, "Near-UV photosensitivity of optical fibers: fundamentals and new applications," in LEOS '97, 361-362 (1997).
11. S. Wang, H. Erlig, H. Fetterman, V. Grubsky, and J. Feinberg, "One-dimensional photonic crystals for CDMA," Multimedia Networks: Security, Displays, Terminals, and Gateways Proceedings of SPIE, Dallas, Texas, 3228, 407-416, (1997).
12. K.-M. Feng, V. Grubsky, D. S. Starodubov, J.-X. Cai, A. E. Willner, J. Feinberg, "Tunable nonlinearly-chirped fiber Bragg grating for use as a dispersion compensator with a voltage-controlled dispersion," in OFC '98, 2, OSA Technical Digest Series, 72-74 (1998).
13. J.-X. Cai, A. E. Willner, K.-M. Feng, V. Grubsky, D. S. Starodubov, J. Feinberg, "Dynamic dispersion compensation in a 10-Gbit/s optical system using a novel nonlinearly chirped fiber Bragg grating," in OFC '98, 2, OSA Technical Digest Series, 72-74 (1998).
14. D. S. Starodubov, V. Grubsky, A. Skorucak, J. Feinberg, K.-M. Feng, J.-X. Cai, A. E. Willner, "Novel fiber amplitude modulators for dynamic channel power equalization in WDM systems," in OFC '98, 2, OSA Technical Digest Series, postdeadline paper PD8 (1998).
15. D. S. Starodubov, V. Grubsky, J. Feinberg, "Near-UV photosensitivity: microscopic mechanisms," in Summer School on Photosensitivity in Optical Waveguides and Glasses, Vitznau, Switzerland (1998).
16. S. Wang, H. Erlig, H. R. Fetterman, E. Yablonovitch, V. Grubsky, D. S. Starodubov, and J. Feinberg, "Group velocity dispersion cancellation and additive group delays by cascaded fiber Bragg grating in transmission," IEEE Microwave and Guided Wave Letters 8 (10), 327-329 (October 1998).
17. S. Wang, H. Erlig, H. R. Fetterman, E. Yablonovitch, V. Grubsky, D. S. Starodubov, and J. Feinberg, "Measurement of the temporal delay of a light pulse through a one-dimensional photonic crystal," to be published in Microwave and Optical Technology Letters.
18. D. S. Starodubov, V. Grubsky, J. Feinberg, "All-fiber bandpass filter with adjustable transmission using cladding-mode coupling," Photonics Technology Letters 10 (11), 1590-1592 (November 1998).
19. V. Grubsky, D. S. Starodubov, A. Skorucak, J. Feinberg, "Explanation of strong

- UV-induced index change in hydrogen-loaded fibers,*" in 1998 OSA Annual Meeting, paper ThD3 (1998).
20. S. Wang, H. Erlig, H. R. Fetterman, E. Yablonovitch, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Use of one-dimensional photonic crystal sequences as matched filters in fiber-optic CDMA systems,*" in 1998 OSA Annual Meeting, paper ThNN5 (1998).
 21. V. Grubsky, A. Skorucak, J. Feinberg, and D. S. Starodubov, "*Fabrication of long-period fiber gratings with no harmonics,*" in LEOS '98, 257-258 (1998).
 22. D. S. Starodubov, V. Grubsky, and J. Feinberg, "*All-fiber bandpass filter using cladding-mode coupling,*" in LEOS '98, 261-262 (1998).
 23. V. Grubsky, A. Skorucak, D. S. Starodubov, and J. Feinberg, "*Fabrication of long-period gratings with no harmonics,*" *Photonics Technology Letters* **11** (1), 87 (1999).
 24. X. Jiang, M. Cardakli, K.-M. Feng, J.-X. Cai, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Control monitoring of routing bits and data packets in WDM networks using wavelength-to-time mapping,*" in OFC '99, OSA Technical Digest, TuJ7 (1999).
 25. S. Lee, R. Khosravani, J. Peng, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*High-birefringence nonlinearly-chirped fiber Bragg grating for tunable compensation of polarization mode dispersion,*" in OFC '99, OSA Technical Digest, TuS3 (1999).
 26. V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Effect of molecular water on thermal stability of gratings in hydrogen-loaded optical fibers,*" in OFC '99, OSA Technical Digest, ThD2 (1999).
 27. E. Salik, D. S. Starodubov, V. Grubsky, and J. Feinberg, "*Thermally stable gratings in optical fibers without temperature annealing,*" in OFC '99, OSA Technical Digest, ThD3 (1999).
 28. D. S. Starodubov, V. Grubsky, and J. Feinberg, "*All-fiber bandpass filter with adjustable transmission,*" in OFC '99, OSA Technical Digest, ThJ3 (1999).
 29. M. Cardakli, S. Lee, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*All-optical packet header recognition and switching in a reconfigurable network using fiber Bragg gratings for time-to-wavelength mapping and decoding,*" in OFC '99, OSA Technical Digest, TuM4 (1999).
 30. J.-X. Cai, K.-M. Feng, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Sampled nonlinearly-chirped fiber-Bragg-grating for the tunable dispersion compensation of many WDM channels simultaneously,*" in OFC '99, OSA Technical Digest, FA7 (1999).
 31. V. Grubsky, A. Skorucak, D. S. Starodubov, and J. Feinberg, "*Fabrication of spectrally clean, long-period grating filters,*" in OFC '99, OSA Technical Digest, FK5 (1999).
 32. K.-M. Feng, J.-X. Cai, V. Grubsky, D. S. Starodubov, M. I. Hayee, S. Lee, A. E. Willner, and J. Feinberg, "*Dynamic dispersion compensation in a 10-Gb/s optical system using a novel voltage tuned nonlinearly chirped fiber Bragg grating,*" *Photonics Technology Letters* **11** (3), 373 (1999).
 33. V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Photochemical reaction of hydrogen with germanosilicate glass initiated by 3.4 eV – 5.4 eV ultraviolet light,*" *Optics Letters* **24**, 729 (1999).
 34. V. Grubsky and J. Feinberg, "*Long-period grating sensor with fixed resonance wavelength,*" in *Bragg Gratings, Photosensitivity, and Poling in Glass*

Waveguides, OSA Technical Digest, 192-194 (1999).

35. D. S. Starodubov, V. Grubsky, M. Ewart, J. Feinberg, E. M. Dianov, A. A. Rybaltovskii, and A. O. Rybaltovskii, "*The role of oxygen deficient centers in hydrogen-loaded germanosilicate glass,*" in Bragg Gratings, Photosensitivity, and Poling in Glass Waveguides, OSA Technical Digest, 199-201 (1999).
36. X. Jiang, K.-M. Feng, M. Kardakli, J.-X. Cai, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Control monitoring of routing bits and data packets in WDM networks using wavelength-to-time mapping,*" Photonics Technology Letters **11** (9), 1186-1188 (1999).
37. S. Lee, R. Khosravani, J. Peng, V. Grubsky, D. S. Starodubov, A. E. Willner, and J. Feinberg, "*Adjustable compensation of polarization mode dispersion using a high-birefringence nonlinearly chirped fiber Bragg grating,*" Photonics Technology Letters **11** (10), 1277 (1999).
38. D. S. Starodubov, V. Grubsky, and J. Feinberg, "*Optical fiber gratings: new fabrication techniques and components,*" in WDM Components, Digest of the LEOS Summer Topical Meetings, 45-46 (1999).
39. D. S. Starodubov, V. Grubsky, and J. Feinberg, "*Ultrastrong fiber gratings and their applications,*" in Optical Fiber Reliability and Testing, Proceedings of SPIE **3848**, 178-185 (1999).
40. J.-X. Cai, K.-M. Feng, A. E. Willner, V. Grubsky, D. S. Starodubov, and J. Feinberg, "*Simultaneous tunable dispersion compensation of many WDM channels using a sampled nonlinearly chirped fiber Bragg grating,*" Photonics Technology Letters **11** (11), 1455-1457 (1999).

PATENTS

1. K.-M. Feng, V. Grubsky, D. S. Starodubov, J.-X. Cai, A. E. Willner, J. Feinberg, "*Tunable Nonlinearly-Chirped Grating,*" U. S. patent 5,982,963 (1999).
2. V. Grubsky, "*Wavelength-selective optical fiber components using cladding-mode assisted coupling,*" filed on 5/12/1999.

LANGUAGES

French, Spanish, Russian, Ukrainian

PROFESSIONAL MEMBERSHIPS

Member of the Optical Society of America