

Curriculum- Vitae

Dr. Vipul Rastogi

Professor, Department of Physics
Joint Faculty, Center for Photonics and Quantum Communication Technology (CPQCT)
Indian Institute of Technology Roorkee, India

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Date of Birth: 01 January 1972

Professional Profile

Distinguished academic and research leader with over 25 years of experience in optics, photonics, optical fibers, plasmonics-based sensors, and quantum communication technologies. Author of 100+ peer-reviewed journal publications, multiple patents, commercialized software tools, and extensive international collaborations. Currently serving as Professor in the Department of Physics at IIT Roorkee.

Current Position

Professor, Department of Physics

Joint Faculty, CPQCT
Indian Institute of Technology Roorkee

Previous Academic Appointments

- **Professor**, Department of Physics, IIT Roorkee (2018 – present)
 - **Associate Professor**, Department of Physics, IIT Roorkee (2012 – 2018)
 - **Assistant Professor**, Department of Physics, IIT Roorkee (2003 – 2012)
 - **Research Fellow**, City University of Hong Kong (2000 – 2003)
 - **Postdoctoral Fellow**, Université de Nice Sophia Antipolis, France (1998 – 1999)
 - **Founding Head**, Centre for Photonics and Quantum Communication Technology, IIT Roorkee (2022 – 2023)
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Education

- **Ph.D. (Physics)** – Indian Institute of Technology Delhi, 1998
 - **M.Sc. (Physics)** – Indian Institute of Technology Roorkee (formerly University of Roorkee), 1993
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Research Areas

- Microstructured & Specialty Optical Fibers
- Fiber-based Laser Systems
- Surface Plasmon Resonance Sensors
- Optical Communication Systems
- White OLED Light Extraction Technologies
- ENZ material-based devices

Research Output

- **100+** refereed international journal publications (**1000+** citations and **15** *h-index* since 2021)
- **150+** conference papers
- **2** book chapters
- **5** patents
- **2** commercialized software packages

🔗 Google Scholar Profile:

<https://scholar.google.com/citations?user=HeEFKm4AAAAJ>

Research Supervision

- **Ph.D. Theses:** 14 Awarded | 7 Ongoing
 - **M.Tech Theses:** 23
 - **M.Sc. Projects/Dissertations:** 25
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Selected Significant Research Contributions

- **First proposal for realization of long-period gratings in integrated-optic waveguides**
[V. Rastogi and K. S. Chiang, *Appl. Opt.*, 41, 6351, 2002 (**138** citations)]
 - **PCF-based sensor for blood plasma and cancer detection**
[A. Bijalwan, B. K. Singh and V. Rastogi, *Optik*, 226, 165994, 2021 (**195** citations)]
 - **Conceptualisation of segmented cladding fiber: a novel photonic crystal fiber[†]**
[V. Rastogi and K. S. Chiang, *Opt. Lett.*, 26, 491, 2001 (**99** citations)]
 - **Multilayer cladding large-mode-area leaky fiber ***
[A. Kumar and V. Rastogi, *J. Opt. A*, 10, 15303, 2007 (**48** citations)]
 - **Dielectric nanoparticles for enhancing the efficiency of OLED**
[V. Mann and V. Rastogi, *Opt. Commun.*, 387, 202, 2017 (**55** citations)]
 - **Few-mode erbium-doped fiber amplifier**
[A. Gaur and V. Rastogi, *J. Opt. Soc. Am. B*, 35, 2211, 2018 (**40** citations)]
[V. Rastogi, B. Dussardier and P. Aschieri, French Patent No. FR 3016742, February 2016.]
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Selected Sponsored Research Projects

- **DRDO Project (2025)**
Design and analysis of RF photonic link (₹47 Lakhs)
- **DST-RSF Indo-Russia Research Award (2016)**
Development of new optical fibers for modern laser systems (₹35 Lakhs)
- **Ministry of Information & Communication Technology (2011–2014)**
Innovative light extraction technology for white OLED
Collaboration: IIT Delhi & Moser Baer India Ltd.
Total outlay: ₹317.22 Lakhs
- **UKIERI Major Award (2007–2011)**
Application-specific microstructured optical fibers

Multi-institutional UK–India collaboration

Total outlay: £415,117

- **DST Project (2008–2012)**
Development of silica-based segmented cladding fiber
Collaboration: CGCRI Kolkata (₹54.5 Lakhs)
 - **Indo-French Network Project (2006–2010)**
Specialty optical fibers & communication components
Multi-institutional Indo-French collaboration (₹26.4 Lakhs)
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Awards & Recognitions

- **Chairman**, Fibre Optics Sectional Committee - Bureau of Indian Standards
 - **Distinguished Fellow**, Optical Society of India
 - **Vice-President** (Central Zone), Indian Association of Physics Teachers (2025–2027)
 - **President**, Uttarakhand Regional Council (IAPT) (2022–2024)
 - **Ramkumar Prize** (2019), IIT Roorkee, for outstanding teaching and research
 - **IAPT-DSM Award** (2016), for UG Physics teaching
 - **Outstanding Teacher Award** (2011, 2023), IIT Roorkee
 - **Senior Member Designation** (2011), Optica (Formerly the Optical Society of America)
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Leadership Roles and Outreach

- **Head**, Department of Physics, IIT Roorkee (2023-26)
 - **Founding Head**, Centre for Photonics and Quantum Communication Technology, IIT Roorkee (2022-2023)
 - **Associate Dean**, Academic Affairs, IIT Roorkee (2017-2021)
 - **Leading role in the establishment of the Center for Photonics and Quantum Communication Technology (CPQCT)** at IIT Roorkee
 - Leading role in the establishment of DRDO Industry Academia-Center of Excellence (DIA-CoE), IIT Roorkee
 - **Leading role in the establishment of MTech (Photonics)** program at IIT Roorkee
 - **Founding member**, Executive Committee, Workshop on Optics and Photonics: Theory & Computational Techniques - OPTCT (An annual workshop being held since 2017)
 - Member Advisory Committee/Technical Program Committee of most of the major conferences and workshops organized in India
 - **20+ special lectures** in the faculty development programs and short courses in various colleges across India
 - Several workshops, experimental demonstrations, and quizzes in the schools of Uttarakhand through IIT Roorkee Student Chapter of Optica
 - Contributions in **spreading Physics education to various parts of Central India** through regional councils of the Indian Association of Physics Teachers as the Vice-President of its Central zone.
 - **NPTEL online course on Fiber Optics** freely available on YouTube, benefiting several thousand students at remote places
<https://nptel.ac.in/courses/115107095>
<https://www.youtube.com/watch?v=gseDKybaoHU&list=PLkYiMrD6Uzuz9eK2IZr1rLb3jOnMzsjpV>
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Invited International Appointments

- Invited Professor, LPMC, Université de Nice, France (2008, 2013)
- Visiting Fellow, City University of Hong Kong (2005)

Book Chapters

- Chiang, K. S. & Rastogi, V. (2006). *Radial Effective Index Method for the Analysis of Microstructured Fibers*, in **Guided Wave Optical Components and Devices**, Academic Press.
- Rastogi, V. (2023). *Surface Plasmon Resonance–Based Optical Sensors: A Conceptual Framework*, in **Plasmonics-Based Optical Sensors and Detectors**, Jenny Stanford Publishing.

Software Developed & Transferred

- **FM-EDFA Solver** – Transferred to CodeSScientific, Ottawa
- **LIGHTSIM** – Optical fiber & planar waveguide simulation software (Transferred to Fiber Optika Technologies Pvt. Ltd.)
- **Basic Quantum Mechanics Software** – Companion to textbook by Ajoy Ghatak

Patents

1. Optical Fiber for Ultra High Capacity Transmission (US Patent, 2004)
2. Optical Fiber (China Patent, 2008)
3. Optical Fiber (US Patent, 2010)
4. Dispositif D'amplification Optique Multimode (French Patent, 2016)
5. Graphene Assisted SPR-Based Refractive Index Sensor (Indian Patent Application, 2025)

Selected Publications

The complete list is available at

https://scholar.google.com/citations?hl=en&user=HeEFKm4AAAAJ&view_op=list_works

1. S. P. Mahato and **V. Rastogi***, “Low power all optical switch based on epsilon near zero material coupled grating structure,” *Journal of Optical Society of America B* (2026). <https://doi.org/10.1364/JOSAB.589154>
2. I. De, A. Gaur and **V. Rastogi***, “WDM amplification of 30+30 OAM modes in dual concentric core erbium-doped photonic crystal amplifier,” *IEEE-OSA J. Lightwave Technology*, vol. 44, pp. 251 – 259, 2026.
3. M. Uwais, and **V. Rastogi***, “Cu-Grating and Graphene-Assisted SPR-Based Refractive Index Sensor,” *Plasmonics*, vol. 20, pp. 9289-9296, 2025.
4. R. Chauhan, U. S. Tripathi, and **V. Rastogi***, “Liquid crystal based tunable coupler and filter for CWDM using parallel long-period waveguide gratings,” *Journal of Optical Society of America B*, vol. 42, pp. B1 – B9, 2025.
5. R. Chauhan, U. S. Tripathi, and **V. Rastogi**, “Wavelength tunable mode converters using cascaded long period waveguide gratings in SiNOI and LNOI,” *Applied Physics B*, vol. 131, p. 141, 2025.
6. M. Uwais, and **V. Rastogi**, “Cu-Grating and Graphene-Assisted SPR-Based Refractive Index Sensor,” *Plasmonics* (May 2025). <https://doi.org/10.1007/s11468-025-02992-8>
7. I. De, A. Gaur and **V. Rastogi**, “Multimode erbium-doped fiber amplifier based on double-clad GeO₂-doped photonic crystal fiber supporting 38 orbital angular momentum modes,” *J. Lightwave Technology*, vol. 42, pp. 5650 – 5656, May 2024.

8. R. Chauhan, U. S. Tripathi and **V. Rastogi**, "Liquid-crystal clad tunable wavelength demultiplexer and coupler/filter in silicon nitride rib waveguide structure," *Optics Communications*, vol. 556, p. 130287, January 2024.
9. M. Uwais, A. Bijalwan and **V. Rastogi**, "SPR-based sensor for colorectal cancer detection using Al-Cu and graphene," *Plasmonics*, vol. 19, p. 1857, November 2023.
10. M. Uwais, A. Bijalwan and **V. Rastogi**, "SPR-based refractive index sensor using BaTiO₃ and WS₂ with Al-Ni bimetal for glucose sensing," *Physica Scripta*, vol. 98, p. 105515, September 2023.
11. M. Uwais, A. Bijalwan and **V. Rastogi**, "Surface phonon assisted refractive index sensing in mid-infrared wavelength range," *Plasmonics*, vol. 17, pp. 1331-1338, March 2022.
12. M. Rehan, A. Kumar and **V. Rastogi**, "Amplification of picosecond and femtosecond pulses using large mode area Erbium doped fiber at 1530 nm wavelength," *Optics & Laser Technology*, vol. 145, p. 1753, January 2022.
13. A. Mehta, M. Rehan and **V. Rastogi**, "Erbium-doped circular photonic crystal fiber design for the amplification of 20 OAM modes," *J. Opt. Soc. Am. B*, vol. 38, pp. F138 – F144, December 2021.
14. A. Bijalwan, B. K. Singh and **V. Rastogi**, "Analysis of one-dimensional photonic crystal based sensor for detection of blood plasma and cancer cells," *Optik*, vol. 226, p. 165994, Jan 2021. (IF: 2.187)
15. M. Rehan, A. K. Mishra and **V. Rastogi**, "Generation of femtosecond pulse train by pulse splitting in a large mode area fiber at 2 μm wavelength," *Optical Fiber Technology*, vol. 60, p. 102362, 2020.
16. U. S. Tripathi, A. Bijalwan and **V. Rastogi**, "Rib waveguide based liquid crystal EO switch," *IEEE J. Photonics Technology Letters*, vol. 32, pp. 1453 – 1456, 2020.
17. V. Mann and **V. Rastogi**, "FDTD Simulation Studies on Improvement of Light Absorption in Organic Solar Cells by Dielectric Nanoparticles," *Optical and Quantum Electronics*, vol. 52, pp. 233 (1-16), 2020.
18. U. S. Tripathi and **V. Rastogi**, "Liquid Crystal Based Rib Waveguide," *IEEE-OSA Journal of Lightwave Technology*, vol. 38, pp. 4045-4051, 2020. (IF: 4.288)
19. A. Bijalwan, B. K. Singh and **V. Rastogi**, "Surface plasmon resonance based sensors using nano ribbons of graphene and WSe₂," *Plasmonics*, vol. 15, pp. 1015-1023, 2020. (IF: 2.335)
20. Anjali, M. Rehan, G. Kumar and **V. Rastogi**, "Highly nonlinear silica spiral photonic crystal fiber for supercontinuum generation extending from 320 nm to 2620 nm," *Optik*, [vol. 208, pp. 163897 \(1-6\)](#), 2020.
21. B. K. Singh, A. Bijalwan and **V. Rastogi**, "Enhancement of light harvesting efficiency of perovskite solar cells by using one-dimensional photonic crystals," *Applied Optics*, vol. 58, pp. 8046 – 8054, 2019. (IF: 1.961)
22. A. Bijalwan and **V. Rastogi**, "Design and simulation of a palladium-aluminum nanostructure based hydrogen sensor with improved figure of merit," *IEEE Sensors Journal*, vol. 19, pp. 6112 – 6118, 2019. (IF: 3.076)
23. U. S. Tripathi and **V. Rastogi**, "Liquid crystal-based widely tunable integrated optic wavelength filters," *Journal of Optical Society of America B*, vol. 36, pp. 1883 – 1889, 2019.
24. U. S. Tripathi and **V. Rastogi**, "Temperature insensitive long period waveguide gratings in rib waveguide," *Optik*, vol. 186, pp. 15 – 21, 2019.
25. D. A. Korobko, **V. Rastogi**, A Sysoliatin, and I. O. Zolotovskii, "Generation of 2 μm radiation due to single-mode fibers with longitudinally varying diameter," *Optical Fiber Technology*, vol. 47, pp. 38 – 42, 2019.
26. A. Bijalwan and **V. Rastogi**, "Gold–aluminum-based surface plasmon resonance sensor with a high quality factor and figure of merit for the detection of hemoglobin," *Applied Optics*, vol. 57, pp. 9230 – 9237, 2018.
27. A. Gaur and **V. Rastogi**, "Modal gain equalization of 18 modes using a single-trench ring-core EDFA," *Journal of Optical Society of America B*, vol. 35, pp. 2211 – 2216, 2018.

28. G. Kumar, M. Rehan, **V. Rastogi**, D. A. Korobko and A. A. Sysolyatin, "Direction- dependent propagation of high-power femtosecond pulses through a large-mode-area tapered fiber," *Journal of Optical Society of America B*, vol. 35, pp. 1681 – 1686, 2018.
29. Babita Hooda and **V. Rastogi**, "Depressed index clad fiber as a highly sensitive low-cost refractive index sensor," *Optik*, vol. 170, pp. 237-241, 2018.
30. A. Bijalwan and **V. Rastogi**, "Design and analysis of refractive sensor with high quality factor using Au-Al₂O₃ grating on Aluminum," *Plasmonics*, vol. 13, pp. 1995 - 2000, 2018
31. A. Gaur, G. Kumar and **V. Rastogi**, "Dual-core few-mode EDFA for amplification of 20 modes," *Optical and Quantum Electronics*, vol. 50, pp. 66(1-10), 2018.
32. A. Bijalwan and **V. Rastogi**, "Sensitivity enhancement of a conventional gold grating assisted surface plasmon resonance sensor by using a bimetallic configuration," *Applied Optics*, vol. 56, pp. 9606-9612, 2017.
33. V. Mann, B. Hooda and **V. Rastogi**, "Improvement of light extraction efficiency of organic light-emitting diodes using dielectric nanoparticles," *Journal of Nanophotonics*, vol. 11, pp. 36010, 2017.
34. B. Hooda and **V. Rastogi**, "Low cost highly sensitive miniaturized refractive index sensor based on planar waveguide," *Optik*, vol. 143, pp. 158-166, 2017.
35. A. Gaur and **V. Rastogi**, "Design and analysis of high-power segmented-core trench-assisted Yb-free erbium doped fiber amplifier," *Optics and Laser Technology*, vol. 95, pp. 46-50, 2017.
36. V. Mann and **V. Rastogi**, "Dielectric nanoparticles for the enhancement of OLED light extraction efficiency," *Optics Communications*, vol. 387, pp. 202-207, 2017.
37. A. Pal, A. Dhar, A. Ghosh, R. Sen, B. Hooda, **V. Rastogi**, M. Ams, F. Mathias, T. Sun, and K. T. V. Grattan, "Sensors for harsh environment : radiation resistant FBG sensor system," *J. Lightwave Technology*, 2016, DOI 10.1109/JLT.2016.2598666
38. **V. Rastogi**, A. Gaur, P. Aschieri, and B. Dussardier, "Mode group specific amplification length in an asymmetric LPG assisted few-mode EDFA," *Optics Communications*, vol. 382, pp. 13-17, 2017.
39. A. Gaur and **V. Rastogi**, "Design and analysis of annulus core few-mode EDFA for modal gain equalization," *IEEE Photonics Technology Letters*, vol. 28, pp. 1057-1060, 2016.
40. G. Semwal and **V. Rastogi**, "Design optimization of long period waveguide grating devices for refractive index sensing using adaptive particle swarm optimization," *Optics Communications*, vol. 359, pp. 336-343, 2016.
41. N. Ashok and **V. Rastogi**, "Design and study of trench-assisted long-period-waveguide-grating based gain flattening filter for erbium-doped waveguide amplifier," *J. Optics (OSI)*, vol. 45, pp. 285 - 291, 2015.
42. B. Hooda, A. Pal, **V. Rastogi**, R. Sen, and J. Kobelke, "Segmented cladding fiber fabricated in silica-based glass," *Optical Engineering*, vol. 54, pp. 075103, 2015.
43. V. Mann, N. Ashok, and **V. Rastogi**, "Coupled strip-slot waveguide design for dispersion compensation," *Optical and Quantum Electronics*, vol. 47, pp. 3161-3169, 2015.
44. G. Semwal and **V. Rastogi**, "Design optimization of two concatenated long period waveguide grating devices for an application specific target spectrum," *Applied Optics*, vol. 54, pp. 3141 – 3149, 2015.
45. G. Semwal and **V. Rastogi**, "Design of LPWG broad band filters with genetic algorithm optimization," *J Optics (OSI)*, vol. 43, pp. 165-168, 2014.
46. K. Thirupataiah, B. Iyer, N. P. Pathak, and **V. Rastogi**, "Concurrent dual-band diplexer for nanoscale wireless links," *IEEE Photonics Technology Letters*, vol. 26, pp. 1832 - 1835, 2014.
47. G. Semwal and **V. Rastogi**, "Design of application specific long period waveguide grating filters using adaptive particle swarm optimization algorithms," *J Optics (IOP)*, vol. 16, pp. 15504(1-8), 2014.
48. G. Semwal and **V. Rastogi**, "Derivative free method for computing modes of multilayer planar waveguide," *Optical and Quantum Electronics*, vol. 46, pp. 423-438, 2014.
49. B. Hooda and **V. Rastogi**, "Design of segmented cladding fiber for femtosecond laser pulse delivery at 1550 and 1064 nm wavelengths," *Optical and Quantum Electronics*, vol. 46, pp. 397-408, 2014.

50. K. Thirupataiah, N. P. Pathak, and **V. Rastogi**, "Concurrent dual-band filters using plasmonic slot waveguide," *IEEE Photonics Technology Letters*, vol. 25, pp. 2217-2220, 2013.
51. N. Ashok, and **V. Rastogi**, "Dual-core leaky waveguide-based filters for erbium doped waveguide amplifier," *Fiber and Integrated Optics*, vol. 32, pp. 242-250, 2013.
52. K. Kamakshi, **V. Rastogi**, and A. Kumar, "Design and analysis of a refractive index sensor based on dual-core large-mode-area fiber," *Optical Fiber Technology*, vol. 19, pp. 325-329, 2013.
53. G. Prabhakar, A. Peer, **V. Rastogi**, and A. Kumar, "Large-effective-area dispersion-compensating fiber design based on dual-core microstructure," *Applied Optics*, vol. 52, pp. 4505-4509, 2013.
54. B. Hooda, and **V. Rastogi**, "Segmented-core single mode optical fiber with ultra-large-effective-area, low dispersion slope and flattened dispersion for DWDM optical communication system," *Progress in Electromagnetic Research B*, vol. 51, pp. 157-175, 2013.
55. N. Ashok, **V. Rastogi**, and A. Kumar, "Long-period-grating in a trench assisted planar optical waveguide," *Applied Optics*, vol. 52, pp. 1954-1962, 2013.
56. Babita, **V. Rastogi**, and A. Kumar, "Design of large-mode-area three-layered fiber structure for femtosecond laser pulse delivery," *Optics Communications*, vol. 293, pp. 108-112, 2013.
57. **V. Rastogi**, "Application specific leaky optical fibers," *J. Optics (OSI)*, vol. 42, pp. 42-50, 2013.
58. N. Ashok, **V. Rastogi**, and A. Kumar, "Dual-core leaky optical waveguide as an integrated-optic polarizer," *Optics Communications*, vol. 285, pp. 5094-5099, 2012.
59. A. Kumar, **V. Rastogi**, A. Agrawal, and B. M. A. Rahman, "Birefringence analysis of segmented cladding fibre," *Applied Optics*, vol. 51, pp. 3104-3108, 2012.
60. K. Kamakshi, and **V. Rastogi**, "Inherently gain flattened S-band erbium doped fiber amplifier based on dual core resonantly leaky fiber," *Optics Communications*, vol. 285, pp. 2821-2825, 2012.
61. **V. Rastogi**, R. Kumar, and A. Kumar, "Large-effective-area all-solid dispersion compensating fiber," *J. Optics (IOP)*, vol. 13, pp. 125707(1-6), 2011.
62. A. Kumar and **V. Rastogi**, "Design and analysis of dual-shape-core large-mode-area optical fiber," *Applied Optics*, vol. 50, pp. E119 - E124, 2011.
63. **V. Rastogi**, N. Ashok, and A. Kumar, "Design and analysis of large-core high-GVD planar optical waveguide for dispersion compensation," *Applied Physics B*, 2011, vol. 105, pp. 821-824, 2011.
64. B. Dussardier, **V. Rastogi**, A. Kumar and G. Monnom, "Large mode area leaky optical fiber fabricated by MCVD." *Applied Optics*, vol. 50, pp. 3118 - 3122, 2011.
65. K. Kamakshi, **V. Rastogi**, P. Singh and A. Kumar, "Design of dual-core resonant leaky optical fibre based gain flattening filters for erbium doped fibre amplifiers," *Optics Communications*, vol. 283, pp. 5025-5027, 2010.
66. L. Labonte, **V. Rastogi**, A. Kumar, B. Dussardier and G. Monnom, "Birefringence analysis of multilayer leaky cladding optical fiber," *J. Optics (IOP)*, vol. 12, pp. 065705 (1-4), 2010.
67. A. Kumar, **V. Rastogi**, C. Kakkar, and B. Dussardier, "Co-axial dual-core resonant leaky fibre for optical amplifiers," *J. Optics A: Pure and Applied Optics*, vol. 10, pp. 115306 (1-6), 2008.
68. A. Kumar, and **V. Rastogi**, "Multilayer cladding leaky planar waveguide for high-power applications," *Applied Physics B*, vol. 92, pp. 577-583, 2008.
69. A. Kumar, **V. Rastogi**, and K. S. Chiang, "Large-core single-mode channel waveguide based on geometrically shaped leaky cladding," *Applied Physics B*, vol. 90, pp. 507-512, 2008.
70. A. Kumar, and **V. Rastogi**, "Design and analysis of a multilayer cladding large-mode-area optical fibre," *J. Optics A : Pure and Applied Optics*, vol. 10, pp. 015303 (1-6), 2008.
71. A. Kumar, **V. Rastogi**, and K. S. Chiang, "Leaky optical waveguide for high power applications," *Applied Physics B*, vol. 85, pp. 11-16, 2006.
72. **V. Rastogi**, and K. S. Chiang, "Analysis of segmented cladding fiber by the radial effective-index method," *J. Optical Society of America B*, vol. 21, pp. 258-265, 2004.
73. Q. Liu, K. S. Chiang, and **V. Rastogi**, "Analysis of corrugated long-period gratings in slab waveguides and their polarization dependence," *J. Lightwave Technology*, vol. 21, pp. 3399-3405, 2003.
74. **V. Rastogi**, and K. S. Chiang, "Holey optical fiber with circularly distributed holes analyzed by radial effective-index method," *Optics Letters*, vol. 28, pp. 2449-2451, 2003.

75. **V. Rastogi**, and K. S. Chiang, "Leaky optical fibre for large mode area singlemode operation," *Electronics Letters*, vol. 39, pp. 1110-1112, 2003.
76. K. S. Chiang, R. Kancheti, and **V. Rastogi**, "Temperature-compensated fiber-Bragg-grating-based magnetostrictive sensor for DC and AC currents," *Optical Engineering*, vol. 42, pp. 1906-1909, 2003.
77. K. S. Chiang, K. P. Lor, C. K. Chow, H. P. Chan, **V. Rastogi**, and Y. M. Chu, "Widely tunable long-period gratings fabricated in polymer-clad ion-exchanged glass waveguides," *Photonics Technology Letters*, vol. 15, pp. 1094-1096, 2003.
78. **V. Rastogi** and K. S. Chiang, "Long period gratings in planar optical waveguides," *Applied Optics*, vol. 41, pp. 6351-6355, 2002.
79. **V. Rastogi**, K. S. Chiang, and N. N. Akhmediev, "Soliton states in a nonlinear directional coupler with intermodal dispersion," *Physics Letters A*, vol. 301, pp. 27 – 34, 2002.
80. **V. Rastogi** and K. S. Chiang, "Propagation characteristics of a segmented cladding fiber," *Optics Letters*, vol. 26, pp. 491-493, 2001.
81. **V. Rastogi**, P. Baldi, I. Aboud, P. Aschiéri, M.P. De Micheli, D.B. Ostrowsky, and J.P. Meyn, "Effect of proton exchange on periodically poled ferroelectric domains in lithium tantalate," *Optical Materials*, vol. 15, pp. 27-32, 2000.
82. P. Aschiéri, **V. Rastogi**, L. Chanvillard, P. Baldi, M. De Micheli, D. B. Ostrowsky, G. Bellanca, P. Bassi, K. Thyagarajan and M. R. Shenoy, "Experimental observation of longitudinal modulation of mode fields in periodically segmented waveguides," *Applied Optics*, vol. 38, pp. 5734-5737, 1999.
83. K. El Hadi, **V. Rastogi**, M. R. Shenoy, K. Thyagarajan, M. De Micheli, and D. B. Ostrowsky, "Spectral measurements of the film-substrate index difference in proton exchanged LiNbO₃ waveguides," *Applied Optics*, vol. 37, pp. 6463-6467, 1998.
84. **V. Rastogi**, A. K. Ghatak, D. B. Ostrowsky, K. Thyagarajan, M. R. Shenoy, " Ray analysis of parabolic-index segmented planar waveguides," *Applied Optics*, vol. 37, pp. 4851-4856, 1998.
85. **V. Rastogi**, V. Mahalakshmi, M. R. Shenoy, and K. Thyagarajan, "Propagation characteristics of a novel complementary-structure planar segmented waveguide," *Optics Communications*, vol. 148, pp. 230-235, 1998.
86. **V. Rastogi**, K. Thyagarajan, M. R. Shenoy, P. Baldi, M. De Micheli, and D. B. Ostrowsky, "Modeling of large-bandwidth parametric amplification in the Cerenkov-idler configuration in planar waveguides," *J. Opt. Soc. of America B, Special issue on Nonlinear Guided Waves: Physics and Applications*, vol. 14, pp. 3191-3196, 1997.
87. K. Thyagarajan, **V. Rastogi**, M. R. Shenoy, D. B. Ostrowsky, M. De Micheli, and P. Baldi, "Modeling of parametric amplification in the Cerenkov-idler configuration in planar waveguides," *Optics Letters*, vol. 21, pp. 1631-1633, 1996.
88. K. Thyagarajan, **V. Rastogi**, V. Mahalakshmi, and M. R. Shenoy, "Propagation characteristics of novel gain-guided segmented planar waveguides," *Optics Communications*, vol. 121, pp. 19-26, 1995.