

## OptiBPM Publication References

Below is a listing of scientific papers, technical journals, periodicals, and conference publications which reference the use of OptiBPM..

### 2009

- [ 1 ] Sahu, P.P., “**A Compact Optical Multiplexer Using Silicon Nano-Waveguides**”, IEEE Journal of Selected Topics in Quantum Electronics, Volume 15, Issue 5, p1537 – 1541, 2009;
- [ 2 ] Ferreira, R.A.S.; Vicente, C.M.S.; Fernandes, V.; Macedo, A.G.; Pecoraro, E.; Nogueira, R.N.; Andre, P.S.; Marques, P.; Carlos, L.D., “**Organic-inorganic hybrids for the new generation of optical networks**”, 11th International Conference on Transparent Optical Networks, 2009. ICTON apos;09. June 28 - July 2 Page(s):1 – 4, 2009;
- [ 3 ] Xiao-yang Zhang et al, “**Resonant frequency shift characteristic of integrated optical ring resonators with tunable couplers**”, Journal of Optics A: Pure and Applied Optics 11 085411, 2009;
- [ 4 ] Indrajit Boiragi et al, “**SU-8 polymer based waveguide biochemical sensor for medical diagnostic application**”, International Conference on Optics and Photonics Chandigarh, India, 30 Oct. – 1 Nov., 2009;
- [ 5 ] Vandana Sachdeva<sup>1</sup>, Rajeev Ratan<sup>2</sup> and J. S. Mahanwal, “**Design of 4x4 Banyan optical switch using optoelectronic MZI switches with low crosstalk**”, Indian Journal of Science and Technology, Vol.2 No. 10, 2009;
- [ 6 ] P. P. Sahu, “**Parabolic tapered structure for an ultracompact multimode interference coupler**”, Applied Optics, Vol. 48, Issue 2, pp. 206-211, 2009;
- [ 7 ] Zhaobing Tian and Scott S.-H. Yam, “**In-Line Single-Mode Optical Fiber Interferometric Refractive Index Sensors**,” Journal of Lightwave Technology 27, p 2296-2306, 2009;
- [ 8 ] G. Singh, R.P.Yadav, and V.Janyani, “**Multimode Interference (MMI) coupler based All Optical Switch: Design, Applications & Performance Analysis**”, International Journal of Recent Trends in Engineering, Vol 1, No. 3, p 115 - 119, 2009;
- [ 9 ] Jie Suna, Changming Chena, Lei Gaoa, Xiaoqiang Suna, Weinan Gaoa, Chunsheng Maa and Daming Zhang, “**Polarisation-insensitive strip-loaded waveguide for electro-optic modulators and switches**”, Optics Communications, Volume 282, Issue 11, 1 June, Pages 2255-2258 , 2009;
- [ 10 ] A. Bhatnagar et al, “**Simulation of femtosecond laser written waveguide in BK7 glass for telecommunication application**”, International Conference on Optics and Photonics Chandigarh, India, 30 Oct. – 1 Nov., 2009;

### 2008

- [ 1 ] Niru K. Nahar and Roberto G. Rojas, “**Coupling Loss From Free Space to Large Mode Area Photonic Crystal Fibers**,” Journal of Lightwave Technology 26(22), 3669-3676, 2008;
- [ 2 ] M. Kusko, A. Avram, D. Apostol, “**Design and fabrication of Fresnel lenses, Semiconductor Conference, 2008, CAS 2008 Proceedings**”. International Volume 2, pp. 445 – 448, 2008;
- [ 3 ] Singh, G.; Sharma, M.K.; Yadav, R.P., Janyani, V. , “**Design of 4x4 banyan optical switch using MMI switches with low crosstalk & low coupling loss**”, Recent Advances in Microwave Theory and Applications, 2008. MICROWAVE 2008. 21-24 Nov. p 416 – 418, 2008;
- [ 4 ] M Kusko et al “**Design of single-mode vertically coupled microring resonators**” Journal of Optics A: Pure and Applied Optics 10 064012 , 2008;
- [ 5 ] Andreas Kornfeld , Niko Bärsch, Dietmar Kracht and Andreas Ostendorf, “**Integrated optical micro structures for signal processing in the position metrology**”, Microsystem Technologies, Volume 14, Number 12 / November, p 1955-1960, 2008;
- [ 6 ] Ghanshyam Singh, R. P. Yadav, Vijay Janyani, and Aranab Ray, “**Design of 2x2 Optoelectronic Switch Based on MZI and Study the Effect of Electrode Switching Voltages**”, World Academy of Science, Engineering and Technology 39 p 401 – 407, 2008;
- [ 7 ] Tian, Zhaobing, “**In-line optical fiber interferometric refractive index sensors**”, Master’s Thesis, Queen’s University, 2008;
- [ 8 ] Niru K. Nahar, “**Photonic Crystal Fibers and Optical True Time Delay Engines for Wideband Arrays**”, Ph.D Thesis, Ohio State University, Department of ECE, 2008;
- [ 9 ] Marko Galarza, Dries Van Thourhout, Roel Baets, and Manuel Lopez-Amo, “**Compact and highly-efficient polarization independent vertical resonant couplers for active-passive monolithic integration**”, Optics Express, Vol. 16, Issue 12, pp. 8350-8358, 2008;
- [ 10 ] Hall, Douglas, Huang, Mingjun, “**Monolithically-Pumped Erbium-Doped Waveguide Amplifiers and Lasers**”, United States Patent Application 20080267237, 2008;
- [ 11 ] Ghanshyam Singh et. al.; “**Design of Non-Blocking and Rearrangeable Modified Banyan Network with Electro-Optic MZI Switching Elements**”, Proceedings of World Academy of Science, Engineering and Technology. pp. 225-230, 2008;

### 2007

- [ 1 ] Avinash Karanth Kodi and Ahmed Louri, “**System simulation methodology of optical interconnects for high-performance computing systems**”, Journal of Optical Networking, Vol. 6, Issue 12, pp. 1282-1300, 2007;

- [ 2 ] Shoji Kakio et al “**Improvement of Diffraction Properties in Waveguide-Type Acoustooptic Modulator Driven by Surface Acoustic Wave**”, Japanese Journal of Applied Physics 46 pp. 669-674, 2007;
- [ 3 ] Ying Zha, De Gui Sun, Tie Gen Liu, Ying Zhang, Xiao Qi Li, Jun Feng Jiang, “**Rearrangeable Nonblocking 8x8 Matrix Optical Switches Based on Extended Banyan Network**”, www.scientific.net Key Engineering Materials (Volumes 364 - 366) Optics Design and Precision Manufacturing Technologies, p 1043-1047, 2007;
- [ 4 ] Shoji Kakio et al “**Monolithically Integrated Tandem Waveguide-Type Acoustooptic Modulator Driven by Surface Acoustic Waves**”, Japanese Journal of Applied Physics 46 pp 4608-4612, 2007;
- [ 5 ] Francesco Dell’Olio, Vittorio M. N. Passaro and Francesco De Leonardis, “**Simulation of a high speed interferometer optical modulator in polymer materials**”, Journal of Computational Electronics, Volume 6, Numbers 1-3, September, p 297-300, 2007;
- [ 6 ] De-Gui Sun, Ying Zha, Tiegeng Liu, Ying Zhang, Xiaoqi Li, and Xiuhua Fu, “**Demonstration for rearrangeable nonblocking 8x8 matrix optical switches based on extended banyan networks**”, Optics Express, Vol. 15, Issue 15, pp. 9347-9356, 2007;
- [ 7 ] Mariko Ishida, Yuichiro Ikuma, Takanori Suzuki, and Hiroyuki Tsuda, “**180-Degree-Bend Structures Using Light Reflection at Double Elliptic Mirror in Slab Waveguide**”, Japanese Journal of Applied Physics 46 p 168 – 174 , 2007;
- [ 8 ] Ke Feng, “**Biolayer modeling and optimization for the Sparrow biosensor**”, Ph.D Thesis, Eberly College of Arts and Sciences at West Virginia University, Department of Physics , 2007;
- [ 9 ] Francesco De Leonardis et. al.; **Modeling and Performance of a Guided-Wave Optical Angular-Velocity Sensor Based on Raman Effect in SOI**, Optics Infobase. pp. 2352-2366, 2007;

## 2006

- [ 1 ] Paula Obreja, Mihai Kusko, Dana Cristea, Munizer Purica, “**Doped polymers with controllable refractive index – preparation, processing and applications**”, Proceedings of the Symposium on Photonics Technologies for 7th Framework Program, Wroclaw, p392-395 12-14 October, 2006;
- [ 2 ] Eric Harvey, “**Design and fabrication of silicon on insulator optical waveguide devices**”, Master’s Thesis, Dept. of Electrical Engineering, Rochester Institute of Technology, 2006;
- [ 3 ] Kyoji Komatsu, Jiro Ishihara, Okihiro Sugihara and Toshikuni Kaino, “**Fabrication of Calixarene Derivative Optical Waveguide Using Two-Photon Assisted Polymerization Method**”, Japanese Journal of Applied Physics 45 pp. 479-482, 2006;
- [ 4 ] Christoph Wächter, “**Integrated optics design: software tools and diversified applications**”, NATO Science Series II: Mathematics, Physics and Chemistry, Frontiers in Planar Lightwave Circuit Technology Design, Simulation, and Fabrication, ISBN 978-1-4020-4164-8 (Print) 978-1-4020-4167-9 (Online), 2006;
- [ 5 ] T. J. Clement, R. G. DeCorby, N. Ponnampalam, T. W. Allen, “**Nanocluster sensitized erbium-doped silicon monoxide waveguides**”, OPTICS EXPRESS, <http://www.opticsinfobase.org> Vol. 14, No. 25, p 12151 – 12162 11 December, 2006;
- [ 6 ] V. M. N. Passaro, F. De Leonardis, and F. Dell’Olio, “**Dual-Channel Approach to Photonic Modulators in Silicon-on-Insulator Technology**”, Proceedings Symposium IEEE/LEOS Benelux Chapter, Eindhoven p 81 – 84 , 2006;
- [ 7 ] F. Dupont et al “**Design of a new photomixer based on electro-optic polymer**”, International Topical Meeting on Microwave Photonics, Grenoble, October 03-October 06 ISBN: 1-4244-0203-4, 2006;
- [ 8 ] De-Gui Sun, Wenyuan Deng, Shulin E, Ying Zha, Zhiying Liu, and Xiaoqi Li, “**Study for performance of thermo-optic matrix switches with flexible switching units and Banyan networks**”, Optical Engineering, Vol. 45, 014602, 2006;
- [ 9 ] Huiling Wang et. al.; **Gain characteristics of asymmetric multiple quantum-well lasers**, IEEE Journal of Quantum Electronics. pp. 464-470, 2006;
- [ 10 ] Luxue Rose Deng; **Design of Mid-Infrared Ridge-Waveguide Directional Couplers by Optiwave Simulation**, NINU. pp. 100-101, 2006;
- [ 11 ] Lin, Y.-H et. al.; **Improved design of a 64/spl times/64 arrayed waveguide grating based on silicon-on-insulator substrate**, IEEE Proceedings of Optoelectronics. pp. 57-62, 2006;
- [ 12 ] Passaro, V.M.N et. al.; **Modeling and design of a novel high-sensitivity electric field silicon-on-insulator sensor based on a whispering-gallery-mode resonator**, IEEE Journal of Selected Topics in Quantum Electronics. pp. 124-133, 2006;
- [ 13 ] M. Bednorz et. al.; **Application of SU8 Polymer in Waveguide Interferometer Ammonia Sensor**, Molecular and Quantum Acoustics. pp. 31-40, 2006;

## 2005 (and earlier)

- [ 1 ] Cleary, A. et. al.; **An integrated fluorescence array as a platform for lab-on-a-chip technology using multimode interference splitters**, IEEE Sensors Journal. pp. 1315-1320, 2005;
- [ 2 ] F. Dürr; **Analytical Design of X-Couplers**, IEEE Journal of lightwave Technology. pp. 876, 2005;
- [ 3 ] Passaro, V.M.N et. al.; **Design of polarisation insensitive vertical couplers in silicon-on-insulator waveguides with small cross section**, Conference Paper. pp. 198-203, 2005;
- [ 4 ] Shoji Kakio et. al.; **Diffraction Properties and Beam-Propagation Analysis of Waveguide-Type Acoustooptic Modulator Driven by Surface Acoustic Wave**, Japanese Journal of Applied Physics. pp. 4472-4476, 2005;