

## LIST OF PUBLICATIONS USING FULLWAVE ®

Title	Author	Publication	Year
Combined first-principles and electromagnetic simulation study of n-type doped anatase TiO <sub>2</sub> for the applications in infrared surface plasmon	Thien Duc Ngo, Thang Duy Dao, Nguyen Thanh Cuong, Naoto Umezawa, and Tadaaki Nagao	Phys. Rev. Materials 4, 055201 – Published 7 May 2020	2020
Design and Fabrication of Microscale, Thin-Film Silicon Solid Immersion Lenses for Mid-Infrared Application	Gil Ju Lee, Hyun Myung Kim and Young Min Song	Journals Micromachines Volume 11 Issue 3 10.3390/mi11030250	2020
Geometry optimization of unidirectional integrated ring laser	Giuseppe Giannuzzi, Enrico Ghillino, Paolo Bardella	Proceedings Volume 11283, Integrated Optics: Devices, Materials, and Technologies XXIV; 112832H (2020)	2020
FDTD simulation studies on improvement of light absorption in organic solar cells by dielectric nanoparticles	Vidhi Mann & Vipul Rastogi	Optical and Quantum Electronics volume 52, Article number: 233 (2020)	2020
Large permittivity increments for efficient predictive photonic devices optimization	Salim Boutami, Nathan Zhao, Shanhui Fan	Proceedings Volume 11290, High Contrast Metastructures IX; 112900Q (2020) <a href="https://doi.org/10.1117/12.2545703">https://doi.org/10.1117/12.2545703</a> Event: SPIE OPTO, 2020, San Francisco, California, United States	2020
Localized surface plasmon-induced vibrational excitations in the surface-enhanced Raman scattering using two-dimensional array of silver nanocubes	Satoshi Katano, Takeru Iwahori, Ryota Yamasaki, Ayana Mizuno, Atsushi Ono, and Yoichi Uehara	Home > Journal of Applied Physics > Volume 127, Issue 18 > 10.1063/5.0005487	2020
Above-threshold ionization driven by few-cycle spatially bounded inhomogeneous laser fields	P Rueda, F Videla, E Neyra, J A Pérez-Hernández, M F Ciappina and G A Torchia	Journal of Physics B: Atomic, Molecular and Optical Physics, Volume 53, Number 6	2020
Silicon nitride based devices: lithographic mask roughness mitigation	Paulo Lourenço, Alessandro Fantoni, Joao Costa, Manuela Vieira	Proceedings Volume 11364, Integrated Photonics Platforms: Fundamental Research, Manufacturing and Applications; 113641Q (2020) <a href="https://doi.org/10.1117/12.255564">https://doi.org/10.1117/12.255564</a>	2020
Highly linearly polarized light emission from flexible organic light-emitting devices capitalized on integrated ultrathin metal-dielectric nanograting	Lei Zhou, Yu-Fu Zhu, Qun-Yong Zhang, Yun Zhou, Yan-Zong Wang, Guang-Hong Zhou, Huai-Xin Wei, and Su Shen	Optics Express Vol. 28, Issue 9, pp. 13826-13836 (2020)	2020
A novel proposal for an all-optical 2-bit adder/subtractor based on photonic crystal ring resonators	SagharSadegh-BonabHamedAlipour-Banaei	Photonics and Nanostructures - Fundamentals and Applications Volume 39, May 2020, 100777	2020
Terahertz signal generation based on a microwave photonic system with add-drop microring resonator	Rohan Katti Shanthi Prince	Microwave and Optical Technology Letters Early View <a href="https://doi.org/10.1002/mop.32375">https://doi.org/10.1002/mop.32375</a>	2020
Reflectivity of Finite 3D GaAs Photonic Band Gap Crystals	Takeyoshi Tajiri, Shun Takahashi, Cornelis A.M. Hartevelde, Yasuhiko Arakawa, Satoshi Iwamoto,	Physics -Optics	2020
MID-INFRARED MICRO-DISPLACEMENT MEASUREMENT WITH A BIDIMENSIONAL SILICON PHOTONIC CRYSTAL	T. Zouache and A. Hocini	Progress In Electromagnetics Research Letters, Vol. 91, 77-83	2020
Embedding Scattering Centers in Polymer Substrate to Yield Robust Hazy Film with High Optical Transmittance: Application to Virtual-Reality Display	Jae Yong Park Won Seok Cho Chung Sock Choi Sang-Hwan Cho Jong-Lam Lee	Advanced Optical Materials Volume 8, Issue 8	2020

Title	Author	Publication	Year
An all-optical half subtractor based on Kerr effect and photonic crystals	Asghar Askarian,Gholamreza Akbarizadeh, Mehdi Fartash	Optik Volume 207, April 2020, 164424 Web Reference : ELSEVIER	2020
The effect of two-photon absorption on the dynamic range of integrated microwave photonics links	Jake Bass, Brandon Brea, Huong Tran, Wei Du, Richard Soref, Shui-Qing Yu	Proceedings Volume 11285, Silicon Photonics XV; 112851C (2020) <a href="https://doi.org/10.1117/12.2546601">https://doi.org/10.1117/12.2546601</a> Event: SPIE OPTO, 2020, San Francisco, California, United States	2020
Futuristic elongated-hexagonal photonic crystal waveguide for slow light	Sayed Elshahat,IsraaAbood,Zixian Liang,Jihong Pei,Zhengbiao Ouyang	Optics Communications Volume 474, 1 November 2020, 126082 Web Reference : ELSEVIER	2020
Thin Film Refractive Index and Thickness	Paulo Lourenco,Manuela Vieira,Alessandro Fantoni	Doctoral Conference on Computing, Electrical and Industrial Systems DoCEIS 2020: Technological Innovation for Life Improvement pp 179-188	2020
Sporadic-Slot Photonic-Crystal Waveguide for All-Optical Buffers With Low-Dispersion, Distortion, and Insertion Loss	Sayed Elshahat ; Israa Abood ; Zixian Liang ; Jihong Pei ; Zhengbiao Ouyang	Published in: IEEE Access ( Volume: 8 ) Page(s): 77689 - 77700 DOI: 10.1109/ACCESS.2020.2986082	2020
Optimization of an All-Optical Photonic Crystal NOT Logic Gate Using Switch Based on Nonlinear Kerr Effect and Ring Resonator	Kouddad, Elhachemi; Naoum, Rafah	American Scientific Publishers Source: Sensor Letters, Volume 18, Number 2, February 2020, pp. 89-94(6)	2020
Reflectivity of three-dimensional GaAs photonic band-gap crystals of finite thickness	Takeyoshi Tajiri, Shun Takahashi, Cornelis A. M. Hartevelde, Yasuhiko Arakawa, Satoshi	Phys. Rev. B 101, 235303 – Published 1 June 2020	2020
Engineering vertically interrogated interferometric sensors for optical label-free biosensing	Rafael Casquel, Miguel Holgado, María F. Laguna, Ana L. Hernández, Beatriz Santamaría,	Analytical and Bioanalytical Chemistry volume 412, pages3285–3297(2020)	2020
Design conditions in the middle range for implementation of integrated ring resonators in LiNbO3 by direct laser writing	Paula L. Pagano ; Damián Presti ; Roberto R. Peyton ; Fabian A. Videla ; Gustavo A	Published in: IET Optoelectronics ( Volume: 14 , Issue: 3 ) Page(s): 104 - 108	2020
Experimental demonstration of metamaterial anisotropy engineering for broadband on-chip polarization beam splitting	Alaine Herrero-Bermello, Antonio Dias-Ponte, Jose Manuel Luque-Gonzalez, Alejandro Ortega-	Optics Express Vol. 28, Issue 11, pp. 16385-16393 (2020) • <a href="https://doi.org/10.1364/OE.389070">https://doi.org/10.1364/OE.389070</a>	2020
Air-gap-embedded robust hazy films to reduce the screen-door effect in virtual reality displays	Won Seok Cho, Jae Yong Park, Chung Sock Choi , Sang-Hwan Cho , Sangwon Baek and Jong-	DOI: 10.1039/C9NR10615D (Paper) Nanoscale, 2020, 12, 8750-8757	2020
Improving the transmission efficiency in eight-channel all optical demultiplexers	Bahareh Mohammadi, Mohammad Soroosh, Abdulnabi Kavsarian & Yousef Seifi Kavian	Photonic Network Communications volume 38, pages115–120(2019)	2019
Design conditions in the middle range for implementation of integrated ring resonators in LiNbO3 by direct laser writing	Paula L. Pagano ; Damián Presti ; Roberto R. Peyton ; Fabian A. Videla ; Gustavo A. Torchia	Journals & magazines > IET Optoelectronics > Volume 14, Issue 3 >	2019
Diffraction sidewall grating coupler: towards 2D free-space optics on chip	A. Hadij-ElHouati, P. Cheben, A. Ortega-Monux, J. G. Wanguermert-Perez, R. Halir, J. H. Schmid, Í.	Proceedings Volume 11031, Integrated Optics: Design, Devices, Systems, and Applications V; 110310R (2019)	2019
Full wave modulation applied to 3-level FC and NPC inverters	Erroui, Najoua and Gateau, Guillaume and Roux, Nicolas	IEEE International Conference on Industrial Technology (ICIT)	2019
Planar Multipole Resonance Probe: Comparison of Full-wave Electromagnetic Simulation and Electrostatic Approximation	Michael Friedrichs ; Dennis Pohle ; Ilona Rolfes ; Jens Oberrath	Kleinheubach Conference (IEEE)	2019
Efficient pixel-by-pixel optimization of photonic devices utilizing the Dyson's equation in a Green's function formalism: Part II. Implementation using	Salim Boutami and Shanhui Fan	Journal of the Optical Society of America B Vol. 36, Issue 9, pp. 2387-2394 (2019)	2019
An eight-channel wavelength-mode-division (de)multiplexer based on photonic crystals	Ke Ji , Heming Chen,Yuchen Hu	Superlattices and Microstructures Volume 135, November 2019, 106275 Web Reference : ELSEVIER	2019

Title	Author	Publication	Year
Material Models in Full-Wave Nonlinear Optics	Michael Povolotskyi ; Shaimaa Azzam ; Ludmila J. Prokopeva ; Samuel Peana ;Alexander V. Kildishev	International Applied Computational Electromagnetics Society Symposium (ACES)-IEEE	2019
Light-sample interaction in microsphere enhanced 2D super-resolution imaging	Göran Maconi, Ivan Kassamakov, T. Vainikka, Timo Arstila, Edward Hægström	Proceedings Volume 11056, Optical Measurement Systems for Industrial Inspection XI;110560Q (2019)Event: SPIE Optical	2019
Unconventional energy transfer from narrow to broad luminescent wide band gap materials	Satish Laxman Shinde <sup>1,2</sup> , Thang Duy Dao <sup>2</sup> , Tadaaki Nagao <sup>2</sup> and Karuna Kar Nanda	EPL (Europhysics Letters), Volume 127, Number 1	2019
MEMS-Based Wavelength-Selective Bolometers	Thang Duy Dao, Anh Tung Doan, Satoshi Ishii, Takahiro Yokoyama, Handegard Sele	Journals Micromachines Volume 10 Issue 6 10.3390/mi10060416	2019
Label-free 3D super-resolution nanoscope	I. Kassamakov, G. Maconi, M. Jarvinen, A. Nolvi, T. Vainikka, P. Raatikainen, T. Arstila, T. Ylitalo, I.	Proceedings Volume 11056, Optical Measurement Systems for Industrial Inspection XI; 110560S (2019)	2019
FDTD simulation of compositionally graded HgCdTe photodetectors	Marco Vallone, Michele Goano, Francesco Bertazzi, Giovanni Ghione, Stefan Hanna, Detlef Eich, Heinrich Figgemeier	Infrared Physics & Technology Volume 97, March 2019, Pages 203-209 Web Reference : ELSEVIER	2019
Selective thermal emitters with infrared plasmonic indium tin oxide working in the atmosphere	Thang Duy Dao, Anh Tung Doan, Dang Hai Ngo, Kai Chen, Satoshi Ishii, Akemi Tamanai, and Tadaaki Nagao	Optical Materials Express Vol. 9, Issue 6, pp. 2534-2544 (2019)	2019
Fabrication of GaSb Microdisc Resonator on Silicon Substrate by Rapid Melt Growth Process	Ming-Chang M. Lee ; Chih-Ching Cheng ; Cheng-Yu Lin ; Yi-Syue Wun ; Pawan Mishra	2019 International Conference on Optical MEMS and Nanophotonics (OMN) Electronic ISBN: 978-1-7281-4503-7	2019
Simulative Parametric Study on Heterojunction Thin Film Solar Cells Incorporating Interfacial Nanoclusters Layer	Megha Grover, Monika Nehra and Deepak Kedia	Energy Harvesting and Systems   Volume 6: Issue 1-2	2019
Optimization of Graphene Layer Incorporation in Silicon Solar Cells: A Simulative Study	Saini, Preeti; Dhull, Sanjeev	IUP Journal of Electrical & Electronics Engineering . Jul2019, Vol. 12 Issue 3, p56-64. 9p	2019
A MEMS-Based Quad-Wavelength Hybrid Plasmonic–Pyroelectric Infrared Detector	Anh Tung Doan ,Takahiro Yokoyama ,Thang Duy Dao,Satoshi Ishii ,Akihiko Ohi	Journals Micromachines Volume 10 Issue 6 10.3390/mi10060413	2019
A novel proposal for all optical 1-bit comparator using nonlinear PhCRRs	Somaye Serajmohammadi,Hamed Alipour-Banaei,Farhad Mehdizadeh	Photonics and Nanostructures - Fundamentals and Applications Volume 34, May 2019, Pages 19-23	2019
InAs quantum dot in a needlelike tapered InP nanowire: a telecom band single photon source monolithically grown on silicon	Ali Jaffal, Walid Redjem, Philippe Regreny, Hai Son Nguyen, Sébastien Cueff, Xavier Letartre,	Nanoscale, Issue 45	2019
P-117: Simulation of Light Extraction from an Electroluminescent QD-LED	David J. Montgomery Edward A. Boardman James A. R. Dimmock Tim M. Smeeton	SID Symposium Digest of Technical Papers Volume 50, Issue 1 Book 3: Emissive, MicroLED, and Quantum-Dot	2019
Highly Sensitive Refractive Index Sensor Using Dual Resonance in Subwavelength Grating/Waveguide With Normally Incident Optical Geometry	Yuusuke Takashima ; Keita Kusaba ; Masanobu Haraguchi ; Yoshiki Naoi	IEEE Sensors Journal ( Volume: 19 , Issue: 15 , Aug.1, 1 2019 ) DOI: 10.1109/JSEN.2019.2910585 Publisher: IEEE	2019

Title	Author	Publication	Year
Gradient metal nanoislands as a unified surface enhanced Raman scattering and surface enhanced infrared absorption platform for analytics	Dimitra Gkogkou, Timur Shaykhutdinov, Christoph Kratz, Thomas W. H. Oates, Peter Hildebrandt, Inez M. Weidinger, Khoa Hoang Ly, Norbert Essera and Karsten Hinrichs	Analyst Impact factor: 4.019   Issues per year: 24   Indexed in MEDLINE	2019
Design of a suspended germanium micro-antenna for efficient fiber-chip coupling in the long-wavelength mid-infrared range	A. Sánchez-Postigo, A. Ortega-Moñux, D. Pereira-Martín, Í. Molina-Fernández, R. Halir, P. Cheben, J. Soler Penadés, M. Nedeljkovic, G. Z. Mashanovich, and J. G. Wangüemert-Pérez	Optics Express Vol. 27, Issue 16, pp. 22302-22315 (2019) • <a href="https://doi.org/10.1364/OE.27.022302">https://doi.org/10.1364/OE.27.022302</a>	2019
Modified structural arrangement of InAs-based quantum dots and nanostructures for high	M. Sreelakshmi, S. Chakraborty, A. Ravikumar, and K. Bhowmick	Home > AIP Conference Proceedings > Volume 2166, Issue 1 > 10.1063/1.5131597	2019
Dark-Field Scattering and Local SERS Mapping from Plasmonic Aluminum Bowtie Antenna Array	Thang Duy Dao, Chung Vu Hoang, Natsuki Nishio, Naoki Yamamoto, Akihiko Ohi, Toshihide Nabatame, Masakazu Aono and Tadaaki Nagao	Journals Micromachines Volume 10 Issue 7 10.3390/mi10070468	2019
Dual-band in situ molecular spectroscopy using single-sized Al-disk perfect absorbers	Thang Duy Dao, Kai Chen and Tadaaki Nagao	Nanoscale, Issue 19	2019
IMPROVED DESIGN OF ALL-OPTICAL HALF SUBTRACTOR BASED 2-DIMENSIONAL PHOTONIC CRYSTAL	Oraman Yoosefi, Angel Rodríguez, Nemat Azimi	International Journal of Advance Engineering and Research Development	2019
2D-FDTD simulation of ultra-compact multifunctional logic gates with nonlinear photonic	Ali Farmani, Ali Mir, and Maryam Irannejad	Journal of the Optical Society of America B Vol. 36, Issue 4, pp. 811-818 (2019)	2019
Design of a hybrid wavelength selective switch using silica and silicon waveguides	Kunio Kobayashi, Hiroyuki Tsuda	Proceedings Volume 11184, Optoelectronic Devices and Integration VIII; 11184OF (2019) <a href="https://doi.org/10.1117/12.2538852">https://doi.org/10.1117/12.2538852</a> Event: SPIE/COS Photonics Asia, 2019,	2019
Reflective color filter with precise control of the color coordinate achieved by stacking silicon nanowire arrays onto ultrathin optical coatings	Han Sung Song, Gil Ju Lee, Dong Eun Yoo, Yeong Jae Kim, Young Jin Yoo, Dong-Wook Lee, Vantari Siva, Il-Suk Kang & Young Min Song	Scientific Reports volume 9, Article number: 3350 (2019)	2019
The Non-Vortex Inverse Propagation of Energy in a Tightly Focused High-Order Cylindrical Vector Beam	Sergey S. Stafeev; Victor V. Kotlyar; Anton G. Nalimov; Elena S. Kozlova	IEEE Photonics Journal ( Volume: 11, Issue: 4, Aug. 2019) DOI: 10.1109/JPHOT.2019.2921669	2019
A highly sensitive optofluidic-gas sensor using two dimensional photonic crystals	Aysan Anamoradi & Kiazand Fasihi	Superlattices and Microstructures Volume 125, January 2019, Pages 302-309 Web Reference : ELSEVIER	2019
Integrated photonics chip with InGaN/GaN light-emitting diode and bended waveguide for visible-light communications	Xin Li, Yan Jiang, Jie Li, Zheng Shi, Gangyi Zhu, Yongjin Wang	Optics & Laser Technology Volume 114, June 2019, Pages 103-109 Web Reference : ELSEVIER	2019
A T-branch diplexer based on directional couplers and resonant cavities in photonic crystal	Amel Labbani, Moumenismene and Faiza Bounaas	MATEC Web Conf. Volume 292, 2019 23rd International Conference on Circuits, Systems, Communications and Computers (CSCC)	2019
Photo-assisted methanol synthesis via CO <sub>2</sub> reduction under ambient pressure over plasmonic Cu/ZnO catalysts	Zhou-jun Wang, Hui Song, Hong Pang, Yanxiao Ning, Thang Duy Dao, Zhuan Wang, Hailong Chen, Yuxiang Weng, Qiang Fu, Tadaaki Nagao, Yunming Fang, Jinhua Ye	Applied Catalysis B: Environmental Volume 250, 5 August 2019, Pages 10-16 Web Reference : ELSEVIER	2019
Efficient multiphysics modeling of thin-film solar cells with periodically textured surfaces	Farid Elsehrawy, Alberto Tibaldi, Federica Cappelluti	Proceedings Volume 10913, Physics, Simulation, and Photonic Engineering of Photovoltaic Devices VIII; 109130K (2019) <a href="https://doi.org/10.1117/12.2511126">https://doi.org/10.1117/12.2511126</a>	2019
Two-petal laser beam near a binary spiral axicon with topological charge 2	Victor V. Kotlyar, Sergey S. Stafeev, Anton G. Nalimov, Sebastian Schulz, Liam O'Faolain	Optics & Laser Technology Volume 119, November 2019, 105649 Web Reference : ELSEVIER	2019

Title	Author	Publication	Year
Numerical investigation of photonic crystals structure on zinc oxide film	Iulia Anghel	Optik Volume 185, May 2019, Pages 282-286 Web Reference : ELSEVIER	2019
A novel proposal for all-optical compact and fast XOR/XNOR gate based on photonic crystal	Golnaz Tavakoli, Hamed Alipour-Banaei & Mahdi Hassangholizadeh-Kashtiban	Journal of Modern Optics Volume 66, 2019 - Issue 6	2019
Radiation pattern design of photonic crystal LED optimized by using multi-objective grey wolf optimizer	Behnaz Merikhi, Seyed Mohammad Mirjalili, Milad Zoghi, Seyedeh Zahra Mirjalili & Seyedali Mirjalili	Photonic Network Communications volume 38, pages167–176(2019)	2019
Perforated Bimodal Interferometric Biosensor for Affinity Sensing	Ken Uchiyama, Kyohei Okubo, Kiyoshi Asakawa, Yuri Kamon, Yukiya Kitayama, Toshifumi Takeuchi, Hiroaki Suzuki	Advanced Materials Technologies Volume 4, Issue 9	2019
The optical analyses of the multilayer transparent electrode and the formation of ITO/Mesh-Ag/ITO multilayers for enhancing an optical transmittance	Seung Yong Lee, Eou-Sik Cho, Sang Jik Kwon	Applied Surface Science Volume 487, 1 September 2019, Pages 990-999	2019
2-D hollow core photonic crystal fiber-type absorption layer for enhancement of efficiency and broad response in multi-junction solar cell	Sandeep Dey and Kaustav Bhowmick	AIP Conference Proceedings > Volume 2166, Issue 1 > 10.1063/1.5131596	2019
SPATIO-TEMPORAL ANALYSIS OF NON-COLLINEAR FEMTOSECOND PULSES COMBINATION	Laura IONEL	U.P.B. Sci. Bull., Series A, Vol. 81, Iss. 3, 2019	2019
A Survey of On-Chip Optical Interconnects	Janibul Bashir, Eldhose Peter, Smruti R. Sarangi	ACM Journals ACM Computing Surveys Vol. 51, No. 6A Survey of On-Chip Optical Interconnects	2019
Optical Nanostructures for Controllable and Tunable Optical Properties	Siraji, Ashfaqu Anwar	Wayne State University, ProQuest Dissertations Publishing, 2019. 22621300.	2019
Design of ultra-compact multimode interference (MMI) couplers and high efficiency grating couplers in TriPleX platform as part of a photonic-based sensor	Lefteris Gounaridis, Panos Groumas, Erik Schreuder, Christos Tsokos, Elias Mylonas, Adam Raptakis, Rene Heideman, Hercules Avramopoulos, Christos Kouloumentas	Proceedings Volume 10921, Integrated Optics: Devices, Materials, and Technologies XXIII; 1092127 (2019) <a href="https://doi.org/10.1117/12.2510053">https://doi.org/10.1117/12.2510053</a> Event: SPIE OPTO, 2019, San Francisco, California, United States	2019
Theoretical band gap study in 1D one-dimensional magneto-photonic crystals	Louiza, LAIFAOUI	Faculty of Technology /Electronic/Master Electronics	2019
Slow light in ultracompact photonic crystal decoder	Tina Daghooghi, Mohammad Soroosh, and Karim Ansari-Asl	Applied Optics Vol. 58, Issue 8, pp. 2050-2057 (2019) • <a href="https://doi.org/10.1364/AO.58.002050">https://doi.org/10.1364/AO.58.002050</a>	2019
Analysis of Photonic Crystal Diffraction Grating Based Light Trapping Structure for GaAs Solar Cell	Nikhil Deep Gupta & Vijay Janyani	IETE Journal of Research	2019
Emergent Upconversion Sustainable Micro-Optical Trapping Device	Kuan Bo Lin, Ting Wei Shen & Yen Hsun Su	Particle & Particle Systems Characterization Volume 36, Issue 7	2019
High Resolution Nano Temperature Sensor based on Two-Dimensional Photonic Crystal	Esfah, Pardis Kazemi; Alaei, Zahra	Majlesi Journal of Telecommunication Devices . Dec2019, Vol. 8 Issue 4, p149-153. 5p.	2019
Design of an add filter and a 2-channel optical demultiplexer with high-quality factor based on nano-ring resonator	Gholamali Delphi, Saeed Olyaei, Mahmood Seifouri & Ahmad Mohebzadeh-Bahabady	Journal of Computational Electronics volume 18, pages1372–1378(2019)	2019
Evaluation of the Returned Electromagnetic Signal from Retro-reflectors in Turbid Media	Iman Hassani nia, Skyler Wheaton & Hooman Mohseni	Scientific Reports volume 9, Article number: 6550 (2019)	2019
Design and simulation of optical micro-structures in silicon integrated circuitry with Si avalanche-mode light emitters, EXCEL optical ray tracing, and RSOFT optical simulation	Lukas W. Snyman, Timothy Okhai	Proceedings Volume 11043, Fifth Conference on Sensors, MEMS, and Electro-Optic Systems; 110430M (2019) <a href="https://doi.org/10.1117/12.2502061">https://doi.org/10.1117/12.2502061</a> Event: Fifth Conference on Sensors, MEMS, and	2019
VENUS: A Vertical-Cavity Surface-Emitting Laser Electro-Opto-Thermal NUMERICAL Simulator	Alberto Tibaldi ; Francesco Bertazzi ; Michele Goano ; Rainer Michalzick ; Pierluigi Debernardi	IEEE Journal of Selected Topics in Quantum Electronics ( Volume: 25 , Issue: 6 , Nov.-Dec. 2019 ) Article Sequence Number: 1500212 Date of Publication: 17 January 2019 INSPEC Accession Number: 18449945 DOI: 10.1109/JSTQE.2019.2893755	2019

Title	Author	Publication	Year
Design of a Broadband Polarization Splitter Based on Anisotropy-Engineered Tilted Subwavelength Gratings	Alaine Herrero-Bermello ; José Manuel Luque-González ; Aitor V. Velasco ,Alejandro Ortega-Moñux,Pavel Cheben,Robert Halir	IEEE Photonics Journal ( Volume: 11 , Issue: 3 , June 2019 ) Article Sequence Number: 6601508 Date of Publication: 19 April 2019 INSPEC Accession Number: 18648686 DOI: 10.1109/JPHOT.2019.2912335	2019
Protruding-shaped SiO <sub>2</sub> -microtip: from fabrication innovation to microphotonic device construction	Lingxin Kong, Yanxin Zhang, Weigang Zhang, Zhe Li, Lin Yu, Tiewi Yan, Pengcheng Geng, and Biao Wang	Optics Letters Vol. 44, Issue 14, pp. 3514-3517 (2019)	2019
Transparent diffraction gratings using silicon nanowire arrays embedded in flexible polymer	Yeong Jae Kim, Young Jin Yoo, and Young Min Song	Conference on Lasers and Electro-Optics OSA Technical Digest (Optical Society of America,	2019
Microring resonator-based photonic system for terahertz signal generation	Rohan Katti & Shanthy Prince	Photonic Network Communications volume 38, pages75–88(2019)	2018
Numerical Modeling of Abnormal Blocking Effect for the Design of Novel Optical Sensor Element Constructed by Periodic Grating Strips Over Si/SiO <sub>2</sub>	Andrei Tsarev Francesco De Leonardis Vittorio M. N. Passaro	physica status solidi (a)Volume 216, Issue 3	2018
Loss-Less Elliptical Channel Drop Filter for WDM Applications	S. Naghizade and S. M. Sattari-Esfahlan	Journal of Optical Communications   Volume 40:	2017
Design and Simulation of Optical 4-Channel Demultiplexer Using Photonic Crystals	Abdulhamid Zahedi, Fariborz Parandin, Mohammad Mehdi Karkhanehchi, Hosein Habibi Shams and Sahbasadat Rajamand	Journal of Optical Communications   Volume 40: Issue 1 DOI: <a href="https://doi.org/10.1515/joc-2017-0039">https://doi.org/10.1515/joc-2017-0039</a>   Published online: 12 Apr 2017	2017
Design of Photonic Crystal-Based Demultiplexer with High-Quality Factor for DWDM Applications	Mahdi Zavvari	Journal of Optical Communications   Volume 40: Issue 2	2017
Simulating of Surface Plasmonics on Different Applications	Chenglin Xu, Dan Herrmann, and Ying Zhou	Synopsys Inc, RSoft Division	2016
Detection of glucose content in tears using photonic crystal based surface plasmon resonance	Sane, Vani; Patil, Harshada; Sriram, G; Sharan, Preeta	Communication Technologies (GCCT), 2015 Global Conference Pages: 728 - 732, DOI:	2015
Optimization of Excitation in FDTD Method and Corresponding Source Modeling	Bojan DIMITRIJEVIC, Bojana NIKOLIC, Slavoljub ALEKSIC, Nebojsa RAICEVIC	RADIOENGINEERING, VOL. 24, NO. 1	2015
Optical filter based on photonic crystal	Seyyede Marziye Musavizadeh, Mohamaad Soroosh, Farhad Mehdizadeh	Indian Journal of Pure & Applied Physics	2015
All Optical Communication Filter Based on Photonic	Hamed Alipour-Banaei, Farhad Mehdizadeh, and Behnaz Amini	International Journal of Future Computer and Cor	2015
MEMS based photonic crystal sensor for structural health monitoring system	Azeem, S.; Sharan, P.; Talabattula, S.	Advanced Communication Control and Computing Technologies (ICACCCT), 2014 International Conference	2014
FDTD analysis of modal dispersive properties of nonlinear photonic crystal fibers	Tomasz Karpisz · Bartłomiej Salski · Anna Szumska · Mariusz Klimczak · Ryszard Buczynski	Optical and Quantum Electronics	2014
Simulation and Implementation of a Morphology-Tuned Gold Nano-Islands Integrated Plasmonic Sensor	Jayan Ozhikandathil,Muthukumarank Packirisamy	Multidisciplinary Digital Publishing Institute (MDP	2014
FDTD simulations for ultrasound propagation in a 2-D cervical tissue model	Laura Peralta, Guillermo Rus, Nicolas Bochud, Juan Melchor, Juan Chiachío, and Manuel Chiachío	Proceedings IWBBIO 2014	2014
All Optical Demultiplexer Based on Photonic Crystal Ring Resonators	Serajmohammadi, Somaye; Alipour-Banaei, Hamed; Mehdizadeh, Farhad	Bentham Science Publishers	2014
Artificial Ground Plane For Magnetic Resonance Coils To Reduce The Energy Specific Absorption Rate	Gameel Saleh; Farid Touati; Daniel Erni; Klaus Solbach	Qatar Foundation Annual Research Conference	2014
1x3 plasmonic power splitter for various splitting	Yuhsin Chang, Chyong-Hua Chen	ECIO Conference 2014, P037	2014
The resonance frequency shift in an SOI nano-waveguide microring resonator	Zang Junbin, Xue Chenyang, Wei Liping, Liu Chao, Cui Danfeng, Wang Yonghua, and Zhang Wendong	Chinese Institute of Electronics	2013

Title	Author	Publication	Year
Polarization State of Scattered Light in Apertureless Reflection-mode Scanning Near-Field Optical Microscopy	Yongfu Cai <sup>1</sup> , Mitsuharu Aoyagi <sup>1</sup> , Akira Emoto <sup>2</sup> , Tatsutoshi Shioda <sup>3</sup> , and Takayuki Ishibashi	Journal of Magnetics	2013
Plasmonic nanofocusing with a metallic pyramid and an integrated C-shaped aperture	Nathan C. Lindquist, Timothy W. Johnson, Prashant Nagpal, David J. Norris & Sang-Hyun Oh	Scientific Reports 3, Article number: 1857	2013
Comparison of Confined Modes in L1 and L3 Photonic Crystal Nanocavities in terms of Fill Factor	Foroogh Khozayemeh Sarbisheh, Soheil Sharifi and Ahmadreza Daraei	CHEMICAL RAPID COMMUNICATIONS	2013
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