

Vadim Backman

List of Publications by Year in descending order

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Version: 2024-02-01

232
papers

9,471
citations

36203

51
h-index

49773

87
g-index

243
all docs

243
docs citations

243
times ranked

7530
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Chromatin as self-returning walks: From population to single cell and back. <i>Biophysical Reports</i> , 2022, 2, 100042. | 0.7 | 1 |
| 2 | PWSpy: A Python library dedicated to the analysis of Partial Wave Spectroscopic Microscopy data.. <i>Journal of Open Source Software</i> , 2022, 7, 3957. | 2.0 | 0 |
| 3 | Lipid exposure activates gene expression changes associated with estrogen receptor negative breast cancer. <i>Npj Breast Cancer</i> , 2022, 8, 59. | 2.3 | 4 |
| 4 | Analysis of three-dimensional chromatin packing domains by chromatin scanning transmission electron microscopy (ChromSTEM). <i>Scientific Reports</i> , 2022, 12, . | 1.6 | 18 |
| 5 | Nanoscale chromatin imaging and analysis platform bridges 4D chromatin organization with molecular function. <i>Science Advances</i> , 2021, 7, . | 4.7 | 37 |
| 6 | Spike-in normalization for single-cell RNA-seq reveals dynamic global transcriptional activity mediating anticancer drug response. <i>NAR Genomics and Bioinformatics</i> , 2021, 3, lqab054. | 1.5 | 5 |
| 7 | Atomic Force Microscopy Detects the Difference in Cancer Cells of Different Neoplastic Aggressiveness via Machine Learning. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2000116. | 1.7 | 13 |
| 8 | Origins of subdiffractive contrast in optical coherence tomography. <i>Biomedical Optics Express</i> , 2021, 12, 3630. | 1.5 | 3 |
| 9 | Early Upper Aerodigestive Tract Cancer Detection Using Electron Microscopy to Reveal Chromatin Packing Alterations in Buccal Mucosa Cells. <i>Microscopy and Microanalysis</i> , 2021, 27, 878-888. | 0.2 | 2 |
| 10 | A Phylogeny-Informed Analysis of the Global Coral-Symbiodiniaceae Interaction Network Reveals that Traits Correlated with Thermal Bleaching Are Specific to Symbiont Transmission Mode. <i>MSystems</i> , 2021, 6, . | 1.7 | 5 |
| 11 | Quantification of gastric mucosal microcirculation as a surrogate marker of portal hypertension by spatially resolved subdiffuse reflectance spectroscopy in diagnosis of cirrhosis: a proof-of-concept study. <i>Gastrointestinal Endoscopy</i> , 2021, 94, 60-67.e1. | 0.5 | 1 |
| 12 | Chromatin Reprogramming via Contact Guidance-Induced Nuclear Deformation Promotes Stem Cell Differentiation. , 2021, , . | | 0 |
| 13 | Dynamic Crowding Regulates Transcription. <i>Biophysical Journal</i> , 2020, 118, 2117-2129. | 0.2 | 15 |
| 14 | Disordered chromatin packing regulates phenotypic plasticity. <i>Science Advances</i> , 2020, 6, eaax6232. | 4.7 | 34 |
| 15 | Physical and data structure of 3D genome. <i>Science Advances</i> , 2020, 6, eaay4055. | 4.7 | 32 |
| 16 | Nanoscale Chromatin Imaging and Analysis (nano-ChIA) Platform Bridges 4-D Chromatin Organization with Molecular Function. <i>Microscopy and Microanalysis</i> , 2020, 26, 1046-1050. | 0.2 | 3 |
| 17 | Evidence for possible association of vitamin D status with cytokine storm and unregulated inflammation in COVID-19 patients. <i>Aging Clinical and Experimental Research</i> , 2020, 32, 2141-2158. | 1.4 | 131 |
| 18 | Uncovering the role of Symbiodiniaceae assemblage composition and abundance in coral bleaching response by minimizing sampling and evolutionary biases. <i>BMC Microbiology</i> , 2020, 20, 124. | 1.3 | 5 |

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|----|---|-----|-----------|
| 19 | Disordered Chromatin Packing Regulates Ensemble Gene Expression and Phenotypic Plasticity. <i>Biophysical Journal</i> , 2020, 118, 549a-550a. | 0.2 | 1 |
| 20 | Characterizing chromatin packing scaling in whole nuclei using interferometric microscopy. <i>Optics Letters</i> , 2020, 45, 4810. | 1.7 | 11 |
| 21 | Physicochemical mechanotransduction alters nuclear shape and mechanics via heterochromatin formation. <i>Molecular Biology of the Cell</i> , 2019, 30, 2320-2330. | 0.9 | 77 |
| 22 | Preservation of cellular nano-architecture by the process of chemical fixation for nanopathology. <i>PLoS ONE</i> , 2019, 14, e0219006. | 1.1 | 4 |
| 23 | Spectral contrast optical coherence tomography angiography enables single-scan vessel imaging. <i>Light: Science and Applications</i> , 2019, 8, 7. | 7.7 | 24 |
| 24 | Physicochemical mechanotransduction alters nuclear shape and mechanics via heterochromatin formation. <i>Molecular Biology of the Cell</i> , 2019, , mbc.E19-05-0286. | 0.9 | 6 |
| 25 | Editorial Introduction to the JSTQE Issue on Biophotonics. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019, 25, 1-4. | 1.9 | 0 |
| 26 | Multimodal interference-based imaging of nanoscale structure and macromolecular motion uncovers UV induced cellular paroxysm. <i>Nature Communications</i> , 2019, 10, 1652. | 5.8 | 16 |
| 27 | Quantitative quality-control metrics for in vivo oximetry in small vessels by visible light optical coherence tomography angiography. <i>Biomedical Optics Express</i> , 2019, 10, 465. | 1.5 | 8 |
| 28 | Single Nucleotide Polymorphism Facilitated Down-Regulation of the Cohesin Stromal Antigen-1: Implications for Colorectal Cancer Racial Disparities. <i>Neoplasia</i> , 2018, 20, 289-294. | 2.3 | 7 |
| 29 | Measuring Nanoscale Chromatin Heterogeneity with Partial Wave Spectroscopic Microscopy. <i>Methods in Molecular Biology</i> , 2018, 1745, 337-360. | 0.4 | 10 |
| 30 | Correlating colorectal cancer risk with field carcinogenesis progression using partial wave spectroscopic microscopy. <i>Cancer Medicine</i> , 2018, 7, 2109-2120. | 1.3 | 12 |
| 31 | Chromatin histone modifications and rigidity affect nuclear morphology independent of lamins. <i>Molecular Biology of the Cell</i> , 2018, 29, 220-233. | 0.9 | 257 |
| 32 | Label free localization of nanoparticles in live cancer cells using spectroscopic microscopy. <i>Nanoscale</i> , 2018, 10, 19125-19130. | 2.8 | 3 |
| 33 | Inpainting Assisted Controlled Rotation Tomography (CORT). <i>Microscopy and Microanalysis</i> , 2018, 24, 502-503. | 0.2 | 1 |
| 34 | Single capillary oximetry and tissue ultrastructural sensing by dual-band dual-scan inverse spectroscopic optical coherence tomography. <i>Light: Science and Applications</i> , 2018, 7, 57. | 7.7 | 20 |
| 35 | In vivo broadband visible light optical coherence tomography probe enables inverse spectroscopic analysis. <i>Optics Letters</i> , 2018, 43, 619. | 1.7 | 6 |
| 36 | Biophotonic detection of high order chromatin alterations in field carcinogenesis predicts risk of future hepatocellular carcinoma: A pilot study. <i>PLoS ONE</i> , 2018, 13, e0197427. | 1.1 | 1 |

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|----|--|-----|-----------|
| 37 | Nanoscale Imaging of Chromatin with Labeled and Label-Free Super-Resolution Microscopy and Partial-Wave Spectroscopy. , 2018, , . | | 0 |
| 38 | Phylogenetic analysis of symbiont transmission mechanisms reveal evolutionary patterns in thermotolerance and host specificity that enhance bleaching resistance among vertically transmitted <i>Symbiodinium</i> . European Journal of Phycology, 2018, 53, 443-459. | 0.9 | 12 |
| 39 | Early increase in blood supply (EIBS) is associated with tumor risk in the Azoxymethane model of colon cancer. BMC Cancer, 2018, 18, 814. | 1.1 | 6 |
| 40 | Quantifying Chromatin Fractal Dimension through ChromEM Staining. Microscopy and Microanalysis, 2018, 24, 1282-1283. | 0.2 | 0 |
| 41 | Fully automated fiber-based optical spectroscopy system for use in a clinical setting. Journal of Biomedical Optics, 2018, 23, 1. | 1.4 | 2 |
| 42 | Sub-10-nm imaging of nucleic acids using spectroscopic intrinsic-contrast photon-localization optical nanoscopy (SICLON). Optics Letters, 2018, 43, 5817. | 1.7 | 2 |
| 43 | Spectral biomarkers for chemoprevention of colonic neoplasia: a placebo-controlled double-blinded trial with aspirin. Gut, 2017, 66, 285-292. | 6.1 | 30 |
| 44 | Consensus thermotolerance ranking for 110 <i>Symbiodinium</i> phylotypes: an exemplar utilization of a novel iterative partial rank aggregation tool with broad application potential. Functional Ecology, 2017, 31, 172-183. | 1.7 | 91 |
| 45 | Colocalization of cellular nanostructure using confocal fluorescence and partial wave spectroscopy. Journal of Biophotonics, 2017, 10, 377-384. | 1.1 | 13 |
| 46 | Bleaching response of coral species in the context of assemblage response. Coral Reefs, 2017, 36, 395-400. | 0.9 | 7 |
| 47 | Theoretical model for optical oximetry at the capillary level: exploring hemoglobin oxygen saturation through backscattering of single red blood cells. Journal of Biomedical Optics, 2017, 22, 025002. | 1.4 | 24 |
| 48 | ASPIrin Intervention for the REDuction of colorectal cancer risk (ASPIRED): a study protocol for a randomized controlled trial. Trials, 2017, 18, 50. | 0.7 | 36 |
| 49 | Measuring the Autocorrelation Function of Nanoscale Three-Dimensional Density Distribution in Individual Cells Using Scanning Transmission Electron Microscopy, Atomic Force Microscopy, and a New Deconvolution Algorithm. Microscopy and Microanalysis, 2017, 23, 661-667. | 0.2 | 4 |
| 50 | P2.01-094 Stromal Antigen 1 (SA-1), a Cohesin, is a Novel Proto-Oncogene Regulating Chromatin in Non-Small Cell Lung Cancer (NSCLC). Journal of Thoracic Oncology, 2017, 12, S845-S846. | 0.5 | 0 |
| 51 | Review of interferometric spectroscopy of scattered light for the quantification of subdiffractive structure of biomaterials. Journal of Biomedical Optics, 2017, 22, 030901. | 1.4 | 23 |
| 52 | Reflection statistics of weakly disordered optical medium when its mean refractive index is different from an outside medium. Optics Communications, 2017, 393, 185-190. | 1.0 | 1 |
| 53 | The transformation of the nuclear nanoarchitecture in human field carcinogenesis. Future Science OA, 2017, 3, FSO206. | 0.9 | 8 |
| 54 | The effects of chemical fixation on the cellular nanostructure. Experimental Cell Research, 2017, 358, 253-259. | 1.2 | 64 |

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|----|---|------|-----------|
| 55 | Macrogenomic engineering via modulation of the scaling of chromatin packing density. <i>Nature Biomedical Engineering</i> , 2017, 1, 902-913. | 11.6 | 47 |
| 56 | Parallel Three-Dimensional Tracking of Quantum Rods Using Polarization-Sensitive Spectroscopic Photon Localization Microscopy. <i>ACS Photonics</i> , 2017, 4, 1747-1752. | 3.2 | 20 |
| 57 | Stochastic fluorescence switching of nucleic acids under visible light illumination. <i>Optics Express</i> , 2017, 25, 7929. | 1.7 | 5 |
| 58 | Metabolic reprogramming of the premalignant colonic mucosa is an early event in carcinogenesis. <i>Oncotarget</i> , 2017, 8, 20543-20557. | 0.8 | 36 |
| 59 | Nuclear Blebbing Solely as a Function of Chromatin Compaction State. <i>FASEB Journal</i> , 2017, 31, lb237. | 0.2 | 0 |
| 60 | Optical Detection of Early Damage in Retinal Ganglion Cells in a Mouse Model of Partial Optic Nerve Crush Injury. , 2016, 57, 5665. | | 25 |
| 61 | Automated Cell Selection Using Support Vector Machine for Application to Spectral Nanocytology. <i>BioMed Research International</i> , 2016, 2016, 1-10. | 0.9 | 5 |
| 62 | Using electron microscopy to calculate optical properties of biological samples. <i>Biomedical Optics Express</i> , 2016, 7, 4749. | 1.5 | 7 |
| 63 | Detection of extracellular matrix modification in cancer models with inverse spectroscopic optical coherence tomography. <i>Physics in Medicine and Biology</i> , 2016, 61, 6892-6904. | 1.6 | 12 |
| 64 | Super-resolution spectroscopic microscopy via photon localization. <i>Nature Communications</i> , 2016, 7, 12290. | 5.8 | 91 |
| 65 | The Effects of Chemical Fixation on the Cellular Nanostructure: A Correlative Study of Back-Scattered Interference Spectrometry Microscopy and TEM. <i>Microscopy and Microanalysis</i> , 2016, 22, 234-235. | 0.2 | 0 |
| 66 | The Greater Genomic Landscape: The Heterogeneous Evolution of Cancer. <i>Cancer Research</i> , 2016, 76, 5605-5609. | 0.4 | 25 |
| 67 | Label-free imaging of the native, living cellular nanoarchitecture using partial-wave spectroscopic microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E6372-E6381. | 3.3 | 56 |
| 68 | Finite-difference time-domain-based optical microscopy simulation of dispersive media facilitates the development of optical imaging techniques. <i>Journal of Biomedical Optics</i> , 2016, 21, 065004. | 1.4 | 8 |
| 69 | Higher Order Chromatin Modulator Cohesin SA1 Is an Early Biomarker for Colon Carcinogenesis: Race-Specific Implications. <i>Cancer Prevention Research</i> , 2016, 9, 844-854. | 0.7 | 11 |
| 70 | Enhancing the sensitivity of mesoscopic light reflection statistics in weakly disordered media by interface reflections. <i>International Journal of Modern Physics B</i> , 2016, 30, 1650155. | 1.0 | 1 |
| 71 | Nanoscale refractive index fluctuations detected via sparse spectral microscopy. <i>Biomedical Optics Express</i> , 2016, 7, 883. | 1.5 | 10 |
| 72 | Superresolution intrinsic fluorescence imaging of chromatin utilizing native, unmodified nucleic acids for contrast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 9716-9721. | 3.3 | 56 |

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|----|--|-----|-----------|
| 73 | Enhanced Survival with Implantable Scaffolds That Capture Metastatic Breast Cancer Cells <i>In Vivo</i> . <i>Cancer Research</i> , 2016, 76, 5209-5218. | 0.4 | 86 |
| 74 | Subsurface Super-resolution Imaging of Unstained Polymer Nanostructures. <i>Scientific Reports</i> , 2016, 6, 28156. | 1.6 | 31 |
| 75 | Skeletal light-scattering accelerates bleaching response in reef-building corals. <i>BMC Ecology</i> , 2016, 16, 10. | 3.0 | 43 |
| 76 | Coral bleaching response index: a new tool to standardize and compare susceptibility to thermal bleaching. <i>Global Change Biology</i> , 2016, 22, 2475-2488. | 4.2 | 75 |
| 77 | Reconstruction of explicit structural properties at the nanoscale via spectroscopic microscopy. <i>Journal of Biomedical Optics</i> , 2016, 21, 025007. | 1.4 | 3 |
| 78 | Visible Inverse Spectroscopic Optical Coherence Tomography Probe for Spatially Resolved Nanoscale Characterization. , 2016, , . | | 0 |
| 79 | Comparison of Sample Preparation Methods for Analysis of Mucus-Secreting Colon Cancer Cells by Scanning Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2015, 21, 185-186. | 0.2 | 0 |
| 80 | Harnessing novel modalities: field carcinogenesis detection for personalizing prostate cancer management. <i>Future Oncology</i> , 2015, 11, 2737-2741. | 1.1 | 3 |
| 81 | Nanocytological Field Carcinogenesis Detection to Mitigate Overdiagnosis of Prostate Cancer: A Proof of Concept Study. <i>PLoS ONE</i> , 2015, 10, e0115999. | 1.1 | 27 |
| 82 | Nanoscale 3D Refractive Indices Mapping on Native Cheek Cells by Axial Scanning Transmission Electron Tomography. <i>Microscopy and Microanalysis</i> , 2015, 21, 405-406. | 0.2 | 0 |
| 83 | Subdiffusion reflectance spectroscopy to measure tissue ultrastructure and microvasculature: model and inverse algorithm. <i>Journal of Biomedical Optics</i> , 2015, 20, 097002. | 1.4 | 20 |
| 84 | Visible light optical coherence tomography measures retinal oxygen metabolic response to systemic oxygenation. <i>Light: Science and Applications</i> , 2015, 4, e334-e334. | 7.7 | 133 |
| 85 | Fractal Characterization of Chromatin Decompaction in Live Cells. <i>Biophysical Journal</i> , 2015, 109, 2218-2226. | 0.2 | 19 |
| 86 | Rectal Optical Markers for In Vivo Risk Stratification of Premalignant Colorectal Lesions. <i>Clinical Cancer Research</i> , 2015, 21, 4347-4355. | 3.2 | 17 |
| 87 | In Vivo Risk Analysis of Pancreatic Cancer Through Optical Characterization of Duodenal Mucosa. <i>Pancreas</i> , 2015, 44, 735-741. | 0.5 | 12 |
| 88 | Spectroscopic microscopy can quantify the statistics of subdiffractive refractive-index fluctuations in media with random rough surfaces. <i>Optics Letters</i> , 2015, 40, 4931. | 1.7 | 6 |
| 89 | Super-resolution two-photon microscopy via scanning patterned illumination. <i>Physical Review E</i> , 2015, 91, 042703. | 0.8 | 33 |
| 90 | 911 A Novel Use of Angiotensin II Receptor Blocker (ARB) Losartan to Inhibit AOM Induced Tumorigenesis and Neoangiogenesis in Experimental Colon Cancer. <i>Gastroenterology</i> , 2015, 148, S-172. | 0.6 | 5 |

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| 91 | Sa1578 Race and Gender Predilection for Spectroscopic Rectal Microvascular Markers in Colonic Field Carcinogenesis Detection: Implications for Colorectal Cancer Screening. <i>Gastrointestinal Endoscopy</i> , 2015, 81, AB268. | 0.5 | 0 |
| 92 | Monte Carlo Investigation of Optical Coherence Tomography Retinal Oximetry. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 2308-2315. | 2.5 | 25 |
| 93 | In vivo capture and label-free detection of early metastatic cells. <i>Nature Communications</i> , 2015, 6, 8094. | 5.8 | 133 |
| 94 | Buccal Spectral Markers for Lung Cancer Risk Stratification. <i>PLoS ONE</i> , 2014, 9, e110157. | 1.1 | 18 |
| 95 | Buccal microRNA dysregulation in lung field carcinogenesis: Gender-specific implications. <i>International Journal of Oncology</i> , 2014, 45, 1209-1215. | 1.4 | 15 |
| 96 | Monte Carlo model of the depolarization of backscattered linearly polarized light in the sub-diffusion regime. <i>Optics Express</i> , 2014, 22, 5325. | 1.7 | 4 |
| 97 | What structural length scales can be detected by the spectral variance of a microscope image?. <i>Optics Letters</i> , 2014, 39, 4290. | 1.7 | 23 |
| 98 | In vivo functional microangiography by visible-light optical coherence tomography. <i>Biomedical Optics Express</i> , 2014, 5, 3603. | 1.5 | 53 |
| 99 | Introduction to the BIOMED 2014 feature issue. <i>Biomedical Optics Express</i> , 2014, 5, 4144. | 1.5 | 0 |
| 100 | Spatially resolved optical and ultrastructural properties of colorectal and pancreatic field carcinogenesis observed by inverse spectroscopic optical coherence tomography. <i>Journal of Biomedical Optics</i> , 2014, 19, 036013. | 1.4 | 37 |
| 101 | Nanoscale changes in chromatin organization represent the initial steps of tumorigenesis: a transmission electron microscopy study. <i>BMC Cancer</i> , 2014, 14, 189. | 1.1 | 69 |
| 102 | Network signatures of nuclear and cytoplasmic density alterations in a model of pre and postmetastatic colorectal cancer. <i>Journal of Biomedical Optics</i> , 2014, 19, 016016. | 1.4 | 20 |
| 103 | Macromolecular Crowding as a Regulator of Gene Transcription. <i>Biophysical Journal</i> , 2014, 106, 1801-1810. | 0.2 | 72 |
| 104 | Colonic Mucosal Fatty Acid Synthase as an Early Biomarker for Colorectal Neoplasia: Modulation by Obesity and Gender. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2014, 23, 2413-2421. | 1.1 | 10 |
| 105 | Modeling Light Scattering in Tissue as Continuous Random Media Using a Versatile Refractive Index Correlation Function. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 173-186. | 1.9 | 65 |
| 106 | Endocytosis-binding protein 1 (EB1) upregulation is an early event in colorectal carcinogenesis. <i>FEBS Letters</i> , 2014, 588, 829-835. | 1.3 | 24 |
| 107 | Polarization gating spectroscopy of normal-appearing duodenal mucosa to detect pancreatic cancer. <i>Gastrointestinal Endoscopy</i> , 2014, 80, 786-793.e2. | 0.5 | 9 |
| 108 | The Role of Nuclear Nano-Environment on DNA Dehybridization. , 2014, , . | | 0 |

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|-----|--|-----|-----------|
| 109 | Targeting the ultrastructural origins of field carcinogenesis using low coherence enhanced backscattering. , 2014, , . | | 1 |
| 110 | Angora: A Free Software Package for Finite-Difference Time-Domain Electromagnetic Simulation. IEEE Antennas and Propagation Magazine, 2013, 55, 80-93. | 1.2 | 13 |
| 111 | Single Realization Stochastic FDTD for Weak Scattering Waves in Biological Random Media. IEEE Transactions on Antennas and Propagation, 2013, 61, 818-828. | 3.1 | 45 |
| 112 | Computation of tightly-focused laser beams in the FDTD method. Optics Express, 2013, 21, 87. | 1.7 | 33 |
| 113 | Insights into the field carcinogenesis of ovarian cancer based on the nanocytology of endocervical and endometrial epithelial cells. International Journal of Cancer, 2013, 133, 1143-1152. | 2.3 | 31 |
| 114 | Biological Mechanisms Underlying Structural Changes Induced by Colorectal Field Carcinogenesis Measured with Low-Coherence Enhanced Backscattering (LEBS) Spectroscopy. PLoS ONE, 2013, 8, e57206. | 1.1 | 12 |
| 115 | Nanoscale markers of esophageal field carcinogenesis: potential implications for esophageal cancer screening. Endoscopy, 2013, 45, 983-988. | 1.0 | 29 |
| 116 | Can OCT be sensitive to nanoscale structural alterations in biological tissue?. Optics Express, 2013, 21, 9043. | 1.7 | 59 |
| 117 | Method of detecting tissue contact for fiber-optic probes to automate data acquisition without hardware modification. Biomedical Optics Express, 2013, 4, 1401. | 1.5 | 3 |
| 118 | High-speed spectral nanocytology for early cancer screening. Journal of Biomedical Optics, 2013, 18, 117002. | 1.4 | 17 |
| 119 | Ultrastructural alterations in field carcinogenesis measured by enhanced backscattering spectroscopy. Journal of Biomedical Optics, 2013, 18, 097002. | 1.4 | 28 |
| 120 | Nano-Architectural Alterations in Mucus Layer Fecal Colonocytes in Field Carcinogenesis: Potential for Screening. Cancer Prevention Research, 2013, 6, 1111-1119. | 0.7 | 12 |
| 121 | A physical sciences network characterization of non-tumorigenic and metastatic cells. Scientific Reports, 2013, 3, 1449. | 1.6 | 146 |
| 122 | Visible-light optical coherence tomography for retinal oximetry. Optics Letters, 2013, 38, 1796. | 1.7 | 151 |
| 123 | Advances in Biophotonics Detection of Field Carcinogenesis for Colon Cancer Risk Stratification. Journal of Cancer, 2013, 4, 251-261. | 1.2 | 49 |
| 124 | Evidence-based Guidelines for Precision Risk Stratification-Based Screening (PRSBS) for Colorectal Cancer: Lessons learned from the US Armed Forces: Consensus and Future Directions. Journal of Cancer, 2013, 4, 172-192. | 1.2 | 14 |
| 125 | Modulation of Light-Enhancement to Symbiotic Algae by Light-Scattering in Corals and Evolutionary Trends in Bleaching. PLoS ONE, 2013, 8, e61492. | 1.1 | 106 |
| 126 | HDAC Up-Regulation in Early Colon Field Carcinogenesis Is Involved in Cell Tumorigenicity through Regulation of Chromatin Structure. PLoS ONE, 2013, 8, e64600. | 1.1 | 114 |

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|-----|---|-----|-----------|
| 127 | Imaging a full set of optical scattering properties of biological tissue by inverse spectroscopic optical coherence tomography. <i>Optics Letters</i> , 2012, 37, 4443. | 1.7 | 91 |
| 128 | Introduction to the BIOMED 2012 Feature Issue. <i>Biomedical Optics Express</i> , 2012, 3, 2771. | 1.5 | 0 |
| 129 | A fiber optic probe design to measure depth-limited optical properties in-vivo with Low-coherence Enhanced Backscattering (LEBS) Spectroscopy. <i>Optics Express</i> , 2012, 20, 19643. | 1.7 | 19 |
| 130 | Near-field penetrating optical microscopy: a live cell nanoscale refractive index measurement technique for quantification of internal macromolecular density. <i>Optics Letters</i> , 2012, 37, 506. | 1.7 | 8 |
| 131 | Structural length-scale sensitivities of reflectance measurements in continuous random media under the Born approximation. <i>Optics Letters</i> , 2012, 37, 5220. | 1.7 | 55 |
| 132 | Structured interference optical coherence tomography. <i>Optics Letters</i> , 2012, 37, 3048. | 1.7 | 7 |
| 133 | In vivo measurement of the shape of the tissue-refractive-index correlation function and its application to detection of colorectal field carcinogenesis. <i>Journal of Biomedical Optics</i> , 2012, 17, 047005. | 1.4 | 13 |
| 134 | Open source software for electric field Monte Carlo simulation of coherent backscattering in biological media containing birefringence. <i>Journal of Biomedical Optics</i> , 2012, 17, 115001. | 1.4 | 25 |
| 135 | Polarized Enhanced Backscattering Spectroscopy for Characterization of Biological Tissues at Subdiffusion Length Scales. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012, 18, 1313-1325. | 1.9 | 25 |
| 136 | Nanocytology of Rectal Colonocytes to Assess Risk of Colon Cancer Based on Field Cancerization. <i>Cancer Research</i> , 2012, 72, 2720-2727. | 0.4 | 56 |
| 137 | Spectroscopic Applications in Gastrointestinal Endoscopy. <i>Clinical Gastroenterology and Hepatology</i> , 2012, 10, 1335-1341. | 2.4 | 23 |
| 138 | A Frequency-Domain Near-Field-to-Far-Field Transform for Planar Layered Media. <i>IEEE Transactions on Antennas and Propagation</i> , 2012, 60, 1878-1885. | 3.1 | 11 |
| 139 | The Microscope in a Computer: Image Synthesis from Three-Dimensional Full-Vector Solutions of Maxwell's Equations at the Nanometer Scale. <i>Progress in Optics</i> , 2012, 57, 1-91. | 0.4 | 15 |
| 140 | Nanoscale Differences Assessed by Partial Wave Spectroscopy in the Field of Esophageal Cancer and Barrett's Esophagus. <i>Gastroenterology</i> , 2011, 140, S-752. | 0.6 | 5 |
| 141 | Understanding Biological Mechanisms of Nuclear Disorder Strength in Early Carcinogenesis. <i>Gastroenterology</i> , 2011, 140, S-765-S-766. | 0.6 | 4 |
| 142 | Light-Scattering Technologies for Field Carcinogenesis Detection: A Modality for Endoscopic Prescreening. <i>Gastroenterology</i> , 2011, 140, 35-41.e5. | 0.6 | 46 |
| 143 | Colonoscopy and Optical Biopsy: Bridging Technological Advances to Clinical Practice. <i>Gastroenterology</i> , 2011, 140, 1863-1867. | 0.6 | 18 |
| 144 | Crowding-Induced Structural Alterations of Random-Loop Chromosome Model. <i>Physical Review Letters</i> , 2011, 106, 168102. | 2.9 | 52 |

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|-----|--|-----|-----------|
| 145 | The influence of chromosome density variations on the increase in nuclear disorder strength in carcinogenesis. <i>Physical Biology</i> , 2011, 8, 015004. | 0.8 | 33 |
| 146 | Neo-angiogenesis and the premalignant micro-circulatory augmentation of early colon carcinogenesis. <i>Cancer Letters</i> , 2011, 306, 205-213. | 3.2 | 23 |
| 147 | Experimental confirmation at visible light wavelengths of the backscattering enhancement phenomenon of the photonic nanojet. <i>Optics Express</i> , 2011, 19, 7084. | 1.7 | 70 |
| 148 | Alternate formulation of enhanced backscattering as phase conjugation and diffraction: derivation and experimental observation. <i>Optics Express</i> , 2011, 19, 11922. | 1.7 | 8 |
| 149 | Numerical simulation of partially coherent broadband optical imaging using the finite-difference time-domain method. <i>Optics Letters</i> , 2011, 36, 1596. | 1.7 | 17 |
| 150 | Measurement of the spatial backscattering impulse-response at short length scales with polarized enhanced backscattering. <i>Optics Letters</i> , 2011, 36, 4737. | 1.7 | 20 |
| 151 | Association of stem-like cells in gender-specific chemoprevention against intestinal neoplasia in MIN mouse. <i>Oncology Reports</i> , 2011, 26, 1127-32. | 1.2 | 1 |
| 152 | A proposed perfectly matched stratified medium FDTD TFSF sourced by inhomogeneous plane waves. , 2011, , . | | 4 |
| 153 | Quantification of nanoscale density fluctuations by electron microscopy: probing cellular alterations in early carcinogenesis. <i>Physical Biology</i> , 2011, 8, 026012. | 0.8 | 21 |
| 154 | FDTD simulation of a partially-coherent Gaussian Schell-model beam. , 2011, , . | | 0 |
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