europass

Radu Hristu

Nationality: Romanian | **Phone number:** (+40) 214029402 (Work) | **Email address:** radu.hristu@upb.ro |

Address: 313 Splaiul Independentei, 060042, Bucharest, Romania (Work)

WORK EXPERIENCE

01/10/2022 – CURRENT Bucharest, Romania

ASSOCIATE PROFESSOR NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY POLITEHNICA BUCHAREST

- Teaching physics courses to undergradute students
- Coordinating laboratory activities for undergraduate students in faculties in Politehnica Bucharest
- Coordinating tutorial activities for undergraduate students in faculties in Politehnica Bucharest
- Guiding students' scientific activities

01/10/2017 – CURRENT Bucharest, Romania

SCIENTIFIC RESEARCHER UPB, CENTER FOR MICROSCOPY-MICROANALYSIS AND INFORMATION PROCESSING

- Writing grant/scientific project proposals
- Scientific research activities in national and international research projects
- Project leader: NANOSHG (2018-2020), SHGThyPath (2020-2022)

01/10/2017 – 30/09/2022 Bucharest, Romania

LECTURER UNIVERSITY POLITEHNICA OF BUCHAREST, PHYSICS DEPARTMENT

- Teaching physics courses to undergradute students
- Coordinating laboratory activities for undergraduate students in faculties in UPB
- Coordinating tutorial activities for undergraduate students in faculties in UPB
- Guiding students' scientific activities
- Writing grant/scientific project proposals

01/02/2016 – 30/09/2017 Bucharest, Romania

ASSOCIATE LECTURER UNIVERSITY POLITEHNICA OF BUCHAREST, PHYSICS DEPARTMENT

- Teaching physics courses to undergradute students
- Coordinating laboratory activities for undergraduate students in faculties in UPB
- Guiding students' scientific activities
- Writing grant/scientific project proposals

14/05/2014 – 07/12/2015 Bucharest, Romania

POSTDOC UNIVERSITY POLITEHNICA OF BUCHAREST, PHYSICS DEPARTMENT

- Research activities financed in the frame of the contract POSDRU/159/1.5/S/132397 "Excelence in research by doctoral and postdoctoral grants" (ExcelDOC)

01/10/2007 – 30/09/2017 Bucharest, Romania

UNIVERSITY RESEARCH ASSISTANT UPB, CENTER FOR MICROSCOPY-MICROANALYSIS AND INFORMATION PROCESSING

- Writing grant/scientific project proposals
- Scientific research activities in national and international research projects
- Project partner leader: ISPLAMS (2012-2016)

01/07/2005 – 10/07/2007 Bucharest, Romania
LAYOUT DESIGNER CATALYST SEMICONDUCTOR ROMANIA

EDUCATION AND TRAINING

01/10/2007 – 10/06/2012 Bucharest, Romania
PHD IN ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING University Politehnica of Bucharest

Address 313 Splaiul Independentei, sector 6, 060042, Bucharest, Romania

01/10/2002 – 30/06/2007 Bucharest, Romania
DIPLOMA ENGINEER IN ELECTRONICS - SPECIALIZATION MICROELECTRONICS (OPTOELECTRONICS) University Politehnica of Bucharest

Address 313, Splaiul Independentei, sector 6, 060042, Bucharest, Romania

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1
GERMAN	B2	B2	A2	A2	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

PROJECTS

27/08/2020 – CURRENT
Integration of pixel-wise and whole image classification of second harmonic generation microscopy datasets for thyroid pathology

Project objective: The development of a methodology for quantitative analysis of images obtained on tissue sections by integrating pixel-level and whole-image level quantitative metrics.
Publications:

1. Hristu, R., Stanciu, S.G., Dumitru, A., Paun, B., Floroiu, I., Costache, M. and Stanciu, G.A., 2021. Influence of hematoxylin and eosin staining on the quantitative analysis of second harmonic generation imaging of fixed tissue sections. *Biomedical Optics Express*, *12*(9), pp.5829-5843.
2. Hristu, R., Eftimie, L.G., Stanciu, S.G., Glogojeanu, R.R., Gheorghita, P. and Stanciu, G.A., 2022. Assessment of extramammary Paget disease by two-photon microscopy. Frontiers in Medicine, p. 283.

Link https://shgthypath.cmmip-upb.org/

02/05/2018 – 30/11/2020
Quantitative label-free second harmonic generation microscopy at the nanoscale

Project objective: To bring second harmonic generation (SHG) imaging and analysis beyond the diffraction limit and to apply the developed imaging methodology for the assessment of collagen organization in tissue samples.
Publications:

1. Hristu, R., Eftimie, L.G., Paun, B., Stanciu, S.G. and Stanciu, G.A., 2020. Pixel-level angular quantification of capsular collagen in second harmonic generation microscopy images of encapsulated thyroid nodules. Journal of Biophotonics, 13(12), p.e202000262.

2. Bueno, J.M., Ávila, F.J., Hristu, R., Stanciu, S.G., Eftimie, L. and Stanciu, G.A., 2020. Objective analysis of collagen organization in thyroid nodule capsules using second harmonic generation microscopy images and the Hough transform. *Applied Optics*, *59*(23), pp.6925-6931.
3. Paun, B., Hristu, R., Stanciu, S.G., Dumitru, A.V., Costache, M. and Stanciu, G.A., 2019. Strategies for optimizing the determination of second-order nonlinear susceptibility tensor coefficients for collagen in histological samples. *IEEE Access*, *7*, pp.135210-135219.
4. Hristu, R., Eftimie, L.G., Stanciu, S.G., Tranca, D.E., Paun, B., Sajin, M. and Stanciu, G.A., 2018. Quantitative second harmonic generation microscopy for the structural characterization of capsular collagen in thyroid neoplasms. *Biomedical Optics Express*, *9*(8), pp.3923-3936.
5. Quantitative Multiphoton Microscopy in Cancer Research, R. Hristu, L.G. Eftimie, B. Paun, S.G. Stanciu, D.E. Tranca, G.A. Stanciu, Imaging & Microscopy, vol. 21, Nov. 2019.

Link https://nanoshg.cmmip-upb.org/

PUBLICATIONS

Selected publications

Hristu, Radu, Lucian G. Eftimie, Stefan G. Stanciu, Remus R. Glogojeanu, Pavel Gheorghita, and George A. Stanciu. "Assessment of Extramammary Paget Disease by Two-Photon Microscopy." *Frontiers in Medicine* 9 (2022): 839786.
Hristu, Radu, Stefan G. Stanciu, Adrian Dumitru, Lucian G. Eftimie, Bogdan Paun, Denis E. Tranca, Pavel Gheorghita, Mariana Costache, and George A. Stanciu. "PSHG-TISS: A collection of polarization-resolved second harmonic generation microscopy images of fixed tissues." *Scientific Data* 9, no. 1 (2022): 376.
Stanciu, Stefan G., **Radu Hristu**, George A. Stanciu, Denis E. Tranca, Lucian Eftimie, Adrian Dumitru, Mariana Costache et al. "Super-resolution re-scan second harmonic generation microscopy." *Proceedings of the National Academy of Sciences* 119, no. 47 (2022): e2214662119.
Eftimie, Lucian G., Remus R. Glogojeanu, A. Tejaswee, Pavel Gheorghita, Stefan G. Stanciu, Augustin Chirila, George A. Stanciu, Angshuman Paul, and **Radu Hristu**. "Differential diagnosis of thyroid nodule capsules using random forest guided selection of image features." *Scientific Reports* 12, no. 1 (2022): 21636.
Radu Hristu, Stefan G. Stanciu, Adrian Dumitru, Bogdan Paun, Iustin Floroiu, Mariana Costache, George A. Stanciu. "Influence of hematoxylin and eosin staining on the quantitative analysis of second harmonic generation imaging of fixed tissue sections." Biomedical Optics Express 12, no. 9 (2021): 5829-5843.
Radu Hristu, Lucian G. Eftimie, Bogdan Paun, Stefan G. Stanciu, George A. Stanciu. "Pixel-level angular quantification of capsular collagen in second harmonic generation microscopy images of encapsulated thyroid nodules." Journal of Biophotonics 13, no. 12 (2020): e202000262.
Radu Hristu, Lucian G. Eftimie, Stefan G. Stanciu, Denis E. Tranca, Bogdan Paun, Maria Sajin, George A. Stanciu. "Quantitative second harmonic generation microscopy for the structural characterization of capsular collagen in thyroid neoplasms." Biomedical Optics Express 9, no. 8 (2018): 3923-3936.
Radu Hristu, Stefan G. Stanciu, Denis E. Tranca, George A. Stanciu. "Improved quantification of collagen anisotropy with polarization-resolved second harmonic generation microscopy." Journal of Biophotonics 10, no. 9 (2017): 1171-1179.
Radu Hristu, Stefan G. Stanciu, Denis E. Tranca, Efstathios K. Polychroniadis, George A. Stanciu. "Identification of stacking faults in silicon carbide by polarization-resolved second harmonic generation microscopy." Scientific Reports 7, no. 1 (2017): 1-9.
Radu Hristu, Stefan G. Stanciu, Denis E. Tranca, and George A. Stanciu. "Electron beam influence on the carbon contamination of electron irradiated hydroxyapatite thin films." Applied Surface Science 346 (2015): 342-347.
Radu Hristu, Stefan G. Stanciu, Denis E. Tranca, Alecs Matei, George A. Stanciu. "Nonlinear optical imaging of defects in cubic silicon carbide epilayers." Scientific reports 4, no. 1 (2014): 1-6.



Radu Hristu

Center for Microscopy-Microanalysis and Information Processing,
University Politehnica of Bucharest

microscopy
biophotonics

	Toate	Din 2019
Referințe bibliografice	1402	796
h-index	20	16
i10-index	44	30

6 articole indisponibile

10 articole disponibile

Pe baza cerințelor privind finanțarea

TITLU	CITAT DE	ANUL
Deep learning-based diagnosis of thyroid tumors using histopathology images from thyroid nodule capsule NA Shah, J Suthar, A Tejaswee, A Enache, LG Eftimie, R Hristu, A Paul Medical Imaging 2024: Computer-Aided Diagnosis 12927, 808-812		2024
Differential Diagnosis of Thyroid Tumors through Information Fusion from Multiphoton Microscopy Images using Fusion Autoencoder HR Kethireddy, A Tejaswee, LG Eftimie, R Hristu, GA Stanciu, A Paul Medical Imaging with Deep Learning		2024
Characterization of Nanoporous Copper Using Scanning Probe Techniques SR Anton, DE Tranca, SG Stanciu, R Hristu, CK Banica, E Vasile, Z Hu, ... Coatings 13 (11), 1908		2023
Applications of Phasor Data Analysis on Scattering Scanning Near-field Optical Microscopy Investigations DE Tranca, A Sobetkii, R Hristu, SG Stanciu, C Stoichita, GA Stanciu 2023 23rd International Conference on Transparent Optical Networks (ICTON), 1-4		2023
Mechanical and Optical Investigations of Cr Thin Films Deposited on Si Substrate DE Tranca, A Sobetkii, R Hristu, SR Anton, SG Stanciu, E Fiorentis, ... 2023 23rd International Conference on Transparent Optical Networks (ICTON), 1-4		2023
Highlighting Cerebral Metastases Using Two-Photon Microscopy A Enache, LG Eftimie, R Hristu, AM Graur, RR Glogojeanu, M Sajin, ... 2023 23rd International Conference on Transparent Optical Networks (ICTON), 1-3		2023
Collagen Organization in Second Harmonic Generation Images for the Assessment of Thyroid Nodule Capsular Invasion R Hristu, SG Stanciu, DE Tranca, LG Eftimie, A Enache, GA Stanciu 2023 23rd International Conference on Transparent Optical Networks (ICTON), 1-4		2023
Super-Resolved Non-linear Optical Microscopy: Architectures, Advantages and Perspectives SG Stanciu, R Hristu, GA Stanciu, DE Tranca, L Eftimie, A Dumitru, ... 2023 23rd International Conference on Transparent Optical Networks (ICTON), 1-1		2023

TITLU	CITAT DE	ANUL
Nanoscale local modification of PMMA refractive index by tip-enhanced femtosecond pulsed laser irradiation DE Tranca, SG Stanciu, R Hristu, AM Ionescu, GA Stanciu Applied Surface Science 623, 157014	3	2023
Imaging of colorectal adenomas with pseudoinvasion and malignant polyps using two-photon excitation microscopy MA Florea, LG Eftimie, RR Glogojeanu, R Hristu, GA Stanciu, M Costache		2023
Automated detection of corneal edema with deep learning-assisted second harmonic generation microscopy SR Anton, RM Martínez-Ojeda, R Hristu, GA Stanciu, A Toma, CK Banica, ... IEEE Journal of Selected Topics in Quantum Electronics 29 (6: Photonic …	5	2023
Structural and mechanical properties of CrN thin films deposited on Si substrate by using magnetron techniques DE Tranca, A Sobetkii, R Hristu, SR Anton, E Vasile, SG Stanciu, ... Coatings 13 (2), 219	4	2023
Differential diagnosis of thyroid nodule capsules using random forest guided selection of image features LG Eftimie, RR Glogojeanu, A Tejaswee, P Gheorghita, SG Stanciu, ... Scientific Reports 12 (1), 21636	6	2022
Super-resolution re-scan second harmonic generation microscopy SG Stanciu, R Hristu, GA Stanciu, DE Tranca, L Eftimie, A Dumitru, ... Proceedings of the National Academy of Sciences 119 (47), e2214662119	11	2022
On the Automated Detection of Corneal Edema with Second Harmonic Generation Microscopy and Deep Learning SR Anton, RM Martínez-Ojeda, R Hristu, GA Stanciu, A Toma, CK Banica, ... arXiv preprint arXiv:2210.00332		2022
Biological and Physico-Chemical Properties of Composite Layers Based on Magnesium-Doped Hydroxyapatite in Chitosan Matrix SL Iconaru, CS Ciobanu, G Predoi, K Rokosz, MC Chifiriuc, C Bleotu, ... Micromachines 13 (10), 1574	7	2022
Local Refractive Index Change by Tip-Enhanced Femtosecond Laser for Surface Photonic Crystal Creation DE Tranca, R Hristu, SG Stanciu, GA Stanciu Nonlinear Photonics, NpTh2F. 4		2022
PSHG-TISS: A collection of polarization-resolved second harmonic generation microscopy images of fixed tissues R Hristu, SG Stanciu, A Dumitru, LG Eftimie, B Paun, DE Tranca, ... Scientific Data 9 (1), 376	12	2022
Combining Bright-field and Second Harmonic Generation Microscopy for the Characterization of Thyroid Nodules R Hristu, LG Eftimie, R Glogojeanu, SG Stanciu, GA Stanciu		2022

TITLU	CITAT DE	ANUL
Optics, Photonics and Lasers, 26		
Scattering-type scanning near-field optical microscopy of polymer-coated gold nanoparticles SG Stanciu, DE Tranca, G Zampini, R Hristu, GA Stanciu, X Chen, M Liu, ... ACS omega 7 (13), 11353-11362	12	2022
Assessment of Extramammary Paget Disease by Two-Photon Microscopy R Hristu, LG Eftimie, SG Stanciu, RR Glogojeanu, P Gheorghita, ... Frontiers in Medicine 9, 839786	3	2022
Influence of hematoxylin and eosin staining on the quantitative analysis of second harmonic generation imaging of fixed tissue sections R Hristu, SG Stanciu, A Dumitru, B Paun, I Floroiu, M Costache, ... Biomedical Optics Express 12 (9), 5829-5843	20	2021
Scattering-type scanning near-field optical microscopy GA Stanciu, D Tranca, SG Stanciu, R Hristu, C Stoichita Imaging Modalities for Biological and Preclinical Research: A Compendium …		2021
Multi-Level evaluation of UV action upon Vitamin D enhanced, silver doped hydroxyapatite thin films deposited on titanium substrate CC Negrila, D Predoi, RV Ghita, SL Iconaru, SC Ciobanu, M Manea, ... Coatings 11 (2), 120	3	2021
Characterization of *Acinetobacter baumannii* Filamentous Cells by Re-Scan Confocal Microscopy and Complementary Fluorometric Approaches M Lucidi, R Hristu, L Nichele, GA Stanciu, P Visca, CK Banica, G Cincotti, ... IEEE Journal of Selected Topics in Quantum Electronics 27 (5), 1-7	5	2021
Pixel-level angular quantification of capsular collagen in second harmonic generation microscopy images of encapsulated thyroid nodules R Hristu, LG Eftimie, B Paun, SG Stanciu, GA Stanciu Journal of Biophotonics 13 (12), e202000262	10	2020
SSNOMBACTER: A collection of scattering-type scanning near-field optical microscopy and atomic force microscopy images of bacterial cells M Lucidi, DE Tranca, L Nichele, D Ünay, GA Stanciu, P Visca, AM Holban, ... GigaScience 9 (11), giaa129	14	2020
STED nanoscopy of KK114-stained pathogenic bacteria M Lucidi, R Hristu, L Nichele, GA Stanciu, DE Tranca, AM Holban, P Visca, ... Journal of Biophotonics 13 (9), e202000097	6	2020
Objective analysis of collagen organization in thyroid nodule capsules using second harmonic generation microscopy images and the Hough transform JM Bueno, FJ Ávila, R Hristu, SG Stanciu, L Eftimie, GA Stanciu Applied Optics 59 (23), 6925-6931	14	2020
Surface optical characterization at nanoscale using phasor representation of data acquired by scattering scanning near-field optical microscopy DE Tranca, SG Stanciu, R Hristu, L Latterini, GA Stanciu	4	2020

TITLU	CITAT DE	ANUL
Applied Surface Science 509, 145347		
Characterization of nanomaterials by locally determining their complex permittivity with scattering-type scanning near-field optical microscopy SG Stanciu, DE Tranca, L Pastorino, S Boi, YM Song, YJ Yoo, S Ishii, ... ACS Applied Nano Materials 3 (2), 1250-1262	19	2020
Cross-modal Representation Learning for Efficient Registration of Multiphoton and Brightfield Microscopy Images of Skin Tissue E Wetzer, N Pielawski, J Öfverstedt, L Jiahao, J Lindblad, A Dumitru, ... 4th NEUBIAS Conference, Bordeaux, France, Feb 29-Mar 6, 2020		2020
A novel approach for near-field optical microscopy based on tip-enhanced fluorescence via plasmon resonance energy transfer (TEFPLASNOM) SG Stanciu, DE Tranca, G Zampini, G Quaglia, GA Stanciu, R Hristu, ... Proc. ATTRACT-Final Conf. Igniting Deep Tech Revol, 1-6	1	2020
Higher-harmonic generation microscopy beyond the diffraction barrier based on re-scan strategies for optical data acquisition (HARMOPLUS) SG Stanciu, R Hristu, DE Tranca, GA Stanciu, H Manders, A Cherian, ... Proc. ATTRACT-Final Conf.—Igniting Deep Tech Revol., 1-5	2	2020
Multiphoton microscopy of the dermoepidermal junction and automated identification of dysplastic tissues with deep learning MJ Huttunen, R Hristu, A Dumitru, I Floroiu, M Costache, SG Stanciu Biomedical optics express 11 (1), 186-199	27	2020
Preparations of silver/montmorillonite biocomposite multilayers and their antifungal activity SL Iconaru, A Groza, GE Stan, D Predoi, S Gaiaschi, R Trusca, ... Coatings 9 (12), 817	14	2019
Quantitative imaging of advanced nanostructured materials with scattering-type scanning near field optical microscopy SG Stanciu, DE Tranca, L Pastorino, S Boi, YM Song, YJ Yoo, S Ishii, ... Fourth International Conference on Applications of Optics and Photonics …		2019
Growth mechanisms and the effects of deposition parameters on the structure and properties of high entropy film by magnetron sputtering Y Liang, P Wang, Y Wang, Y Dai, Z Hu, DE Tranca, R Hristu, SG Stanciu, ... Materials 12 (18), 3008	10	2019
Strategies for optimizing the determination of second-order nonlinear susceptibility tensor coefficients for collagen in histological samples B Paun, R Hristu, SG Stanciu, AV Dumitru, M Costache, GA Stanciu IEEE Access 7, 135210-135219	3	2019
Investigating and Assessing the Dermoepidermal Junction with Multiphoton Microscopy and Deep Learning MJ Huttunen, R Hristu, A Dumitru, M Costache, SG Stanciu bioRxiv, 743054	1	2019

TITLU	CITAT DE	ANUL
Investigating Human Skin Using Deep Learning Enhanced Multiphoton Microscopy MJ Huttunen, R Hristu, A Dumitru, M Costache, SG Stanciu 2019 21st International Conference on Transparent Optical Networks (ICTON), 1-4		2019
Correlative imaging using a multimodal microscopy system for investigations at micro and nano scales GA Stanciu, DE Tranca, SG Stanciu, R Hristu, C Stoichita, JM Bueno 2019 21st International Conference on Transparent Optical Networks (ICTON), 1-4	1	2019
Advances in Fractal Analysis of the Biological Tissues Images Obtained by Using Laser Scanning Microscopy A Toma, R Hristu, T Capraru, SG Stanciu, D Tranca, GA Stanciu 2019 21st International Conference on Transparent Optical Networks (ICTON), 1-4		2019
Re-scan Confocal Microscopy of ESCRT-mediated lysosome repair SG Stanciu, I Floroiu, R Hristu, E Fiorentis, M Radulovic, C Raiborg, ... Nature cell biology 21 (1), 72		2019
Label-based and label-free optical nanoscopy of pathogenic bacterial species M Lucidi, SG Stanciu, DE Tranca, R Hristu, AM Holban, L Nchele, ... Сборник трудов конференции «International Conference on Advanced Laser …		2019
Preliminary evaluation of the antifungal activity of samarium doped hydroxyapatite thin films CS Turculet, AM Prodan, I Negoi, G Teleanu, M Popa, E Andronescu, ... Rom. Biotechnol. Lett. 23, 13928-13932	15	2018
Modern methods for the structural characterisation of collagen in capsular invasion areas in papillary thyroid carcinoma L Eftimie, R Hristu, M Dumitrescu, M Costache, S Stanciu, M Sajin, ... VIRCHOWS ARCHIV 473, S249-S249		2018
Quantitative second harmonic generation microscopy for the structural characterization of capsular collagen in thyroid neoplasms R Hristu, LG Eftimie, SG Stanciu, DE Tranca, B Paun, M Sajin, GA Stanciu Biomedical optics express 9 (8), 3923-3936	38	2018
Imaging Biological Specimens and Advanced Materials with Correlative Far-field Near-field Microscopy SG Stanciu, DE Tranca, C Stoichita, R Hristu, GA Stanciu Conference on Lasers and Electro-Optics/Pacific Rim, Th3K. 4		2018
Towards automated tissue characterization using parallel bag-of-features experts dealing with two-photon excitation fluorescence and second harmonic generation microscopy datasets SG Stanciu, R Hristu, A Dumitru, RM Buga, T Totu, M Popescu, ... 2018 20th International Conference on Transparent Optical Networks (ICTON), 1-4	1	2018

TITLU	CITAT DE	ANUL
Nanoscale Investigations of Optical Fiber by Using Scattering Scanning Near-Field Optical Microscopy DE Tranca, C Stoichita, R Hristu, SG Stanciu, CV Sammut, GA Stanciu 2018 20th International Conference on Transparent Optical Networks (ICTON), 1-3	1	2018
A new technique in scanning near field optical microscopy used for investigations on the biological samples GA Stanciu, DE Tranca, R Hristu, SG Stanciu, AM Holban, A Toma, ... 2018 20th International Conference on Transparent Optical Networks (ICTON), 1-3	3	2018
Changes in the collagen structure of thyroid nodule capsules determined by polarization-resolved second harmonic generation microscopy R Hristu, B Paun, L Eftimie, SG Stanciu, DE Tranca, GA Stanciu 2018 20th International Conference on Transparent Optical Networks (ICTON), 1-4	3	2018
Modern methods to differentiate benign thyroid nodules from malignant ones L Eftimie, R Hristu, M Dumitrescu, M Costache, SG Stanciu, M Sajin, ... microscopy 121 (1)		2018
A Study on Image Quality in Polarization-Resolved Second Harmonic Generation Microscopy (vol 7, 2017) SG Stanciu, FJ Avila, R Hristu, JM Bueno SCIENTIFIC REPORTS 8		2018
Author Correction: A Study on Image Quality in Polarization-Resolved Second Harmonic Generation Microscopy SG Stanciu, FJ Ávila, R Hristu, JM Bueno Scientific Reports 8		2018
Nanoscale mapping of refractive index by using scattering-type scanning near-field optical microscopy DE Tranca, SG Stanciu, R Hristu, BM Witgen, GA Stanciu Nanomedicine: Nanotechnology, Biology and Medicine 14 (1), 47-50	34	2018
Correlative imaging of biological tissues with apertureless scanning near-field optical microscopy and confocal laser scanning microscopy SG Stanciu, DE Tranca, R Hristu, GA Stanciu Biomedical optics express 8 (12), 5374-5383	22	2017
A study on image quality in polarization-resolved second harmonic generation microscopy SG Stanciu, FJ Ávila, R Hristu, JM Bueno Scientific reports 7 (1), 15476	26	2017
Confocal laser-scanning microscopy and conventional light microscopy targeting morphological changes in colorectal lesions AS Postolache, I Dumitru, SA Varban, M Sajin, G Stanciu, S Stanciu, ... VIRCHOWS ARCHIV 471, S179-S180		2017

TITLU	CITAT DE	ANUL
Differential diagnosis between benign and malignant thyroid nodules using Second Harmonic Generation Microscopy LG Eftimie, R Hristu, OC Voinea, M Dumitrescu, G Stanciu, M Sajin VIRCHOWS ARCHIV 471, S69-S69		2017
Improved quantification of collagen anisotropy with polarization-resolved second harmonic generation microscopy R Hristu, SG Stanciu, DE Tranca, GA Stanciu Journal of Biophotonics 10 (9), 1171-1179	46	2017
Identification of stacking faults in silicon carbide by polarization-resolved second harmonic generation microscopy R Hristu, SG Stanciu, DE Tranca, EK Polychroniadis, GA Stanciu Scientific Reports 7 (1), 4870	13	2017
Nanoscale imaging by using label free microscopy techniques GA Stanciu, DE Tranca, SG Stanciu, C Stoichita, R Hristu 2017 19th International Conference on Transparent Optical Networks (ICTON), 1-4		2017
Correlative investigations of biological specimens using label free far-field and near-field microscopy techniques SG Stanciu, JM Bueno, DE Tranca, FJ Ávila, R Hristu, GA Stanciu The European Conference on Lasers and Electro-Optics, CL_5_4	1	2017
Properties of samarium doped hydroxyapatite thin films deposited by evaporation SL Iconaru, GA Stanciu, R Hristu, RV Ghita Rom. Rep. Phys 69, 508	10	2017
Combined far-field, near-field and topographic imaging of nano-engineered polyelectrolyte capsules SG Stanciu, DE Tranca, C Ruggiero, GA Stanciu, E Dellacasa, A Antipov, ... Materials Letters 183, 105-108	12	2016
A comparative study of corrosion inhibitors on hot-dip galvanized steel IA Kartsonakis, SG Stanciu, AA Matei, R Hristu, A Karantonis, ... Corrosion Science 112, 289-307	88	2016
Nonlinear optical effects used for investigations on biological samples at micro and nanoscale GA Stanciu, DE Tranca, R Hristu, SG Stanciu, C Stoichita, A Toma 2016 18th International Conference on Transparent Optical Networks (ICTON), 1-3	3	2016
Bag-of-features approaches for combined classification of laser scanning microscopy and spectroscopy data sets SG Stanciu, R Boriga, AC Dascalescu, R Hristu, GA Stanciu 2016 International Conference Laser Optics (LO), S2-13-S2-13		2016
Perspectives on combining Nonlinear Laser Scanning Microscopy and Bag-of-Features data classification strategies for automated disease diagnostics SG Stanciu, DE Tranca, GA Stanciu, R Hristu, JM Bueno	5	2016

TITLU	CITAT DE	ANUL
Optical and Quantum Electronics 48, 1-13		
Embedding complementary imaging data in laser scanning microscopy micrographs by reversible watermarking IC Dragoi, SG Stanciu, R Hristu, HG Coanda, DE Tranca, M Popescu, ... Biomedical Optics Express 7 (4), 1127-1137	2	2016
Mapping electron-beam-injected trapped charge with scattering scanning near-field optical microscopy DE Tranca, E Sánchez-Ortiga, G Saavedra, M Martínez-Corral, SAM Tofail, ... Optics Letters 41 (5), 1046-1049	7	2016
Enamel based composite layers deposited on titanium substrate with antifungal activity SL Iconaru, AM Prodan, CS Turculet, M Beuran, RV Ghita, A Costescu, ... Journal of Spectroscopy 2016	19	2016
Amplitude and phase reconstruction issues in scattering scanning near-field optical microscopy D Tranca, SG Stanciu, R Hristu, C Stoichita, GA Stanciu Sci. Bull. Politeh. Univ. Bucharest Ser. A 78, 253-262	2	2016
Towards imaging skin cancer by apertureless scanning near-field optical microscopy SG Stanciu, M Costache, DE Tranca, R Hristu, M Popescu, V Enache, ... University Politehnica of Bucharest Scientific Bulletin-Series A-Applied …	6	2016
Structural characterization and adhesion appraisal of TiN and TiCN coatings deposited by CAE-PVD technique on a new carbide composite cutting tool AA Matei, I Pencea, SG Stanciu, R Hristu, I Antoniac, E Ciovica, CE Sfat, ... Journal of Adhesion Science and technology 29 (23), 2576-2589	36	2015
Evaluation of the protective ability of typical corrosion inhibitors for magnesium alloys towards the Mg ZK30 variant IA Kartsonakis, SG Stanciu, AA Matei, EK Karaxi, R Hristu, A Karantonis, ... Corrosion Science 100, 194-208	67	2015
Antimicrobial activity evaluation on silver doped hydroxyapatite/ polydimethylsiloxane composite layer CS Ciobanu, A Groza, SL Iconaru, CL Popa, P Chapon, MC Chifiriuc, ... BioMed research international 2015	50	2015
On packing laser scanning microscopy images by reversible watermarking: A case study IC Dragoi, SG Stanciu, D Coltuc, DE Tranca, R Hristu, GA Stanciu 2015 23rd European Signal Processing Conference (EUSIPCO), 66-70	2	2015
Electron beam influence on the carbon contamination of electron irradiated hydroxyapatite thin films R Hristu, SG Stanciu, DE Tranca, GA Stanciu Applied Surface Science 346, 342-347	12	2015

TITLU	CITAT DE	ANUL
Bags of features for classification of Laser Scanning Microscopy data SG Stanciu, R Hristu, DE Tranca, GA Stanciu 2015 17th International Conference on Transparent Optical Networks (ICTON), 1-4	2	2015
High-resolution quantitative determination of dielectric function by using scattering scanning near-field optical microscopy DE Tranca, SG Stanciu, R Hristu, C Stoichita, SAM Tofail, GA Stanciu Scientific reports 5 (1), 11876	44	2015
Efficiency of vanilla, patchouli and ylang ylang essential oils stabilized by iron oxide@ C14 nanostructures against bacterial adherence and biofilms formed by Staphylococcus … M Bilcu, AM Grumezescu, AE Oprea, RC Popescu, GD Mogoșanu, ... Molecules 19 (11), 17943-17956	66	2014
Gas sensing properties of porphyrin thin films influenced by their surface morphologies İ Çapan, M Erdoğan, B Güner, B İlhan, SG Stanciu, R Hristu, GA Stanciu Sensor Letters 12 (8), 1218-1227	4	2014
Hydroxyapatite surface charge investigated by scanning probe microscopy R Hristu, SAM Tofail, SG Stanciu, DE Tranca, GA Stanciu 2014 16th International Conference on Transparent Optical Networks (ICTON), 1-4	4	2014
Investigations on organic fluorophore doped silica nanoparticles by apertureless scanning near-field optical microscopy SG Stanciu, DE Tranca, L Tarpani, GA Stanciu, R Hristu, L Latterini 2014 16th International Conference on Transparent Optical Networks (ICTON), 1-4	3	2014
Nonlinear optical imaging of defects in cubic silicon carbide epilayers R Hristu, SG Stanciu, DE Tranca, A Matei, GA Stanciu Scientific reports 4 (1), 5258	19	2014
Surface charge and carbon contamination on an electron-beam-irradiated hydroxyapatite thin film investigated by photoluminescence and phase imaging in atomic force microscopy R Hristu, DE Tranca, SG Stanciu, M Gregor, T Plecenik, M Truchly, T Roch, ... Microscopy and Microanalysis 20 (2), 586-595	8	2014
A study on the image contrast of pseudo-heterodyned scattering scanning near-field optical microscopy DE Tranca, C Stoichita, R Hristu, SG Stanciu, GA Stanciu Optics Express 22 (2), 1687-1696	23	2014
Investigations at nanoscale by using fluorescence in apertureless scanning near field microscopy GA Stanciu, DE Tranca, R Hristu, C Stoichita, SG Stanciu 2013 15th International Conference on Transparent Optical Networks (ICTON), 1-3	2	2013
Magnetic nanoparticles for controlling in vitro fungal biofilms MC Chifiriuc, AM Grumezescu, C Saviuc, R Hristu, V Grumezescu, ...	14	2013

TITLU	CITAT DE	ANUL
Current Organic Chemistry 17 (10), 1023-1028		
The interaction between the gas sensing and surface morphology properties of LB thin films of porphyrins in terms of the adsorption kinetics İ Çapan, M Erdoğan, GA Stanciu, SG Stanciu, R Hristu, M Göktepe Materials Chemistry and Physics 136 (2-3), 1130-1136	13	2012
Hybrid nanomaterial for stabilizing the antibiofilm activity of Eugenia carryophyllata essential oil AM Grumezescu, MC Chifiriuc, C Saviuc, V Grumezescu, R Hristu, ... IEEE transactions on nanobioscience 11 (4), 360-365	50	2012
Metallic samples investigated by using a scattering near field optical microscope GA Stanciu, C Stoichita, R Hristu, SG Stanciu, DE Tranca 2012 14th International Conference on Transparent Optical Networks (ICTON), 1-3	3	2012
Influence of atomic force microscopy acquisition parameters on thin film roughness analysis R Hristu, SG Stanciu, GA Stanciu, İ Çapan, B Güner, M Erdoğan Microscopy Research and Technique 75 (7), 921-927	11	2012
Two-photon excited photoluminescence of photonic quantum ring laser structures R Hristu, SG Stanciu, FJ Kao, GA Stanciu Applied Physics B 107, 97-101		2012
IMAGING OF PHOTONIC QUANTUM RING LASERS BY USING OPTICAL BEAM INDUCED CURRENT MICROSCOPY R Hristu, GA Stanciu UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED …		2012
Inhibitory Activity of $\mathrm{Fe_3O_4}$/Oleic Acid/Usnic Acid—Core/Shell/Extra-Shell Nanofluid on S. aureus Biofilm Development AM Grumezescu, C Saviuc, MC Chifiriuc, R Hristu, DE Mihaiescu, ... IEEE Transactions on NanoBioscience 10 (4), 269-274	68	2011
The influence of the surface morphologies of Langmuir Blodgett (LB) thin films of porphyrins on their gas sensing properties D Çaycı, SG Stanciu, İ Çapan, M Erdoğan, B Güner, R Hristu, GA Stanciu Sensors and Actuators B: Chemical 158 (1), 62-68	42	2011
Digital image inpainting and microscopy imaging SG Stanciu, R Hristu, GA Stanciu Microscopy research and technique 74 (11), 1049-1057	6	2011
Hybrid nanosystem for stabilizing essential oils in biomedical applications C Saviuc, AM Grumezescu, CM Chifiriuc, DE Mihaiescu, R Hristu, ... Dig. J. Nanomater. Biostruct 6 (4), 1657-1666	34	2011

TITLU	CITAT DE	ANUL
Investigations on SiC by using nonlinear effects in scanning laser microscopy R Hristu, EK Polychroniadis, SG Stanciu, GA Stanciu 2011 13th International Conference on Transparent Optical Networks, 1-4	2	2011
Optical beam induced current microscopy of photonic quantum ring lasers R Hristu, SG Stanciu, SJ Wu, FJ Kao, OD Kwon, GA Stanciu Applied Physics B 103, 653-657	6	2011
Influence of confocal scanning laser microscopy specific acquisition parameters on the detection and matching of speeded-up robust features SG Stanciu, R Hristu, GA Stanciu Ultramicroscopy 111 (5), 364-374	18	2011
Biointerface Research in Applied Chemistry AM Grumezescu, C Saviuc, A Holban, R Hristu, C Croitoru, G Stanciu, ... Magnetic chitosan for drug targeting and in vitro drug delivery response 1 …	18	2011
In vitro methods for the study of microbial biofilms C Saviuc, AM Grumezescu, MC Chifiriuc, C Bleotu, G Stanciu, R Hristu, ... Biointerface Res Appl Chem 1 (1), 031-040	67	2011
Magnetic chitosan for drug targeting and in vitro drug delivery response AM Grumezescu, C Saviuc, A Holban, R Hristu, C Croitoru, G Stanciu, ... Biointerface Res. Appl. Chem 1 (5), 160-165	67	2011
Two photon emission and nonlinear optical imaging of acetonitrile-treated quasi-spherical nanoscale PbS systems N Dutta, D Mohanta, GA Ahmed, A Choudhury, R Hristu, SG Stanciu, ... IEEE Photonics Journal 2 (6), 1060-1068	6	2010
On the suitability of SIFT technique to deal with image modifications specific to confocal scanning laser microscopy SG Stanciu, R Hristu, R Boriga, GA Stanciu Microscopy and Microanalysis 16 (5), 515-530	21	2010
The inhibitory activity of pomelo essential oil on the bacterial biofilms development on soft contact lenses C Saviuc, L Dascălu, MC Chifiriuc, V Rădulescu, E Oprea, M Popa, ... Roum Arch Microbiol Immunol 69 (3), 145-152	11	2010
Optical induced current technique used to investigate the photonic quantum ring laser GA Stanciu, R Hristu, SG Stanciu, OD Kwon, DK Kim 2010 12th International Conference on Transparent Optical Networks, 1-3	2	2010
Aspects of correlation between the surface analysis and heavy metal content in temporary teeth from areas with various pollution levels of Romania M Prodana, A Meghea, G Stanciu, R Hristu, I Demetrescu International Journal of Environmental Science and Development 1 (1), 47	10	2010

TITLU	CITAT DE	ANUL
Near field investigation based on a novel apertureless near field optical microscope C Stoichita, R Hristu, SG Stanciu, G Stanciu 2009 3rd ICTON Mediterranean Winter Conference (ICTON-MW), 1-3	5	2009
Image fusion for photonic quantum ring laser structures investigated by confocal scanning laser microscopy SG Stanciu, D Coltuc, R Hristu, C Stoichita, GA Stanciu 2009 3rd ICTON Mediterranean Winter Conference (ICTON-MW), 1-4	3	2009
Feature based recognition of photonic devices in images obtained by confocal scanning laser microscopy SG Stanciu, R Hristu, R Boriga, G Stanciu 2009 11th International Conference on Transparent Optical Networks, 1-4	2	2009
Photonic-corral-mode quantum ring lasers investigated by laser scanning microscopy and near field microscopy GA Stanciu, SG Stanciu, R Hristu, DK Kim, OD Kwon 2008 2nd ICTON Mediterranean Winter, 1-4	1	2008
Investigation on photonic-corral-mode quantum ring lasers by laser scanning microscopy GA Stanciu, SG Stanciu, R Hristu, OD Kwon, DK Kim 2008 10th Anniversary International Conference on Transparent Optical …	3	2008
Investigation on CdS: Mn quantum dots using scanning laser microscopy SG Stanciu, R Hristu, B Savu, GA Stanciu, D Mohanta, GA Ahmed, ... 2007 ICTON Mediterranean Winter Conference, 1-4		2007
ICTON-MW'07-INTERNATIONAL CONFERENCE ON TRANSPARENT OPTICAL NETWORKS" MEDITERRANEAN WINTER" 2007-CONFERENCE PROCEEDINGS B Derkowska, B Sahraoui, F Firszt, A Marasek, SG Stanciu, R Hristu, ...		2007
Biointerface research in applied chemistry AM Grumezescu, C Saviuc, A Holban, R Hristu		
ICTON 2023 G Stanciu, M Costoiu, A Toma, SG Stanciu, C Cirtoaje, R Hristu, D Tranca, ...		
Photonic quantum ring laser structures investigated by laser scanning microscopy techniques R Hristu, SG Stanciu, GA Stanciu Micro-and nano-photonic materials and devices, 117		
TOWARDS IMAGING SKIN CANCER BY APERTURELESS SCANNING NEAR-FIELD OPTICAL MICROSCOPY G Stefan, M COSTACHE, DE TRANCA, R HRISTU, M POPESCU, ...		
Combined Multimodal Imaging at Micro-and Nanoscale Using Complementary Contrast Mechanisms		

TITLU	CITAT DE	ANUL
SG Stanciu, C Stoichita, R Hristu, DE Tranca, GA Stanciu		
Inhibitory Activity of/Oleic Acid/Usnic Acid—Core/Shell/Extra-Shell Nanofluid on S. aureus Biofilm AM Grumezescu, C Saviuc, MC Chifiriuc, R Hristu, DE Mihaiescu, ...		
Semiconductor Quantum Dots Characterization And Applications In Photonics GA Stanciu, RS Hristu, B Savu, SG Stanciu Excellence Research as away to ERA, Project	3	