

PERSONAL  
INFORMATION

Valentina Carmen Dinca



 409 Atomistilor, Magurele, 077125, Ilfov, Romania

 40214574414  40742769568

 [valentina.dinca@inflpr.ro](mailto:valentina.dinca@inflpr.ro)

Sex Fem |

Date of birth 03/12/1977 |

Nationality Romanian

WORK EXPERIENCE

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2001- Researcher

present National Institute for lasers, Plasma and Radiation Physics, Laser Department, Magurele, Bucharest, Romania

- Organic and inorganic thin film deposition by pulsed laser deposition (PLD) and matrix assisted pulsed laser evaporation (MAPLE);
- Laser based methods for biological compounds, natural and synthetic polymers patterning (LIFT) for bioplatfroms and sensors;
- Chemical sensors; Biosensors;
- Polymer, hybrid and composites materials: 2D and 3D surface structuring for cell interaction, behavior studies;
- Excimer laser structuring, topographical gradients for cell behaviour studies, topographical modification of polymers, hot embossing and PDMS replications;
- Biointerfaces for *in vitro* analysis of surfaces characteristics on mammalian cells.

Business or sector Research Institute/

EDUCATION AND  
TRAINING

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- 10.06.2019-present**      **Researcher degree 1 at NILPRP**
- 30/06/2014-10.06.2019**      **Researcher degree 2 at NILPRP**
- 01/07/2013-30/06/2014**      **Post-Doc Sciex fellowship**  
Principal subjects / occupational skills covered  
Excimer laser structuring, topographical gradients for cell behaviour studies,  
topographical modification of polymers, hot embossing and PDMS  
replications, **EMPA, Thun, Switzerland**
- 15 /04/2010 – 15 /04/2011**      **Post Doc fellowship**  
Laser Induced Forward Transfer of liquids, Time resolved imaging  
experiments for transfer dynamics study  
**University of Barcelona, Spain**
- 01/11/2005 - 16/01/2009**      **PhD in Medical Physics, Summa cum Laudae Distinction**  
Lasers physics, surface patterning, polymeric materials and proteins  
University of Bucharest, Faculty of Physics-Biomedical Physics Department  
(Romania)
- 16/01/2006 – 16/01/2008**      **Marie Curie PhD student fellowship**  
Lasers physics, biological compounds and synthetic polymers patterning  
using Laser Induced Forward Transfer  
**FORTH-IESL Crete, Greece**
- 01/10/2001 – 30/05/2003**      **Master Degree, Diploma in Biosensors**  
Medical Physics  
**University of Bucharest, Faculty of Physics-Biomedical Physics  
Department, Romania**
- 01/10/1998 - 30/06/2003**      **Bachelor Degree, Diploma in Laser Lithotripsy**  
Medical Physics  
**University of Bucharest, Faculty of Physics-Biomedical Physics Department  
(Romania)**

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	C1/C2	C1/C2	C1/C2	C1/C2	C1/C2
Replace with name of language certificate. Enter level if known.					
English	C1/C2	C1/C2	C1/C2	C1/C2	C1/C2
Replace with name of language certificate. Enter level if known.					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

[Common European Framework of Reference for Languages](#)



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- Curriculum Vitae
- Guest Editor for Applied Surface Science Elsevier, Hot Topics in Surfaces Science: Laser-assisted functionalization and nano/micro-processing of advanced materials (HTSS-LAFPAM) 2021-2023
- Guest Editor for Nanomaterials -Special Issue: New Challenges in Designed Nanointerfaces-2022-2023
- Guest Editor for Nanomaterials -Special Issue: "Multifunctional 2D and 3D Nano and Microtextured Interfaces: From Medical to Environmental and Sensing Applications, 2021
- Invited Editor for Current Medicinal Chemistry, Special Issue- Advanced Functional Bio-interfaces Engineering for Medical Applications: From Drug Delivery to Bio-scaffolds, 2020
- Editor book Elsevier: Functional Nanostructured Interfaces for Environmental and Biomedical Applications, ISBN: 9780128144022, 2019;

## Managerial skills

- EMRS Spring 2017, Symposium X co-organizer: New frontiers in laser interaction: from hard coatings to smart materials.
- Project director:
  - PN-III-P4-ID-PCE-2020-2375- / 2021-2023 PCE project, Breast implants silicon outshell bioinstructive engineering for preventing microbial and fibrosis development / Ingineria de biointerfețe instructive ale capsulelor siliconice pentru prevenirea dezvoltării microbiene și reducerea fibrozei în implantologia mamara, 2020-2023
  - PN-II-RU-TE-2014-4-2434 Young Research Team project: Multiscale bone-like intelligent interfaces engineering using laser methods for mesenchymal stem cells enhanced osteoinduction”, [http://ppam.inflpr.ro/TE\\_24/biosintel\\_en.htm](http://ppam.inflpr.ro/TE_24/biosintel_en.htm)
  - PN-II-PT-PCCA-2013-4 Partnership project: “Next generation of orthopaedic implants based on new Ti bioalloy functionalized with biomimetic coatings” , <http://ppam.inflpr.ro/ORTHOBIOMIM.htm>
  - PN-II-RU-TE-2011-3-0289- Young Research Team Project: “Antimicrobial and degradable biohybrid substrates with controlled surface architecture combining localized bio activation with antifouling properties” - [http://ppam.inflpr.ro/TE\\_43\\_ro.htm](http://ppam.inflpr.ro/TE_43_ro.htm).
- Project Responsible:
  - PNIII-P3-3.1-PM-RO-FR-2019-0108, Brancusi project 10 BM 10/06/2019-BIOGRAPHT

## International Research stages:

**EMPA Thun, Switerland:** 01.07.2013-30.06.2014

- **SCIEX project** -*Bio platform of advanced microtopographical surface gradients for influencing cellular interaction behavior Bio-AMaN* /01.07.2013-01.07.2014 - Scientific Exchange Agency (Programme between Switzerland and the New Member States of the European Union)

- **Barcelona University, Spain:** 15 Apr. 2010- 15 Apr. 2011

- **Paul Scherrer Institute, Materials Group, Switzerland**

□ 4-26 May 2008

□ 7-22 Sept 2008

□ 2 -16 Nov. 2008

□ 15-25 June 2009

- **Institute of Electronic Structure and Laser, Foundation for Research and Technology Hellas, 16 Jan. 2006-16 Jan.2008 , Marie Curie Fellowship -Advanced Training in Laser Sciences - ATLAS" Marie Curie Host Fellowships - Early Stage Training Project No FP6-MEST-CT-2004-008048, FORTH-IESL, Crete, Greece;**

- **LENS, Florence, Italy:** research stage in the frame of ATLAS project: 1 September 2007-1 December 2007

- **University Mons-Hainaut, Belgium:** 1 Oct. 2001- 1 Feb. 2002

## International prizes:

- **Excellency Prize and Gold medal at Euroinvent 14 Edition European Exhibition of Creativity and Inovation 2022,** Zwitterionic polymeric films obtained by laser evaporation for microorganisms inhibition, for antimicrobial surface applications

- **Excellency Prize at International Exhibition of Scientific Research, Innovation and Inventions PRO INVENT, XVII, 2019,** Cluj Napoca, Process for the physical immobilization of ACHe enzymes in the Polyethyleneimine polymeric membrane in order to obtain improved active elements for chemical / gas sensors;

- **Excellency Diploma and Inventica Medal at the International Exhibition of Inventics, XXII, 2019,** Iasi, Romania.

- **Best poster award** at EMRS Strasbourg 2007, France, for the work: "Preliminary results on peptide based patterns by laser transfer"

- **Young Scientist Award** at EMRS Strasbourg 2005, France, for the work:” Nickel-Titanium alloy:Cytotoxicity and genotoxicity evaluation”

**Team prizes won by members of DV team within the coordinated projects:**

- **Best poster award**, EMRS Strasbourg 2013, France, for the work: Stimuli responsive functional polymeric thin films obtained by matrix assisted pulsed laser evaporation (MAPLE) for cell detachment studies
- **Special prize** at PRIOCHEM -XII-th edition, October 27 - 28, 2016, Bucharest, Romania for the work : Macrophage response to biomimetic-coated material
- **2<sup>nd</sup> prize** at PRIOCHEM, 10th edition, October 30-31, 2014, in section Multifunctional materials and nanocomposites, Designed titanium coated polymeric substrate microtopography for bone tissue engineering;
- **Best poster award** at BIOMATERIALS FOR HEALTHCARE: Biomaterials for Tissue and Genetic Engineering and the Role of Nanotechnology, 1st biennial conference BioMaH October 17-20, 2016 Rome, Italy, for the work : Biomimetic surface for controlled cellular response.

**Invited presentations**

1. Silicone microstructuring strategy for studying microorganisms and cells-topography interaction: attachment and growth, ICPAM, Dubrovnik, Croatia, 8-16 sept 2022
2. On the quest for bio-instructive multifunctional interfaces for implant research: an interdisciplinary laser-based approach concept, Conf CLEO, San Jose, California, 15-20 May 2022
3. On the road to bioactive and multifunctional biointerfaces for implant research: a laser-based approach concept / 13th International Conference on Physics of Advanced Materials (ICPAM-13) - T8-I, 2021, San Feliu de Guixol, Spain
4. Impact of Laser Processed Micro-Structured Topographies on Screening

Mammalian Cells Response towards the Development of Multifunctional Biointerfaces and Scaffolds, HPLA 2018, Santa Fe, USA

5. Bioinstructive multiscaled interfaces engineering by laser direct texturing for tailoring the mesenchymal stem cells response *in vitro*- Biophysics Rome 2017, 18-19 MAI 2017, Roma, Italia
  6. Materials and laser technologies for controlled bio-interfaces in tissue engineering applications -7-14 september-ICPAM 2016, Cluj, Romania
  7. Multiscaled Bone-Like Intelligent Interfaces Engineering using Laser Methods for Steering Mesenchymal Stem Cells Behavior *in vitro*". HPLA/DE (High Power Laser Ablation and Directed Energy Symposium),4-8 April 2016, Santa Fe – USA
- Laser-Induced Forward Transfer: An approach to single-step multi-functional patterns for biological and sensor applications"- 3RD FAST-DOT SUMMER SCHOOL“PHOTONICS MEETS BIOLOGY” 28 September -2 October 2015, Anissaras, Crete, Greece
  - Laser based methods for biological compound patterning for biomedical applications, LDFS meeting, 16 december, 2014, CNR – Area di Ricerca, Tito Scalo, Italy
  - Bio-interfaces engineering using laser based methods for biomedical applications, HPLA-BEP conference, Santa Fe New Mexico,21-25 April 2014
  - LASER INDUCED FORWARD TRANSFER FOR BIOMEDICAL APPLICATIONS, Workshop ICECHIM "Emerging analytical tools to investigate nitro-oxidative stress", Bucuresti, Romania, 24-26 July (2012).
  - Smart Thermoresponsive Coatings Based on pNIPAM and its Derivatives Obtained by Matrix Assisted Pulsed Evaporation, HPLA DE 2016, Promising New Laser and Optical Technologies Symposium, April 4-7, Santa Fe, USA
  - MAPLE and LIFT “soft” laser techniques for organic materials processing, Current trends and advanced ellipsometry and all x-ray techniques for the characterization of TCO, BIO and other nanostructured materials”, 12-14 Sept, 2012, Bucharest Romania
  - Laser processing of soft materials: application to controlled drug delivery,

**Invited  
presentations co-  
author**

tissue engineering sensing, 10th International Conference on Optics  
ROMOPTO, 3-6 Sept. 2012

<p><b>Oral presentations</b></p>	<p>N. Dumitrescu, A. Bonciu, A. Moldovan, V. Dinca and L. Rusen / Preparation and Properties of P(N-Isopropylacrylamide-co-butylacrylate) Coatings using Matrix Assisted Pulsed Laser Evaporation /13th International Conference on Physics of Advanced Materials (ICPAM-13) – 2021, San Feliu de Guixol, Spain.</p> <p>A.F. Bonciu, S. Orobeti, L. E. Sima, M. Icriverzi, V. Dinca, M. Filipescu, A. Moldovan, A. Popescu and M. Dinescu Pyramidal shaped ceria nano-biointerfaces for early bone cell response EMRS Spring 2021 31Mai-4Iunie, O.4.6, on line</p> <p>Anca Bonciu, Alixandra Wagner, Nicoleta Dumitrescu, Valentina Marascu, Antoniu Moldovan, Cerasela Zoica Dinu, Valentina Dinca Influence of laser-designed microstructures density on interfaces characteristics and on preliminary responses of cells EMRS Spring 2021 31Mai-4Iunie H.HP.14, on line</p> <p>Dinca Valentina, Mesenchymal Stem Cells Interaction with Hierarchical Textured Surfaces Obtained by Laser Processing HPLA 2021, 13 - 15 April 2021</p> <p>Dinca Valentina, Nano-Micro Biointerfaces by Using Laser Methods for Evaluating the In Vitro Cellular Response: The Quest for Bone Regeneration Continues HPLA 2021, 13 - 15 April 2021, on line</p> <p>V. Dinca, V. Mitran, S. Brajnicov, A. Bonciu, L. Rusen , A. Cimpean, Graphene nanoplatelets-sericin surface-modified Gum alloy for improved biological response, Simp. L., 19 June 2018, EMRS 2018</p> <p>V. Dinca, L.E. Sima, M. Icriverzi, A. Bonciu, L. Rusen Bioinstructive interfaces engineering using laser methods for in vitro cells behaviour screening, simp. F, 22 iunie 2018, EMRS Strasbourg 2018</p>
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	<p>V. Dinca, V. Mitran, S. Brajnicov, A. Bonciu, L. Rusen, M. Dinescu and A. Cimpeanu; "Graphene based composite coatings effect on MC3T3-E1 pre-osteoblasts behavior" European Materials Research Society (E-MRS), E-MRS 2017 Fall Meeting, September 18-21, Varşovia, Polonia, Session 7 - Cell-surface interactions - U.7.2</p> <p>V. Dinca, L. Rusen, M. Icriverzi, V. Malheiro, L. E. Sima, M. Uta, N. Nichita-Branza, A. Roseanu, E. C. Sirigim, P. Hoffmann, M. Dinescu; "Micro-structured biointerfaces for screening mammalian cell response towards surface topography" European Materials Research Society (E-MRS), E-MRS 2017 Fall Meeting, September 18-21, Varşovia, Polonia, Session 7 - Cell-surface interactions - U.7.3</p> <p>L. Rusen, Livia Elena Sima, Madalina Icriverzi, N. Mihailescu, I. Anghel, A. Bonciu, S. Brajnicov, A. Cimpean, M. Dinescu, A. Roseanu and V. Dinca, In vitro behaviour of human mesenchymal stem cells on smart biointerfaces obtained by laser methods for tissue engineering applications, ICPEPA10, 28 august -2 sept 2016, Brasov, Romania</p> <p>Dinca V, Rusen, A Bonciu, L.E Sima, Laser based methods for nano- and micro-engineered biomaterials for regenerative medical applications, 16 th INTERNATIONAL BALKAN WORKSHOP on APPLIED PHYSICS 7 -9 July 2016, Constanta, Romania</p> <p>V. Dinca, L.E. Sima, A. Bonciu, L. Rusen, I. Iordache(Urzica), M. Dinescu , Multiscale intelligent interfaces engineering using laser methods for mesenchymal stem cells behaviour control , EMRS 2016, Smart biointerfaces for functional biomaterials Symposium, May 2-6, Lille, France - oral presentation EMRS2016 Q.5.5 - oral presentation</p> <p>V.Dinca, L.E. Sima, L. Rusen, S. Brajnicov, V.Marascu, A.Bonciu, A. Roseanu and M.Dinescu, Inflammatory response of hybrid biomimetic coatings obtained by MAPLE” M. Icriverzi, E-MRS Spring Meeting 2-6 may 2016, Lille, France“</p> <p>V. Dinca, L.E. Sima, L. Rusen, A. Bonciu, P. Hoffmann, Micro topographical surface</p>
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	<p>features and gradients for influencing mesenchymal stem cells behavior for bone tissue engineering, Nanotech Washington, USA, 22-25 may-2016</p> <p>Sima LE, Icriverzi M, Florian P, Bohlen K, Siringil EC, Jager T, Wasmer K, Hoffmann P, Dinescu M, Roseanu A, Dinca V, Designed titanium coated polymeric substrate microtopography for bone tissue engineering, International Symposium Prioritatile Chimiei pentru o dezvoltare durabila – PRIOCHEM, 10th edition, October 30-31, 2014, 2nd prize in section Multifunctional materials and nanocomposites, ICECHIM, Bucharest, Romania</p> <p>V. Dinca, A. Palla Papavlu, M. Dinescu, „Laser induced forward transfer (LIFT) for biomedical applications, „Emerging Analytical Tools to Investigate Nitro-Oxidative Stress” -Exploratory Workshop, July 24-26 2012, Bucharest, Romania</p> <p>M. Dinescu, A. Palla-Papavlu, V. Dinca, M. Filipescu, Multi ribbons polymers donors deposited by Matrix Assisted Pulsed Laser Evaporation (MAPLE) 4th International Symposium on Flexible Organic Electronics (IS-FOE11), 10-13 July 2011, Thessaloniki, Greece</p> <p>A.Palla-Papavlu, V. Dinca, M. Dinescu, F. Di Pietrantonio, D. Cannatà, M. Benetti, E. Verona, T. Mattle, T. Lippert, COLA Cancun, Mexic, 2011 Detection of sarin gas by chemoselective polymers transferred by laser induced forward transfer</p> <p>V. Dinca, Polymer patterning by Laser Induced Forward Transfer, Scientific session of Faculty of Physics, Bucharest, Romania, 17 june 2011</p> <ul style="list-style-type: none"> <li>• V. Dinca, A. Palla-Papavlu, M. Dinescu, J. Shaw Stewart, T. K. Lippert, F. Di Pietrantonio, D. Cannata, M. Benetti, E. Verona, Polymer pixel enhancement by laser-induced forward Transfer for sensor applications , COLA Conference, Singapore, 22-27 November 2010.</li> </ul> <p>M. Dinescu, A. Palla – Papavlu, V. Dinca, D. Cannata, F. Dipietrantonio, M. Benetti, E. Verona, T. Mattle, J. Shaw – Stewart, T. Lippert Polymer membrane</p>
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	<p>patterning for sensor applications Conferinta MRS, Boston, USA, 2010</p> <ul style="list-style-type: none"> <li>• V. Dinca, R. Fardel, F. Di Pietrantonio, D. Cannatà, E. Verona, A. Palla-Papavlu, A. Matei, M. Dinescu, T.Lippert, Laser-Induced Forward Transfer: An Approach to Single-Step Polymer Microsensor Microfabrication, E-MRS Spring Meeting Strasbourg (France), 2009.</li> </ul> <p>V. Dinca: Avidin-Biotin Mediated Assembly for 2D and 3D Micropatterning of Amyloid Peptides Using Laser Technology New Frontiers in Micro and Nano Photonics, Florence Italy, 2008</p> <ul style="list-style-type: none"> <li>• V. Dinca, A. Rannela, M. Farsari, C. Fotakis: Parameters optimization for biological molecules patterning using 248 nm ultrafast lasers, EMRS Strasbourg (France), 2007.</li> </ul> <p>V. Dinca: Comparative study on protein transfer using LIFT with ns and fs laser pulses- Chemical Dynamics- ATLAS workshop, Heraklion, Greece, 2006</p> <p>V. Dinca: Tissue engineering approaches, seminar at FORTH-IESL, Crete, Greece, 2006</p>
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<p><b>Publications</b></p> <p><b>Hirsch index: 20</b></p>	<p><b>Books and chapters</b></p> <p><b>Book Editor:</b> Functional Nanostructured Interfaces for Environmental and Biomedical Applications-1st Edition, 2019- Elsevier;</p> <p><b>Book chapters:</b></p> <ol style="list-style-type: none"> <li>1. S. Szunerits, A. Vasilescu, V. Dinca, S. Peteu, R. Boukherroub, Chapter 14: Stimuli-Responsive Graphene-Based Matrices for Smart Therapeutics, in Handbook of Graphene, I-VIII, Willey, Book Editor(s): Edvige Celasco Alexander N. Chaika Tobias Stauber Mei Zhang Cengiz Ozkan Cengiz Ozkan Umit Ozkan Barbara Palys Sulaiman Wadi Harun, 2019, ISBN: 9781119468455, <a href="https://doi.org/10.1002/9781119468455.ch84">https://doi.org/10.1002/9781119468455.ch84</a></li> <li>2. P. Pascariu, E. Koudoumas, V. Dinca, L. Rusen, M.P. Suchea, Chapter 14 -</li> </ol>
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	<p>Applications of metallic nanostructures in biomedical field in Functional Nanostructured Interfaces for Environmental and Biomedical Applications, Micro and Nano Technologies 2019, Pages 341-361</p> <p>3. A.Palla Papavlu, V. Dinca, and M. Dinescu, Chapter 14: Laser Printing of Proteins and Biomaterials, in Laser Printing of Functional Materials: 3D Microfabrication, Electronics and Biomedicine, ed. Willey, 2018, ISBN: 978-3-527-34212-9</p> <p>4. L. Rusen, V. Dinca, C. Mustaciosu, M. Icriverzi, L. E. Sima, A. Bonciu, S. Brajnicov, N. Mihailescu, N. Dumitrescu, A. I. Popovici, A. Roseanu and M. Dinescu , Chapter 10: "Smart Thermoresponsive Surfaces Based on pNIPAm Coatings and Laser Method for Biological Applications" in "Modern Technologies for Creating the Thin-film Systems and Coatings", 2017, ISBN 978-953-51-3004-8, Print ISBN 978-953-51-3003-1</p> <p>5. A.Palla Papavlu, V. Dinca, M. Filipescu and M. Dinescu, Chapter 8: "Matrix-Assisted Pulsed Laser Evaporation of Organic Thin Films: Applications in Biology and Chemical Sensors", in Laser Ablation - From Fundamentals to Applications, INTECH, December 21st 2017, ISBN: 978-953-51-3700-9</p> <p>6. V. Dinca, L. E. Sima, L. Rusen, A. Bonciu, T. Lippert, M. Dinescu, M. Farsari, Cap 9: "Bio-Interfaces Engineering Using Laser-Based Methods for Controlled Regulation of Mesenchymal Stem Cell Response In Vitro", in Recent Advances in Biopolymers, 2016; InTech, pages 1-32, 2016; ISBN 978-953-51-2255-5</p> <p>7. A.Vasilescu, V.Dinca, M.Filipescu, L.Rusen, I.S.Hosu, R.Boukherroub, S.Szunerits, M.Dinescu and S.F. Peteu, Chapter 9: "Recent Approaches to Enhance the Selectivity of Peroxynitrite Detection" in Peroxynitrite Detection in Biological Media: Challenges and Advances, 2015; Royal Society of Chemistry, pages 166-185, 21 Oct 2015; Print ISBN: 978-1-78262-085-3, PDF eISBN: 978-1-78262-235-2, EPUB eISBN: 978-1-78262-740-1, DOI:10.1039/9781782622352.</p>
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**Articles:**

1. Nistorescu, S.; Icriverzi, M.; Florian, P.; Bonciu, A.; Marascu, V.; Dumitrescu, N.; Pircalabioru, G.G.; Rusen, L.; Mocanu, A.; Roseanu, A.; Cimpean, A.; Grama, F.; **Dinca, V.**; Cristian, D.A. Mitigation of Cellular and Bacterial Adhesion on Laser Modified Poly (2-Methacryloyloxyethyl Phosphorylcholine)/Polydimethylsiloxane Surface. *Nanomaterials* 2023, 13, 64. <https://doi.org/10.3390/nano13010064>-**corresponding**
2. Dumitrescu, N.-L.; Icriverzi, M.; Bonciu, A.; Florian, P.; Moldovan, A.; Roseanu, A.; Rusen, L.; **Dinca, V.**; Grama, F. New Poly(N-isopropylacrylamide-butylacrylate) Copolymer Biointerfaces and Their Characteristic Influence on Cell Behavior In Vitro. *Int. J. Mol. Sci.*, 23, 3988. <https://doi.org/10.3390/ijms23073988> (2022)
3. Satulu, V., Dinca, V., Bacalum, M., Mustciosu, C., Mitu, B., Dinescu, G., Chemistry-Induced Effects on Cell Behavior upon Plasma Treatment of pNIPAAm, *Polymers*, 2022, 14(6), 1081
4. Bonciu, A., Vasilescu, A., **Dinca, V.**, Peteu, S.F., Interfaces obtained by MAPLE for chemical and biosensors applications, *Sensors and Actuators Reports*, 2021, 3, 100040
5. O. L. Rose, A. Bonciu, V. Marascu, A. Matei, Q. Liu, L. Rusen, V. Dinca, C. Z. Dinu, Thin films of metal organic frameworks interfaces obtained by laser evaporation, *Nanomaterials* 11(6), 1367 (2021)
6. Dumitrescu, LN; Icriverzi, M; Bonciu, A; Roseanu, A; Moldovan, A; **Dinca, V.**, In Vitro Effect of Replicated Porous Polymeric Nano-MicroStructured Biointerfaces Characteristics on Macrophages Behavior , *Nanomaterials* Volume 11 Issue 8 Article Number 1913 (2021)
7. Miu, DN; Constantinoiu, I; Dinca, V; Viespe, C / Surface Acoustic Wave Biosensor with Laser-Deposited Gold Layer Having Controlled Porosity / *Chemosensors* Volume 9 Issue 7 Article Number 17 (2021)

8. **Dinca V.**, Editorial: Advanced Functional Bio-interfaces Engineering for Medical Applications: From Drug Delivery to Bio-scaffolds, *Current Medicinal Chemistry* 27 (6), 836-837 (2020).
9. **Dinca V.**, Liu Q., Brajnicov S., Bonciu A., Vlad A., Dinu C.Z., Composites formed from tungsten trioxide and graphene oxide for the next generation of electrochromic interfaces, *Composites Communications* 17, 115-122,1 (2020).
10. Dumitrescu L.N., Neacsu P., Necula M.G., Bonciu A., Marascu V., Cimpean A., **Dinca V.**, Dinescu M., Induced Hydrophilicity and In Vitro Preliminary Osteoblast Response of Polyvinylidene Fluoride (PVDF) Coatings Obtained via MAPLE Deposition and Subsequent Thermal Treatment, *Molecules* 25 (3), 582, (2020).
11. **Dinca V.**, Mocanu A., Isopencu G., Busuioc C., Brajnicov S., Vlad A., Icriverzi M., Roseanu A., Dinescu M., Stroescu M., Stoica-Guzun A., Sucheana M., Biocompatible pure ZnO nanoparticles-3D bacterial cellulose biointerfaces with antibacterial properties, *Arabian Journal of Chemistry*, Volume 13, Issue 1, Pages 3521-3533 (2020).
12. Icriverzi, M.; Bonciu, A.; Rusen, L.; Sima, L.E.; Brajnicov, S.; Cimpean, A. Evans, R.W., **Dinca, V.**, Roseanu, A. Human Mesenchymal Stem Cell Response to Lactoferrin-based Composite Coatings. *Materials*, 12, 3414. -*Materials* 1996-1944 1, 405 (2019)
13. Viespe, C.; Dinca, V.; Popescu-Pelin, G.; Miu, D. Love Wave Surface Acoustic Wave Sensor with Laser-Deposited Nanoporous Gold Sensitive Layer. *Sensors*, 19, 4492 (2019).
14. Benetti M., Cannatà D., Verona E., Palla Papavlu A., Dinca V., Dinescu M., Di Pietrantonio F., Highly selective surface acoustic wave e-nose implemented by laser direct writing, 2019, *Sensors and Actuators, B: Chemical*, Volume 283, Pages 154-162 (2019)

15. Dong C., Wagner A., Dinca V., Dinu C.Z., Reduced graphene-tungsten trioxide-based hybrid materials with peroxidase-like activity, *Catal. Sci. Technol.*, 9, 271-274 (2019).
16. **Dinca V.**, Viespe C., Brajnicov S., Constantinoiu I, Moldovan A., Bonciu A., Toader C.N., Ginghina R.E., Grigoriu N., Dinescu M., Scarisoreanu N.D, MAPLE assembled acetylcholinesterase– Polyethylenimine hybrid and multilayered interfaces for toxic gases detection, *Sensors* 18(12): 4265 (2018).
17. Icriverzi, M; Rusen, L; Sima, LE; Moldovan, A; Brajnicov, S; Bonciu, A; Mihailescu, N; Dinescu, M; Cimpean, A; Roseanu, A; **Dinca, V**; "In vitro behavior of human mesenchymal stem cells on poly(N-isopropylacrylamide) based biointerfaces obtained by matrix assisted pulsed laser evaporation"; *APPLIED SURFACE SCIENCE* 440, 712-724 (2018).
18. **Dinca, V**; Zaharie-Butucel, D; Stanica, L; Brajnicov, S; Marascu, V; Bonciu, A; Cristoceca, A; Gaman, L; Gheorghiu, M; Astilean, S; Vasilescu, A; "Functional Micrococcus lysodeikticus layers deposited by laser technique for the optical sensing of lysozyme"; *COLLOIDS AND SURFACES B-BIOINTERFACES* 162, 98-107 (2018).
19. Mitran, V; Dinca, V; Ion, R; Cojocaru, VD; Neacsu, P; Dinu, CZ; Rusen, L; Brajnicov, S; Bonciu, A; Dinescu, M; Raducanu, D; Dan, I; Cimpean, A; "Graphene nanoplatelets-sericin surface-modified Gum alloy for improved biological response"; *RSC ADVANCES* 8 (33) 18492-18501 (2018).
20. Tirca, I; Mitran, V; Marascu, V; Brajnicov, S; Ion, V; Stokker-Cheregi, F; Popovic, IA; Cimpean, A; **Dinca, V**; Dinescu, M; "In vitro testing of curcumin based composites coatings as antitumoral systems against osteosarcoma cells"; *APPLIED SURFACE SCIENCE* 425, 1040-1051 (2017).
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**Reviewer:** Applied Surface Science, Biomaterials Science, Biofabrications, Journal of Selected Topics in Quantum Electronics, Journal of the Mechanical Behavior of Biomedical Materials, Applied Physics A., Materials, Materials and Chemistry B, IJMBS, Nanomaterials, Biomedical Microdevices

**Personal skills** ▪ **Photography, painting, book illustration**

▪ **Children book illustrator and author**

-**Povesti pentru mici si mari (author and illustrator), 2012, Ed. Abi**

**Fundatie**

-**Lumea-lui-Ciupicila-Mofturici (author)**

**<http://editura.liternet.ro/carte/89/Valentina-Carmen-Dinca-Iuliana-Vilsan/Lumea-lui-Ciupicila-Mofturici.html>**