

INFORMATII PERSONALE Alina Vasilescu

 Centrul International de Biodinamica, Bucuresti, Romania

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Web of Science ResearcherID: [C-5112-2011](https://orcid.org/0000-0002-2492-0819)

POSITIA IN PROIECT Membru in echipa

EXPERIENTA

din 01.2011- pana in prezent

Cercetator senior (CS I din 12.2018)

Centrul International de Biodinamica, Bucuresti

- Dezvoltarea de metode analitice bazate pe biosenzori pentru aplicatii practice; studiul proceselor dinamice precum agregarea proteinelor, legarea aptamer-proteina, cinetica enzimatica etc

Business sau sector: Cercetare si Dezvoltare

din 01.2004 pana la 08.2010

Chimist R&D, Analytical Operations,

Apotex Inc, Richmond Hill, ON, Canada

- Dezvoltarea si validarea de metode analitice pentru materii prime si produse farmaceutice

Business sau sector Cercetare si Dezvoltare

din 06.2003 pana la 12.2003

Cercetator postdoctoral,

Facultatea de Chimie, Universitatea din Toronto, Canada

- Dezvoltarea de biosenzori acustici

Business sau sector Cercetare si Dezvoltare

din 11.2002 pana la 06/2003

Chimist,

Innopharm, Toronto, Canada

- Testarea conformitatii; Dezvoltarea si validarea de metode analitice pentru materii prime si produse farmaceutice

Business sau sector Laborator de analize farmaceutice

din 07.2001 pana la 12.2001

Cercetator ,

Facultatea de Chimie, Universitatea din Bucuresti

- Dezvoltarea de biosenzori electrochimici

Business sau sector Cercetare si Dezvoltare

din 10.1994 pana la 11.1996

Chimist,

CNIEP Larex, Bucuresti

- Testarea conformitatii; Dezvoltarea si validarea de metode analitice pentru produse alimentare

Business sau sector Laborator de analize

EDUCATIE

din 1998 pana la 2001

Doctorat in Chimie

Teza in cotutela- Universitatea din Bucuresti, Facultatea de Chimie si Universitatea din Perpignan, Franta

din 1996 pana la 1997

Masterat

Biosenzori pentru monitorizarea mediului (program TEMPUS program), Facultatea de Chimie, Universitatea din Bucuresti

din 1994 pana la 1995

Masterat

Enzimologie Aplicata, Facultatea de Chimie, Universitatea din Bucuresti

din 1989 pana la 1994

Licenta in Chimie

Facultatea de Chimie, Universitatea din Bucuresti

ABILITATI PERSONALE

Limba materna

Romana

Limbi straine

	INTELEGERE		VORBIT	SCRIS
	Ascultat	Citit		
Engleza	C1	C1	C1 C1	C1
Franceza	C1	C1	B1 B1	B1

Aptitudini manageriale si de organizare

- abilități solide in management-ul proiectelor de cercetare dobândite ca Director de Proiect sau Responsabil Partener in 12 proiecte
- experiență bună în supervizarea studenților (inclusiv co-îndrumator la 2 lucrări de master; în prezent membru in comisia de îndrumare academica a 2 doctoranzi de la Universitatea din Bucuresti)
- abilități organizatorice bune (organizarea a 3 seminarii internaționale)

Abilitati tehnice si de cercetare

- experiență in evaluarea articolelor științifice (evaluator pentru diverse reviste, inclusiv Nature, Nature Chemical Engineering, Sensors and Actuators B Chemical, TrAC Trends in Analytical Chemistry, ACS Applied Materials and Interfaces)
- expertiză în dezvoltarea și validarea metodelor analitice pentru aplicații industriale (produse farmaceutice și alimentare) și in cercetare și dezvoltare bazată pe biosenzori, dobândită în timpul angajării în laboratoare analitice din industrie și în instituții academice de cercetare
- cunoștințe silide privind procedurile de control al calității în laboratoare analitice (alimente și produse farmaceutice) în industrie, dobândite în timpul angajării la LAREX, INNOPHARM și APOTEX

INFORMATII ADITIONALE

Publicatii

64 articole (Scopus) and 20 capitole de carte (13 indexate ISI), totalizand > 2550 citari (H index 31/30, Scopus/Web of Science)

Prezentari la conferinte

49 prezentari la conferinte (19 ca prezentator) in perioada 2020-2025

Proiecte

12 proiecte (7 nationale, 5 internationale) ca Director de Proiect sau Responsabil Partener

Premii si distinctii

- Medalia de Bronz si Premiul Special al USAMV Bucuresti la a 14^a Editie a Salonului Euroinvent, Iași, 26 - 28 Mai 2022, pentru „ Senzori electrochimici bazați pe straturi micro- și nano-structurate de ceria obținute prin metode laser pentru detecția de NADH și biosenzori ” (rezultat obtinut impreuna cu un grup de la INFLPR Măgurele), inventatori: Dinca Valentina, Filipescu Mihaela, Bonciu Anca, Vasilescu Alina.
- Premiul “Emil Racovita” Prize al Academiei Romane, 2024 (impreuna cu Sorin David)
- Premiul « Editor of Distinction » al revistei Chemosensors (MDPI), pentru 2025

Apartenenta la societati stiintifice sau comitete editoriale

- Electrochemical Society, (2022, 2025)
- Societatea Romana de Chimie (2021-2022)
- Comitetul Editorial de revistei open accees Chemosensors (MDPI,Q2);

ANEXE Lista publicatiilor, aplicatiilor de brevet, prezentarilor la conferinte si proiectelor

PUBLICATII -

1. Articole

1.	Ftodiev A.I., Necula Petrareanu G., Puiu M., Proteasa G., Munteanu C.V.A., Banciu R.M., Chauhan R., Visinescu D., Purcarea C., Fanjul-Bolado P., Ibañez D., Fogel R., Limson J., Potara M., Bonciu A.F., Astilean S., Bala C., Vasilescu, A., Comprehensive analysis of the inhibition of aldehyde dehydrogenase from <i>Flavobacterium</i> PL002 and its coupling with SERS as a path for the selective detection of thiram, <i>Methods</i> , 2026 , 245, 83-98, https://doi.org/10.1016/j.ymeth.2025.10.006
2.	Vasilescu, A.; Gáspár, S.; Gheorghiu, M.; Polonschii C.; Banciu R.M.; David S.; Gheorghiu, E.; Marty, J.-L.; Promising Solutions to Address the Non-Specific Adsorption in Biosensors Based on Coupled Electrochemical-Surface Plasmon Resonance Detection, <i>Chemosensors</i> , 2025 , 13(3), 92; https://doi.org/10.3390/chemosensors13030092
3.	Craciun, A.-M.; Colnita, A.; Marconi, D.; Barbu-Tudoran, L.; Turcu, I.; Focsan, M.; Vasilescu, A.; Potara, M.; Astilean, S. Fabrication and characterization of large-scale ordered silver-coated polystyrene microspheres films for surface-enhanced Raman spectroscopy, <i>Physica Scripta</i> , 2025 , 100(4), 045524, https://doi.org/10.1088/1402-4896/adbd80
4.	Chauhan, R.; Fogel, R.; Purcarea, C.; Necula-Petrareanu, G.; Fanjul-Bolado, P.; Ibañez, D.; Vasilescu, A.; Banciu, R. M.; Limson, J., Electrochemical characterization of carbon black in different redox probes and their application in electrochemical sensing, <i>Carbon Trends</i> , 2024 , 17, 100408, https://doi.org/10.1016/j.cartre.2024.100408
5.	Purcarea, C., Ruginescu, R., Banciu, R.M., Vasilescu, A. Extremozyme-Based Biosensors for Environmental Pollution Monitoring: Recent Developments. <i>Biosensors</i> , 2024 , 14(3), 143; https://doi.org/10.3390/bios14030143
6.	Polonschii, C.; Potara, M.; Iancu, M.; David, S.; Banciu, R.M.; Vasilescu, A.; Astilean, S. Progress in the Optical Sensing of Cardiac Biomarkers. <i>Biosensors</i> , 2023 , 13, 632. https://doi.org/10.3390/bios13060632
7.	Banciu, R.M., Numan, N., Vasilescu, A., Optical biosensing of lysozyme, <i>Journal of Molecular Structure</i> , 2022 , 1250, 131639; https://doi.org/10.1016/j.molstruc.2021.131639
8.	Lulea, A. C., Ruginescu, R., Banciu, R. M., Pantazi, C., Brinduse, E., Ion, M., Quintela, S., Elejalde, E., Fernández-de-Castro, L., Villarán, M. C., Ruiz-de-Vergara, Z., Ruíz, C., Epure, P., Purcarea, C., Vasilescu, A. Fast Electrochemical Measurement of Laccase Activity for Monitoring Grapes' Infection with <i>Botrytis cinerea</i> . <i>Processes</i> , 2022 , 10(3), 575. https://doi.org/10.3390/pr10030575
9.	Paun, V.I., Banciu, R.M., Lavin, P., Vasilescu, A., Fanjul-Bolado, P., Purcarea, C. Antarctic aldehyde dehydrogenase from <i>Flavobacterium</i> PL002 as a potent catalyst for acetaldehyde determination in wine. <i>Scientific Reports</i> , 2022 , 12(1), 17301 https://doi.org/10.1038/s41598-022-22289-8
10.	Necula-Petrareanu, G., Lavin, P., Paun, V.I., Gheorghita G.R., Vasilescu, A., Purcarea, C. Highly stable, cold-active aldehyde dehydrogenase from the marine antarctic flavobacterium sp. PL002, <i>Fermentation</i> , 2022 , 8(1), 7; https://doi.org/10.3390/fermentation8010007
11.	Fanjul-Bolado, P., Fogel, R., Limson, J., Purcarea, C., Vasilescu, A., Advances in the Detection of Dithiocarbamate Fungicides: Opportunities for Biosensors. <i>Biosensors</i> , 2021 , 11(1), 12. https://doi.org/10.3390/bios11010012
12.	Kirk, K.A., Vasilescu, A., Andreescu, D., Senaratna D., Mondal, S., Andreescu, S., Collision-Based Electrochemical Detection of Lysozyme Aggregation, <i>Analytical Chemistry</i> , 2021 , 93(4), 2026–2037, https://doi.org/10.1021/acs.analchem.0c03578
13.	Bucur, B., Purcarea, C., Andreescu, S., Vasilescu, A., Addressing the selectivity of enzyme biosensors: Solutions and perspectives, <i>Sensors</i> , 2021 , 21(9), 3038, https://doi.org/10.3390/s21093038
14.	Khan, R., Radoi, A., Rashid, S., Hayat, A., Vasilescu, A., Andreescu, S. Two-Dimensional Nanostructures for Electrochemical Biosensor. <i>Sensors</i> , 2021 , 21(10), 3369. https://doi.org/10.3390/s21103369
15.	Vasilescu, A., Hrinchenko, B., Swain, G.M., Peteu, S.F. Exhaled breath biomarker sensing, <i>Biosensors and Bioelectronics</i> , 2021 , 182, 113193, https://doi.org/10.1016/j.bios.2021.113193
16.	Rhouati, A., Marty, J.-L., Vasilescu, A. Electrochemical biosensors combining aptamers and enzymatic activity: Challenges and analytical opportunities <i>Electrochimica Acta</i> , 2021 , 390, 138863, https://doi.org/10.1016/j.electacta.2021.138863
17.	Bonciu, A., Vasilescu, A., Dinca, V., Peteu, S.F. Interfaces obtained by MAPLE for chemical and biosensors applications, <i>Sensors and Actuators Reports</i> , 2021 , 3, 100040, https://doi.org/10.1016/j.snr.2021.100040
18.	Andreescu, S., Vasilescu, A. Advances in electrochemical detection for probing protein aggregation, <i>Current Opinion in Electrochemistry</i> , 2021 , 30, 100820, https://doi.org/10.1016/j.coelec.2021.100820

19.	Gáspár S., Brinduse E., <u>Vasilescu A.</u> , Electrochemical evaluation of laccase activity in must, <i>Chemosensors</i> , 2020 , 8, 126; https://doi.org/10.3390/chemosensors8040126
20.	Titoiu, A.M., Necula-Petrareanu, G., Visinescu, D., Dinca V, Bonciu A, Mihailescu C.N, Purcarea C, Boukherroub R, Szunerits S, <u>Vasilescu A.</u> , Flow injection enzymatic biosensor for aldehydes based on a Meldola Blue-Ni complex electrochemical mediator, <i>Microchimica Acta</i> , 2020 , 187(10), 550, https://doi.org/10.1007/s00604-020-04477-3
21.	Popa, C.V., <u>Vasilescu, A.</u> , Litescu, S.C., Albu, C., Danet, A.F., Metal Nano-Oxide based Colorimetric Sensor Array for the Determination of Plant Polyphenols with Antioxidant Properties, <i>Analytical Letters</i> , 2020 , 53(4), 627–645, https://doi.org/10.1080/00032719.2019.1662430
22.	<u>Vasilescu A.</u> , Fanjul-Bolado P, Titoiu A-M, Porumb R, Epure P, Progress in Electrochemical (Bio)Sensors for Monitoring Wine Production, <i>Chemosensors</i> , 2019 , 7, 66, https://doi.org/10.3390/chemosensors7040066
23.	Titoiu, A.M., Porumb, R., Fanjul-Bolado, P., Epure P., Zamfir, M., <u>Vasilescu, A.</u> , Detection of Allergenic Lysozyme during Winemaking with an Electrochemical Aptasensor, <i>Electroanalysis</i> , 2019 , 31 (11), 2262-2273, https://doi.org/10.1002/elan.201900333
24.	Titoiu AM, Lapauw M Necula-Petrareanu G, Purcarea C, Fanjul-Bolado P, Marty J-L, <u>Vasilescu A.</u> , Carbon Nanofiber and Meldola Blue Based Electrochemical Sensor for NADH: Application to the Detection of Benzaldehyde, <i>Electroanalysis</i> , 2018 , 30(11), 2676-2688, https://doi.org/10.1002/elan.201800472
25.	Grabowska I, Sharma N, <u>Vasilescu A.</u> , Iancu M, Badea G, Boukherroub R, Ogale S, Szunerits S, Electrochemical aptamer-based biosensor for the detection of cardiac biomarkers, <i>ACS Omega</i> , 2018 , 3(9), 12010-12018. https://doi.org/10.1021/acsomega.8b01558
26.	Bucur B, Munteanu F-D, Marty J-L, <u>Vasilescu A.</u> , Advances in Enzyme-Based Biosensors for Pesticide Detection, <i>Biosensors</i> , 2018 , 8(2), 27; https://doi.org/10.3390/bios8020027
27.	Munteanu F-D, Titoiu A-M, Marty J-L, <u>Vasilescu A.</u> , Detection of Antibiotics and Evaluation of Antibacterial Activity with Screen-Printed Electrodes, <i>Sensors</i> , 2018 , 18(3), 901; https://doi.org/10.3390/s18030901
28.	Chekin F, <u>Vasilescu A.</u> , Jijie R, Singh S.K, Kurungot S, Iancu M, Badea G, Boukherroub R, Szunerits S., Sensitive electrochemical detection of cardiac troponin I in serum and saliva by nitrogen-doped porous reduced graphene oxide electrode, <i>Sensors and Actuators B</i> , 2018 , 262, 180–187, https://doi.org/10.1016/j.snb.2018.01.215
29.	<u>Vasilescu A.</u> , Ye R, Boulahneche S, Jijie R, Medjram M S, Gaspar S, Singh S.K, Kurungot S, Boukherroub R, Szunerits S, Porous reduced graphene oxide modified electrodes for the analysis of protein aggregation. Part 2: Application to the analysis of calcitonin containing pharmaceutical formulation, <i>Electrochimica Acta</i> , 2018 , 266, 364-372, https://doi.org/10.1016/j.electacta.2018.02.038
30.	Dinca V., Zaharie-Butucel D., Stanica L., Brajnicov S., Marascu V., Bonciu A., Cristoceana A., Gaman L., Gheorghiu M., Astilean S., <u>Vasilescu A.</u> , Functional Micrococcus lysodeikticus layers deposited by laser technique for the optical sensing of lysozyme, <i>Colloids and Surfaces B: Biointerfaces</i> , 2018 , 162, 98-107, https://doi.org/10.1016/j.colsurfb.2017.11.058
31.	<u>Vasilescu A.</u> , Hayat A, Gaspar S, Marty J-L, Advantages of Carbon Nanomaterials in Electrochemical Aptasensors for Food Analysis, <i>Electroanalysis</i> , 2018 , 30, 2-19, https://doi.org/10.1002/elan.201700578
32.	<u>Vasilescu A.</u> , Boulahneche S., Chekin F., Gáspár S., Medjram M. S., Diagne A A., Singh S.K., Kurungot S., Boukherroub R., Szunerits S., Porous reduced graphene oxide modified electrodes for the analysis of protein aggregation. Part 1: Lysozyme aggregation at pH 2 and 7.4, <i>Electrochimica Acta</i> , 2017 , 254, 375-383, https://doi.org/10.1016/j.electacta.2017.09.083
33.	<u>Vasilescu A.</u> , Gheorghiu M., Peteu S., Nanomaterial-based electrochemical sensors and optical probes for detection and imaging of peroxynitrite: a review, <i>Microchimica Acta</i> , 2017 , 184(3), 649-675, https://doi.org/10.1007/s00604-017-2093-7
34.	Wang Q., <u>Vasilescu A.</u> , Wang Q., Coffinier Y., Li M., Boukherroub R., Szunerits S., Electrophoretic Approach for the Simultaneous Deposition and Functionalization of Reduced Graphene Oxide Nanosheets with Diazonium Compounds: Application for Sensing in Serum, <i>ACS Applied Materials and Interfaces</i> , 2017 , 9 (14), 12823–12831 https://doi.org/10.1021/acsami.6b15955
35.	<u>Vasilescu A.</u> , Gaspar S., Gheorghiu M, David S., Dinca V., Peteu S., Wang Q., Li M., Boukherroub R., Szunerits S., Surface Plasmon Resonance based sensing of lysozyme in serum on <i>Micrococcus lysodeikticus</i> -modified graphene oxide surfaces, <i>Biosensors and Bioelectronics</i> , 2017 , 15;89(Pt 1):525-531. https://doi.org/10.1016/j.bios.2016.03.040
36.	Chekin F., Singh S.K., <u>Vasilescu A.</u> , Dhavale V.M., Kurungot S., Boukherroub R., Szunerits S., Reduced Graphene Oxide Modified Electrodes For Sensitive Sensing of Gliadin in Food Samples, <i>ACS Sensors</i> , 2016 , 1 (12), 1462–1470, https://doi.org/10.1021/acssensors.6b00608

37.	Vasilescu A., Nunes G., Hayat A., Latif U., Marty J-L., Electrochemical Affinity Biosensors Based on Disposable Screen-Printed Electrodes for Detection of Food Allergens, <i>Sensors</i> , 2016 , 16, 1863; https://doi.org/10.3390/s16111863
38.	Vasilescu A., Wang Q., Li M., Boukherroub R., Szunerits S., Aptamer-Based Electrochemical Sensing of Lysozyme, <i>Chemosensors</i> , 2016 , 4, 10; https://doi.org/10.3390/chemosensors4020010
39.	Andrei V., Sharpe E., Vasilescu A., Andreescu S., A single use electrochemical sensor based on biomimetic nanoceria for the detection of wine antioxidants, <i>Talanta</i> , 2016 , 156-157, 112-118, https://doi.org/10.1016/j.talanta.2016.04.067
40.	Wang Q., Palaniappan S., Schechter A., Teblum E., Yemini R., Nessim G.D., Vasilescu A., Li M., Boukherroub R., Szunerits S., Vertically Aligned Nitrogen-Doped Carbon Nanotube Carpet Electrodes: Highly Sensitive Interfaces for the Analysis of Serum from Patients with Inflammatory Bowel Disease, <i>ACS Applied Materials & Interfaces</i> , 2016 , 8(15), 9600–9609, https://doi.org/10.1021/acsami.6b00663
41.	Vasilescu A., Purcarea C., Popa E., Zamfir M., Mihai I., Litescu S., David S., Gaspar S., Gheorghiu M., Marty J-L., Versatile SPR aptasensor for detection of lysozyme dimer in oligomeric and aggregated mixtures, <i>Biosensors & Bioelectronics</i> , 2016 , 83, 353-360, https://doi.org/10.1016/j.bios.2016.04.080
42.	Vasilescu A., Marty J-L., Electrochemical aptasensors for the assessment of food quality and safety, <i>Trends in Analytical Chemistry</i> , 2016 , 79, 60-70, https://doi.org/10.1016/j.trac.2015.11.024
43.	Hosu I.S., Wang Q., Vasilescu A., Petcu S.F., Raditoiu V., Railian S., Zaitsev V., Turcheniuk K., Wang Q., Li M., Boukherroub R., Szunerits S., Cobalt phthalocyanine tetracarboxylic acid modified reduced graphene oxide: A sensitive matrix for the electrocatalytic detection of peroxynitrite and hydrogen peroxide, <i>RSC Advances</i> , 2015 , 5, 1474-1484, https://doi.org/10.1039/C4RA09781E
44.	Ocana C., Hayat A., Mishra R., Del Valle M., Vasilescu A., Marty J-L., Label free aptasensor for lysozyme detection: A comparison of the analytical performance of two aptamers, <i>Bioelectrochemistry</i> , 2015 , 105, 72-77, https://doi.org/10.1016/j.bioelechem.2015.05.009
45.	Ocana C., Hayat A., Mishra R., Del Valle M., Vasilescu A., Marty J-L., A novel electrochemical aptamer-antibody sandwich assay for lysozyme detection, <i>Analyst</i> , 2015 , 140(12), 4148-4153, https://doi.org/10.1039/c5an00243e
46.	Mihai I., Vezeanu A., Polonschii C., Albu C., Radu G-L., Vasilescu A., Label-free detection of lysozyme in wines using an aptamer based biosensor and SPR detection, <i>Sensors Actuators B Chemical</i> , 2015 , 206, 198-204, https://doi.org/10.1016/j.snb.2014.09.050
47.	Andrei, V., Bunea, A.-I., Tudorache, A., Gáspár, S., Vasilescu, A., Simple DPPH.-Based Electrochemical Assay for the Evaluation of the Antioxidant Capacity: A Thorough Comparison with Spectrophotometric Assays and Evaluation with Real-World Samples, <i>Electroanalysis</i> , 2014 , 26 (12), 2677-2685, https://doi.org/10.1002/elan.201400376
48.	Mihai I., Vezeanu A., Polonschii C., David S., Gaspar S., Bucur B., Blaszykowski C., Sheikh S., Thompson M., Vasilescu A., Low-fouling SPR detection of lysozyme and its aggregates, <i>Analytical Methods</i> , 2014 , 6, 7646–7654, https://doi.org/10.1039/C4AY01237B
49.	Wang Q., Vasilescu A., Subramanian P., Vezeanu A., Andrei V., Coffinier Y., Li M., Boukherroub R., Szunerits S., Simultaneous electrochemical detection of tryptophan and tyrosine using boron-doped diamond and diamond nanowire electrodes, <i>Electrochemical Communications</i> , 2013 , 35, 84–87, https://doi.org/10.1016/j.elecom.2013.08.010
50.	Subramanian P., Lesniewski A., Kaminska I., Vlandas A., Vasilescu A., Niedziolka-Jonsson J., Pichonat E., Happy H., Boukherroub R., Szunerits S., Lysozyme detection on aptamer functionalized graphene-coated SPR interfaces, <i>Biosensors and Bioelectronics</i> , 2013 , 50, 239-243, https://doi.org/10.1016/j.bios.2013.06.026
51.	Vasilescu A., Gaspar S., Mihai I., Tache A., Litescu S. C., Development of a label-free aptasensor for monitoring the self-association of lysozyme, <i>Analyst</i> , 2013 , 138, 3530-3537, https://doi.org/10.1039/c3an00229b
52.	Vasilescu A., Sharpe E., Andreescu S., Nanoparticle-Based Technologies for the Detection of Food Antioxidants, <i>Current Analytical Chemistry</i> , 2012 , 8(4), 495-505, https://doi.org/10.2174/157341112803216780
53.	Vasilescu A., Ballantyne S.M., Cheran L.-E., Thompson M., Surface properties and electromagnetic excitation of a piezoelectric gallium phosphate biosensor", <i>Analyst</i> , 2005 , 130, 213-220, https://doi.org/10.1039/b413012j
54.	Vasilescu A., Andreescu S., Bala C., Litescu S.C., Noguer T., Marty J-L. Screen-printed electrodes with electropolymerized Meldola Blue as versatile detectors in biosensors, <i>Biosensors and Bioelectronics</i> , 2003 , 18, 781-790, https://doi.org/10.1016/S0956-5663(03)00044-7

55.	Vasilescu A., Noguer T., Andreescu S., Calas-Blanchard C., Bala C., Marty J.-L. Strategies for developing NADH detectors based on Meldola Blue and screen-printed electrodes: a comparative study, <i>Talanta</i> , 2003 , 59 (4), 751-765, https://doi.org/10.1016/S0039-9140(02)00614-8
56.	Avramescu A., Andreescu S., Noguer T., Bala C., Andreescu D., Marty J.-L. Biosensors designed for environmental and food quality control based on screen-printed graphite electrodes with different configurations, <i>Analytical and Bioanalytical Chemistry</i> , 2002 , 374, 25-32, https://doi.org/10.1007/s00216-002-1312-0
57.	Andreescu S., Avramescu A., Bala C., Magearu V., Marty J.-L. Detection of organophosphorus insecticides with immobilized acetylcholinesterase: Comparative study between two enzyme sensors, <i>Analytical and Bioanalytical Chemistry</i> , 2002 , 374, 39-45, https://doi.org/10.1007/s00216-002-1442-4
58.	Avramescu A., Noguer T., Avramescu M., Marty J.-L. Screen-printed biosensors for the control of wine quality based on lactate and acetaldehyde determination, <i>Analytica Chimica Acta</i> , 2002 , 458, 203-213, https://doi.org/10.1016/S0003-2670(01)01580-X
59.	Noguer T., Tencaliec A., Calas-Blanchard C., Avramescu A., Marty J.-L. Interference –free biosensors based on screen-printing technology and sol-gel immobilization for determination of acetaldehyde in wine, <i>Journal of AOAC International</i> , 2002 , 85(6), 1382-1389, https://doi.org/10.1016/S0003-2670(01)01580-X
60.	Avramescu A., Noguer T., Magearu V., Marty J.-L., Chronoamperometric determination of D-lactate using screen-printed enzyme sensors, <i>Analytica Chimica Acta</i> , 2001 , 433, 81-88, https://doi.org/10.1016/S0003-2670(00)01386-6
61.	Noguer T., Balasoiu A M., Avramescu A., Marty J.-L., Development of a disposable biosensor for the detection of metam-sodium and its metabolite MITC, <i>Analytical Letters</i> , 2001 , 34 (4), 513-528, https://doi.org/10.1081/AL-100002592
62.	Avramescu A., Andreescu S., Bala C., Noguer T., Magearu V., Marty J.-L., The potential of screen-printed electrodes for the development of biosensors. Application in environmental and food industry, <i>University Politehnica of Bucharest Scientific Bulletin, Series B</i> , 2001 , 63 (3), 317-328
63.	Avramescu A., Rouillon R., Carpentier R., Potential for use of a cyanobacterium <i>Synechocystis</i> sp. Immobilized in poly(vinyl alcohol): application to the detection of pollutants, <i>Biotechnology Techniques</i> , 1999 , 3, 559-562, https://doi.org/10.1023/A:1008991531206
64.	Dumitrescu V., Avramescu A., Avramescu M., Determinarea potentiometrica a plumbului din vinuri (Potentiometric determination of lead in wines), <i>Revista de Chimie</i> , 1997 , 48, 965-974

2. Capitoile de carte

No	Referinta bibliografica	Indexata ISI
1	Vasilescu, A., Polonschii, C., Marty, J.-L. Biosensors for the Detection of Food Allergens, in Beatriz Cabanillas (editor), <i>Food allergens</i> , series Methods in Molecular Biology, Springer protocols, Humana Press, Clifton, New Jersey, USA, 2024 , 2717, pp. 239–250, https://doi.org/10.1007/978-1-0716-3453-0_16	Da
2	Vasilescu, A., Polonschii, C., Titoiu, A.M., Mishra R., Peteu, S., Marty, J.-L. Bioassays and biosensors for food analysis: focus on allergens and food packaging, in Mustafa Kemal Sezgin (editor), <i>Commercial Biosensors and Their Applications: Clinical, Food, and Beyond</i> , Elsevier, 2020 , pp. 217–258, https://doi.org/10.1016/B978-0-12-818592-6.00009-8	Da
3	Vasilescu A., Titoiu A.M., Dinca V., Purcarea C., Petrareanu G., Fanjul-Bolado P., Szunerits S., Boukherroub R., Advantages of carbon nanomaterials in electrochemical sensing: example of protein aggregation and benzaldehyde detection, in Zaharescu M., Ion A., Enachescu M., Lupu N., Dascau D. (editors), <i>Nanomaterials-Functional properties and application</i> , Series in Micro and Nanoengineering, 28, Editura Academiei Romane, Bucuresti, 2020 , ISBN: 978-973-27-3290-8	Nu
4	Szunerits, S., Boukherroub, R., Vasilescu, A., Electrochemical biosensing with odorant binding proteins, in Paolo Pelosi, Wolfgang Knoll (editors), <i>Methods in Enzymology</i> , Academic Press, 2020 , 642, pp. 345–369, https://doi.org/10.1016/bs.mie.2020.04.071	Da

5	Purcarea, C; Necula-Petrareanu, G; Vasilescu, A, Chapter 7 - Extremophile-assisted nanomaterial production and nanomaterial-based biosensing in Dinca Valentina and Suche Mirela Petruta (editors), <i>Functional Nanostructured Interfaces for Environmental and Biomedical Applications</i> , Elsevier, 2019 , p153-180, https://doi.org/10.1016/B978-0-12-814401-5.00007-4	Da
6	Szunerits, S., Vasilescu, A., Dinca, V., Peteu, S., Boukherroub, R. Stimuli-responsive graphene-based matrices for smart therapeutics. In Edvige Celasco, Alexander N. Chaika, Tobias Stauber, Mei Zhang, Cengiz Ozkan, Cengiz Ozkan, Umit Ozkan, Barbara Palys, Sulaiman Wadi Harun (editors), <i>Handbook of Graphene</i> , 2019 , 8, pp. 507–533, https://doi.org/10.1002/9781119468455.ch84	Da
7	Andrei, V., Copolovici, D., Munteanu, F.-D., (...), Darie, C.C., Vasilescu, A. Detection of Biomedically Relevant Stilbenes from Wines by Mass Spectrometry in Alisa G. Woods and Costel C. Darie (editors), <i>Advances in experimental medicine and biology</i> , 2 nd edition, Springer, 2019 ; 1140, pp. 665-684, ISBN: 978-3-030-15949-8, https://doi.org/10.1007/978-3-030-15950-4_40	Da
8	Rhouati A., Marty J.-L., Vasilescu A. Metal nanomaterial-assisted aptasensors for emerging pollutants detection, in Dimitrios P. Nikolelis and Georgia-Paraskevi Nikoleli (editors), <i>Nanotechnology and Biosensors</i> , Advanced Nanomaterials pp. 193-231, 2018 , Elsevier, https://doi.org/10.1016/B978-0-12-813855-7.00007-6	Da
9	Gheorghiu M, Vasilescu A, Surface plasmon resonance -modified graphene oxide surfaces for whole-cell-based sensing, in Ashutosh Tiwari (editor), <i>Graphene Bioelectronics</i> , 2018 , pp.151-175, Elsevier, ISBN: 978-0-12-813349-1, https://doi.org/10.1016/B978-0-12-813349-1.00007-X	Da
10	Vasilescu A, Marty J-L, Aptasensors, an Analytical Solution for Mycotoxins Detection, in Ilaria Palchetti, Peter-Diedrich Hansen, Damia Barcelo (editors), Past, Present and Future Challenges of Biosensors and Bioanalytical Tools in Analytical Chemistry: A Tribute to Professor Marco Mascini, Comprehensive Analytical Chemistry Series vol. 77, 2017 , pp. 101-146, Elsevier, https://doi.org/10.1016/bs.coac.2017.05.006 , eBook ISBN: 9780444639479	Da
11	Szunerits S, Wang Q, Vasilescu A, Li M, Boukherroub R, Graphene/gold nanoparticles for electrochemical sensing, in Sabine Szunerits, Rabah Boukherroub, Alice Downard, Jun-Jie Zhu (editors), <i>Nanocarbons for Electroanalysis</i> , 2017 , p. 139-172, Wiley, ISBN: 978-1-119-24390-8	Da
12	Vasilescu, A; Dinca, V; Filipescu, M; Rusen, L; Hosu, IS; Boukherroub, R; Szunerits, S; Dinescu, M; Peteu, SF, Recent approaches to enhance the selectivity of peroxynitrite detection, in Serban Peteu, Sabine Szunerits, Mekki Bayachou (editors), <i>Peroxynitrite detection in biological media: challenges and advances</i> , RSC Detection Series, p 166-185, 2016 , Royal Society of Chemistry, https://doi.org/10.1039/9781782622352-00166	Da
13	Andrei V, Wetie AG, Mihai I, Darie CC, Vasilescu A. Detection of biomedically relevant stilbenes from wines by mass spectrometry in Alisa G. Woods and Costel C. Darie (editors), <i>Advancements of Mass Spectrometry in Biomedical Research</i> , Springer, editors:, 2014 ; 806:361-82. https://doi.org/10.1007/978-3-319-06068-2_17 , ISBN: 978-3-319-06067-5 (print), 978-3-319-06068-2 (online)	Da
14	Vasilescu A, Schuhmann W, Gaspar S, Recent progress in the Electrochemical detection of disease-related diagnostic biomarkers, in Pankaj Vadgama and SF Peteu (editor), <i>Detection challenges in clinical diagnostics</i> , Royal Society of Chemistry, editors:, 2013 , ISBN: 978-184-973-612-1 , https://doi.org/10.1039/9781849737302-00089	Da
15	Vasilescu A, Vezeanu A, David S, Gaspar S, "Development of an aptasensor for lysozyme based on graphene oxide through the layer-by-layer method" in Maria Zaharescu, Horia Chiriac, Dan Dascalu (editors), 2016 , <i>Nanomaterials, nanoparticles, nanodevices, Series on Micro and Nanoengineering</i> vol 24, p.145-160, Publishing House of the Romanian Academy. ISBN: 978-973-27-2643-3.	Nu
16	Bucur B., Hosu I, S., Vasilescu A., "Biosensors for Characterisation of Bioactive Compounds from Wines", in Constantin Apetrei (editor), <i>Natural Sources, Physicochemical Characterization and Applications, Frontiers in Bioactive Compounds</i> , 2016 , Vol 1, pp.147-189, Bentham Science, ISSN: 2468-6395 (Print), ISSN: 2468-6409 (Online), https://doi.org/10.2174/97816810834141160101	Nu
17	Vasilescu A., Mihai I., Vezeanu A., Andrei V., Nedelcu G., Popa E., Purcarea C., Subramanian P., Coffinier Y., Boukherroub R., Szunerits S., "A new nanomaterial for the study of protein interactions" in Alina Catrinel Ion, Dan Dascalu, Gabriela Carja, Magdalena	Nu

	Lidia Ciurea (editors.), <i>New Applications of Nanomaterials</i> , „Micro and nano engineering” series, vol 22, pp.19-33, 2014 , Publishing House of the Romanian Academy. ISBN: 978-973-27-2311-1.	
18	Vasilescu A., Vezeanu A., Badea M., “Electrochemical Impedance Spectroscopy investigations focussed on food allergens” in K. Kalcher, R. Metelka, I. Švancara, K. Vyřas (editors), <i>Sensing in Electroanalysis</i> , 8, 59-83, 2013/2014 University Press Centre, Pardubice, Czech Republic. ISBN 978-80-7395-782-7 (print); ISBN 978-80-7395-783-4 (pdf)	Nu
19	Peteu S.F., Szunerits S., Vasilescu A., Knoll W., Nanoscale Architectures for Smart Bio-Interfaces: Advances and Challenges”, in Yoshitake Masuda (Editor), <i>Nanotechnology and Nanomaterials</i> , “Nanofabrication”, 2011 , ISBN 978-953-307-912-7, https://doi.org/10.5772/28893	Nu
20	Vasilescu A., Bala C., “Biosenzori bazati pe dehidrogenaze.” in Camelia Bala, V. Magearu (Editors), <i>Biosenzori. Aplicatii si perspective</i> , Ars Docendi publishing house, Bucharest, Romania, 2003 , ISBN 973-558-053-5	Nu

3. Aplicatii de brevet nationale

No	Detalii
1	RO A/00587/2018: Metoda de determinarea a fungicidului tiram bazata pe inhibitie enzimatica si senzori electrochimic, inventatori: Vasilescu Alina, Titoiu Ana Maria. Purcarea Cristina, Necula-Petrareanu Georgiana
2	RO A100872/ 06/11/2018, Sistem automatizat bazat pe biosenzori pentru monitorizarea unor parametri ai procedului de vinificatie”, inventatori: Epure Petru, Porumb Roxana, Vasilescu Alina, Gaspar Szilveszter, Titoiu Ana-Maria
3	RO A/00717/2021 Senzori electrochimici bazați pe straturi micro- și nano-structurate de ceria obținute prin metode laser pentru detecția de NADH și biosenzori, inventatori: Dinca Valentina, Filipescu Mihaela, Bonciu Anca, Vasilescu Alina
4	RO A00748/12/07/2021, Metodă și kit de analiză a activității lacazei din struguri în vie bazat pe detecție duală optică și electrochimică , inventatori: Vasilescu Alina, Lulea Andreea, Banciu Roberta, Gaspar Szilveszter
5	RO A/00671 /09.11.2023. Metodă optimizată de izolare a membranelor tilacoide din microalga <i>Coccomyxa subellipsoidea</i> LT4, inventatori: Ruginescu Robert Marian, Vasilescu Alina Mihaela, Cristina Purcarea
6	RO A/ 00780/ 04/12/2023. Metodă de detecție în ape a poluanților inhibitori ai fotosintezei bazată pe biosenzor electrochimic cu tilacoide din <i>Coccomyxa subellipsoidea</i> LT4, inventatori: Vasilescu Alina Mihaela, Ftodiev Andreea Iuliana, Banciu Roberta Maria, Ruginescu Robert Marian, Purcarea Cristina
7	RO A100376/14.07.2023, Metodă de determinare selectivă a tiramului bazată pe cuplarea între o reacție de inhibiție enzimatică și spectroscopie Raman amplificată de suprafață , inventatori: Vasilescu Alina Mihaela, Banciu Roberta Maria, Necula-Petrareanu Georgiana, Ftodiev Andreea, Purcarea Cristina
8	RO A/00504/14.09.2023, Metodă de obținere a unor straturi catalitice din cerneluri pe bază de aldehid dehidrogenază din <i>Flavobacterium</i> PL002 pentru aplicații biosenzoristice, inventatori: Vasilescu Alina Mihaela, Banciu Roberta Maria, Necula-Petrareanu Georgiana, Ftodiev Andreea Iuliana, Purcarea Cristina, Dinca Valentina
9	RO A/00149 /29.03/2024 Metodă de control al activității enzimactice a lizozimei prin intermediul unui aptamer în câmp electric, inventatori: Vasilescu Alina Mihaela, Banciu Roberta Maria, Ftodiev Andreea Iuliana
10	RO A/00598/2024, Substrat SERS microstructurat fabricat pe bază de biofilm bacterian metalizat cu aur, inventatori: M. Potara, A. Vasilescu, I. Turcu, S. Astilean, A. Colnita, S. D. Marconi, S. David, A.M. Craciun, M. Suciu

4. Participari la conferinte (2020-2025)

5.

Nr crt.	Conferinta	Autori
1	247 th ECS Meeting, 18-22May, 2025, Montreal, Canada	Vasilescu A, Banciu R. M., Potara M., Bonciu A., Dinca V., Bala C., Astilean S., Addressing Non-Specific Adsorption in Aptamer-Based Surface Enhanced Raman Scattering Biosensors
2	International Conference “New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences”, 20 - 22 September 2024, Braşov, Romania	Vasilescu A, Banciu RM, David S., Marconi D., Colniță A, Turcu I, Potara M, Craciun A-M, Astilean S, Aptamer-modified plasmonic nanoplatforms as biosensor for SERS detection of human matrix metalloproteinase 9-

2	International Conference "New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences", 20 - 22 September 2024, Braşov, Romania	Banciu RM, Bala C., Vasilescu A, Effect of the electrical field on the specific binding between an aptamer and its target analyte: case study of a lysozyme aptasensor
4	International Conference "New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences", 20 - 22 September 2024, Braşov, Romania	Ftodiev A, Necula Petrareanu G, Purcarea C, Bala C, Vasilescu A., Aptamers labelling with new enzyme for bioassay and biosensors: preliminary results
5	Summer School Erasmus Plus "Bioanalytical (Tele)Monitoring for Life Sciences – Medicine, Food Control, Environmental Monitoring", University Transilvania of Braşov, 13 - 21 September 2024	Vasilescu A, Enhancing the sensitivity of aptasensors: challenges and opportunities
6	European Horticulture Congres, 12-16 May 2024, Bucharest, Romania	Vasilescu A, Brinduse E, Banciu RM, Ion M, Gáspár S, Potara M, Ruginescu R, Purcarea C, Development of new bioanalytical tools for assessing the grapes' infection with <i>Botrytis cinerea</i>
7	Annual Microbiology Conference "G. Zarnea", 25 September 2024, Bucharest	Vasilescu A, Banciu R, Ftodiev A, Necula Petreăreanu G, Purcărea C – Selectivitatea senzorilor Raman: provocări şi soluţii
8	International Symposium "Priorities of Chemistry for a sustainable development", 20th edition, 16- 18 October 2024, Bucharest	Ftodiev A, Vasilescu A, David S., Bala C, Necula Petrareanu G, Purcarea C, Detection of analytes (from proteins to bacteria) using aptamers
9	244th ECS Meeting, 8 - 13 Oct 2023, Göteborg, Sweden	Vasilescu A, Banciu RM, Ftodiev A, Necula Petrareanu G, Bala C, Purcarea C., F-ALDH, A New Catalyst For Enzyme And Aptamer-Based Electrochemical Biosensors
10	NanoBioMed2023 Conference, 21 - 23 November 2023, Barcelona, Spain	Banciu RM, Gáspár S, Ruginescu R, Purcarea C, Vasilescu A, Inhibition of the photosynthesis of <i>Coccomyxa subellipsoidea</i> TL4 algae by diuron– comparison with the cyanobacteria <i>Synechococcus elongatus</i> PCC 7942 and analytical exploitation
11	NanoBioMed2023 Conference, 21 - 23 November 2023, Barcelona, Spain	Ftodiev A, Ruginescu R, Banciu RM, Purcarea C, Vasilescu A, „Sensitivity of the ice cave microalgae <i>Coccomyxa 17 subellipsoidea</i> TL4 to marine water pollutants: potential for biosensors.
12	International Symposium "Priorities of Chemistry for a sustainable development", editia a 19-a, 11 - 13 October 2023, Bucharest	Ftodiev A, Necula Petrareanu G, Purcarea C, Bala C, Vasilescu A, A Cold Active Aldehyde Dehydrogenase from Flavobacterium PL002 as a New Enzymatic Label for DNA Aptamers: a Preliminary Study ,
13	The international workshop "Applications of microbial strains and extremozymes", 7-11 February 2023, Grahamstown, South Africa	Purcarea C, Paun V.I, Sanda C, Vasilescu A., Environmental microbiomes and cold-active extremozymes.
14	The international workshop "Applications of microbial strains and extremozymes", 7-11 February 2023, Grahamstown, South Africa	Vasilescu A, Biosensors for practical applications
15	The international Summer school "Food safety and Healthy Living", 6 September 2023, Bucharest	Vasilescu A., Aptamer based detection of lysozyme
16	"G. Zarnea"Microbiology Conference. 28 September 2023, Bucharest	Vasilescu A, Banciu R, Ftodiev A, Gáspár S, Necula Petrareanu G, Paun VI, Ruginescu R, Purcarea C., Elemente de biorecunoaştere din microorganisme active la temperaturi scăzute: aplicaţii în biosenzori
17	"G. Zarnea"Microbiology Conference. 28 September 2023, Bucharest	Ruginescu R, Vasilescu A, Banciu R, Purcarea C., Aplicaţii ale membranelor tilacoide în dezvoltarea de biosenzori sensibili la erbicide
18	"Karst Science Day 2023" Symposium, 31 March 2023, Bucharest	Ruginescu R, Vasilescu A, Banciu R, Purcarea C., Cold-adapted phototrophic microorganisms from Scarisoara Ice Cave: Suitable models for developing electrochemical biosensors for herbicides

19	International workshop "Biosensing as a solution to current analytical problems", 12 September 2023, Bucharest	Ruginescu R, Vasilescu A, Banciu R, Purcărea C, Potential of Phototrophic Microorganisms from Scarisoara Ice Cave as Sensitive Components in Electrochemical Biosensors for Herbicides
20	International workshop "Biosensing as a solution to current analytical problems", 12 September 2023, Bucharest	Vasilescu A, Banciu R, Ftodiev A, Purcarea C, Necula-Petrareanu G, Fanjul Bolado P, Limson J, Fogel R, Chauhan R, The ENZ4IFACES project: enzyme-based coatings for sensors and beyond
21	International workshop "Biosensing as a solution to current analytical problems", 12 September 2023, Bucharest	Necula-Petrareanu G, Paun VI, Sanda C, Limson J, Vasilescu A, Purcarea C., Highly stable cold-active recombinant aldehyde dehydrogenase from Antarctic bacterium for biosensing applications
22	International workshop "Focus on Science - a workshop dedicated to highschool and university students", 12 September 2023 Bucharest	Banciu RM, Ruginescu R, Purcarea C, Bala C, Vasilescu A, Promising fast and on-site assay addressing water pollution using thylakoids from Coccoxyxa species
23	International workshop "Focus on Science - a workshop dedicated to highschool and university students", 12 September 2023 Bucharest	Ftodiev A, Bala C, Vasilescu A, Labeling DNA aptamers with aldehyde dehydrogenase from Flavobacterium PL002
24	11th International Workshop on Surface Modification for Chemical and Biochemical Sensing, 3 – 7 Noi 2023, Łochów, Poland	Banciu RM, Bala C, Puiu M, Vasilescu A, Addressing non-specific adsorption in aptasensors for protein aggregation studies
25	11th International Workshop on Surface Modification for Chemical and Biochemical Sensing, 3 – 7 Noi 2023, Łochów, Poland	Ftodiev A, Necula Petrareanu G, Purcarea C, Bala C, Vasilescu A, A Cold Active Aldehyde Dehydrogenase from Flavobacterium PL002 as a New Enzymatic Label for DNA Aptamers: a Preliminary Study
26	„The International School on Innovations in Homogeneous and Supported Homogeneous Catalysis", 25 - 28 April 2023, Bucharest	Ftodiev A, Necula Petrareanu G, Purcarea C, Bala C, Vasilescu A, „Preliminary study of aldehyde dehydrogenase from Flavobacterium PL002 as an enzymatic label for a DNA aptamer"
27	„The International School on Innovations in Homogeneous and Supported Homogeneous Catalysis", 25 - 28 April 2023, Bucharest	Banciu RM, Necula Petrareanu G, Purcarea C, Bala C, Vasilescu A., Enzymatic inks based on aldehyde dehydrogenase from the Antarctic Flavobacterium PL002 immobilized on micro and nanoparticles for the electrochemical detection of aldehydes
28	International Conference "Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences", 6th edition, 8 – 10 June 2022, Braşov	Vasilescu A, Banciu R, Paun V, Dinca V, Bonciu A, Epure P, Purcarea C. Enzymatic inks based on aldehyde dehydrogenases for the electrochemical detection of aldehydes in a wide temperature range
29	International Symposium "Biodynamics: a transdisciplinary approach", 19 - 21 May 2022, Bucharest	Vasilescu A, Brinduse E, Gáspár S., Banciu RM, Potara M, Ruginescu R, Purcarea C, Towards the assessment of <i>Botrytis cinerea</i> spores by coupled electrochemical and Raman spectroscopy assays
30	International conference "New Trends on Sensing-Monitoring Telediagnosis for Life Sciences", 6th edition, 8 - 10 September 2022, Braşov	Vasilescu A, Brinduse E, Gáspár S, Potara M, Lulea AC, Banciu RM, Ruginescu R, Purcarea C, „Screening grapes for infection by <i>Botrytis cinerea</i> : detection of spores versus the evaluation of laccase activity
31	International Symposium "Priorities of Chemistry for a sustainable development", 26 - 28 October 2022, Bucharest	Banciu RM, Bala C, Puiu M, Vasilescu A, Addressing non-specific adsorption in protein biosensors.
32	Annual Scientific Communications Meeting ICDVV, 24 February 2022, Valea Călugărească, Romania	Vasilescu A, The WINBIOTOOL project
33	International Symposium "Enzyme biosensors: catalytic activity, inhibition and beyond", 25 October 2022, Bucharest	Banciu R, Necula Petrareanu G, Dinca V, Purcarea C, Vasilescu A, Development of stable enzymatic inks for sensing interfaces for aldehydes based on a cold-active aldehyde dehydrogenase

34	International Symposium "Enzyme biosensors: catalytic activity, inhibition and beyond", 25 October 2022, Bucharest	Vasilescu A, Paun VI, Banciu R, Porumb R, Purcarea C, Facile determination of free acetaldehyde in wines by an electrochemical enzyme-based assay
35	International Summer School "Food safety and healthy living", 5 - 8 Sept 2022, Braşov	Vasilescu A, Electrochemical sensors and biosensors for wines
36	"G. Zarnea" Microbiology Conference, 29 September 2022, Bucharest	Necula-Petrareanu G, Sanda C, Paun VI, Limson J, Vasilescu A, Purcarea C., Caracterizarea stabilităţii şi activităţii enzimice a aldehyd dehidrogenazei F-ALDH din <i>Flavobacterium PL002</i>
37	"G. Zarnea" Microbiology Conference, 29 September 2022, Bucharest	Paun VI, Banciu R, Vasilescu A, Ion S, Sandulescu M, Purcarea C, Enzyme din bacterii psihrofile cu potenţial aplicativ
38	International Conference Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences 6th edition, 8 – 10 June 2022, Braşov	Banciu R, Vasilescu A, Paun VI, Fanjul-Bolado P, Purcarea C, Lulea AC, Electrochemical assay of acetaldehyde in wines based on novel a cold-active aldehyde dehydrogenase: comparison of mediated versus non mediated detection-
39	International Conference Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences 6th edition, 8 – 10 June 2022, Braşov	Lulea AC, Ruginescu R, Banciu RM, Brinduse E, Epure P, Purcarea C, Vasilescu A, Fast electrochemical measurement of laccase activity for monitoring grapes' infection with <i>Botrytis cinerea</i>
40	International Symposium "Priorities of Chemistry for a sustainable development", ediţia a XVIII-a, 26 - 28 October 2022, Bucharest	Bucur B, Vasilescu A, Purcarea C, Selectivity improvement of the inhibition-based biosensors. Application to aldehyde dehydrogenase-based detection of thiram
41	International Symposium Biodynamics: A Transdisciplinary Approach, 19 - 21 Mai 2022, Bucureşti	Banciu RM, Vasilescu A, Gáspár S., Ruginescu R., Purcarea C., Thylakoids from cyanobacterium <i>Synechococcus elongatus</i> PCC 7942
42	International Conference New Trends on Sensing-Monitoring Telediagnosis for Life Sciences, 6th edition, 8 – 10 June 2022, Braşov	Banciu R., Vasilescu A., Polonschii C., Strategies to address the non-specific adsorption in electrochemical aptasensors for clinically relevant proteins
43	International Conference New Trends on Sensing-Monitoring Telediagnosis for Life Sciences, 6th edition, 8 – 10 June 2022, Braşov	Vasilescu A, Paun VI, Banciu RM, David S, Necula-Petrareanu G, Purcarea C, Epure P Facile specific detection of acetaldehyde in air samples using electrochemical enzyme biosensors
44	International Conference New Trends on Sensing-Monitoring Telediagnosis for Life Sciences, 6th edition, 8 – 10 June 2022, Braşov	Ruginescu R., Vasilescu A., Banciu R.M., Gáspár S., Purcarea C. From whole cyanobacterial cells of <i>Synechococcus elongatus</i> PCC 7942 to PSII: the effect of diuron on photosynthesis
45	13th International Congress on Extremophiles, 18 – 22 Sept 2022, Loutraki, Greece	Ruginescu R, Iancu L, Vasilescu A, Purcarea C. Diversity and hydrolytic potential of marine bacteria from the Black Sea
46	International workshop "First steps for young scientists in the field of Life Sciences - a partnership between high schools, universities, research institutes", 8 September 2022, Braşov	Perpelea V.A., Gheonea A., Vasilescu D., Banciu R.M, Gáspár S., Vasilescu A, PSII and whole bacteria cells of <i>Synechococcus elongatus</i> PCC 7942: AFM studies and the effect of diuron on photosynthesis
47	Webinar, organised by the journal <i>Molecules</i> , MDPI, 10 December 2021	Vasilescu A, Overcoming the Selectivity Challenges in the Application of Electrochemical Enzyme Biosensors
48	International Conference „Advances in Food Chemistry”, 15 - 17 April 2021, Online	Vasilescu, A, Gáspár S, Titoiu AM, Porumb R, Brinduse E, Screen printed electrochemical sensors for monitoring laccase and lysozyme during wine production
49	International Conference "Advances in Food Chemistry", 15 - 17 April 2021, Online	Banciu, R, Numan N, Porumb R, Vasilescu A, Optimization of an enzyme biosensor for the detection of acetaldehyde in wines

5. Proiecte (coordonate ca Director de proiect sau Responsabil de proiect)

No	Detalii	Codul proiectului, contract, perioada	Calitatea
1	Aptasenzori pentru proteine modulate electric: sensibilitate, selectivitate si controlul activitatii enzimatic, E-MAP	PN-III-P4-ID-PCE-2020-2297, Contract: PCE 84 /09/02/2021 2021-2024	Director de proiect
2	Dezvoltarea unor aptasenzori SERS de inalta sensibilitate si selectivitate pentru diagnostic medical -NanoAptaDia	PN-III-P2-2.1-PED-2021-1998, 2022-2024	Responsabil Partener
3	Biosenzor portabil cuplat cu drona de prelevare pentru determinarea in situ a toxicitatii apei marine - MobilTox	ERANET-MARTERA-MOBILTOX-1, Contract: 223/04.01.2021, 2021-2023	Responsabil Partener
4	Straturi enzimatic inovative pentru interfete electrochimice - ENZ4IFACES	ERANET-M-ENZ4IFACES, Contract 166/ 01/05/2020 2020-2023	Director de proiect
5	Dispozitiv portabil bazat pe biosenzori pentru evaluarea riscului de infectare a strugurilor cu <i>Botrytis cinerea</i> in vie - WINBIOTOOL	ERANET-MANUNET-WINBIOTOOL Contract 173/01.06.2020 , 2020-2022	Responsabil Partener
5	Platforma selectiva bazata pe enzime extremofile pentru detectia aldehydelor in aer intr-un domeniu larg de temperaturi - ALDSENS	PN-III-P2-2.1-PED-2019-2746, Contract: 266PED/03/08/2020, 2020-2022	Director de proiect
6	Suprafate pentru biosenzori performanti bazate pe grafena obtinute prin metode noi de functionalizare - BIOGRAPHIT	Partenariat Hubert Curien Brâncuși, PN-III-P3-3.1-PM-RO-FR-2019-0108, 2019-2020,	Director de proiect
7	Sistem nou automatizat bazat pe biosenzori pentru monitorizarea procesului de vinificare si evaluarea riscului alergenice de-a lungul lantului tehnologic de productie a vinurilor - SENS4WINE	ERANET-MANUNET II-SENS4WINE Contract 32/14.06.2017,, 2017-2019	Director de proiect
8	Aldehid-dehidrogenază nouă dintr-o bacterie antarctică folosită ca si catalizator foarte eficient pentru biotehnologii si biosenzori la temperaturi scăzute (COLDSENSOR)	PN-III-P2-2.1-PED-2016-0116, 2017-2018	Responsabil Partener
9	Exploatarea potentialului antioxidant al strugurilor negri pentru producerea de vinuri de calitate inalta autentificata , ANTIOXWIN	PN-II-PT-PCCA-2011-3.1-1809contract 101/2012, 2012-2016	Director de proiect
10	Marie Curie International Reintegration Grant, Agregarea proteinelor-oevaluare cantitativa - PROARGUS	Contract No. PIRG08-GA-2010-277126, 2011-2015,	Beneficiarul Grant ului
11	Senzori bazari pe aptameri pentru detectia alergenilor	Contract No. 703/2013, Module III Capacities Bilateral project Romania-France, PHC-Brancusi Ctr. 703/2013, 2013-2014	Director de proiect
12	Urmărirea proteinelor la procesarea alimentelor cu ajutorul biosenzorilor	PN-II-RU-TE-2011-3-0302, Contract 06/5.10.2012, 2012-2014	Director de proiect

Data:

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Semnatura

Alina Mihaela Vasilescu

