

Universitatea Transilvania din Braşov
Facultatea de Medicină
Departamentul DFPC

Poz. Postului: 10
Disciplinele postului: Fizica I; Biofizica;
Translatarea cercetării științifice în domeniul MTC;
Metode și tehnici de analiză instrumentală I

FIȘA DE VERIFICARE A ÎNDEPLINIRII STANDARDELOR UNIVERSITĂȚII

Postul: Profesor Universitar, poziția 10,
publicat în Monitorul Oficial al României¹ nr. 1185 din data de 28.11.2024

Candidat: Monica Florescu

Data nașterii: 27.07.1970

Funcția actuală: Conferențiar Universitar

Instituția: Universitatea *Transilvania* din Braşov

1. Studii universitare (licență și masterat)

Nr. Crt.	Instituția de învățământ superior și facultatea	Domeniul	Perioada	Titlul acordat
1	Universitatea din București, Facultatea de Fizică	Fizică	1988-1993	Licențiat în fizică

2. Studii de doctorat

Nr. Crt.	Instituția organizatoare de doctorat	Domeniul	Perioada	Titlul acordat
1	Universitatea din București, Facultatea de Fizică	Fizică	2000-2007	Doctor în fizică
2	Universitatea Transilvania din Braşov, Facultatea de Medicină	Medicină	2011-2019	Doctor în medicină

3. Studii și burse postdoctorale (stagii de cel puțin 6 luni)

Nr. Crt.	Instituția	Domeniul/ Specializarea	Perioada	Titlul de bursă
1	Universitatea Wisconsin-Milwaukee, USA	Fizică/ Biofizică	2007-2008	postdoctoral
2	Universitatea Transilvania din Braşov	Medicină	2024	Abilitare

4. Standarde minimale ale universității și CNATDCU (comisia Medicină)

Post didactic	Realizări conform standardelor proprii ale universității
Profesor Universitar	(i) Nr. Articole ISI Autor Principal: 31

¹ Numărul documentului se completează numai în cazul posturilor pe perioadă nedeterminată.


	(ii) Nr. Articole ISI Coautor: 17
	(iii) Index Hirsch: 18
	(iv) (ISI) Factor cumulat de impact autor principal (FCIAP): 81.085


Candidat
Conf. Dr. Dr. Monica Florescu




Condiții minimale CNATDCU			
Nr. Crt.	Categoria		
	Domeniul de activitate	Condiții Profesor de îndeplinit	Condiții Profesor realizate
1	Nr. Articole ISI Autor Principal	10	31
2	Nr. Articole ISI Coautor	5	17
3	Index Hirsch	6	18
4	FCIAP	10	81.085

Nr. Crt.	Articole în reviste cotate ISI Web of Science - Autor Principal	Factor de impact
1	M. Florescu and A. Katerkamp, <i>Optimisation of a polymer membrane used in optical oxygen sensing</i> , Sensors and Actuators B 97 (2004) 39–44, DOI: 10.1016/S0925-4005(03)00603-8	2.083
2	M. Florescu and C.M.A. Brett, <i>Development and characterization of cobalt hexacyanoferrate modified carbon electrodes for electrochemical biosensors</i> , Analytical Letters Vol. 37, No. 5, pp. 871–886, 2004, DOI: 10.1081/AL-120030284	1.165
3	M. Florescu and C.M.A. Brett, <i>Development and evaluation of electrochemical enzyme biosensors based on carbon film electrodes</i> , Talanta 65 (2005) 306–312, doi: 10.1016/j.talanta.2004.07.003	2.391
4	M. Florescu , M. Barsan, R. Pauliukaite, C. M.A. Brett, <i>Development and application of oxysilane sol–gel electrochemical glucose biosensors based on cobalt hexacyanoferrate modified carbon film electrodes</i> , Electroanalysis 19, 2007, No. 2-3, 220 – 226, DOI: 10.1002/elan.200603714	2.949


5	M. Florescu and C.M.A. Brett, <i>Evaluation of cobalt hexacyanoferrate modified carbon film electrodes for electrochemical glucose biosensors</i> , Revue Roumaine de Chimie , 2007, 52(10), 969–974. WOS:000257405600007	0.262
6	M. Florescu and C.M.A. Brett, <i>Nanostructured biosensors development for environmental measurements</i> , Journal of Optoelectronics and Advanced Materials Vol. 10, No. 3, March 2008, 713 - 716. WOS:000254588800050	0.577
7	M. Florescu , M. Badea, Untitled, Editorial Material, <i>Analytical Letters</i> , 2011, 44(8), 2841-2842. WOS:000298081200001	1.150
8	M. Florescu* , <i>Third International Conference: Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2014) June 13-15, 2014, Brasov, Romania</i> , Analytical Letters , VOL. 49,(3), 2016, 331-334. DOI: 10.1080/00032719.2015.1070167	1.150
9	M. Florescu , W. Hu, <i>Evaluation of Si nanowire as biosensing device</i> , Journal of optoelectronics and advanced materials , Vol. 17, No. 7-8, July – August 2015, p. 1092 - 1098, ISSN: 1454 – 4164, eISSN: 1841-7132. WOS:000359967600030	0.383
		
10	M. David, M. Florescu* , M. M. Barsan, C. M.A. Brett, Label-free evaluation of carbon nanoparticles in Layer-by-Layer self-assembled enzyme-based biosensors, <i>Procedia Technology</i> 27 (2017) 304 – 305; DOI: 10.1016/j.protcy.2017.04.125	0.000
11	C. Rădulescu, C. Stih, M. Ilie, D. Lazurcă, R. Gruia, O. T. Olaru, O. Bute, I. D. Dulamă, R. Știrbescu, S. Teodorescu, M. Florescu* , <i>Characterization of Phenolics in Lavandula angustifolia</i> , Analytical Letters , VOL. 50,(17), 2017, 2839–2850. http://dx.doi.org/10.1080/00032719.2016.1264409	1.150
12	M. Florescu* , <i>4th International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2016: June 29-July 1, 2016, Brasov - Romania</i> (http://icanmbes.unitbv.ro), Analytical Letters , VOL. 50 (17), 2017, 2661-2664. https://doi.org/10.1080/00032719.2017.1354869	1.206
13	M. Florescu* , M. David, <i>Tyrosinase-based biosensor for selective dopamine detection</i> , 2017, Sensors Journal , 2017, 17, 1314; doi:10.3390/s17061314.	2.677
14	M. Florescu* , C. Stih, C. Rădulescu, I. D. Dulamă, O. Bute, R. Știrbescu, S. Teodorescu, A. Serban, <i>Mineral composition of lavandula angustifolia flowers and hippophae rhamnoides fruits extracts</i> , Journal of Science and Arts , 4(41), 2017, 789-794. WOS:000418405300020	0.000
15	M. David, M. M. Barsan, C. M.A. Brett, and M. Florescu* , <i>Improved Glucose Label-Free Biosensor with Layer-by-Layer Architecture and Conducting Polymer poly(3,4-ethylenedioxythiophene)</i> , 2018, Sensors and Actuators B	6.393

	Chem., 255, 2018, 3227-3234. https://doi.org/10.1016/j.snb.2017.09.149	
16	M. David, M. Badea, M. Florescu* , <i>Development and evaluation of sol-gel-based biosensors for cadmium ions detection</i> , Environmental Engineering and Management Journal , 17(2), 2018. WOS:000427084800008	1.186
17	C. G. Chilom, M. Bacalum, M. M. Stanescu, M. Florescu* , <i>Insight into the interaction of human serum albumin with folic acid: A biophysical study</i> , Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy , 2018, 204, 648–656. DOI: 10.1016/j.saa.2018.06.093	2.931
18	M. David, A. Serban, C. V. Popa, M. Florescu* , <i>A Nanoparticle-Based Label-Free Sensor for Screening the Relative Antioxidant Capacity of Hydrosoluble Plant Extracts</i> , Sensors 2019, 19(3), Article Number: 590. DOI: 10.3390/s19030590	3.031
19	M. David, A. Serban, C. Radulescu, A. F. Danet, M. Florescu* , <i>Bioelectrochemical evaluation of plant extracts and gold nanozyme-based sensors for total antioxidant capacity determination</i> , Bioelectrochemistry , 2019, 129, 124-134. DOI: 10.1016/j.bioelechem.2019.05.011	4.474
20	M. Florescu , L. Rogozea, <i>Comment from the Editors on the Special Issue: Advanced Analytical Methods in Clinical Diagnosis and Therapy</i> , Journal of Clinical Medicine , 2019, 8(11), DOI: 10.3390/jcm8111936	4.242
21	I. Milosan, M. Florescu* et. al., <i>Electrochemical Evaluation of Heat-Treated AISI 316 Stainless Steel in Solar Furnaces to be used as possible implant material</i> , Materials , 2020, 13, 581; DOI: 10.3390/ma13030581.	2.972
22	C. G. Chilom, M. David, M. Florescu* , <i>Monitoring biomolecular interaction between folic acid and bovine serum albumin</i> , Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy , 2020, 230, 118074. DOI: 10.1016/j.saa.2020.118074.	2.931
		
23	M. David, A. C. Chebac, M.G. Chirita, M.J. Carezim, C. Santos, M. Florescu* , <i>An impedimetric sensor for levothyroxine detection towards point of care applications</i> , IEEE 2021 International Workshop on Impedance Spectroscopy (IWIS) , 2021, 99-103, DOI: 10.1109/IWIS54661.2021.9711839.	0.000
24	M. David, I. Budziak-Wieczorek, D. Karcz, M. Florescu* , A. Matwijczuk, <i>Insight into dual fluorescence effects induced by molecular aggregation occurring in membrane model systems containing 1,3,4-thiadiazole derivatives</i> , European Biophysics Journal with Biophysics Letters , 2021, 50(8), 1083-1101. DOI: 10.1007/s00249-021-01569-7	1.733

25	N. Sandu, C. G. Chilom, M. Florescu* , <i>Molecular insights into binding mechanism of rutin to bovine serum albumin–Levothyroxine complex: Spectroscopic and molecular docking approaches</i> , Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 2022, 264, 120261. DOI: 10.1016/j.saa.2021.120261	4.098
26	M. David, A. Serban, T.A. Enache, M. Florescu* , <i>Electrochemical quantification of levothyroxine at disposable screen-printed electrodes</i> , Journal of Electroanalytical Chemistry , 2022, 911, 116240. DOI: 10.1016/j.jelechem.2022.116240	4.464
27	N. Cazacu, C. G. Chilom, M. David, M. Florescu* , <i>Conformational changes in the BSA-LT4 complex induced by the presence of vitamins: spectroscopic approach and molecular docking</i> , International Journal of Molecular Sciences , 2022, 23, 4215. DOI: 10.3390/ijms23084215.	6.208
28	N. Sandu, C. G. Chilom, M. David, M. Florescu* , <i>Evaluation of the interaction of levothyroxine with bovine serum albumin using spectroscopic and molecular docking studies</i> , Journal of Biomolecular Structure & Dynamics , 2022, 40(3), 1139–1151. DOI: 10.1080/07391102.2020.1822919	5.235
29	M. David, T.A. Enache, L. Barbu-Tudoran, C. Bala, M. Florescu* , <i>Biologically Synthesized Gold Nanoparticles with Enhanced Antioxidant and Catalytic Properties</i> , Pharmaceuticals , 2024, 17(9), 1105; DOI: 10.3390/ph17091105	4.300
30	S. Bakhtiari doost, C. Musuroi, M. Volmer, M. Florescu* , <i>Optoelectronic Microfluidic Device for Point-of-Care Blood Plasma Viscosity Measurement, Lab on a Chip</i> , 2024, 24, 3305. DOI: 10.1039/d4lc00211c.	6.100
31	M. David, M. Florescu* , <i>Ultrasensitive electrochemical (bio)sensors for therapeutic drug monitoring</i> , Current Opinion in Electrochemistry , 2024, 46:101501; DOI: 10.1016/j.coelec.2024.101501.	8.500

Nr. Crt.	Articole în reviste cotate ISI Web of Science - Coautor	Factor de impact
1	S. De Luca, M. Florescu , M.E. Ghica, A. Lupu, G. Palleschi, C.M.A. Brett and D. Compagnone, <i>Carbon film electrodes for oxidase-based enzyme sensors in food analysis</i> , Talanta 68 (2005) 171–178, DOI: 10.1016/j.talanta.2005.06.017	2.391
2	R. Pauliukaite, M. Florescu , C. M. A. Brett, <i>Characterization of cobalt- and copper hexacyanoferrate-modified carbon film electrodes for redox-mediated biosensors</i> , J Solid State Electrochem (2005) 9: 354–362, DOI: 10.1007/s10008-004-0632-8	1.158
		

3	F. N. Crespilho, M. E. Ghica, M. Florescu , F. C. Nart, O. N. Oliveira, Jr. C. M.A. Brett, <i>A strategy for enzyme immobilization on layer-by-layer dendrimer-gold nanoparticle electrocatalytic membrane incorporating redox mediator</i> , Electrochemistry Communications 8 (2006) 1665–1670, DOI: 10.1016/j.elecom.2006.07.032	3.484
4	M. M. Barsan, E. M. Pinto, M. Florescu , and C. M.A. Brett, <i>Development and characterization of a new conducting carbon composite electrode</i> , Analytica Chimica Acta 635 (2009) 71–78, doi: 10.1016/j.aca.2009.01.012	3.757
5	M.R. Stoneman, M. Florescu , M.P. Fox, W.D. Gregory, A. Hudetz, V. Raicu, <i>Non-Debye dielectric behaviour and near-field interactions in biological tissues: when structure meets function</i> , Journal of Non-Crystalline Solids 356 (2010) 772–776, doi: 10.1016/j.jnoncrysol.2009.06.056	1.492
6	L. Floroian, F. Sima, M. Florescu , M. Badea, A.C. Popescu, N. Serban, I.N. Mihailescu, <i>Double layered nanostructured composite coatings with bioactive silicate glass and polymethylmetacrylate for biomimetic implant application</i> , Journal of Electroanalytical Chemistry 648 (2010) 111–118, doi: 10.1016/j.jelechem.2010.08.005	2.733
7	L. Floroian, M. Florescu , F. Sima, G. Popescu-Pelin, C. Ristoscu, I.N. Mihailescu, <i>Synthesis of biomaterial thin films by pulsed laser technologies: Electrochemical evaluation of bioactive glass-based nanocomposite coatings for biomedical applications</i> , Materials Science and Engineering: C , Volume 32, Issue 5, 1 July 2012, Pages 1152–1157. Imprint: ELSEVIER, ISSN: 0928-4931. DOI 10.1016/j.msec.2012.03.001, DOI 10.1016/j.msec.2012.03.001	2.404
8	Barsan, M.M., David, M., Florescu, M. , ugulea, L., Brett, C.M.A. <i>A new self-assembled layer-by-layer glucose biosensor based on chitosan biopolymer entrapped enzyme with nitrogen doped graphene</i> , Bioelectrochemistry , 99, pp. 46-52, 2014, Publisher: Elsevier, ISSN: 1567-5394. DOI: 10.1016/j.bioelechem.2014.06.004	4.172
9	L. Floroian, M. Florescu , D. Munteanu, M. Badea, G. Popescu-Pelin, C. Ristoscu, F. Sima, M.C. Chifiriuc, I.N. Mihailescu, <i>A new concept of stainless steel medical implant based upon composite nanostructures coating</i> , Digest Journal of Nanomaterials and Biostructures , Vol. 9, No. 4, October - December 2014, p. 1555 - 1568. WOS:000346138800029	0.945
10	M. David, M. M. Barsan, M. Florescu , and C. M.A. Brett, <i>Acidic and Basic Functionalized Carbon Nanomaterials as Electrical Bridges in Enzyme Loaded Chitosan/Poly(styrene sulfonate) Self-Assembled Layer-by-Layer Glucose Biosensors</i> , Electroanalysis , 2015, 27, 1 – 12, Online ISSN: 1521-4109, DOI: 10.1002/elan.201500171	2.471

11	F. A. Martin, D. Marconi, S. Neamtu, T. Radu, M. Florescu , R. Turcu, C. Lar, N. D. Hădăde, I. Grosuc, I. Turcu, "Click" access to multilayer functionalized Au surface: A terpyridine patterning example, Materials Science and Engineering C , 75 (2017) 1343–1350. ISSN: 0928-4931, DOI: 10.1016/j.msec.2017.03.033.	5.080
		
12	C. Radulescu, R. L. Olteanu, C. Stih, M. Florescu , et al., <i>Chemometric Assessment of Spectroscopic Techniques and Antioxidant Activity for Hippophae rhamnoides L. Extracts Obtained by Different Isolation Method</i> , Analytical Letters , 2019, 52(15), 2393-2415. DOI: 10.1080/00032719.2019.1590379	1.248
13	C. Gabor, D. Cristea, I.L. Velicu, M. Florescu , et al., <i>Ti-Zr-Si-Nb Nanocrystalline Alloys and Metallic Glasses: Assessment on the Structure, Thermal Stability, Corrosion and Mechanical Properties</i> , Materials 12(9), 2019, Article Number: 1551. DOI: 10.3390/ma12091551	2.972
14	C. Rădulescu, R.L. Olteanu, C. Stih, M. Florescu , R. Ştirbescu, S. Teodorescu, S.G. Stănescu, C.M. Nicolescu, M. Bumbac, <i>Chemometrics based-vibrational spectroscopy for Juglandis semen extracts investigation</i> , Journal of Chemometrics , 2020; e3234. DOI: 10.1002/cem.3234.	1.847
15	M. David, M. Florescu , C. Bala, <i>Biosensors for Antioxidants Detection: Trends and Perspectives</i> , Biosensors , 2020, 10, 112; DOI:10.3390/bios10090112	3.240
16	C. G. Chilom, A. E. Balan, T.A. Enache, D. Oprea, M. Enculescu, M. Florescu , M. David, Albumin-rutin nanoparticles: Design, characterization, and biophysical evaluation, <i>Coatings</i> , 2024, 14(2), 220; DOI: 10.3390/coatings14020220.	3.236
17	G. R. Ivanov, T. Venelinov, Y. G. Marinov, G. B. Hadjichristov, A. Terfort, M. David, M. Florescu, and S. Karakus, First Direct Gravimetric Detection of Perfluorooctane Sulfonic Acid (PFOS) Water Contaminants, Combination with Electrical Measurements on the Same Device-Proof of Concepts, <i>Chemosensors</i> 2024, 12(7), 116; DOI: 10.3390/chemosensors12070116.	3.700

30.12.2024

Conf. Dr. Dr. Monica Florescu

