Autorul tezei de abilitare: Conf. Dr. Dr. Monica Florescu
Titlul tezei de abilitare: Abordări inovatoare pentru noi metodologii de diagnostic și terapie
Domeniul: Medicină

FIȘA DE AUTOEVALUARE A ÎNDEPLINIRII STANDARDELOR MINIMALE ȘI OBLIGATORII PENTRU ACORDAREA ATESTATULUI DE ABILITARE

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 postoctorale (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

4. Standarde minimale ale universiățtii si CNATDCU (comisia Medicină)

Post didactic	Realizări conform standardelor proprii ale universității
Conferențiar Universitar	(i) Nr. Articole ISI Autor Principal: 27 (ii) Nr. Articole ISI Coautor: 15 (iii) Index Hirsch: 16 (iv) (ISI) Factor cumulat de impact autor principal (FCIAP): 58.875

Condiții minimale CNATDCU			
Nr. Crt.	**Categoria**		
	Domeniul de activitate	**Condiții Abilitare de îndeplinit**	**Condiții Abilitare realizate**
1	Nr. Articole ISI Autor Principal	10	27
2	Nr. Articole ISI Coautor	5	15
3	Index Hirsch	6	16
4	FCIAP	10	58.875

Nr. Crt.	**Articole în reviste cotate ISI Web of Science - Autor Principal**	**Factor de impact**
1	**M. Florescu** and A. Katerkamp, *Optimisation of a polymer membrane used in optical oxygen sensing*, **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, *Development and characterization of cobalt hexacyanoferrate modified carbon electrodes for electrochemical biosensors*, **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, *Development and evaluation of electrochemical enzyme biosensors based on carbon film electrode*s, **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, *Development and application of oxysilane sol–gel electrochemical glucose biosensors based on cobalt hexacyanoferrate modified carbon film electrodes,* **Electroanalysis** 19, 2007, No. 2-3, 220 – 226, DOI: 10.1002/elan.200603714	2.949
5	**M. Florescu** and C.M.A. Brett, *Evaluation of cobalt hexacyanoferrate modified carbon film electrodes for electrochemical glucose biosensors*, **Revue Roumaine de Chimie**, 2007, 52(10), 969–974**.** WOS:000257405600007	0.262
6	**M. Florescu** and C.M.A. Brett, *Nanostructurated biosensors development for environmental measurement*s, **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, Analytical Letters, 2011, 44(8), 2841-2842**.** WOS:000298081200001	1.150
8	**M. Florescu***, *Third International Conference: Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2014) June 13-15, 2014, Brasov, Romania*, **Analytical Letters,** VOL. 49,(3), 2016, 331-334. DOI: 10.1080/00032719.2015.1070167	1.150
9	**M. Florescu**, W. Hu, *Evaluation of Si nanowire as biosensing device*, **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

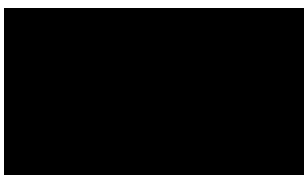
10	C. Rădulescu, C. Stihi, M. Ilie, D. Lazurcă, R. Gruia, O. T. Olaru, O. Bute, I. D. Dulamă, R Știrbescu, S. Teodorescu, **M. Florescu***, *Characterization of Phenolics in Lavandula angustifolia*, **Analytical Letters**, VOL. 50,(17), 2017, 2839–2850. http://dx.doi.org/10.1080/00032719.2016.1264409	1.150
11	**M. Florescu***, 4*th International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences, IC-ANMBES 2016: June 29-July 1, 2016, Brasov - Romania* (http://icanmbes.unitbv.ro), **Analytical Letters**, VOL. 50 (17), 2017, 2661-2664. https://doi.org/10.1080/00032719.2017.1354869	1.206
12	**M. Florescu***, M. David, *Tyrosinase-based biosensor for selective dopamine detection*, 2017, **Sensors** Journal, 2017, 17, 1314; doi:10.3390/s17061314.	2.677
13	**M. Florescu***, C. Stihi, C. Rădulescu, I. D. Dulamă, O. Bute, R Știrbescu, S. Teodorescu, A. Serban, *Mineral composition of lavandula angustifolia flowers and hippophae rhamnoides fruits extract*s, **Journal of Science and Arts**, 4(41), 2017, 789-794. WOS:000418405300020	0.000
14	M. David, M. M. Barsan, C. M.A. Brett, and **M. Florescu***, *Improved Glucose Label-Free Biosensor with Layer-by-Layer Architecture and Conducting Polymer poly(3,4-ethylenedioxythiophene*), 2018, **Sensors and Actuator**s **B Chem**., 255, 2018, 3227-3234. https://doi.org/10.1016/j.snb.2017.09.149	6.393
15	M. David, M. Badea, **M. Florescu***, *Development and evaluation of sol-gel-based biosensors for cadmium ions detection*, **Environmental Engineering and Management Journal**, 17(2), 2018. WOS:000427084800008	1.186
16	C. G. Chilom, M. Bacalum, M. M. Stanescu, **M. Florescu***, *Insight into the interaction of human serum albumin with folic acid: A biophysical study*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,** 2018, 204, 648–656. DOI: 10.1016/j.saa.2018.06.093	2.931
17	M. David, A. Serban, C. V. Popa, **M. Florescu*,** *A Nanoparticle-Based Label-Free Sensor for Screening the Relative Antioxidant Capacity of Hydrosoluble Plant Extracts*, **Sensors** 2019, 19(3), Article Number: 590. DOI: 10.3390/s19030590	3.031
18	M. David, A. Serban. C. Radulescu, A. F. Danet, **M. Florescu*,** *Bioelectrochemical evaluation of plant extracts and gold nanozyme-based sensors for total antioxidant capacity determination*, **Bioelectrochemistry**, 2019, 129, 124-134. DOI: 10.1016/j.bioelechem.2019.05.011	4.474
19	**M. Florescu**, L. Rogozea, *Comment from the Editors on the Special Issue: Advanced Analytical Methods in Clinical Diagnosis and Therapy*, **Journal of Clinical Medicine**, 2019, 8(11), DOI: 10.3390/jcm8111936	4.242
20	I. Milosan, **M. Florescu*** et. al., *Electrochemical Evaluation of Heat-Treated AISI 316 Stainless Steel in Solar Furnaces to be used as possible implant material*, **Materials**, 2020, 13, 581; DOI: 10.3390/ma13030581.	2.972
21	C. G. Chilom, M. David, **M. Florescu***, *Monitoring biomolecular interaction between folic acid and bovine serum albumin*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 2020, 230, 118074. DOI: 10.1016/j.saa.2020.118074.	2.931

[redacted]

22	M. David, A. C. Chebac, M.G. Chirita, M.J. Carezim, C. Santos, **M. Florescu*,** *An impedimetric sensor for levothyroxine detection towards point of care applications*, **IEEE 2021 International Workshop on Impedance Spectroscopy (IWIS)**, 2021, 99-103, DOI: 10.1109/IWIS54661.2021.9711839.	0.000
23	M. David, I. Budziak-Wieczorek, D. Karcz, **M. Florescu***, A. Matwijczuk, *Insight into dual fluorescence effects induced by molecular aggregation occurring in membrane model systems containing 1,3,4-thiadiazole derivatives*, **European Biophysics Journal with Biophysics Letters**, 2021, 50(8), 1083-1101. DOI: 10.1007/s00249-021-01569-7	1.733
24	N. Sandu, C. G. Chilom, **M. Florescu***, *Molecular insights into binding mechanism of rutin to bovine serum albumin–Levothyroxine complex: Spectroscopic and molecular docking approaches*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy** 2022, 264, 120261. DOI: 10.1016/j.saa.2021.120261	4.098
25	M. David, A. Serban, T.A. Enache, **M. Florescu***, *Electrochemical quantification of levothyroxine at disposable screen-printed electrodes*, **Journal of Electroanalytical Chemistry**, 2022, 911, 116240. DOI: 10.1016/j.jelechem.2022.116240	4.464
26	N. Cazacu, C. G. Chilom, M. David, **M. Florescu***, *Conformational changes in the BSA-LT4 complex induced by the presence of vitamins: spectroscopic approach and molecular docking*, **International Journal of Molecular Sciences**, 2022, 23, 4215. DOI: 10.3390/ijms23084215.	6.208
27	N. Sandu, C. G. Chilom, M. David, **M. Florescu***, *Evaluation of the interaction of levothyroxine with bovine serum albumin using spectroscopic and molecular docking studies*, **Journal of Biomolecular Structure & Dynamics**, 2022, 40(3), 1139-1151. DOI: 10.1080/07391102.2020.1822919	5.235

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, *Carbon film electrodes for oxidase-based enzyme sensors in food analysis*, **Talanta** 68 (2005) 171–178, DOI: 10.1016/j.talanta.2005.06.017	2.391
2	R. Pauliukaite, **M. Florescu**, C. M. A. Brett, *Characterization of cobalt- and copper hexacyanoferrate-modified carbon film electrodes for redox-mediated biosensor*s, **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, *A strategy for enzyme immobilization on layer-by-layer dendrimer–gold nanoparticle electrocatalytic membrane incorporating redox mediator*, **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, *Development and characterization of a new conducting carbon composite electrod*e, **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, *Non-Debye dielectric behaviour and near-field interactions in biological tissues: when structure meets functio*n, **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, *Double layered nanostructured composite coatings with bioactive silicate glass and polymethylmetacrylate for biomimetic implant application*, **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, *Synthesis of biomaterial thin films by pulsed laser technologies: Electrochemical evaluation of bioactive glass-based nanocomposite coatings for biomedical application*s**, 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**., Ţugulea, L., Brett, C.M.A. *A new self-assembled layer-by-layer glucose biosensor based on chitosan biopolymer entrapped enzyme with nitrogen doped graphene*, **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, *A new concept of stainless steel medical implant based upon composite nanostructures coating*, **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, *Acidic and Basic Functionalized Carbon Nanomaterials as Electrical Bridges in Enzyme Loaded Chitosan/Poly(st*yrene sulfonate) Self-Assembled Layer-by-Layer Glucose Biosensors, **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. Hădade, 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. Stihi, **M. Florescu**, et al., *Chemometric Assessment of Spectroscopic Techniques and Antioxidant Activity for Hippophae rhamnoides L. Extracts Obtained by Different Isolation Method*, **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., *Ti-Zr-Si-Nb Nanocrystalline Alloys and Metallic Glasses: Assessment on the Structure, Thermal Stability, Corrosion and Mechanical Properties*, **Materials** 12(9), 2019, Article Number: 1551. DOI: 10.3390/ma12091551	2.972



14	C. Rădulescu, R.L. Olteanu, C. Stihi, **M. Florescu**, R Știrbescu, S. Teodorescu, SG. Stanescu, CM. Nicolescu, M. Bumbac, *Chemometrics based-vibrational spectroscopy for Juglandis semen extracts investigation,* **Journal of Chemometrics**, 2020; e3234. DOI: 10.1002/cem.3234.	1.847
15	M. David, **M. Florescu**, C. Bala, *Biosensors for Antioxidants Detection: Trends and Perspectives*, **Biosensors**, 2020, 10, 112; DOI:10.3390/bios10090112	3.240

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