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**Fișa de îndeplinire a standardelor minimale stabilite de CNATDCU
pentru Abilitare, Comisia Chimie**

Dr. Dorina Casoni

Standarde*	Minimale (cumulative) CNATCDU	Îndeplinite de candidat	Îndeplinirea criteriilor CNATCDU (%)
a) $N_{\max}$ = primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate	50	50	
b) FIC = factor de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză	100	128.6	129%
c) FIC_D = factor de impact cumulat minimal din publicații din domeniile de cercetare declarate.	70	128.6	184%
d) FIC_{AP} = factor de impact cumulat minimal din publicații în calitate de autor principal (prim-autor și autor de corespondență).	50	50.8	102%
e) FIC_{AC} = factor de impact cumulat minimal din publicații în calitate de autor de corespondență	25	27.7	111%
f) h index	13	14	

* **Categorie Profesor / CSI / Abilitare** - în conformitate cu Anexa nr. 4 - COMISIA CHIMIE din Anexa la Ordinul ministrului Educației Naționale și Cercetării Științifice nr. 6.129/20.12.2016 privind aprobarea standardelor minimale necesare și obligatorii pentru conferirea titlurilor didactice din învățământul superior, publicat în Monitorul Oficial, Partea I, nr. 123 din 15 februarie 2017.

Lista celor $N_{\max} = 50$ lucrări selectate

Nr. Crt	Date articol	Prim autor (AP)	Autor corespondență (AC)	Factor impact (IF)
1	Scrob T., Covaci E., Hosu A., Tanaselia C., Casoni D. , Torok A.I., Frentiu T., Cimpoiu, C., Effect of in vitro simulated gastrointestinal digestion on some nutritional characteristics of several dried fruits, Food Chemistry 385 (2022) 132713. https://doi.org/10.1016/j.foodchem.2022.132713			9.8
2	Scrob T., Varodi S.M., Vintila G. A., Casoni D. , Cimpoiu C., Estimation of degradation kinetics of bioactive compounds in several lingonberry jams as affected by different sweeteners and storage conditions, Food Chemistry X 16 (2022) 100471 . https://doi.org/10.1016/j.fochx.2022.100471			8.2
3	Büker E., Kayabas Avsar A., Yildirim E., Casoni D. , Cobzac S.C.A., Cimpoiu, C., Unveiling the Potential of Three Endemic <i>Gypsophila</i> L. (Caryophyllaceae) Taxa as Promising Carbonic Anhydrase Inhibitors-Bio-Metabolic Profiles and In Vitro Evaluation of Enzyme Inhibition and Antioxidant Capacity, Antioxidants 14 (2025) 219. https://doi.org/10.3390/antiox14020219			6.6
4	Sima I. A., Casoni D. , Sârbu C., High sensitive and selective HPTLC method assisted by digital image processing for simultaneous determination of catecholamines and related drugs, Talanta 114 (2013) 117-123. http://dx.doi.org/10.1016/j.talanta.2013.03.058			6.1
5	Apan A., Casoni D. , Leonte D., Pop C., Iaru I., Mogos C., Zaharia V., Heterocycles 52: The Drug-Likeness Analysis of Anti-Inflammatory Thiazolo[3,2-b][1,2,4]triazole and Imidazo[2,1-b][1,3,4]thiadiazole Derivatives, Pharmaceuticals 17 (2024) 295. https://doi.org/10.3390/ph17030295			4.8
6	Büker E., Kiran F., Taliboglu S., Casoni D. , Ipekeli, A., In Vitro Evaluation of Olive Leaf (<i>Olea europaea</i> L.) Extract as a Functional Food Component in Combination with Chemotherapeutics in MCF-7 Breast Cancer Cells, Pharmaceuticals 18 (2025) 965. https://doi.org/10.3390/ph18070965		DA	4.8
7	Cobzac S.C.A., Olah N. K., Casoni D. , Application of HPTLC Multiwavelength Imaging and Color Scale Fingerprinting Approach Combined with Multivariate Chemometric Methods for Medicinal Plant Clustering According to Their Species, Molecules 26(23) (2021) 7225. https://doi.org/10.3390/molecules26237225		DA	4.6
8	Torok A. I., Levei E. A, Constantin S., Moldovan O. T., Senila M., Cadar O., Casoni D. , Angyus S. B, Tanaselia			4.6

	C., Covaci E., Frentiu T., Application of inductively coupled plasma spectrometric techniques and multivariate statistical analysis in the hydrogeochemical profiling of caves—Case study Cloșani, Romania, <i>Molecules</i> 26(22) (2021) 6788 https://doi.org/10.3390/molecules26226788			
9	Casoni D. , Simion I.M., Sârbu C., A comprehensive classification of edible oils according to their radical scavenging spectral profile evaluated by advanced chemometrics, <i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i> 213 (2019) 204-209. https://doi.org/10.1016/j.saa.2019.01.065	DA		4.6
10	Casoni D. , Sârbu, C., Comprehensive evaluation of antioxidant activity: A chemometric approach using principal component analysis, <i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i> 118 (2014) 343–348. http://dx.doi.org/10.1016/j.saa.2013.08.094	DA		4.6
11	Baumli J., Antal N., Casoni D. , Cimpoiu C., Use of Secondary Metabolites Profiling and Antioxidant Activity to Unravel the Differences between Two Species of Nettle, <i>Plants</i> 12 (2023) 3233. https://doi.org/10.3390/plants12183233			4.1
12	Silveșan L., Cimpoiu C., Casoni D. , A new HPTLC-image analysis approach for assessing interactions and antioxidant profiles of adrenergic drugs, <i>Journal of Chromatography A</i> 1772 (2026) 46674. https://doi.org/10.1016/j.chroma.2026.466774		DA	4.0
13	Sârbu C., Nascu-Briciu R. D., Casoni D. , Kot-Wasik A., Wasik A., Namiesnik J. Chromatographic lipophilicity determination using large volume injections of the solvents non-miscible with the mobile phase, <i>Journal of Chromatography A</i> 1266 (2012) 53-60. http://dx.doi.org/10.1016/j.chroma.2012.10.007			4.0
14	Büker E., Casoni D. , Cobzac S. C. A, Bilici İ., Kayır Ö., Doğan H., LC-MS/MS characterization, biological activity, and carbonic anhydrase inhibitory potential of five medicinal plant extracts from Romania and Türkiye, <i>Scientific Reports</i> 16 (2026) 7023; https://doi.org/10.1038/s41598-026-38419-5			3.9
15	Torok A.I., Casoni D. , Senila M., Tanaselia C., Covaci E., Hoaghia M.-A., Neag E., Cadar O., Levei, E. A., Arghir R., Moldovan O. T., Constantin S., Frentiu T., Spatial variability and hydro/geochemical profiling of the elemental composition of mineral deposits and drip water from caves using unsupervised chemometric modelling, <i>Chemical Geology</i> 646 (2024) 121903. https://doi.org/10.1016/j.chemgeo.2023.121903			3.6
16	Dragan O., Tomuta I., Casoni D. , Sarbu C., Campian R., Frentiu T., Influence of mixed additives on the			3.6

	physicochemical properties of a 5.25% sodium hypochlorite solution: an unsupervised multivariate statistical approach, <i>Journal of Endodontics</i> 44 (2), (2018) 280-285. https://doi.org/10.1016/j.joen.2017.08.006			
17	Simion I.M., Casoni D. , Sârbu C., Classification of Romanian medicinal plant extracts according to the therapeutic effects using thin layer chromatography and robust chemometrics, <i>Journal of Pharmaceutical and Biomedical Analysis</i> 163 (2019) 137-143. https://doi.org/10.1016/j.jpba.2018.09.047			3.1
18	Casoni D. , Cobzac S.C.A., Simion I.M., Feasibility of UV-Vis spectroscopy combined with pattern recognition techniques to authenticate the medicinal plant material from different geographical areas, <i>Journal of Analytical Science and Technology</i> 15 (2024) 17. https://doi.org/10.1186/s40543-024-00428-2		DA	2.8
19	Simion I. M., Casoni D. , Sârbu C., Multivariate color scale image analysis–thin layer chromatography for comprehensive evaluation of complex samples fingerprint, <i>Journal of Chromatography B</i> 1170 (2021) 122590. https://doi.org/10.1016/j.jchromb.2021.122590		DA	2.8
20	Coman F. M., Leonte D., Toma A., Casoni D. , Vlase L., Zaharia V., Heterocycles 51: Lipophilicity investigation of some thiazole chalcones and aurones by experimental and theoretical methods, <i>Journal of Separation Science</i> 43 (2020) 2784–2793. https://doi.org/10.1002/jssc.202000262			2.8
21	Casoni D. , Sima I. A., Sârbu, C., Thin-layer chromatography-an image processing method for the determination of acidic catecholamine metabolites, <i>Journal of Separation Science</i> 37 (2014) 2675–2681. https://doi.org/10.1002/jssc.201400550	DA		2.8
22	Casoni D. , Sârbu C., Comprehensive evaluation of lipophilicity of biogenic amines and related compounds using different chemically bonded phases and various descriptors, <i>Journal of Separation Science</i> 35 (2012) 915-921. https://doi.org/10.1002/jssc.201101032	DA		2.8
23	Casoni D. , Petre J., David V., Sârbu C, Prediction of pesticides chromatographic lipophilicity from the computational molecular descriptors, <i>Journal of Separation Science</i> 34 (2011) 247–254. https://doi.org/10.1002/jssc.201000636	DA		2.8
24	Avşar A. K., Bükler E., Yildirim E., Casoni D. , Cobzac S. C. A., Neuroprotective and Renoprotective Potential of a Hydroethanolic Extract From the Aerial Parts of <i>Mattiastrum paphlagonicum</i> Bornm.		DA	2.5

	(Boraginaceae), Chemistry & Biodiversity 23 (2026) e03371. https://doi.org/10.1002/cbdv.202503371			
25	Turdean, G.L., Casoni D. , Sârbu, C., Structure-electrochemical properties correlations of some phenol derivatives investigated by electrochemical techniques, Journal of the Iranian Chemical Society 13 (2016) 945-956. https://doi.org/10.1007/s13738-016-0810-5			2.3
26	Sârbu C., Casoni D. , Comprehensive evaluation of biogenic amines and related drugs antiradical activity using reactive 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical, Central European Journal of Chemistry (Open Chemistry) 11 (2013) 679-688. https://doi.org/10.2478/s11532-013-0210-y		DA	1.9
27	Toma A., Hapău D., Casoni D. , Zaharia V., Heterocycles 33: Lipophilicity of a new class of thioethers estimated by Reversed-PhaseThin-Layer Chromatography and different computational methods, Journal of Chromatographic Science 52 (2014) 1302-1307. https://doi.org/10.1093/chromsci/bmt210			1.3
28	Cobzac S.C.A., Casoni D. , Sârbu C., Lipophilicity of amine neurotransmitter precursors, metabolites and related drugs estimated on various TLC plates, Journal of Chromatographic Science 52 (2014) 1095–1103. https://doi.org/10.1093/chromsci/bmt155			1.3
29	Büker E., Casoni D. , Szasz M.C, Cobzac S.C.A., New method for rapid detection and simultaneous determination of prohibited adrenergic drugs in sports using thin layer chromatography and image processing, Journal of Liquid Chromatography & Related Technolog , 47 (2024) 1-8. https://doi.org/10.1080/10826076.2024.2386320		DA	1.2
30	Szasz M., Casoni D. , Cimpoiu C., Study on binding affinity profile, bioactivity, and lipophilicity of selected antipsychotic drugs, Journal of Liquid Chromatography & Related Technologies 48(6–10) (2025) 138–143. https://doi.org/10.1080/10826076.2023.2216780			1.2
31	Simion I.M., Casoni D. , Sârbu C., Characterization and classification of medicinal plants according to their antioxidant profile estimated by thin layer chromatography assisted by chemometric expertise, Journal of Liquid Chromatography & Related Technologies 41(6) (2018) 342-348. https://doi.org/10.1080/10826076.2018.1448692			1.2
32	Caiali E., Casoni D. , Petre I., David V., Sârbu C., Parabens lipophilicity determination with mobile phases containing low and medium hydrophobic			1.2

	alcohols, <i>Journal of Liquid Chromatography & Related Technologies</i> 37 (2014) 2287–2301. https://doi.org/10.1080/10826076.2013.830270			
33	Sima I. A., Casoni D. , Sârbu C., Simultaneous determination of carbidopa and levodopa using new TLC method and a free as detection reagent, <i>Journal of Liquid Chromatography & Related Technologies</i> 36 (2013) 2395-2404. https://doi.org/10.1080/10826076.2013.790765			1.2
34	Cobzac S.C.A, Casoni D. , Fazakas A. L., Sârbu C, Determination of food synthetic dyes in powder for jelly desserts using slit-scanning densitometry and image analysis methods, <i>Journal of Liquid Chromatography & Related Technologies</i> 35 (2012) 1423-1443. https://doi.org/10.1080/10826076.2012.676875			1.2
35	Casoni D. , Tuhutiu I.A., Sârbu C., Simultaneous determination of parabens in pharmaceutical preparations using High-Performance Thin-Layer Chromatography and image analysis, <i>Journal of Liquid Chromatography & Related Technologies</i> 34 (2011) 805-816. http://dx.doi.org/10.1080/10826076.2011.571141	DA		1.2
36	Casoni D. , Sârbu, C., Chromatographic approach for the evaluation of radical-scavenging activity using a new time-monitoring image analysis method, <i>Journal of Planar Chromatography - Modern TLC</i> 29 (2016) 299-305. https://doi.org/10.1556/1006.2016.29.4.8	DA		1.1
37	Cobzac S.C.A, Casoni D. , Pop D., Tartrazine determination from mustard sample by TLC-Photodensitometry and TLC-Digital processing of images, <i>Journal of Planar Chromatography - Modern TLC</i> 25 (2012) 542-547. https://doi.org/10.1556/JPC.25.2012.6.9			1.1
38	Casoni D. , Ponta M., Bibica M.N., Lazar I. V., Frentiu T., A free non-spectral interferences method based on inductively coupled plasma optical emission spectrometry for multielemental determination in multimineral/multivitamin preparations, <i>Revue Roumaine de Chimie</i> 65(6) (2020) 573-578. (DOI: 10.33224/rrch.2020.65.6.07) https://revroum.lew.ro/wp-content/uploads/2020/06/Art%2007.pdf	DA		0.6
39	Toma A., Leonte D., Zaharia V., Sârbu C., Casoni D. Heterocycles 37. Lipophilicity of new polyheterocyclic schiff bases and mannich bases estimated by thin-layer chromatography and computational methods, <i>Revue Roumaine de Chimie</i> , 60 (2015) 677-687. https://revroum.lew.ro/wp-content/uploads/2015/7/Art%2006.pdf		DA	0.6

40	Sima I. A., Casoni D. , Sârbu C., <i>Rapid screening method for the diagnosis of adrenal tumors, Revue Roumaine de Chimie 59 (2014) 965-970.</i> https://revroum.lew.ro/wp-content/uploads/2014/11/Art%2008.pdf			0.6
41	Casoni D. , Sârbu C., <i>Modeling of food preservatives chromatographic lipophilicity applying genetic algorithm and multiple linear regression, Revue Roumaine de Chimie 56(4) (2011) 381-390.</i> https://revroum.lew.ro/wp-content/uploads/2011/RRCh_4_2011/Art%2011.pdf	DA		0.6
42	Casoni D. , Simion I. M., Cobzac S.C.A., Kiraly A.G., <i>Development of a new micro-HPTLC protocol for total antioxidant potential determination of redox-active drugs, Studia Universitatis Babes-Bolyai, Chemia 67(4) (2022) 235-247.</i> https://doi.org/10.24193/subbchem.2022.4.15		DA	0.5
43	Cobzac S.C.A., Frentiu T., Balabanova B., Ruzdik N., Casoni D. , <i>Regional pattern and characteristics of essential elements in several medicinal plants using spectrometric methods combined with multivariate statistical approaches, Studia Universitatis Babes-Bolyai, Chemia LXVI 2 (2021) 9-22.</i> https://doi.org/10.24193/subbchem.2021.02.01		DA	0.5
44	Casoni D. , Badea M., Cobzac S.C.A., <i>Fish roe sample preparation for synthetic food dyes determination by HPTLC, Studia Universitatis Babes-Bolyai, Chemia LXVI 2 (2021) 265-275.</i> https://doi.org/10.24193/subbchem.2021.02.23	DA		0.5
45	Casoni D. , Badiu R. R., Frentiu T., <i>Spectrophotometric determination and assessment of potential health risk of nitrite from meat and processed meat products, Studia Universitatis Babes-Bolyai, Chemia LXIV 2, Tom I (2019) 265-277.</i> https://doi.org/10.24193/subbchem.2019.2.22		DA	0.5
46	Casoni D. , Badea M., Bros I., Cobzac S. C. A., <i>Investigation on image processing parameters for plate evaluation in TLC analysis of mycotoxins, Studia Universitatis Babes-Bolyai, Chemia LXII (3) (2017) 89-</i> https://doi.org/10.24193/subbchem.2017.3.07	DA		0.5
47	Casoni D. , Olah N., Soran L., Cobzac S.C.A., <i>Comparison of different extraction techniques for the evaluation of polyphenols content in Summer Savory extracts, Studia Universitatis Babes-Bolyai Chemia LXII (3) (2017) 45-56</i> https://doi.org/10.24193/subbchem.2017.3.04	DA		0.5
48	Casoni D. , Boldan A., Cobzac S. C., <i>TLC-densitometric determination of synthetic food colorants from pharmaceutical powders, Studia Universitatis Babes-Bolyai, Chemia 57(1) (2012) 83-92.</i>	DA		0.5

	https://chem.ubbcluj.ro/~studiachemia/issues/chemia2006_2015/Chemia2012_1.pdf			
49	Tuhutiu I. A, Casoni , D., Sârbu, C., <i>Comparative study of different TLC-image analysis methods for quantitative evaluation of parabens in pharmaceutical suspensions</i> , Studia Universitatis Babes Bolyai, Chemia (LVII) (2) (2012) 83-93. https://chem.ubbcluj.ro/~studiachemia/issues/chemia2006_2015/Chemia2012_2.pdf		DA	0.5
50	Casoni D., Sârbu C., <i>Comparative study of different oils and fats impregnated Thin-Layer Chromatographic Layers for the amino-acids lipophilicity estimation</i> , Studia Universitatis Babes-Bolyai, Chemia LVI, 1 (2011) 45-61 https://chem.ubbcluj.ro/~studiachemia/issues/chemia2006_2015/Chemia2011_1.pdf		DA	0.5

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