

**INSTITUTUL DE CHIMIE MACROMOLECULARĂ "PETRU PONI" IAȘI**  
**DEPARTAMENTUL DE POLIMERI NATURALI, MATERIALE BIOACTIVE ȘI**  
**BIOCOMPATIBILE**

**FIȘA DE ÎNDEPLINIRE A STANDARDELOR MINIMALE**

obținerea atestatului de ABILITARE conform Ordin MEN nr.6129/20.12.2016

Domeniul: **CHIMIE**

Candidat: **CSII Dr. ing. Diana Elena CIOLACU**

Categorie	<b>N<sub>max</sub></b>	<b>FIC</b>	<b>FIC<sub>D</sub></b>	<b>FIC<sub>AP</sub></b>	<b>FIC<sub>AC</sub></b>	<b>h-index</b>
Prof./Habil.	≤ 50	100	70	50	25	13
Diana Elena CIOLACU	<b>42</b>	<b>161,6</b>	<b>115,8</b>	<b>120,6</b>	<b>104,3</b>	<b>21</b>

unde:

**N<sub>max</sub>** = primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;

**FIC** = factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;

**FIC<sub>D</sub>** = factorul de impact cumulat minimal din publicații în domeniile de cercetare declarate;

**FIC<sub>AP</sub>** = factorul de impact cumulat minimal din publicații în calitate de autor principal (prim-autor și autor de corespondență);

**FIC<sub>AC</sub>** = factorul de impact cumulat minimal din publicații în calitate de autor de corespondență;

**h-index** – indicele Hirsch.

**Toate criteriile prezăvute în standardele minimale CNATDCU sunt îndeplinite.**

**Detalierea indicatorilor prevăzuți în standardele naționale minimale  
(CNATDCU), conform Ordin MEN nr.6129/20.12.2016**

**1. Criteriul FIC**

**N<sub>max</sub>** = Primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;

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Nr. crt.	Articol	FIC
1	<b>Diana E. Ciolacu</b> , C. Rudaz, M. Vasilescu, T. Budtova, Cellulose gels and cryogels via physical and chemical cross-linking, <i>Carbohydr. Polym.</i> , <b>151</b> , 392–400 (2016)	12,5
2	A.M. Oprea, L. Profire, C. Lupusoru, C. Ghiciuc, <b>Diana E. Ciolacu</b> , C. Vasile, Synthesis and characterization of some cellulose/chondroitin sulphate hydrogels and their evaluation as carriers for drug delivery, <i>Carbohydr. Polym.</i> , <b>87</b> (1), 721–729 (2012)	12,5
3	<b>Diana E. Ciolacu</b> , A.I. Chiriac, F.I.J. Pastor, V. Kokol, The influence of supramolecular structure of cellulose allomorphs on the interactions with cellulose-binding domain, CBD3b from <i>Paenibacillus barcinonensis</i> , <i>Bioresour. Technol.</i> , <b>157</b> , 14-21 (2014)	9
4	I. Rosca, A.R. Petrovici, D. Peptanariu, A. Nicolescu, G. Dodi, M. Avadanei, I.C. Ivanov, A.C. Bostanaru, M. Mares, <b>Diana E. Ciolacu</b> , Biosynthesis of dextran by <i>Weissella confusa</i> and its In vitro functional characteristics, <i>Int. J. Biol. Macromol.</i> , <b>107</b> , 1765-1772 (2018)	8,5
5	<b>Diana E. Ciolacu</b> , A.M. Oprea, N. Anghel, G. Cazacu, M. Cazacu, New cellulose - lignin hydrogels and their application in controlled release of polyphenols, <i>Mater. Sci. Eng. C</i> , <b>32</b> , 452–463 (2012)	7,9
6	O.M. Păduraru, <b>Diana E. Ciolacu</b> , R. Darie, C. Vasile, Synthesis and characterization of polyvinyl alcohol/cellulose cryogels and their testing as carriers for a bioactive component, <i>Mater. Sci. Eng. C</i> , <b>32</b> , 2508–2515 (2012)	7,9
7	<b>Diana E. Ciolacu</b> , R. Nicu, D.M. Suflet, D. Rusu, R.N. Darie-Nita, N. Simionescu, G. Cazacu, F. Ciolacu, Multifunctional hydrogels based on cellulose and modified lignin for advanced wounds management, <i>Pharmaceutics</i> , <b>15</b> , 2588 (2023)	5,5
8	R. Nicu, F. Ciolacu, <b>Diana E. Ciolacu</b> , Advanced functional materials based on nanocellulose for pharmaceutical/medical applications, <i>Pharmaceutics</i> , <b>13</b> (8), 1125 (2021)	5,5
9	R. Nicu, G. Lisa, R.N. Darie-Nita, M.I. Avadanei, A. Bargan, D. Rusu, <b>Diana E. Ciolacu</b> , Tailoring the structure and physico-chemical features of cellulose-based hydrogels using multi-epoxy crosslinking agents, <i>Gels</i> , <b>10</b> (8), 523 (2024)	5,3
10	A. Croitoriu, A.P. Chiriac, A.G. Rusu, A. Ghilan, <b>Diana E. Ciolacu</b> , I. Stoica, L.E. Nita, Morphological evaluation of supramolecular soft materials obtained through co-assembly processes, <i>Gels</i> , <b>9</b> (11), 886 (2023)	5,3

11	A. Ghilan, L.E. Nita, D. Pamfil, N. Simionescu, N. Tudorachi, D. Rusu, A.G. Rusu, M. Bercea, I. Rosca, <b>Diana E. Ciolacu</b> , A.P. Chiriac, One-step preparation of carboxymethyl cellulose—phytic acid hydrogels with potential for biomedical applications, <i>Gels</i> , <b>8</b> (10), 647 (2022)	5,3
12	<b>Diana E. Ciolacu</b> , D. Rusu, R.N. Darie-Nita, D. Timpu, F. Ciolacu, Influence of gel stage from cellulose dissolution in NaOH-water system on the performances of cellulose allomorphs-based hydrogels, <i>Gels</i> , <b>8</b> , 410 (2022)	5,3
13	G. Cazacu, O. Chirilă, M. Totolin, <b>Diana E. Ciolacu</b> , L. Nita, M. Drobota, C. Vasile, Chemical treatment of lignosulfonates under DBD plasma conditions. I. Spectral characterization, <i>J. Polym. Environ.</i> , <b>29</b> , 900–921 (2021)	5
14	G. Cazacu, R.N. Darie-Nita, O. Chirila, M. Totolin, M. Asandulesa, <b>Diana E. Ciolacu</b> , J. Ludwiczak, C. Vasile, Environmentally friendly polylactic acid/modified lignosulfonate biocomposites, <i>J. Polym. Environ.</i> , <b>25</b> , 884–902 (2017)	5
15	R. Nicu, <b>Diana E. Ciolacu</b> , A.R. Petrovici, D. Rusu, M. Avadanei, A.C. Mihaila, E. Butoi, F. Ciolacu, 3D Matrices for enhanced encapsulation and controlled release of anti-inflammatory bioactive compounds in wound healing, <i>Int. J. Mol. Sci.</i> , <b>24</b> , 4213 (2023)	4,9
16	<b>Diana E. Ciolacu</b> , Hydrogels from renewable resources: Advances in 3D networks based on cellulose and hemicellulose. <i>Polymers</i> , <b>17</b> (20), 2760 (2025)	4,9
17	G. Rosu, E.I. Muresan, A.F. Spac, M. Diaconu, <b>Diana E. Ciolacu</b> , A. Danila, C. Tita, A. Muresan, Aromatherapeutic and antibacterial properties of cotton materials treated with emulsions containing Peppermint Essential Oil ( <i>Menthae piperitae aetheroleum</i> ), <i>Polymers</i> , <b>15</b> (10), 2348 (2023)	4,9
18	A.I. Chiriac, F.I.J. Pastor, V.I. Popa, M. Aflori, <b>Diana E. Ciolacu</b> , Changes of supramolecular cellulose structure and accessibility induced by the processive endoglucanase Cel9B from <i>Paenibacillus barcinonensis</i> , <i>Cellulose</i> , <b>21</b> , 203–219 (2014)	4,8
19	<b>Diana E. Ciolacu</b> , L. Pitol-Filho, F. Ciolacu, Studies concerning the accessibility of different allomorphic forms of cellulose, <i>Cellulose</i> , <b>19</b> (1), 55-68 (2012)	4,8
20	<b>Diana E. Ciolacu</b> , S. Gorgieva, D. Tampu, V. Kokol, Enzymatic hydrolysis of different allomorphic forms of microcrystalline cellulose, <i>Cellulose</i> , <b>18</b> , 1527–1541 (2011)	4,8
21	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Natural polymers in heart valve tissue engineering: Strategies, advances and challenges, <i>Biomedicines</i> , <b>10</b> (5), 1095 (2022)	3,9
22	A. Ghilan, R. Nicu, <b>Diana E. Ciolacu</b> , F. Ciolacu, Insight into the latest medical applications of nanocellulose, <i>Materials</i> , <b>16</b> (12), 4447 (2023)	3,2
23	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Cellulose-based hydrogels as sustained drug delivery systems, <i>Materials</i> , <b>13</b> (22), 5270 (2020)	3,2
24	<b>Diana E. Ciolacu</b> , V.I. Popa, H. Ritter, Cellulose derivatives with adamantoyl groups, <i>J. Appl. Polym. Sci.</i> , <b>100</b> , 105–112 (2006)	2,8

25	<b>Diana E. Ciolacu</b> , J. Kovac, V. Kokol, The effect of the cellulose-binding domain from Clostridium cellulovorans on the supramolecular structure of cellulose fibers, <i>Carbohydr. Res.</i> , <b>345</b> , 621–630 (2010)	2,5
26	I.E. Raschip, C. Vasile, <b>Diana E. Ciolacu</b> , G. Cazacu, Semi-interpenetrating polymer networks containing polysaccharides. I xanthan/lignin networks, <i>High Perform. Polym.</i> , <b>19</b> (5-6), 603-621 (2007)	1,6
27	D. Rusu, <b>Diana E. Ciolacu</b> , B.C. Simionescu, Cellulose-based hydrogels in tissue engineering applications, <i>Cell. Chem. Technol.</i> , 53(9-10), 907-923 (2019)	1,1
28	A.R. Petrovici, I. Roșca, G. Dodi, A. Nicolescu, M. Avădanei, C.D. Varganici, <b>Diana E. Ciolacu</b> , The effect of the culture media composition on the exopolysaccharides biosynthesis, <i>Cell. Chem. Technol.</i> , 51(9-10), 821-830, (2017)	1,1
29	<b>Diana E. Ciolacu</b> , F. Doroftei, G. Cazacu, M. Cazacu, Morphological and surface aspects of the cellulose-lignin hydrogels, <i>Cellulose Chem. Technol.</i> , <b>47</b> (5-6), 377-386 (2013)	1,1
30	<b>Diana E. Ciolacu</b> , M. Cazacu, Synthesis of new hydrogels based on xanthan and cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>45</b> (3-4), 163-169 (2011)	1,1
31	<b>Diana E. Ciolacu</b> , F. Ciolacu, V.I. Popa, Amorphous cellulose – structure and characterization, <i>Cellulose Chem. Technol.</i> , <b>45</b> (1-2), 13-21 (2011)	1,1
32	A.M. Oprea, <b>Diana E. Ciolacu</b> , A. Neamtu, O.C. Mungiu, B. Stoica, C. Vasile, Cellulose/chondroitin sulfate hydrogels: synthesis, drug loading/release properties and biocompatibility, <i>Cellulose Chem. Technol.</i> , <b>44</b> (9), 369-378 (2010)	1,1
33	O. Petreus, G. Cazacu, A.M. Necula, <b>Diana E. Ciolacu</b> , Synthesis and characterization of phosphorus-containing lignin-epoxy resins, <i>Cellulose Chem. Technol.</i> , <b>42</b> (9-10), 569-576 (2008)	1,1
34	<b>Diana E. Ciolacu</b> , F. Ciolacu, R. Dumitriu, C. Vasile, V. I. Popa, Kinetics aspects in the enzymatic hydrolysis of cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>41</b> (1), 35-40 (2007)	1,1
35	<b>Diana E. Ciolacu</b> , V.I. Popa, On the thermal degradation of cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>40</b> (6), 445-449 (2006)	1,1
36	<b>Diana E. Ciolacu</b> , V.I. Popa, Structural changes of cellulose determined by dissolution in aqueous alkali solution, <i>Cellulose Chem. Technol.</i> , <b>39</b> (3-4), 179-188 (2005)	1,1
37	<b>Diana E. Ciolacu</b> , G. Cazacu, New green hydrogels based on lignin, <i>J. Nanosci. Nanotechnol.</i> , <b>18</b> (4), 2811-2822 (2018)	1,1
38	A.R. Petrovici, A. Nicolescu, M. Sillion, I. Rosca, <b>Diana E. Ciolacu</b> , Biopolimer biosynthesis by lactic acid bacteria strain in four different culture media, <i>Rev. Roum. Chim.</i> , <b>63</b> (7-8), 637-642 (2018)	0,6
39	<b>Diana E. Ciolacu</b> , V. I. Popa, The correlation between the reactivity and the supramolecular structure of allomorphs of cellulose, <i>Rev. Roum. Chim.</i> , <b>52</b> (4), 361–366 (2007)	0,6

40	G. Cazacu, M. Totolin, G. Constantinescu, <b>Diana E. Ciolacu</b> , Natural polymer modification under radiofrequency electrical discharge conditions, <i>J. Optoelectron. Adv. Mater.</i> , <b>9</b> (4), 970-974 (2007)	0,5
41	<b>Diana E. Ciolacu</b> , On the supramolecular structure of cellulose allomorphs after enzymatic degradation, <i>J. Optoelectron. Adv. Mater.</i> , <b>9</b> (4), 1033-1037 (2007)	0,5
42	N. Olaru, <b>Diana E. Ciolacu</b> , D. Tampu, L. Olaru, Structural modifications of cellulose in heterogeneous acetylation process, <i>J. Optoelectron. Adv. Mater.</i> , <b>9</b> (12), 3917-3920 (2007)	0,5
	<b>Nmax</b>	<b>42</b>
	<b>FIC=</b>	<b>161,6</b>

## 2. Criteriul FIC<sub>D</sub>

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	<b>FIC<sub>D</sub> =</b>	<b>115,8</b>

### 3. Criteriul FIC<sub>AP</sub>

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5	<b>Diana E. Ciolacu</b> , R. Nicu, D.M. Suflet, D. Rusu, R.N. Darie-Nita, N. Simionescu, G. Cazacu, F. Ciolacu, Multifunctional hydrogels based on cellulose and modified lignin for advanced wounds management, <i>Pharmaceutics</i> , <b>15</b> , 2588 (2023)	5,5
6	R. Nicu, F. Ciolacu, <b>Diana E. Ciolacu</b> , Advanced functional materials based on nanocellulose for pharmaceutical/medical applications, <i>Pharmaceutics</i> , <b>13</b> (8), 1125 (2021)	5,5
7	R. Nicu, G. Lisa, R.N. Darie-Nita, M.I. Avadanei, A. Bargan, D. Rusu, <b>Diana E. Ciolacu</b> , Tailoring the structure and physico-chemical features of cellulose-based hydrogels using multi-epoxy crosslinking agents, <i>Gels</i> , <b>10</b> (8), 523 (2024)	5,3
8	A. Ghilan, L.E. Nita, D. Pamfil, N. Simionescu, N. Tudorachi, D. Rusu, A.G. Rusu, M. Bercea, I. Rosca, <b>Diana E. Ciolacu</b> , A.P. Chiriac, One-step preparation of carboxymethyl cellulose—phytic acid hydrogels with potential for biomedical applications, <i>Gels</i> , <b>8</b> (10), 647 (2022)	5,3
9	<b>Diana E. Ciolacu</b> , D. Rusu, R.N. Darie-Nita, D. Timpu, F. Ciolacu, Influence of gel stage from cellulose dissolution in NaOH-water system on the performances of cellulose allomorphs-based hydrogels, <i>Gels</i> , <b>8</b> , 410 (2022)	5,3
10	G. Cazacu, O. Chirilă, M. Totolin, <b>Diana E. Ciolacu</b> , L. Nita, M. Droboata, C. Vasile, Chemical treatment of lignosulfonates under DBD plasma conditions. I. Spectral characterization, <i>J. Polym. Environ.</i> , <b>29</b> , 900–921 (2021)	5
11	R. Nicu, <b>Diana E. Ciolacu</b> , A.R. Petrovici, D. Rusu, M. Avadanei, A.C. Mihaila, E. Butoi, F. Ciolacu, 3D Matrices for enhanced encapsulation and controlled release of anti-inflammatory bioactive compounds in wound healing, <i>Int. J. Mol. Sci.</i> , <b>24</b> , 4213 (2023)	4,9
12	<b>Diana E. Ciolacu</b> , Hydrogels from renewable resources: Advances in 3D networks based on cellulose and hemicellulose. <i>Polymers</i> , <b>17</b> (20), 2760 (2025)	4,9
13	A.I. Chiriac, F.I.J. Pastor, V.I. Popa, M. Aflori, <b>Diana E. Ciolacu</b> , Changes of supramolecular cellulose structure and accessibility induced by the processive endoglucanase Cel9B from <i>Paenibacillus barcinonensis</i> , <i>Cellulose</i> , <b>21</b> , 203–219 (2014)	4,8
14	<b>Diana E. Ciolacu</b> , L. Pitol-Filho, F. Ciolacu, Studies concerning the accessibility of different allomorphic forms of cellulose, <i>Cellulose</i> , <b>19</b> (1), 55-68 (2012)	4,8
15	<b>Diana E. Ciolacu</b> , S. Gorgieva, D. Tampu, V. Kokol, Enzymatic hydrolysis of different allomorphic forms of microcrystalline cellulose, <i>Cellulose</i> , <b>18</b> , 1527–1541 (2011)	4,8
16	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Natural polymers in heart valve tissue engineering: Strategies, advances and challenges, <i>Biomedicines</i> , <b>10</b> (5), 1095 (2022)	3,9

17	A. Ghilan, R. Nicu, <b>Diana E. Ciolacu</b> , F. Ciolacu, Insight into the latest medical applications of nanocellulose, <i>Materials</i> , <b>16</b> (12), 4447 (2023)	3,2
18	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Cellulose-based hydrogels as sustained drug delivery systems, <i>Materials</i> , <b>13</b> (22), 5270 (2020)	3,2
19	<b>Diana E. Ciolacu</b> , V.I. Popa, H. Ritter, Cellulose derivatives with adamantoyl groups, <i>J. Appl. Polym. Sci.</i> , <b>100</b> , 105–112 (2006)	2,8
20	<b>Diana E. Ciolacu</b> , J. Kovac, V. Kokol, The effect of the cellulose-binding domain from <i>Clostridium cellulovorans</i> on the supramolecular structure of cellulose fibers, <i>Carbohydr. Res.</i> , <b>345</b> , 621–630 (2010)	2,5
21	D. Rusu, <b>Diana E. Ciolacu</b> , B.C. Simionescu, Cellulose-based hydrogels in tissue engineering applications, <i>Cell. Chem. Technol.</i> , <b>53</b> (9-10), 907-923 (2019)	1,1
22	A.R. Petrovici, I. Roșca, G. Dodi, A. Nicolescu, M. Avădanei, C.D. Varganici, <b>Diana E. Ciolacu</b> , The effect of the culture media composition on the exopolysaccharides biosynthesis, <i>Cell. Chem. Technol.</i> , <b>51</b> (9-10), 821-830, (2017)	1,1
23	<b>Diana E. Ciolacu</b> , F. Doroftei, G. Cazacu, M. Cazacu, Morphological and surface aspects of the cellulose-lignin hydrogels, <i>Cellulose Chem. Technol.</i> , <b>47</b> (5-6), 377-386 (2013)	1,1
24	<b>Diana E. Ciolacu</b> , M. Cazacu, Synthesis of new hydrogels based on xanthan and cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>45</b> (3-4), 163-169 (2011)	1,1
25	<b>Diana E. Ciolacu</b> , F. Ciolacu, V.I. Popa, Amorphous cellulose – structure and characterization, <i>Cellulose Chem. Technol.</i> , <b>45</b> (1-2), 13-21 (2011)	1,1
26	<b>Diana E. Ciolacu</b> , F. Ciolacu, R. Dumitriu, C. Vasile, V. I. Popa, Kinetics aspects in the enzymatic hydrolysis of cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>41</b> (1), 35-40 (2007)	1,1
27	<b>Diana E. Ciolacu</b> , V.I. Popa, On the thermal degradation of cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>40</b> (6), 445-449 (2006)	1,1
28	<b>Diana E. Ciolacu</b> , V.I. Popa, Structural changes of cellulose determined by dissolution in aqueous alkali solution, <i>Cellulose Chem. Technol.</i> , <b>39</b> (3-4), 179-188 (2005)	1,1
29	<b>Diana E. Ciolacu</b> , G. Cazacu, New green hydrogels based on lignin, <i>J. Nanosci. Nanotechnol.</i> , <b>18</b> (4), 2811-2822 (2018)	1,1
30	<b>Diana E. Ciolacu</b> , V. I. Popa, The correlation between the reactivity and the supramolecular structure of allomorphs of cellulose, <i>Rev. Roum. Chim.</i> , <b>52</b> (4), 361–366 (2007)	0,6
31	<b>Diana E. Ciolacu</b> , On the supramolecular structure of cellulose allomorphs after enzymatic degradation, <i>J. Optoelectron. Adv. Mater.</i> , <b>9</b> (4), 1033-1037 (2007)	0,5
	<b>FIC<sub>AP</sub> =</b>	<b>120,6</b>

#### 4. Criteriul FIC<sub>AC</sub>

FIC<sub>AC</sub> = Factorul de impact cumulat minimal din publicații în calitate de autor de corespondență.

Nr. crt.	Articol	FI
1	<b>Diana E. Ciolacu</b> , C. Rudaz, M. Vasilescu, T. Budtova, Cellulose gels and cryogels via physical and chemical cross-linking, <i>Carbohydr. Polym.</i> , 151, 392–400 (2016).	12,5
2	I. Rosca, A.R. Petrovici, D. Peptanariu, A. Nicolescu, G. Dodi, M. Avadanei, I.C. Ivanov, A.C. Bostanaru, M. Mares, <b>Diana E. Ciolacu</b> , <i>Int. J. Biol. Macromol.</i> , <b>107</b> , 1765-1772 (2018).	8,5
3	<b>Diana E. Ciolacu</b> , A.M. Oprea, N. Anghel, G. Cazacu, M. Cazacu, New cellulose - lignin hydrogels and their application in controlled release of polyphenols, <i>Mater. Sci. Eng. C</i> , <b>32</b> , 452–463 (2012).	7,9
4	<b>Diana E. Ciolacu</b> , R. Nicu, D.M. Suflet, D. Rusu, R.N. Darie-Nita, N. Simionescu, G. Cazacu, F. Ciolacu, Multifunctional hydrogels based on cellulose and modified lignin for advanced wounds management, <i>Pharmaceutics</i> , <b>15</b> , 2588 (2023).	5,5
5	R. Nicu, F. Ciolacu, <b>Diana E. Ciolacu</b> , Advanced functional materials based on nanocellulose for pharmaceutical/medical applications, <i>Pharmaceutics</i> , <b>13</b> (8), 1125 (2021).	5,5
6	R. Nicu, G. Lisa, R.N. Darie-Nita, M.I. Avadanei, A. Bargan, D. Rusu, <b>Diana E. Ciolacu</b> , Tailoring the structure and physico-chemical features of cellulose-based hydrogels using multi-epoxy crosslinking agents, <i>Gels</i> , <b>10</b> (8), 523 (2024).	5,3
7	A. Ghilan, L.E. Nita, D. Pamfil, N. Simionescu, N. Tudorachi, D. Rusu, A.G. Rusu, M. Bercea, I. Rosca, <b>Diana E. Ciolacu</b> , A.P. Chiriac, One-step preparation of carboxymethyl cellulose—phytic acid hydrogels with potential for biomedical applications, <i>Gels</i> , <b>8</b> (10), 647 (2022).	5,3
8	<b>Diana E. Ciolacu</b> , D. Rusu, R.N. Darie-Nita, D. Timpu, F. Ciolacu, Influence of gel stage from cellulose dissolution in NaOH-water system on the performances of cellulose allomorphs-based hydrogels, <i>Gels</i> , <b>8</b> , 410 (2022).	5,3
9	G. Cazacu, O. Chirilă, M. Totolin, <b>Diana E. Ciolacu</b> , L. Nita, M. Drobotă, C. Vasile, Chemical treatment of lignosulfonates under DBD plasma conditions. I. Spectral characterization, <i>J. Polym. Environ.</i> , <b>29</b> , 900–921 (2021).	5
10	R. Nicu, <b>Diana E. Ciolacu</b> , A.R. Petrovici, D. Rusu, M. Avadanei, A.C. Mihaila, E. Butoi, F. Ciolacu, 3D Matrices for enhanced encapsulation and controlled release of anti-inflammatory bioactive compounds in wound healing, <i>Int. J. Mol. Sci.</i> , <b>24</b> , 4213 (2023).	4,9
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12	A.I. Chiriac, F.I.J. Pastor, V.I. Popa, M. Aflori, <b>Diana E. Ciolacu</b> , Changes of supramolecular cellulose structure and accessibility induced by the processive endoglucanase Cel9B from <i>Paenibacillus barcinonensis</i> , <i>Cellulose</i> , <b>21</b> , 203–219 (2014).	4,8

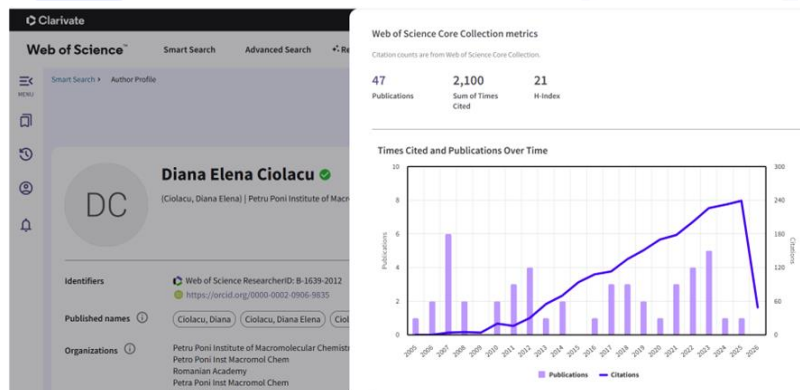
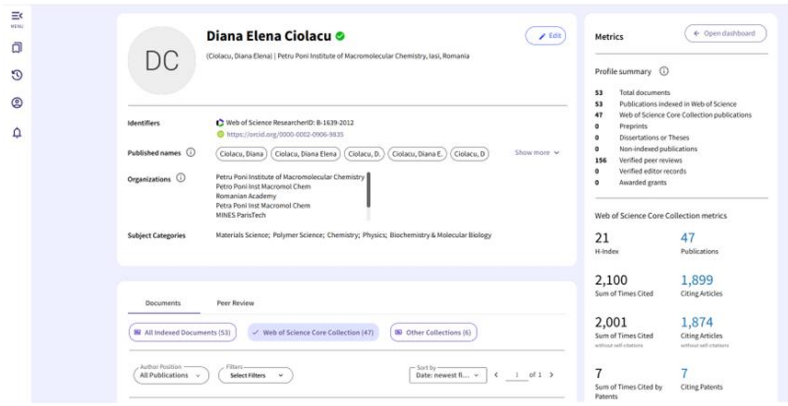
13	<b>Diana E. Ciolacu</b> , L. Pitol-Filho, F. Ciolacu, Studies concerning the accessibility of different allomorphic forms of cellulose, <i>Cellulose</i> , <b>19</b> (1), 55-68 (2012).	4,8
14	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Natural polymers in heart valve tissue engineering: Strategies, advances and challenges, <i>Biomedicines</i> , <b>10</b> (5), 1095 (2022).	3,9
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16	<b>Diana E. Ciolacu</b> , R. Nicu, F. Ciolacu, Cellulose-based hydrogels as sustained drug delivery systems, <i>Materials</i> , <b>13</b> (22), 5270 (2020).	3,2
17	<b>Diana E. Ciolacu</b> , V.I. Popa, H. Ritter, Cellulose derivatives with adamantoyl groups, <i>J. Appl. Polym. Sci.</i> , <b>100</b> , 105–112 (2006).	2,8
18	D. Rusu, <b>Diana E. Ciolacu</b> , B.C. Simionescu, Cellulose-based hydrogels in tissue engineering applications, <i>Cell. Chem. Technol.</i> , <b>53</b> (9-10), 907-923 (2019).	1,1
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20	<b>Diana E. Ciolacu</b> , F. Doroftei, G. Cazacu, M. Cazacu, Morphological and surface aspects of the cellulose-lignin hydrogels, <i>Cellulose Chem. Technol.</i> , <b>47</b> (5-6), 377-386 (2013).	1,1
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22	<b>Diana E. Ciolacu</b> , F. Ciolacu, V.I. Popa, Amorphous cellulose – structure and characterization, <i>Cellulose Chem. Technol.</i> , <b>45</b> (1-2), 13-21 (2011).	1,1
23	<b>Diana E. Ciolacu</b> , F. Ciolacu, R. Dumitriu, C. Vasile, V. I. Popa, Kinetics aspects in the enzymatic hydrolysis of cellulose allomorphs, <i>Cellulose Chem. Technol.</i> , <b>41</b> (1), 35-40 (2007)	1,1
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25	<b>Diana E. Ciolacu</b> , V.I. Popa, Structural changes of cellulose determined by dissolution in aqueous alkali solution, <i>Cellulose Chem. Technol.</i> , <b>39</b> (3-4), 179-188 (2005)	1,1
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27	<b>Diana E. Ciolacu</b> , V. I. Popa, The correlation between the reactivity and the supramolecular structure of allomorphs of cellulose, <i>Rev. Roum. Chim.</i> , <b>52</b> (4), 361–366 (2007)	0,6
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	<b>FIC<sub>AC</sub> =</b>	<b>104,3</b>

## 5. Criteriul h-index

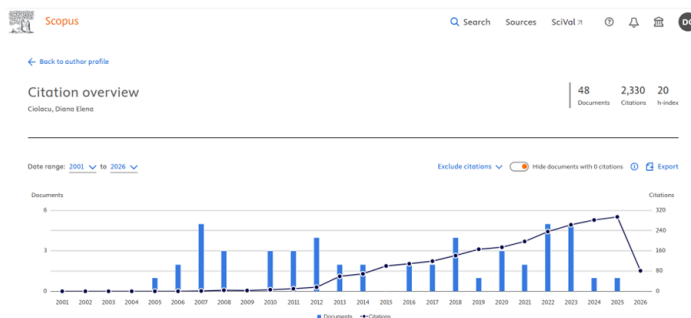
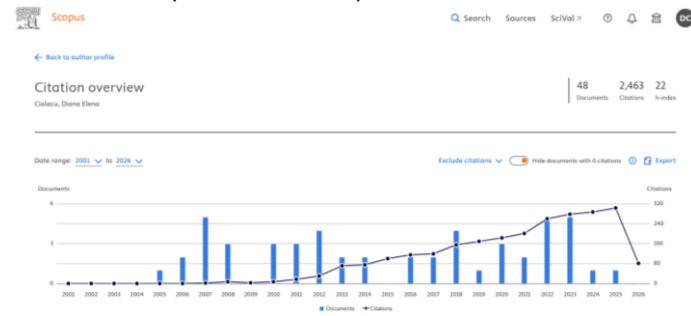
**h-index = 21 (WoS) / 22/20 (Scopus)**

**Numărul total de citări:**

**Web of Science Core Collection: 2100 citări / 2001 citări (fără autocitări)**



**Scopus: 2463 citări / 2330 citări (fără autocitări)**



16.03.2026

Dr. ing. Diana Elena CIOLACU