

**PUBLICATIONS LIST**  
**PhD. ENG. MIHAELA DOCHIA**

**I. ISI articles and ISI Proceedings articles**

1. M.D. Stănescu, M. Fogorasi, **M. Dochia**, S. Mihaela, V.I. Lozinsky  
***Biotechnology for Textile Waste Valorization***  
Revista de Chimie, **2009**, 60, nr.1, 59-62  
ISSN 0034-7752
2. M. D. Stănescu, **M. Dochia**, M. Fogorasi, M. Pustianu, M.S. Bucur  
***Enzymes in Cotton Bio-Scouring***  
*U.P.B. Scientific Bulletin Series B: Chemistry and Materials Science*, 2010, 72(3), 21-28.
3. M.D. Stănescu, **M. Dochia**, D. Radu, C. Sîrghie  
***Green solution for cotton scouring***  
*FIBRES & TEXTILES in Eastern Europe*, **2010**, 18, 3(80), 109-111.  
ISSN 1230-3666
4. **M. Dochia**, M. D. Stănescu, C. Constantin  
***Calcium Content Indicator of Scouring Efficiency***  
*FIBRES & TEXTILES in Eastern Europe*, **2013**; 21, 3(99), 22-25.
5. I.V. Iştoc, M. Pustianu, **M. Dochia**, Cecilia Sîrghie, A. Popescu  
***Study Regarding the Optimization of the Bioscouring Treatment with Ultrasound on 100 % Cotton Materials***  
*Industria Textilă*, **2014**, Vol.65, No. 2, 70-74.
6. I. V. Iştoc, **M. Dochia**, I. Dumitrescu, C. Sîrghie  
***Enzymatic finishing of blended textile materials from cottonised flax and cotton fibers***  
*Industria Textilă*, **2014**, Vol.65, No. 3, 129-133.
7. A. Sanislav, M. Fogorasi, M. D. Stănescu, S. Muntean, **M. Dochia**  
***Ultrasound Effect on Dyeing Wool Fibers with Two Anthraquinone Dyes***  
*Fibers and Polymers*, **2015**, Vol.16, No.1, 62-66.
8. C. Sîrghie, **M. Dochia**, I. V. Istoc, D. Chambre, L. Copolovici  
***A comparison of a new method mediated by molybdenum complex with an enzymatic method for bleaching flax fibers***  
*Journal of Natural Fibers*, **2015**, 12:4, 378-387.
9. **M. Dochia**, S. Gavrilăş, M. Pustianu, D. Tomescu, D.M. Copolovici  
***Comparative study regarding the influence of the complexing agents EDTA and sodium citrate on the 50% flax-50% cotton fabrics during the bioscouring treatment***  
*Proceedings of the 16<sup>th</sup> International Multidisciplinary Scientific Geoconference SGEM 2016, Book 6, Nano, Bio and Green-Technologies for a Sustainable Future, Conference Proceedings*, **2016**, Volume III, 223-230, ISBN 978-619-7105-79-7, ISSN 1314-2704, DOI 10.5593/sgem2016HB63.

10. M. Pustianu, **M. Dochia**, C. Sîrghie, S. Gavrilaş, D. Tomescu  
***Treatment optimization for bioscouring in ultrasound of cotton/cottonised hemp blended fabrics***  
*Proceedings of the 7<sup>th</sup> International Workshop on Soft Computing Applications, Advances in Intelligent Systems and Computing 634*, **2017**, Vol. 2, 595-604, doi: 10.1007/978-3-319-62524-9.
11. M. Bălaş, C. Sîrghie, M. Pustianu, **M. Dochia**, S. Gavrilaş, D. Tomescu  
***Fuzzy method applied on the control of textiles biotechnologies***  
*Proceedings of the 7<sup>th</sup> International Workshop on Soft Computing Applications, Advances in Intelligent Systems and Computing 634*, **2017**, Vol. 2, 605-611, doi: 10.1007/978-3-319-62524-9.
12. **M. Dochia**, D. Chambre, S. Gavrilaş, C. Moisă  
***Characterization of the complexing agents' influence on bioscouring cotton fabrics by FT-IR and TG/DTG/DTA analysis***  
*Journal of Thermal Analysis and Calorimetry*, **2018**, 132, 1489–1498, <https://doi.org/10.1007/s10973-018-7089-y>.
13. **M. Dochia**, M. Pustianu, C. Moisă, D. Chambre, S. Gavrilaş  
***Sodium citrate as an eco-friendly complexing agent for the bioscouring treatment of the cellulosic/lignocellulosic fabrics***  
*Chemical Papers*, **2018**, 72(8), 1881-1888, ISSN 2585-7290, <https://doi.org/10.1007/s11696-018-0455-1>.
14. I. Barbu, S. M. Fogorasi, **M. Dochia**, M. Pustianu, A. Bucevschi, D. Farima  
***A comparative study on the comfort and safety of the seat cover fabrics***  
*Proceedings of the 4<sup>th</sup> International Congress of Automotive and Transport Engineering (AMMA 2018). Proceedings in Automotive Engineering. Springer, Cham*, **2018**, 429-436. Print ISBN 978-3-319-94408-, Online ISBN 978-3-319-94409-8.
15. D. Chambre, **M. Dochia**, S. Gavrilaş  
***TG/DTG analysis of an eco-friendly scoured fabric***  
*Revue Roumaine de Chimie*, **2019**, 64(5), 453-460, Doi: 10.33224/rch.2019.64.5.09.
16. L. Indrie, Z. Zlatev, J. Ilieva, D. C. Ilies, A. Sturza, **M. Dochia**, M. Gozner, G. Herman  
***Implementation of image processing techniques as a tool for form analysis of romanian folk elements***  
*Industria Textilă*, **2020**, Vol.71, No. 5, 492-498.
17. S. Gavrilaş, C. S. Ursachi, **M. Dochia**, S. Perta-Crisan, F. D. Munteanu  
***The influence of different vacuum impregnation solutions on the colour of fresh-cut apple slices***  
*Scientific Study & Research – Chemistry & Chemical Engineering, Biotechnology, Food Industry*, **2020**, 21(4), 523-531.
18. R.M. Beiu, V.F. Duma, C.A. Mnerie, A.C. Beiu, **M. Dochia**, L. Copolovici, G. Dobre, A. Bradu, A. Podoleanu  
***Optical Coherence Tomography versus Microscopy for the Study of Aloe Vera Leaves***  
*Proceedings Volume 12138, Optics, Photonics and Digital Technologies for Imaging Applications VII*; 121380A (2022) <https://doi.org/10.1117/12.2620766>; SPIE Photonics Europe, **2022**, Strasbourg.

19. A. Lupitu, C. Moisa, S. Gavrilaş, **M. Dochia**, D. Chambre, V. Ciutină, D. M. Copolovici, L. Copolovici  
*The influence of elevated CO<sub>2</sub> on volatile emissions, photosynthetic characteristics, and pigment content in Brassicaceae plants*  
*Plants-Basel*, **2022**, 11(7), 973.
20. A. Lupitu, C. Moisa, F. Borteş, D. Peteleu, **M. Dochia**, D. Chambre, V. Ciutina, D.M. Copolovici, L. Copolovici  
*The Impact of Increased CO<sub>2</sub> and Drought Stress on the Secondary Metabolites of Cauliflower (Brassica oleracea var. botrytis) and Cabbage (Brassica oleracea var. capitata)*  
*Plants*, **2023**, 12, 3098.
21. R. Kaminszky, D. Avram, M. S. Fogorasi, **M. Dochia**, I. Barbu, A. Popa, A. Bucevschi  
*Innovative Solution for Reducing Yarns Hairiness on Ring Spinning Machines*  
*Journal of Natural Fibers*, **2023**, 20(2), 2248386.
22. A. M. Tolos (Vasii), C. Moisă, **M. Dochia**, C. Popa, L. Copolovici, D. M. Copolovici  
*Anticancer Potential of Antimicrobial Peptides: Focus on Buforins*  
*Polymers*, **2024**, 16(6), 728.
23. S. Gavrilaş, **M. Dochia**, A. R. Sărsan, B. D. Chereji, F. D. Munteanu  
*Use of VegetableWaste for New Ecological Methods in Wool Fibre Treatments*  
*Clean Technologies*, **2024**, 6, 1326–1339.

## II. Papers in IDB journals

1. M.D. Stănescu, M.S. Fogorasi, F. Chiraleu, **M. Dochia**, E. Heine  
*Spectroscopic Tools for Monitoring Enzyme Action in Textile Finishing*  
*DWI Reports*, **2004**, 128, B,1-5, ISSN 0942301X.
2. M.D. Stănescu, M.S. Fogorasi, **M. Dochia**  
*Enzymatic treatments of cotton-improvement of properties and environmental aspects*  
*DWI Reports*, **2006**, 130, 9p, ISSN 0942301X.
3. M.D. Stănescu, M.S. Fogorasi, **M. Dochia**, S. Mihuța  
*Biodegradation of textile waste based on cotton*  
*DWI Reports*, **2007**, 131, P53, ISSN 0942301X.
4. F.D. Munteanu, **M. Dochia**, C. Sirghie  
*Studies on the stability of a laccase used in ultrasound or in presence of emollient*  
*Analele Universitatii din Oradea, Fascicola Textile&Pielarie*, **2007**, vol VIII, 62-67  
ISSN 1582-5590.
5. M. Pustianu, M. Chindriş, A. Popa, E.t Airinei, A. Bucevschi, C. Sîrghie, **M. Dochia**  
*Study Regarding the Optimization of Wool Dyeing with Natural Dyes Extracted from Green Walnuts Part 1: Determination of the Eficiency of the Dyeing treatment*  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2013**, vol XIV, nr. 1, 167-170,  
P-ISSN: 1843-813X.

6. I.V. Iștoc, M. Pustianu, A. Bucevschi, **M. Dochia**, C. Sîrghie  
***Study Regarding the Optimization of the Bioscouring Treatment on 100% Cotton Materials***  
*Proceedings of the 2<sup>nd</sup> International Conference on Energy and Environment Technologies and Equipment (EEETE '13), Energy, Environmental and Structural Engineering Series, Braşov, România, 1-3 Iunie 2013, 258-262, ISSN: 2227-4359, ISBN: 978-1-61804-188-3.*
7. M. Pustianu, **M. Dochia**, M.S. Pernevan, C. Sîrghie  
***Study Regarding the Influence of the Bioscouring Treatment in Ultrasound on 60% cotton + 40% hemp materials. Part I. Study Regarding the Optimization of the Bioscouring Treatment***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2014, vol XV, Nr. 1, 93-98, P-ISSN: 1843-813X.*
8. **M. Dochia**, C. Sîrghie, M.S. Pernevan, M. Pustianu,  
***Study Regarding the Influence of the Bioscouring Treatment in Ultrasound on 60% cotton + 40% hemp materials. Part II. Study Regarding the Influence Bioscouring Treatment Followed by a Whitening Treatment Using Various Methods***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2014, vol XV, Nr. 1, 99-102, P-ISSN: 1843-813X.*
9. A. Popescu, C. Sîrghie, **M. Dochia**, D. M. Copolovici, L. Chirila  
***Aspects regarding natural dyeing of enzymatically pre-treated cellulosic blended yarns***  
*Proceedings of the 5<sup>th</sup> International Conference on Advanced Materials and Systems – ICAMS, 2014, 373-378, ISSN: 2068 – 0783.*
10. M. Szabo, **M. Dochia**, M. Lungu  
***Research study on the dimensional stability of interlock 1:1 knitted fabrics made of cotton yarns***  
*Scientific Research and Education in the Air Force-AFASES, Mechanical Engineering. Materials and Technology, 2016, 367-376, DOI: 10.19062/2247-3173.2016.18.1.50.*
11. M. Pustianu, C. Sîrghie, G. Böhm-Révész, **M. Dochia**  
***Part I. study regarding the optimization of the bioscouring treatment in ultrasound on 60 % cotton + 40 % cottonised flax materials***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2016, vol XVII, 89-111, P-ISSN: 1843-813X.*
12. **M. Dochia**, C. Sîrghie, M. Pustianu  
***Part II. Study regarding the influence of bioscouring treatment on 60 % cotton + 40 % cottonised flax materials followed by a whitening treatment using alternative methods***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2016, vol XVII, 91-117, P-ISSN: 1843-813X.*
13. M. Pustianu, **M. Dochia**, S. Gavrilaş, D. Tomescu, D. M. Copolovici  
***Study on the bioscouring treatment of 50 % of hemp + 50 % of cotton fabrics***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2017, vol XVIII, Nr. 2, 29-34, P-ISSN: 1843-813X.*
14. **M. Dochia**, M. Pustianu, S. Gavrilaş, D. Tomescu, D. M. Copolovici  
***Study on the influence of ultrasound in bioscouring treatment of 50 % of flax + 50 % of cotton fabrics***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie, 2017, vol XVIII, Nr. 1, 27-32, P-ISSN: 1843-813X.*

15. M. Pustianu, **M. Dochia**, S. Gavrilaş, D. Tomescu  
***Study of the efficiency of bioscouring treatment by determination of the residual Ca<sup>2+</sup> from flax-cotton fabrics***  
*Proceedings of the 17<sup>th</sup> International Multidisciplinary Scientific Geoconference SGEM 2017, Nano, Bio, Green and Space-Technologies for a Sustainable Future*, **2017**, Vol. 17, Nr. 61, 1007-1014.
16. **M. Dochia**, M. Pustianu, S. Gavrilaş, D. Tomescu, D. M. Copolovici  
***Study of the ultrasound efficiency on bioscouring treatment of hemp - cotton fabrics***  
*Proceedings of 17<sup>th</sup> International Multidisciplinary Scientific Geoconference SGEM 2017, Nano, Bio, Green and Space-Technologies for a Sustainable Future*, **2017**, Vol. 17, Nr. 61, 1015-1023.
17. M. Pustianu, **M. Dochia**, S. Gavrilaş, D. Tomescu  
***Comparative Study on Treatment Bioscouring Optimization with and without Ultrasound for 50 % of Cotton + 50 % of Flax Materials***  
*Advanced Engineering Forum*, **2018**, ISSN: 2234-991X, Vol. 27, 111-117.  
<https://doi.org/10.4028/www.scientific.net/AEF.27.111>.
18. M. Pustianu, **M. Dochia**, S. Gavrilaş, C. Moisă  
***Biotreatment optimization for a cellulosic/lignocellulosic blended fabric***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2018**, vol XIX, Nr. 1, 83-88, P-ISSN: 1843-813X.
19. **M. Dochia**, S. Gavrilaş, M. Pustianu, C. Moisă, D. Chambre  
***Waste water analysis from a new green pretreatment of cotton fabrics***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2018**, vol XIX, Nr. 2, 37-42, P-ISSN: 1843-813X.
20. **M. Dochia**, S. Gavrilaş  
***Physico-chemical parameters of residual water from different scouring treatments of hemp/cotton fabric***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2019**, vol XX, Nr. 1, 41-46. P-ISSN: 1843-813X.
21. S. Gavrilaş, **M. Dochia**  
***Efficiency assessment of the different scouring conditions of cotton materials by ruthenium red dyeing***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2019**, vol XX, Nr. 2, 39-44. P-ISSN: 1843-813X.
22. A. Bujdei, S. Gavrilaş, **M. Dochia**, F. D. Munteanu  
***Vegetable food waste for cotton dyeing-new directions for environmental sustainability***  
*Proceedings of the 22<sup>nd</sup> International Symposium "The Environment and Industry" SIMI*, **2019**, 113-120. ISSN-L: 1843 - 5831, <https://doi.org/10.21698/simi.2019.fp15>.
23. **M. Dochia**, S. Gavrilaş  
***New ecological method for pretreatment of lignocellulosic textiles***  
*Proceedings of the XI International Scientific Agricultural Symposium "Agrosym 2020"*, **2020**, 651-656, ISBN 978-99976-787-2-0. 2020.

24. M. Szabo, **M. Dochia**, S. Gavrilaş  
***The behaviour of rib 1:1 and 2:2 knitted cotton fabrics during different solicitations and treatments***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2020**, vol XXI, Nr. 1, 127-132.
25. **M. Dochia**, S. Gavrilaş, M. Szabo  
***Study of the experimental conditions in bioscouring treatment of cotton-hemp blended fabrics***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2020**, vol XXI, Nr. 1, 21-26.
26. **M. Dochia**, D. Chambre  
***Pectin quantification from cellulosic/lignocellulosic raw materials by FT-IR ATR analysis***  
*Scientific and Technical Bulletin, Series Chemistry, Food Science & Engineering*, **2020**, vol. 17(XVIII), 20-25.
27. **M. Dochia**, S. Gavrilaş  
***Characteristics of wastewater from different pretreatments of flax/cotton fabrics***  
*Advanced Engineering Forum*, **2021**, ISSN: 2234-991X, Vol. 42, 143-150.  
doi:10.4028/www.scientific.net/AEF.42.143.
28. **M. Dochia**, S. Gavrilaş, M. Szabo  
***Dyeing of cotton materials after bioscouring and enzymatic bleaching treatments***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2021**, vol. 22, Nr. 2, 33-38.
29. M. Szabo, **M. Dochia**, S. Gavrilaş  
***Comparative study between polyamide/elastane and cotton/polyamide/elastane socks***  
*Analele Universităţii din Oradea, Fascicola Textile&Pielarie*, **2021**, vol. 22, Nr. 1, 83-88.
30. I. Barbu, A. Bucevschi, A. Komjaty, M. S. Fogorasi, **M. Dochia**, M. Pustianu  
***Teaching and E-Learning about Draw Frame Machine***  
*Proceedings of 17<sup>th</sup> eLearning and Software for Education Conference – eLSE*, **2021**, Volume 2, 99-106. DOI: 10.12753/2066-026X-21-152.
31. D. Chambre, **M. Dochia**  
***FT-IR characterization of cellulose crystallinity from raw bast fibers***  
*Scientific and Technical Bulletin, Series Chemistry, Food Science & Engineering*, **2021**, vol. 18(XIX), 10-17.
32. **M. Dochia**, N. Dincă, S. Gavrilaş  
***Comparative study of the chelating agents influence on the weight loss of cotton fabrics during enzymatic scouring***  
*Scientific and Technical Bulletin, Series Chemistry, Food Science & Engineering*, **2021**, vol. 18(XIX), 3-9.
33. **M. Dochia**, R. Kaminszky, M. S. Fogorasi, A. Bucevschi, I. Barbu, A. Popa, C. Nicolaescu  
***Aspects regarding the behaviour and comfort of reusable wool protective masks in the context of the COVID 19 pandemic***  
*IOP Conference Series: Materials Science and Engineering*, Volume 1182, **2021**, 012018,  
doi:10.1088/1757-899X/1182/1/012018.

34. **M. Dochia**, R. Kaminszky, M. S. Fogorasi, D. Farima, I. Barbu, C. Nicolaescu, M. Pustianu, A. Popa, A. Bucevschi  
***Study on the behaviour and comfort of reusable knitting suits of wool blends in the context of the Covid 19 pandemic***  
*IOP Conference Series: Materials Science and Engineering*, Volume 1182, **2021**, 012019, doi:10.1088/1757-899X/1182/1/012019.
35. M. Szabo, **M. Dochia**, V Müller, L. Jitaru  
***The study of the physico-mechanical properties of fashion tights compared to medicinal tights***  
*International Journal of Modern Manufacturing Technologies*, **2022**, Nr. 2, 251-256, <https://doi.org/10.54684/ijmmt.2022.14.2.251>.
36. L.A. Cioban, **M. Dochia**, C. Mureşan, D. Chambre  
***Weathering and deterioration of carbonate stones from historical monuments: a review***  
*Scientific and Technical Bulletin, Series Chemistry, Food Science & Engineering*, **2022**, vol. 19(XX), 15-33.

### III. Other scientific articles

1. M.S. Fogorasi, M.D. Stanescu, **M. Dochia**  
***Studiul influenţei pretratamentului enzimatic asupra vopsirii materialelor din bumbac***  
*Scien. and Techn. Bulletin*, **2004**, 10, 53 – 57, ISSN 1582 – 1021.
2. M.S. Bucur, M. Szabo, C. Sirghie, **M. Dochia**, A.M. Bekesi  
***Eficienţa tratamentului enzimatic “Bioscouring” asupra tricotelurilor din bumbac 100%***  
*Scien. And Techn. Bull., Food Textile Science*, **2005**, Vol. 11, nr. 1, 223-231  
ISSN 1454 – 8917.
3. **M. Dochia**, M.D. Stanescu  
***Biotechnology Applications in Cotton Processing***  
*Scien. and Techn. Bull. Chemistry, Food Sciences & Engineering*, **2006**, 11, 223-231.
4. M.S. Bucur, M. Szabo, C. Sirghie, **M. Dochia**, M. Dan  
***Influenţa tratamentului cu compusi de tip POM asupra alungirii la rupere a fibrelor de canepa***  
*Proceedings of the International Symposium „Research and Education in an Innovation Era” – Engineering Sciences*, **2008**, pp. 447- 456  
ISSN 2065 2569.
5. F.D. Munteanu, **M. Dochia**, C. Sîrghie  
***Sonolysis of DeniLite laccase: effects on enzymatic activity***  
*Scientific Bulletin of ESCORENA*, Vol. 2, **2011**, pp. 43-45  
ISSN-L 2066-5687, ISSN 2069-8070.
6. R.M. Kozlowski, M. S. Pernevan, **M. Dochia**  
***Fire retardant composites made of flax and hemp. Lignocellulosic wastes and mineral vermiculite***  
*Scientific Bulletin of ESCORENA*, Vol. 3, **2011**, pp. 31-37  
ISSN-L 2066-5687, ISSN 2069-8070.

7. R.M. Kozłowski, W. Konczewicz, R. Kaniewski, **M. Dochia**, M.S Pernevan  
*The methods of degumming bast fibrous plants*  
*Scientific Bulletin of ESCORENA*, Vol. 4, **2012**, pp. 17-31  
ISSN-L 2066-5687, ISSN 2069-8070.
8. R.M. Kozłowski, **M. Dochia**, M.S. Pernevan, M. Elena  
*Possibilities of bonding lignocellulosic materials by enzymatic system*  
*Scientific Bulletin of ESCORENA*, Vol. 4, **2012**, pp. 33-41  
ISSN-L 2066-5687, ISSN 2069-8070.
9. **M. Dochia**, C. Sîrghie, L. Copolovici  
*Degumming process of flax at industrial pilot scale*  
*Scientific Bulletin of ESCORENA*, Vol. 8, **2013**, pp. 09-16  
ISSN-L 2066-5687, ISSN 2069-8070.
10. M. Pustianu, M. Chindriș, C. Sîrghie, **M. Dochia**  
*Natural dyes in green walnut shells for textile materials dyeing*  
*Scientific Bulletin of ESCORENA*, Vol. 8, **2013**, pp. 16-22  
ISSN-L 2066-5687, ISSN 2069-8070.
11. D.R. Chambre, **M. Dochia**  
*Characterization of alkaline and enzymatically treated hemp fibers by FT-IR ATR spectroscopy*  
*Scientific and Technical Bulletin, Series Chemistry, Food Science & Engineering*, **2018**, vol. 15(XVI), 18-22.

#### IV. PhD thesis

PhD thesis title: “*Application of biotechnologies for processing row and waste cellulosic textile materials*”

University POLITEHNICA of Bucharest

Faculty of Applied Chemistry and Materials Science

Supervisor: Prof.Dr.Ing. Michaela Dina Stănescu.

#### V. Book Chapters

1. **Handbook of natural fibres, Volume 1: Types, properties and factors affecting breeding and cultivation, Capitolul 2 – Cotton fibres**, autori: **M. Dochia**, C. Sîrghie, R.M. Kozłowski, Z. Roskwitalski, Editura **Woodhead Publishing Limited**, Series in Textiles, Cambridge, UK, Editor Ryszard M. Kozłowski, **2012**, pp. 11 - 23.
2. **Natural fibers: properties, mechanical behavior, functionalization and applications, Capitolul 1 - Cotton dominant natural fibre: production, properties and limitations in its production**, autori: **M. Dochia**, M. Pustianu, Editura Nova Science Publishers Inc., New York, Editori Ryszard M. Kozłowski și Malgorzata Muzyczek, **2017**, pp. 1 - 15.

#### VI. Patents

1. Sîrghie Cecilia, Botar Alexandru, Dinca Nicolae, Craciun Grigore, **Dochia Mihaela**, “*Procedeu ecologic de albire a fibrelor naturale prin oxidare catalitica cu polioxometalati*” - Brevet nr. 122728/30.12.2009, Romania.
2. Stănescu Michaela Dina, Cârpuș Eftalea, Fogorasi Magdalena, Popescu Alina, **Dochia Mihaela**, Mihuța Silvia, “*Procedeu ecologic de recuperare a poliesterului din deseuri textile poliester/bumbac*” Brevet nr. 122919/30.04.2010, Romania.



3. Sîrghie Cecilia, Botar Alexandru, Bodescu Adina Maria, **Dochia Mihaela**, „*Procedeu de albire cu peroxo-polioxometalati a materialelor textile (fire, tesaturi și tricoturi) din amestecuri de fibre celulozice cum ar fi: in-bumbac, canepa-bumbac*” – Brevet nr. 128839A0/04.09.2012, Romania.
4. Sîrghie Cecilia, Radu Dana Gina, Munteanu Florentina Daniela, Pag Andreea, **Dochia Mihaela**, Tomescu Daniel, „*Procedeu de topire a plantelor liberiene ca de exemplu: in, canepa, iuta, etc.*” - Brevet nr. 128837/30.06.2016, Romania.

## VII. International conferences

1. M.D. Stanescu, M.S. Fogorasi, M.Bucur, M. Pustianu, **M. Dochia**  
*Enzymes in Cotton Bioscouring*  
13<sup>th</sup> International Conference on Chemistry and Chemical Engineering  
Bucuresti, Romania, vol. 3, septembrie 2003, 43-48.  
ISBN 973-652-825-1.
2. M. Fogorasi, M.D. Stanescu, **M. Dochia**  
*Enzymes in Cotton Dyeing*  
3<sup>rd</sup> International Conference on Textile Biotechnology, Graz, Austria, 13-16 iunie 2004, P16.
3. M.D. Stanescu, M.S. Fogorasi, M. Bucur, M. Pustianu, S. Mihuta, **M. Dochia**  
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### VIII. National conferences

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