



ACADEMIA ROMANA  
SCOSAAR

**FIȘA DE ÎNDEPLINIRE A STANDARDELOR MINIMALE  
conform CNATDCU**

**Candidat: dr. Iuliana Spiridon**

Nr. crt.	Domeniul activitatilor	Tipul activitatilor	punctaj
1	Activitatea didactica si profesionala (A1)	Carti sau capitole de carte	30
2	Activitatea de cercetare (A2)	2.1. Articole in reviste cotate ISI Thomson Reuters	124
		Brevete de inventie si inovatie	
		2.2. Granturi/proiecte castigate prin competitie	
3	Recunoasterea si impactul activitatii (A3)	3.1. Citari in reviste ISI si BDI	225.5
	Total		379.5

### FIȘA DE VERIFICARE

a îndeplinirii standardelor minimale conform ORDIN Nr. 6560 din 20 decembrie 2012

Candidat: dr. Iuliana Spiridon, CP II

Nr.crt	Domeniul activitatilor	Tipul activitatilor		Categorii si restrictii	indicator	Numar activitati candidat	Punctaj realizat de candidat
1	Activitate didactica si profesionala (A1)	1.1	Carti sau capitole de carte  Professor-min 3  Prim autor min 1	Profesor – 9 CS I - 0	3	10 (2 carti-1 carte publicata in strainatate ca singur autor si 8 capitole (2 la edituri din tara, 6 la edituri din strainatate, - x ca prim autor)	30
2	Activitate de cercetare (A2)	2.1	Articole in reviste cotate ISI Thomson Reuters	Minim 35  Minim 23 in reviste internationale  FI cumulat, min 40  Autor principal/ corespondent, min 10 articole	1	67  67  100.6  24	67
			Brevete de inventie si inovare	Internationale  Nationale	10  1	  1	  1
		2.2	Granturi/proiecte castigate prin competitie	Director/responsabil min 1 Membru in echipa, minim 1	4  2	11  6	44  12

3	Recunoasterea si impactul activitatilor (A3)	3.1	Citari in reviste ISI	Minim 100	0.5	451(fara autocitari)	225.5
							379.5

17.10.2016

## Anexa la Fisa de verificare

### 1. Activitate didactică și profesională (A1)

1.1. Carti sau capitol de carte: 10

#### 1.1.1. Carti publicate: 2

Edituri din strainatate: 1

a) *Iuliana Spiridon*

Biotechnological processes in pulp industry, in Applications of biotechnological processes in the pulp and paper industry, UBI Publisher, Covilha, Portugal, 2001, ISBN 972-9209-75-8

Edituri din tara: 1

a) V. I. Popa, *Iuliana Spiridon*, N. Anghel

Procese biotehnologice in industria de celuloza si hartie, Editura MediaTech, Iasi, 2001, ISBN 973-85088-8-6

#### 1.1.2. Capitoare de carte: 8

Edituri din strainatate: 6

a) V. I. Popa and *Iuliana Spiridon*

Hemicelluloses. Structure and Properties, in “Structural Diversity and Functional Stability of Polysaccharides”, edited by S. Dumitriu, Marcel Dekker Inc., 1998, ISBN 0-8247-0127-5, p. 297-311

b) *Iuliana Spiridon* and Valentin I. Popa

Hemicelluloses. Structure and Properties, in “Structural Diversity and Functional Stability of Polysaccharides”, Second Edition, edited by S. Dumitriu, Marcel Dekker, 2004, ISBN 0-8247-5480-8, p. 475-489

c) *Iuliana Spiridon* and V. I. Popa

Hemicelluloses: major sources, properties and applications, in “Monomers, polymers and composites from renewable resources”, edited by M. N. Belgacem and Alessandro Gandini, Elsevier, ISBN-13: 978-0-08-045316-3, ISBN-10: 0-08-045316-3 2008, pp. 289-305, 2008

d) Florina Crivoi, Cornelia Vasile, Narcis Anghel, *Iuliana Spiridon*

Degradation of low density polyethylene/starch blends under an enzymatic complex or soil microorganisms action, in “Kinetics and Thermodynamics for Chemistry and Biochemistry” (vol. 2), Editors: Eli M. Pearce, G. E. Zaikov, Gerald, Kirshenbaum, ISBN: 978-1-60692-352-8, NOVA Publisher, 2009, p. 407-427

e) *Iuliana Spiridon*, Carmen-Alice Teacă, Raluca Nicoleta Darie, Ruxanda Bodirlău and Ana Maria Resmerita

Biocomposites based on cellulose material (poplar seed floss) and HDPE – Accelerated weathering behaviour in “Biomass-based composites”, edited by V. K. Thakur and A. S. Singha, Smithers Rapra Publishers, p. 193-229 (2013), ISBN: 9781847359803

f) C. A. Teaca, R. Bodirlau, *I. Spiridon*, Cellulose-based starch composites: Structure and properties in Lignocellulosic Polymer Composites: Processing, Characterization and Properties, V. K. Thakur, Ed., Wiley and Scrivener Publishing LLC, 125-145 (2015), ISBN: 978-1-118-77357-4

Edituri din tara: 2

a) *Iuliana Spiridon*

Biotehnologia in prevenirea dezastrelor provocate de factori naturali si antropici, in “Fenomene si procese cu risc major la scara nationala”, coordonatori: Fl. Filip, B. C. Simionescu, Editura Academiei Romane, 2004, p. 349-361, ISBN 973 - 27 - 1150 - 7

b) *Iuliana Spiridon*, Carmen Alice Teaca, Ruxanda Bodirlau, Daniela Cotzur

Metode de investigare a biodegradabilitatii polimerilor, in “Polimeri degradabili si biocompatibili”, editori: C. Vasile, A. P. Chiriac, L. E. Nita, Editura Tehnopress, 2006, ISBN 10: 10-973-702-378-1, ISBN 13: 978-973-702-378-0, p.59-95

### 2. Activitate de cercetare (A2)

2.1. 1. Articole in reviste cotate ISI Thomson Reuters:66

	Articole in reviste cotate ISI Thomson Reuters	Factor de impact
1	New opportunities to valorize biomass wastes into green materials <i>Spiridon, Iuliana</i> ; Darie-Nita, Raluca Nicoleta; Hitruc, Gabriela Elena; et al. JOURNAL OF CLEANER PRODUCTION Volume: 133 Pages: 235-242 Published: OCT 1 2016	4.959
2	Complex Poly(Lactic Acid)-Based Biomaterial for Urinary Catheters. I. Influence of Silver Nanoparticles Concentration on the Mechanical and Thermal Properties, Raluca N. Darie-Niță, Bogdan S. Munteanu, Niță Tudorachi, Rodica Lipșa, Elena Stoleru, <i>Iuliana Spiridon</i> and Cornelia Vasile Bioinspired, Biomimetic and Nanobiomaterials, 5(4),132–151(2016)	0.523
3	Influence of fiber modifications on PLA/fiber composites. Behavior to accelerated weathering <i>Spiridon, Iuliana</i> ; Darie, Raluca Nicoleta; Kangas, Heli COMPOSITES PART B-ENGINEERING Volume: 92 Pages: 19-27 Published: MAY 1 2016	3.850
4	New polylactic acid composites for packaging applications: Mechanical properties, thermal behavior, and antimicrobial activity <i>Spiridon, Iuliana</i> ; Ursu, Ramona Gabriela; Irene Alexandra Cianga INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION Volume: 20 Issue: 8 Pages: 681-692 Published: NOV 17 2015	1.515
5	POLYCARBONATE URETHANE-HYDROXYPROPYL CELLULOSE MEMBRANES WITH ZINC OXIDE NANOPARTICLES Vlad, Stelian; Gradinaru, Luiza M.; Ciobanu, Constantin; Macocinschi, Doina; Filip, Daniela; <i>Spiridon, Iuliana</i> and Gradinaru, Robert. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 49 Issue: 9-10 Pages: 905-913 Published: OCT-DEC 2015	0.562
6	Behavior of biodegradable composites based on starch reinforced with modified cellulosic fibers <i>Spiridon, Iuliana</i> ; Anghel, Narcis; Bele, Adrian POLYMERS FOR ADVANCED TECHNOLOGIES Volume: 26 Issue: 9 Pages: 1189-1197 Published: SEP 2015	1.823
7	New PP/PLA/cellulose composites: effect of cellulose functionalization on accelerated weathering behavior (accelerated weathering behavior of new PP/PLA/cellulose composites) Darie, Raluca Nicoleta; Vlad, Stelian; Anghel, Narcis; Doroftei, Mirela; Tamminen, Tarja; <i>Spiridon, Iuliana</i> et al. POLYMERS FOR ADVANCED TECHNOLOGIES Volume: 26 Issue: 8 Pages: 941-952 Published: AUG 2015	1.823
8	Evaluation of PLA-lignin bioplastics properties before and after accelerated weathering <i>Spiridon, Iuliana</i> ; Leluk, Karol; Resmerita, Ana Maria; et al. COMPOSITES PART B-ENGINEERING Volume: 69 Pages: 342-349 Published: FEB 2015	3.850
9	MALEIC ANHYDRIDE TREATMENT OF SOFTWOOD - EFFECT ON	0.562

	WOOD STRUCTURE AND PROPERTIES Teaca, Carmen-Alice; Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 48 Issue: 9-10 Pages: 863-868 Published: NOV-DEC 2014	
10	Gamma irradiation of protein-based textiles for historical collections decontamination Geba, Maria; Lisa, Gabriela; Ursescu, Cristina Marta; Olaru, A.; <i>Spiridon, I.</i> ; Leon, A. L.; Stanculescu, I. JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 118 Issue: 2 Pages: 977-985 Published: NOV 2014	1.781
11	I. NATURAL FIBER-POLYOLEFIN COMPOSITES. MINI-REVIEW <i>Spiridon, Iuliana</i> CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 48 Issue: 7-8 Pages: 599-611 Published: JUL-AUG 2014	0.562
12	PLA/chitosan/keratin composites for biomedical applications Tanase, Constantin Edi; <i>Spiridon, Iuliana</i> MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS Volume: 40 Pages: 242-247 Published: JUL 1 2014	3.420
13	Catalytic upgrading of co-pyrolysis oils from bisphenol A polycarbonate and lignins Brebu, Mihai; Tamminen, Tarja; Hannevold, Lenka; Stöcker, Michael; <i>Spiridon, Iuliana</i> POLYMER DEGRADATION AND STABILITY Volume: 102 Pages: 88-94 Published: APR 2014	3.120
14	Wastes from Wood Extraction Used in Composite Materials: Behavior after Accelerated Weathering Darie, Raluca Nicoleta; Lack, Eduard; Lang, Franz, Jr.; Sova, Martin; Nistor, Alexandra; <i>Spiridon, Iuliana</i> INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION Volume: 19 Issue: 5 Pages: 453-467 Published: 2014	1.515
15	Green Composites Comprising Thermoplastic Corn Starch and Various Cellulose-Based Fillers Bodirlau, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> BIORESOURCES Volume: 9 Issue: 1 Pages: 39-53 Published: 2014	1.334
16	Polypropylene-based composites reinforced by toluene diisocyanate modified wood <i>Spiridon, Iuliana</i> ; Darie, Raluca Nicoleta; Bodirlau, Ruxanda; Teaca; Carmen-Alice; Doroftei, Florica JOURNAL OF COMPOSITE MATERIALS Volume: 47 Issue: 27 Pages: 3451-3464 Published: DEC 2013	1.242
17	Thermal degradation of various lignins by TG-MS/FTIR and Py-GC-MS Brebu, Mihai; Tamminen, Tarja; <i>Spiridon, Iuliana</i> JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS Volume: 104 Pages: 531-539 Published: NOV 2013	3.652
18	Antioxidant and chemical properties of Inula helenium root extracts <i>Spiridon, Iuliana</i> ; Nechita, Constantin Bogdan; Niculaua, Marius; Silion, Mihaela; Armatu, Alice; Teaca, Carmen-Alice, Bodirlau, Ruxanda CENTRAL EUROPEAN JOURNAL OF CHEMISTRY Volume: 11	1.207

	Issue: 10 Pages: 1699-1709 Published: OCT 2013	
19	Influence of Keratin on Poly(lactic acid)/Chitosan Composite Properties. Behavior upon Accelerated Weathering <i>Spiridon, Iuliana</i> ; Paduraru, Oana Maria; Zaltariov, Mirela Fernanda; Darie, Raluca Nicoleta INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume: 52 Issue: 29 Pages: 9822-9833 Published: JUL 24 2013	2.567
20	Behavior of Cellulose Reinforced Cross-Linked Starch Composite Films Made with Tartaric Acid Modified Starch Microparticles <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice; Bodirlau, Ruxanda; Bercea, Maria JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 21 Issue: 2 Pages: 431-440 Published: JUN 2013	1.969
21	Influence of Accelerated Weathering on the Properties of Polypropylene/Poly(lactic acid)/Eucalyptus Wood Composites Darie, Raluca Nicoleta; Bodirlau, Ruxandra; Teaca, Carmen Alice; Macyszyn, Joanna; Kozlowski, Marek; <i>Spiridon, Iuliana</i> INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION Volume: 18 Issue: 4 Pages: 315-327 Published: MAY 1 2013	1.515
22	Effect of cellulose reinforcement on the properties of organic acid modified starch microparticles/plasticized starch bio-composite films Teaca, Carmen-Alice; Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> CARBOHYDRATE POLYMERS Volume: 93 Issue: 1 Special Issue: SI Pages: 307-315 Published: MAR 1 2013	4.219
23	Mechanical Properties and Weathering Behavior of Polypropylene-Hemp Shives Composites Popa, Marcel Ionel; Pernevan, Silvia; Sirghie, Cecilia; <i>Spiridon, Iuliana</i> ; Chambre, Dorina; Copolovici, Dana Maria; Popa, Niculina JOURNAL OF CHEMISTRY Article Number: 343068 Published: 2013	0.996
24	Influence of natural fillers on the properties of starch-based biocomposite films Bodirlau, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> COMPOSITES PART B-ENGINEERING Volume: 44 Issue: 1 Pages: 575-583 Published: JAN 2013	3.850
25	Co-pyrolysis of LignoBoost (R) lignin with synthetic polymers Brebu, Mihai; <i>Spiridon, Iuliana</i> POLYMER DEGRADATION AND STABILITY Volume: 97 Issue: 11 Pages: 2104-2109 Published: NOV 2012	3.120
26	INVESTIGATION OF STRUCTURAL AND THERMAL PROPERTIES OF DIFFERENT WOOD SPECIES TREATED WITH TOLUENE-2,4-DIISOCYANATE Bodirlau, Ruxanda; Teaca, Carmen-Alice; Resmerita, Ana-Maria; <i>Spiridon, Iuliana</i> CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 46 Issue: 5-6 Pages: 381-387 Published: JUN-JUL 2012	0.562
27	Assessment of Changes Due to Accelerated Weathering of Low-Density Polyethylene/Feather Composites <i>Spiridon, Iuliana</i> ; Paduraru, Oana Maria; Rudowski, Marek; Kozlowski,	2.567

	Marek; Darie, Raluca Nicoleta INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume: 51 Issue: 21 Pages: 7279-7286 Published: MAY 30 2012	
28	STRUCTURAL AND PROPERTIES CHANGES INVESTIGATION UPON ORGANIC ACID MODIFIED STARCH-BASED FILMS Teaca, Carmen-Alice; Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> REVUE ROUMAINE DE CHIMIE Volume: 57 Issue: 4-5 Pages: 401-406 Published: APR-MAY 2012	0.250
29	Effects of chemical modification on the structure and mechanical properties of starch-based biofilms Bodirlu, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> ; Tudorachi, Nita MONATSHEFTE FUR CHEMIE Volume: 143 Issue: 2 Pages: 335- 343 Published: FEB 2012	1.131
30	Rheological Investigation of Prunus Sp. Gums in Aqueous Medium Amarioarei, Gina; <i>Spiridon, Iuliana</i> ; Lungu, Maria; Bercea, Maria INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume: 50 Issue: 24 Pages: 14148-14154 Published: DEC 21 2011	2.567
31	Characterization of biological active compounds from Verbascum phlomoides by chromatography techniques. I. Gas chromatography Armatu, Alice; Bodirlau, Ruxanda; Nechita, Constantin Bogdan; Niculaua, Marius; Teaca, Carmen-Alice; Ichim, Maria; <i>Spiridon, Iuliana</i> ROMANIAN BIOTECHNOLOGICAL LETTERS Volume: 16 Issue: 4 Pages: 6297-6304 Published: JUL-AUG 2011	0.381
32	Thermal degradation of keratin waste Brebu, Mihai; <i>Spiridon, Iuliana</i> JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS Volume: 91 Issue: 2 Pages: 288-295 Published: JUL 2011	3.652
33	Total phenolic content and antioxidant activity of plants used in traditional Romanian herbal medicine <i>Spiridon, Iuliana</i> ; Bodirlau, Ruxanda; Teaca, Carmen-Alice CENTRAL EUROPEAN JOURNAL OF BIOLOGY Volume: 6 Issue: 3 Pages: 388-396 Published: JUN 2011	0.814
34	Preparation and characterization of adipic acid-modified starch microparticles/plasticized starch composite films reinforced by lignin <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice; Bodirlau, Ruxanda JOURNAL OF MATERIALS SCIENCE Volume: 46 Issue: 10 Pages: 3241-3251 Published: MAY 2011	2.302
35	DISSOLUTION OF NATURAL POLYMERS IN IONIC LIQUID Teaca, Carmen-Alice; Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> REVUE ROUMAINE DE CHIMIE Volume: 56 Issue: 1 Pages: 33-+ Published: JAN 2011	0.250
36	STRUCTURAL CHANGES EVIDENCED BY FTIR SPECTROSCOPY IN CELLULOSIC MATERIALS AFTER PRE-TREATMENT WITH IONIC LIQUID AND ENZYMATIC HYDROLYSIS <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice; Bodirlau, Ruxanda BIORESOURCES Volume: 6 Issue: 1 Pages: 400-413 Published: 2011	1.334
37	EVALUATION OF PROPERTIES OF LDPE/OAK WOOD COMPOSITES EXPOSED TO ARTIFICIAL AGEING	0.562



	Darie, Raluca Nicoleta; Bercea, Maria; Kozlowski, Marek; <i>Spiridon, Iuliana</i> CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 45 Issue: 1-2 Pages: 127-135 Published: JAN-FEB 2011	
38	A thermogravimetric study of structural changes of lime wood ( <i>Tilia cordata</i> Mill.) induced by exposure to simulated accelerated UV/Vis-light Popescu, Carmen-Mihaela; <i>Spiridon, Iuliana</i> ; Tibirna, Carmen Mihaela, Vasile, Cornelia JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY Volume: 217 Issue: 1 Pages: 207-212 Published: JAN 1 2011	2.477
39	Antioxidant capacity and total phenolic contents of oregano ( <i>Origanum vulgare</i> ), lavender ( <i>Lavandula angustifolia</i> ) and lemon balm ( <i>Melissa officinalis</i> ) from Romania <i>Spiridon, Iuliana</i> ; Colceru, Svetlana; Anghel, Narcis; Carmen-Alice; Bodirlau, Ruxanda; Armatu, Alice NATURAL PRODUCT RESEARCH Volume: 25 Issue: 17 Pages: 1657-1661 Published: 2011	1.057
40	Enzymatic hydrolysis of <i>Asclepias syriaca</i> fibers in the presence of ionic liquids Bodirlau, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> MONATSHEFTE FÜR CHEMIE Volume: 141 Issue: 9 Pages: 1043-1048 Published: SEP 2010	1.131
41	Enzymatic Degradation of LDPE / Corn Starch Blends Treated with [EMIM][Cl] Ionic Liquid Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice MATERIALE PLASTICE Volume: 47 Issue: 2 Pages: 126-129 Published: JUN 2010	0.903
42	New polyetherurethanes based on cellulose derivative for biomedical applications Vlad, S.; Filip, D.; Macocinschi, D.; <i>Spiridon, Iuliana</i> , Nistor, A.; Gradinaru, L. M.; Musteata, V. E. OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 4 Issue: 3 Pages: 407-414 Published: MAR 2010	0.412
43	INFLUENCE OF IONIC LIQUID ON HYDROLYZED CELLULOSE MATERIAL: FT-IR SPECTROSCOPY AND TG-DTG-DSC ANALYSIS Bodirlau, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION Volume: 15 Issue: 7 Pages: 460-469 Article Number: PII 927858103 Published: 2010	1.515
44	PREPARATION AND CHARACTERIZATION OF COMPOSITES COMPRISING MODIFIED HARDWOOD AND WOOD POLYMERS/POLY(VINYL CHLORIDE) Bodirlau, Ruxanda; Teaca, Carmen Alice; <i>Spiridon, Iuliana</i> BIORESOURCES Volume: 4 Issue: 4 Pages: 1285-1304 Published: AUG 2009	1.334
45	Evaluation of some polyetherurethane elastomers for chemicals, oils and solvents resistance	0.383

	Vlad, S.; Ciobanu, C.; Macocinschi, D.; Filip, D.; <i>Spiridon, Iuliana</i> JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 11 Issue: 8 Pages: 1160-1168 Published: AUG 2009	
46	ANTI-INFLAMMATORY CONSTITUENTS FROM DIFFERENT PLANT SPECIES Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> ; Teaca, Carmen Alice; Anghel, N.; Ichim, M.; Colceru, S.; Armatu, A. ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL Volume: 8 Issue: 4 Pages: 785-792 Published: JUL-AUG 2009	1.008
47	Response surface regression of some polyurethane filled with modified cellulose Vlad, S.; Ciobanu, C.; Macocinschi, D.; Filip, D.; Nistor, A.; Gradinaru, L. M.; <i>Spiridon, Iuliana</i> JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 11 Issue: 6 Pages: 907-913 Published: JUN 2009	0.383
48	Influence of Components Ratio upon Properties of Wood/Thermoplastic Polymer Composites Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice REVISTA DE CHIMIE Volume: 60 Issue: 5 Pages: 508-512 Published: MAY 2009	0.956
49	INFLUENCE OF COMPONENTS RATIO UPON MECHANICAL PROPERTIES OF WOOD/THERMOPLASTIC POLYMER COMPOSITES Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> ; Teaca, Carmen-Alice CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 43 Issue: 4-6 Pages: 205-209 Published: APR-JUN 2009	0.562
50	Thermal, mechanical and wettability properties of some branched polyetherurethane elastomers Vlad, Stelian; <i>Spiridon, Iuliana</i> ; Grigoras, Cristian Vasile; Dobrota, M.; Nistor, A. E-POLYMERS Article Number: 004 Published: JAN 31 2009	0.812
51	Enzymatic degradation of some nanocomposites of poly(vinyl alcohol) with starch <i>Spiridon, Iuliana</i> ; Popescu, Maria Cristina; Bodirlau, Ruxanda; Vasile, Cornelia POLYMER DEGRADATION AND STABILITY Volume: 93 Issue: 10 Pages: 1884-1890 Published: OCT 2008	3.120
52	CHEMICAL MODIFICATION OF BEECH WOOD: EFFECT ON THERMAL STABILITY Bodirlau, Ruxanda; Teaca, Carmen Alice; <i>Spiridon, Iuliana</i> BIORESOURCES Volume: 3 Issue: 3 Pages: 789-800 Published: AUG 2008	1.334
53	Modifications of <i>Asclepias syriaca</i> fibers for paper production <i>Spiridon, Iuliana</i> INDUSTRIAL CROPS AND PRODUCTS Volume: 26 Issue: 3 Pages: 265-269 Published: OCT 2007	3.449
54	CHEMICAL INVESTIGATION OF WOOD TREE SPECIES IN	1.334

	TEMPERATE FOREST IN EAST-NORTHERN ROMANIA Bodirlau, Ruxanda; <i>Spiridon, Iuliana</i> ; Teaca, Carmen Alice BIORESOURCES Volume: 2 Issue: 1 Pages: 41-57 Published: FEB 2007	
55	Thermal investigation upon various composite materials Bodirlau, Ruxanda; Teaca, Carmen-Alice; <i>Spiridon, Iuliana</i> REVUE ROUMAINE DE CHIMIE Volume: 52 Issue: 1-2 Pages: 153-158 Published: JAN-FEB 2007	0.250
56	Influence of natural stress factors on some Salicaceae species <i>Spiridon, I</i> ; Teaca, C.A.; Bodirlau, R. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 39 Issue: 5-6 Pages: 451-457 Published: SEP-DEC 2005	0.562
57	Hydrolytic enzymes effects on straw cellulosic pulp <i>Spiridon, Iuliana</i> REVUE ROUMAINE DE CHIMIE Volume: 50 Issue: 7-8 Pages: 541-545 Published: JUL-AUG 2005	0.250
58	Thermogravimetry and chemical investigation on the oak tree wood from the north-east of Romania Bodirlau, R.; <i>Spiridon, I</i> ; Teaca, C. A.; Popa, V. I. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 39 Issue: 1-2 Pages: 25-35 Published: JAN-APR 2005	0.562
59	Some preliminary data on the enzymatic hydrolysis of <i>Pinus pinaster</i> kraft pulp <i>Spiridon, I</i> ; Duarte, A. P. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 38 Issue: 1-2 Pages: 59-65 Published: JAN-APR 2004	0.562
60	Influence of xylanase treatment on <i>Pinus pinaster</i> kraft pulp <i>Spiridon, I</i> ; Duarte, A. P.; Curto, J. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 37 Issue: 5-6 Pages: 497-504 Published: SEP-DEC 2003	0.562
61	Enzymatic hydrolysis of <i>Pinus pinaster</i> kraft pulp <i>Iuliana Spiridon</i> , A. P. Duarte and M. N. Belgacem <i>Appita Journal</i> , 54, 457-459 (2001)	0.609
62	Application of microorganisms and enzymes in the pulp and paper industry <i>Spiridon, Iuliana</i> .; Popa, V. I. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 34 Issue: 3-4 Pages: 275-285 Published: MAY-AUG 2000	0.562
63	Influence of the hemicellulases enzymes on different lignocellulosic materials V. I. Popa and <i>Iuliana Spiridon</i> <i>Romanian Biotechnological Letters</i> , 2(3), 201-209 (1997)	0.381
64	Some preliminary data on the use of <i>Asclepias syriaca</i> seed hairs in pulp and paper manufacture Popa, V. I.; <i>Spiridon, I</i> ; Bobu, E. CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 30 Issue: 3-4 Pages: 223-227 Published: MAY-AUG 1996	0.562
65	ON SOME CHARACTERISTICS OF LIGNIN AND POLYPHENOLIC PRODUCTS SEPARATED FROM SPRUCE BARK <i>Spiridon Iuliana</i> ; POPA, M; POPA, V. I.	0.562

	CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 29 Issue: 2 Pages: 115-121 Published: MAR-APR 1995	
66	Behaviour of two main portuguese wood species towards enzymatic hydrolysis <i>Iuliana Spiridon</i> , M. N. Belgacem and A. P. Duarte <i>Cellulose Chem. Technol.</i> , <b>35</b> , 243-251 (2001)	0.562
67	Influence of accelerated weathering over performance of PLA based materials <i>Iuliana Spiridon</i> , Raluca Nicoleta Darie Nita, Marek Kozlowski, Ancuta Nechita and Ramona Gabriela Ursu CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 50 Issue: 4-5 Pages: 629-635 Published: MAY-JUNE 2016	0.562
		100.626

### 2.1.2. Articole in reviste necotate ISI Thomson Reuters

	Articole in reviste necotate ISI Thomson Reuters	Factor de impact
1	<i>Iuliana Spiridon</i> and M. N. Belgacem Enzymatic deinking of laser-printed papers <i>Progress in Paper Recycling</i> , 13(4), 12-15 (2004)	
2	<i>Iuliana Spiridon</i> and Azarias Machado de Andrade Enzymatic deinking of old newspaper <i>Progress in Paper Recycling</i> , 14(3), 1-5 (2005)	
3	Florina Crivoi, Cornelia Vasile, Narcis Anghel and <i>Iuliana Spiridon</i> Degradation of low density polyethylene/ starch blends under an enzymatic complex or soil microorganisms action <i>Polymer Research Journal</i> , 2(1), 89-108 (2008), ISSN 1935-2530	
4	<i>Iuliana Spiridon</i> , Narcis Anghel, Ruxanda Bodirlau and Carmen Alice Teaca Characterization of <i>Claviceps purpurea</i> extracts <i>Journal of Colloid and Surface Chemistry</i> , 8(2), 23-29 (2008)	
5	<i>Iuliana Spiridon</i> and V. I. Popa Contributions to the study of enzymatic transformations of high-yield pulps <i>Buletinul Institutului Politehnic, Iasi, Tom XLIV (XLIII), fasc.1-2, p. 115-122 (1998)</i>	
6	C. A. Teaca, <i>Iuliana Spiridon</i> and R. Bodirlau New perspectives for the improvement of wood quality and products <i>Memoriile Sectiilor Stiintifice, Seria IV, tom XXVII, 104-122(2004)</i>	
7	V. I. Popa si <i>Iuliana Spiridon</i> Cercetari in domeniul biodegradarii ligninei. I. Microorganismele si enzime implicate in procesul de biodegradare a ligninei <i>Celuloza si Hartie</i> , 42(4), 27-32 (1993)	
8	V. I. Popa, <i>Iuliana Spiridon</i> Cercetari in domeniul biodegradarii ligninei. II. Separarea si caracterizarea enzimelor implicate in procesul de biodegradare <i>Celuloza si Hartie</i> , 43(2), 28-30 (1994)	
9	V. I. Popa, <i>Iuliana Spiridon</i> Cercetari in domeniul biodegradarii ligninei. III. Metode de control a	

	procesului de biodegradare Celuloza si Hartie, 43(2), 31-34 (1994)	
10	V. I. Popa, C. Stanciu, M. Barsan, <i>Iuliana Spiridon</i> Consideratii privind posibilitatile de aplicare a procesului de bioinalbire a celulozei Celuloza si Hartie, 44(3), 3-10 (1995)	
11	<i>Iuliana Spiridon</i> Cercetari privind descenelizarea enzimatica a hartiei imprimate laser Celuloza si Hartie, 52(1), 12-16 (2003)	
12	<i>Iuliana Spiridon</i> Influenta enzimelor xilanazice asupra pastelor celulozice din paie de grau Celuloza si Hartie, 52(1), 42-46 (2003)	

### 2.1.3 Brevete de inventie si inovare: 1

a) Grigore Alice Elena, Colceru-Mihul Svetlana, Ichim Maria, *Spiridon Iuliana*, Panteli Minerva, Ichim Liviu, Rasit Iuksel, Bubueanu Elena Corina, Draghici Elena  
Procedeu de obtinere a unui produs fitoterapeutic cu actiune antiinflamatoare  
Brevet nr. 12680/3.11.2007

## 2.2. Granturi/proiecte câștigate prin competitie

### 2.2.1. ca director de proiect: 12

#### Granturi internationale:2

1. Forest biorefineries: Added-value from chemicals and polymers by new integrated separation, fractionation and upgrading technologies, CP-IP 228589-2 AFORE  
coordonator: dr. *Iuliana Spiridon*, valoare 2009-2013: 247 920 euro
2. Research Infrastructure for Circular Forest Bioeconomy ERIFORE ID proposal 654371  
coordonator: dr. *Iuliana Spiridon*, valoare 2016-2017:100 000 euro

#### Granturi nationale:9

##### 2.2.1 ca director de proiect

1. Modificarea chimica a polimerilor naturali din biomasa prin reactii enzimaticе (B12), contract 5052/1999  
1999-2000, valoare: 20 000 lei  
Director proiect: dr. *Iuliana Spiridon*
2. Caracterizarea unor principii bioactive de origine vegetala si fungica, cu actiune citostatica, imunomodulatoare, metabolica si neurotrofa si valorificarea lor in alimentatia functional, CEEX 15/3.10.2005, perioada 2005-2007, valoare ICMPP:95 000 ron  
Director proiect: prof. dr. D. Cojocaru Universitatea "Al. I. Cuza" Iasi  
Responsabil proiect: dr. *Iuliana Spiridon*
3. Biomasa vegetala utilizata pentru obtinerea unor substante chimice in vederea realizarii unui produs fitoterapeutic cu actiune asupra sistemului nervos central (SNC) si transferul tehnologic al bioprocesului CEEX 3/6.10.2005, perioada 2005-2008, valoare ICMPP: 141 400 ron  
Director proiect: dr. M. Ichim, BIONG Bucuresti  
Responsabil proiect: dr. *Iuliana Spiridon*

4. Obținerea unor tulpini submerse de *Claviceps purpurea* cu preferențială și înaltă capacitate glucanosintetică și stabilirea domeniilor de valorificare biomedicală a unor preparate glucanice autohtone, CEEEX 110/2006, perioada 2006-2008, valoare ICMPP: 100 000 ron  
Director proiect: dr. P. Rotinberg, Institutul de Cercetări Biologice Iași  
Responsabil proiect: dr. *Iuliana Spiridon*

5. Laborator de certificare a calității materialelor polimere din/pentru ambalaje, contract 276/2006, perioada 2006-2007, valoare ICMPP: 800 000 ron  
Director proiect: dr. *Iuliana Spiridon*

6. Conceperea, dezvoltarea și transferul tehnologiei de obținere a unei formule medicamentoase originale, practic netoxică, cu eficiență deosebită în terapia antiinflamatoare, bazată pe principii active de natură vegetală, contract 17/2007, perioada 2007-2010, valoare ICMPP: 93 210 ron  
Director de proiect: dr. M. Ichim, BIONG București  
Responsabil proiect: dr. *Iuliana Spiridon*

7. Materiale polimere multifuncționale pentru societate, contract 196/2008, perioada 2008-2010, valoare ICMPP: 444 000 ron  
Director proiect: dr. *Iuliana Spiridon*

8. Contract 119EU- Capacități- modul III, perioada 2011-2013, valoare ICMPP: 270 000 ron  
Director proiect: dr. *Iuliana Spiridon*

9. Contract 870/2007  
Laborator de analiză și caracterizare a compusilor naturali pentru materiale materiale cu aplicații în domenii de varf, finalizat cu studiu de fezabilitate.  
Valoare: 600 000 lei, program IMPACT  
Director de proiect: *Iuliana Spiridon*

### **2.2.2. ca membru în echipa:6**

#### **Granturi internaționale:1**

1. The European Polysaccharides Network, 2006-2007  
Valoare: 67 737 E  
Coordonator: acad. Bogdan C. Simionescu

#### **Granturi naționale:5**

1. Influența condițiilor pedoclimatice asupra modificărilor de compoziție chimică a principalelor specii forestiere din România (B 14)  
Valoare: 9,4 milioane lei/940 ron contract 2612/ 5.06.1997, beneficiar **MCT**, Director proiect: acad. Cr. I. Simionescu

2. Influența condițiilor pedoclimatice asupra modificărilor de compoziție chimică a principalelor specii forestiere din România (B 14)  
Beneficiar: **Academia Romana** contract 3040/2.12. 1997, valoare: 940 ron, Director proiect: acad. Cr. I. Simionescu

3. Potențialul chimic al fitomasei în dezvoltarea durabilă  
contract 5052/17.11.1999, perioada:1999-2001, valoare:10 650 ron, Director proiect: dr. Mariana Popa

4. Arhitecturi inovative degradabile, biocompatibile si bioactive pe baza de polimeri naturali si sintetici, CEEEX 10/3.10.2005, perioada 2005-2008, valoare: 50 000 ron, director de proiect: dr. Cornelia Vasile
5. Monitorizarea integritatii structurale si autorepararea palelor de turbine eoliene si a altor structuri din compozite inteligente, PCCA 2013-4-0656, contract nr. 59/01.07.2014, perioada 01.07.2014 – 30.12.2016, valoare: 125 000 ron, Director de proiect: Dr. Adriana Savin

### **A3. Prestigiu stiintific**

#### **3.1. Membru in colective de redactie ale revistelor nationale/internationale (Editorial Board Member)**

a) Associate Editor la jurnalul Cellulose Chemistry and Technology

#### **3.2. Indice Hirch: 14**

Citari in reviste ISI (fara autocitari) - conform ISI Web of knowledge: 451

### *Selectie*

#### Articol

Enzymatic degradation of some nanocomposites of poly(vinyl alcohol) with starch

By: Spiridon, Iuliana; Popescu, Maria Cristina; Bodarlau, Ruxanda; et al.

POLYMER DEGRADATION AND STABILITY Volume: 93 Issue: 10 Pages: 1884-1890 Published: OCT 2008

1. Nano composite solid polymer electrolytes based on biodegradable polymers starch and poly vinyl alcohol

By: Chatterjee, B.; Kulshrestha, Niharika; Gupta, P. N.

MEASUREMENT Volume: 82 Pages: 490-499 Published: MAR 2016

2. Properties and Applications of Polyvinyl Alcohol, Halloysite Nanotubes and Their Nanocomposites

By: Gaaz, Tayser Sumer; Sulong, Abu Bakar; Akhtar, Majid Niaz; et al.

MOLECULES Volume: 20 Issue: 12 Pages: 22833-22847 Published: DEC 2015

3. Sonocatalytic degradation of 2-hydroxyethyl cellulose in the presence of some nanoparticles

By: Taghizadeh, Mohammad Taghi; Seifi-Aghjekohal, Parinaz

ULTRASONICS SONOCHEMISTRY Volume: 26 Pages: 265-272 Published: SEP 2015

4. Characterization of starch/poly(vinyl alcohol)/clay nanocomposite films prepared in twin-screw extruder for food packaging application

By: Navarchian, Amir H.; Jalalian, Mehdi; Pirooz, Majid

JOURNAL OF PLASTIC FILM & SHEETING Volume: 31 Issue: 3 Pages: 309-336 Published: JUL 2015

5. Crystallization behavior, thermal property and enzymatic degradation of PVP/amylose in the presence of graphene oxide nanosheets

By: Taghizadeh, Mohammad Taghi; Abdollahi, Reza

POLYMER DEGRADATION AND STABILITY Volume: 116 Pages: 53-61 Published: JUN 2015

6. Properties of Cast Films Made of Chayote (Sechium edule Sw.) Tuber Starch Reinforced with Cellulose Nanocrystals

By: Terrazas-Hernandez, Jorge A.; Berrios, Jose De J.; Glenn, Gregory M.; et al.

JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 23 Issue: 1 Pages: 30-37  
Published: MAR 2015

7. Preparation, Characterization, and Biodegradation of PS:PLA and PS:PLA:OMMT Nanocomposites Using Aspergillus niger

By: Shimpi, Navinchandra G.; Borane, Mahesh; Mishra, Satyendra

POLYMER COMPOSITES Volume: 35 Issue: 2 Pages: 263-272 Published: FEB 2014

8. Isolation, Characterization, and Application of Nanocellulose from Oil Palm Empty Fruit Bunch Fiber as Nanocomposites

By: Lani, N. S.; Ngadi, N.; Johari, A.; et al.

JOURNAL OF NANOMATERIALS Article Number: 702538 Published: 2014

9 Characterization of Urea Encapsulated by Biodegradable Starch-PVA-Glycerol

By: Lum, Yip Hing; Shaaban, Azizah; Mitan, Nona Merry M.; et al.

JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 21 Issue: 4 Pages: 1083-1087

Published: DEC 2013

10. Study of enzymatic degradation and water absorption of nanocomposites polyvinyl alcohol/starch/carboxymethyl cellulose blends containing sodium montmorillonite clay nanoparticle by cellulase and alpha-amylase

By: Taghizadeh, Mohammad Taghi; Sabouri, Narges

JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 44 Issue: 6 Pages:

995-1001 Published: NOV 2013

11. In Vitro assessment of the enzymatic degradation of several PVA/starch materials

By: Jecu, L.; Raut, I.; Calin, M.; et al.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 15 Issue: 7-8 Pages:

869-873 Published: JUL-AUG 2013

12. Investigation of nano-size montmorillonite on enhancing polyvinyl alcohol-starch blends prepared via solution cast approach

By: Tee, Tiam-Ting; Sin, Lee Tin; Gobinath, R.; et al.

COMPOSITES PART B-ENGINEERING Volume: 47 Pages: 238-247 Published: APR 2013

13. Effects of halloysite nanotubes and kaolin loading on the tensile, swelling, and oxidative degradation properties of poly(vinyl alcohol)/chitosan blends

By: Ismail, Hanafi; Khoo, Wee Shen; Ariffin, Azlan

JOURNAL OF VINYL & ADDITIVE TECHNOLOGY Volume: 19 Issue: 1 Pages: 55-64 Published: MAR 2013

14. Morphological and Thermal Investigations of Starch-Based Nanocomposites

By: Chang, Peter R.; Huang, Jin; Huang, Qing; et al.

Edited by: Dufresne, A; Thomas, S; Pothan, LA

BIOPOLYMER NANOCOMPOSITES: PROCESSING, PROPERTIES, AND APPLICATIONS Book

Series: Wiley Series on Polymer Engineering and Technology Pages: 227-259 Published: 2013

15. Biodegradable nanocomposite hydrogel structures with enhanced mechanical properties prepared by photo-crosslinking solutions of poly(trimethylene carbonate)-poly(ethylene glycol)-poly(trimethylene carbonate) macromonomers and nanoclay particles

By: Sharifi, Shahriar; Blanquer, Sebastien B. G.; van Kooten, Theo G.; et al.

ACTA BIOMATERIALIA Volume: 8 Issue: 12 Pages: 4233-4243 Published: DEC 2012

16. Oxidized banana starch-polyvinyl alcohol film: Partial characterization

By: Palma-Rodriguez, Heidi M.; Aguirre-Alvarez, Gabriel; Chavarria-Hernandez, Norberto; et al.

STARCH-STARKE Volume: 64 Issue: 11 Pages: 882-889 Published: NOV 2012

[View Abstract](#)

17. Biodegradation Behavior of Composite Films with Poly (Vinyl Alcohol) Matrix

By: Kibedi-Szabo, Csaba Zoltan; Stroescu, Marta; Stoica-Guzun, Anicuta; et al.

JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 20 Issue: 2 Pages: 422-430

Published: JUN 2012

18. Biodegradation Kinetics of Antimicrobial Composite Films Based on Polyvinyl Alcohol-bacterial Cellulose

By: Dobre, Loredana-Mihaela; Dobre, Tanase; Ferdes, Mariana

REVISTA DE CHIMIE Volume: 63 Issue: 5 Pages: 540-544 Published: MAY 2012

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19. Properties and structural characterization of oxide starch/chitosan/graphene oxide biodegradable nanocomposites

By: Ma, Jun; Liu, Changhua; Li, Rui; et al.



JOURNAL OF APPLIED POLYMER SCIENCE Volume: 123 Issue: 5 Pages: 2933-2944 Published: MAR 5 2012

20. Starch Nanocomposites

By: Ray, Dipa; Maiti, Sonakshi

Edited by: John, MJ; Sabu, T

NATURAL POLYMERS, VOL 2: NANOCOMPOSITES Book Series: RSC Green Chemistry Series

Issue: 17 Pages: 185-233 Published: 2012

21. Study of enzymatic degradation and water absorption of nanocomposites starch/polyvinyl alcohol and sodium montmorillonite clay

By: Taghizadeh, Mohammad Taghi; Abbasi, Zahra; Nasrollahzade, Zainab

JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume: 43 Issue: 1 Pages: 120-124 Published: JAN 2012

22. Structure and Physical Properties of Starch/Poly Vinyl Alcohol/Sodium Montmorillonite Nanocomposite Films

By: Ali, Samer S.; Tang, Xiaozhi; Alavi, Sajid; et al.

JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY Volume: 59 Issue: 23 Pages: 12384-12395 Published: DEC 14 2011

23. Tailor-made starch-based conjugates containing well-defined poly(vinyl acetate) and its derivative poly(vinyl alcohol)

By: Lu, D. R.; Xiao, C. M.; Xu, S. J.; et al.

EXPRESS POLYMER LETTERS Volume: 5 Issue: 6 Pages: 535-544 Published: JUN 2011

[Full Text from Publisher](#)

24. Recent advances in starch, polyvinyl alcohol based polymer blends, nanocomposites and their biodegradability

By: Tang, Xiaozhi; Alavi, Sajid

CARBOHYDRATE POLYMERS Volume: 85 Issue: 1 Pages: 7-16 Published: APR 22 2011

[Full Text from Publisher](#)

25. Biodegradation of Poly(vinyl alcohol) and Bacterial Cellulose Composites by Aspergillus niger

By: Stoica-Guzun, Anicuta; Jecu, Luiza; Gheorghe, Amalia; et al.

JOURNAL OF POLYMERS AND THE ENVIRONMENT Volume: 19 Issue: 1 Pages: 69-79

Published: MAR 2011

26. Biodegradation of corn flour-based materials assessed by enzymatic, aerobic, and anaerobic tests: Influence of specific surface area

By: Jbilou, Fouzia; Galland, Sophie; Ayadi, Farouk; et al.

POLYMER TESTING Volume: 30 Issue: 1 Pages: 131-139 Published: FEB 2011

27. Polysaccharide-based superporous hydrogels with fast swelling and superabsorbent properties

By: Kuang, Jia; Yuk, Kun Young; Huh, Kang Moo

CARBOHYDRATE POLYMERS Volume: 83 Issue: 1 Pages: 284-290 Published: JAN 1 2011

28. Improved thermo-mechanical properties by the addition of natural fibres in starch-based sustainable biocomposites

By: Moriana, Rosana; Vilaplana, Francisco; Karlsson, Sigbritt; et al.

COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING Volume: 42 Issue: 1 Pages: 30-40 Published: JAN 2011

29. Properties and Structural Characterization of Oxidized Starch/PVA/alpha-Zirconium Phosphate Composites

By: Yang, Yajuan; Liu, Changhua; Chang, Peter R.; et al.

JOURNAL OF APPLIED POLYMER SCIENCE Volume: 115 Issue: 2 Pages: 1089-1097 Published: JAN 15 2010

30. Detection of synergistic interactions of polyvinyl alcohol-cassava starch blends through DSC

By: Sin, Lee Tin; Rahman, W. A. W. A.; Rahmat, A. R.; et al.

CARBOHYDRATE POLYMERS Volume: 79 Issue: 1 Pages: 224-226 Published: JAN 5 2010

Articol

CHEMICAL MODIFICATION OF BEECH WOOD: EFFECT ON THERMAL STABILITY

By: Bodirlau, Ruxanda; Teaca, Carmen Alice; Spiridon, Iuliana

BIORESOURCES Volume: 3 Issue: 3 Pages: 789-800 Published: AUG 2008

1. Thermal degradation of beech wood with thermogravimetry/Fourier transform infrared analysis

By: Ding, Yanming; Ezekoye, Ofodike A.; Lu, Shouxiang; et al.

ENERGY CONVERSION AND MANAGEMENT Volume: 120 Pages: 370-377 Published: JUL 15 2016

2. Review on Lipophilic and Hydrophilic Extractives in Tissues of Common Beech

By: Vek, Viljem; Oven, Primoz; Poljansek, Ida

DRVNA INDUSTRIJA Volume: 67 Issue: 1 Pages: 85-96 Published: MAR 2016

3. IMPROVEMENT OF ANTIFUNGAL ACTIVITY OF CITRONELLA OIL AGAINST ASPERGILLUS FLAVUS ON RUBBERWOOD (HEVEA BRASILIENSIS) USING HEAT CURING

By: Jantamas, S.; Matan, N.; Matan, N.; et al.

JOURNAL OF TROPICAL FOREST SCIENCE Volume: 28 Issue: 1 Pages: 39-47 Published: 2016

4. Centaurea solstitialis and Silybum marianum weeds conversion into value-added thermoplastic materials by benzylolation process

By: Uner, Birol; Dorak, Sinem; Ismailoglu, Yunus; et al.

IRANIAN POLYMER JOURNAL Volume: 25 Issue: 1 Pages: 37-43 Published: JAN 2016

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5. Comparison of different process strategies for bioethanol production from Eucheuma cottonii: An economic study

By: Tan, Inn Shi; Lee, Keat Teong

BIORESOURCE TECHNOLOGY Volume: 199 Pages: 336-346 Published: JAN 2016

6. Maleic Anhydride Treated Wood: Effects of Drying Time and Esterification Temperature on Properties

By: Essoua, Gatien Geraud Essoua; Blanchet, Pierre; Landry, Veronic; et al.

BIORESOURCES Volume: 10 Issue: 4 Pages: 6830-6860 Published: NOV 2015

7. Modification of rapeseed straw with organic acid anhydrides

By: Paukszta, Dominik; Doczekalska, Beata; Ostrowski, Adam; et al.

JOURNAL OF COMPOSITE MATERIALS Volume: 49 Issue: 11 Pages: 1369-1378 Published: MAY 2015

8. Thermal Pretreatment of Kudzu Biomass (Pueraria lobata) as Filler in Cost-Effective PLA Biocomposite Fabrication Process

By: Salak, Feridoun; Uemura, Satoshi; Sugimoto, Kiyotoshi

POLYMER ENGINEERING AND SCIENCE Volume: 55 Issue: 2 Pages: 340-348 Published: FEB 2015

9. Contribution to Understanding the Occurrence of Extractives in Red Heart of Beech

By: Vek, Viljem; Oven, Primoz; Poljansek, Ida; et al.

BIORESOURCES Volume: 10 Issue: 1 Pages: 970-985 Published: 2015

10. Esterification of oily-FFA and transesterification of high FFA waste oils using novel palm trunk and bagasse-derived catalysts

By: Ezebor, Francis; Khairuddean, Melati; Abdullah, Ahmad Zuhairi; et al.

ENERGY CONVERSION AND MANAGEMENT Volume: 88 Pages: 1143-1150 Published: DEC 2014

11. Oil palm trunk and sugarcane bagasse derived heterogeneous acid catalysts for production of fatty acid methyl esters

By: Ezebor, Francis; Khairuddean, Melati; Abdullah, Ahmad Zuhairi; et al.

ENERGY Volume: 70 Pages: 493-503 Published: JUN 1 2014

12. Fuel properties and combustion characteristics of some promising bamboo species in India

By: Kumar, Ritesh; Chandrashekar, N.

JOURNAL OF FORESTRY RESEARCH Volume: 25 Issue: 2 Pages: 471-476 Published: JUN 2014

13. Cyanoethylation of several fiber materials and their utilization as adhesive in wood-based panels

By: Qu, Baoxue; Qin, Tefu; Chu, Fuxiang

WOOD SCIENCE AND TECHNOLOGY Volume: 48 Issue: 3 Pages: 519-531 Published: MAY 2014

14. Switchable Ionic Liquids as Delignification Solvents for Lignocellulosic Materials

By: Anugwom, Ikenna; Eta, Valerie; Virtanen, Pasi; et al.

CHEMSUSCHEM Volume: 7 Issue: 4 Pages: 1170-1176 Published: APR 2014

[View Abstract](#)

15. Biocomposites From Switchgrass and Lignin Hybrid and Poly(butylene succinate) Bioplastic: Studies on Reactive Compatibilization and Performance Evaluation

By: Sahoo, Saswata; Misra, Manjusri; Mohanty, Amar K.

MACROMOLECULAR MATERIALS AND ENGINEERING Volume: 299 Issue: 2 Pages: 178-189

Published: FEB 2014

16. Chemical Modification of Kraft Lignin: Effect on Chemical and Thermal Properties

By: Chen, Yao; Stark, Nicole M.; Cai, Zhiyong; et al.

BIORESOURCES Volume: 9 Issue: 3 Pages: 5488-5500 Published: 2014

17. Characterization of Lignocellulosic Fruit Waste as an Alternative Feedstock for Bioethanol Production

By: Sanchez Orozco, Raymundo; Balderas Hernandez, Patricia; Roa Morales, Gabriela; et al.

BIORESOURCES Volume: 9 Issue: 2 Pages: 1873-1885 Published: 2014

[View Abstract](#)

18. ESTERIFICATION OF WILLOW WOOD WITH CYCLIC ACID ANHYDRIDES

By: Doczekalska, Beata; Bartkowiak, Monika; Zakrzewski, Roman

WOOD RESEARCH Volume: 59 Issue: 1 Pages: 85-96 Published: 2014

19. The effects of binder on the physical and mechanical properties of chemically treated sawdust-reinforced polypropylene composites

By: Idrus, M. A. M. Mohd; Hamdan, Sinin; Islam, Md Saiful; et al.

JOURNAL OF APPLIED POLYMER SCIENCE Volume: 129 Issue: 3 Pages: 1534-1540 Published: AUG 5 2013

20. Evaluation of Biological Pretreatment of Rubberwood with White Rot Fungi for Enzymatic Hydrolysis

By: Nazarpour, Forough; Abdullah, Dzulkefly Kuang; Abdullah, Norhafizah; et al.

MATERIALS Volume: 6 Issue: 5 Pages: 2059-2073 Published: MAY 2013

21. Homogeneous modification of sugarcane bagasse with maleic anhydride in 1-butyl-3-methylimidazolium chloride without any catalysts

By: Chen, Mingjie; Chen, Chaoyi; Liu, Chuanfu; et al.

INDUSTRIAL CROPS AND PRODUCTS Volume: 46 Pages: 380-385 Published: APR 2013

22. Effect of the lignin type on the morphology and thermal properties of the xanthan/lignin hydrogels

By: Raschip, Irina Elena; Hitruc, Gabriela Elena; Vasile, Cornelia; et al.

INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES Volume: 54 Pages: 230-237 Published: MAR 2013

23. Biological Pretreatment of Rubberwood with Ceriporiopsis subvermispora for Enzymatic Hydrolysis and Bioethanol Production

By: Nazarpour, Forough; Abdullah, Dzulkefly Kuang; Abdullah, Norhafizah; et al.

BIOMED RESEARCH INTERNATIONAL Article Number: 268349 Published: 2013

24. Industrial Cellulignin Wastes as Adsorbent for Removal of Methylene Blue Dye from Aqueous Solutions

By: Suteu, Daniela; Malutan, Teodor

BIORESOURCES Volume: 8 Issue: 1 Pages: 427-446 Published: 2013

25. Wood and Bamboo-PP Composites: Fungal and Termite Resistance, Water Absorption, and FT-IR Analyses

By: Kartal, S. Nami; Aysal, Sema; Terzi, Evren; et al.

BIORESOURCES Volume: 8 Issue: 1 Pages: 1222-1244 Published: 2013

26. Ultrasonication-assisted manufacture of cellulose nanocrystals esterified with acetic acid

By: Tang, Lirong; Huang, Biao; Lu, Qilin; et al.

BIORESOURCETECHNOLOGY Volume: 127 Pages: 100-105 Published: JAN 2013

27. Novel compatible system of [C(2)OHmim][OAc]-cellulases for the in situ hydrolysis of lignocellulosic biomass

By: Li, Lu; Xie, Juan; Yu, Shitao; et al.

RSC ADVANCES Volume: 2 Issue: 31 Pages: 11712-11718 Published: 2012

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28. Preparation of cellulose nanofibers with hydrophobic surface characteristics

By: Jonoobi, Mehdi; Harun, Jalaluddin; Mathew, Aji P.; et al.

CELLULOSE Volume: 17 Issue: 2 Pages: 299-307 Published: APR 2010

29. CHEMICAL COMPOSITION, CRYSTALLINITY, AND THERMAL DEGRADATION OF BLEACHED AND UNBLEACHED KENAF BAST (Hibiscus cannabinus) PULP AND NANOFIBERS

By: Jonoobi, Mehdi; Harun, Jalaludin; Shakeri, Alireza; et al.

BIORESOURCES Volume: 4 Issue: 2 Pages: 626-639 Published: MAY 2009

Articol

Influence of natural fillers on the properties of starch-based biocomposite films

By: Bodirlau, Ruxanda; Teaca, Carmen-Alice; Spiridon, Iuliana

COMPOSITES PART B-ENGINEERING Volume: 44 Issue: 1 Pages: 575-583 Published: JAN 2013

1. Effects of chitin nano-whiskers on the antibacterial and physicochemical properties of maize starch films

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9. Sustainable use of cassava (Manihot esculenta) roots as raw material for biocomposites development

By: Versino, Florencia; Lopez, Olivia V.; Alejandra Garcia, M.

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10. Mechanical, Thermal and Barrier Properties of Starch-Based Films Plasticized with Glycerol and Lignin and Reinforced with Cellulose Nanocrystals

By: Miranda, Cleidiene S.; Ferreira, Marina S.; Magalhaes, Mariana T.; et al.

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11. Starch-Based Films Plasticized with Glycerol and Lignin from Piassava Fiber Reinforced with Nanocrystals from Eucalyptus

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16. Review: Raw Natural Fiber-Based Polymer Composites

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18. Lightweight Materials from Biofibers and Biopolymers

By: Zhang, Danning

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By: Kaewtatip, Kaewta; Thongmee, Jariya

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STRUCTURAL CHANGES EVIDENCED BY FTIR SPECTROSCOPY IN CELLULOSIC MATERIALS AFTER PRE-TREATMENT WITH IONIC LIQUID AND ENZYMATIC HYDROLYSIS

By: Spiridon, Iuliana; Teaca, Carmen-Alice; Bodirlau, Ruxanda

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1. Loblolly pine pretreatment by ionic liquid-glycerol mixtures

By: Lynam, Joan G.; Coronella, Charles J.

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By: Abdul, Peer Mohamed; Jahim, Jamaliah Md.; Harun, Shuhaida; et al.

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By: Rafieian, Fatemeh; Simonsen, John

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10. Review: Raw Natural Fiber-Based Polymer Composites

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Thermal degradation of various lignins by TG-MS/FTIR and Py-GC-MS

By: Brebu, Mihai; Tamminen, Tarja; Spiridon, Iuliana  
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By: Degirmentepe, Selim; Baysal, Ergun; Turkoglu, Turkey; et al.

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By: Chen, Dengyu; Zhang, Hongru; Liu, Dong; et al.

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By: Li, Wenzhi; Zhang, Mingjian; Du, Zhijie; et al.

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By: Yu, Haixia; Yu, Wenji; Yang, Liu; et al.

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By: Materazzi, S.; Risoluti, R.

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By: Kim, Jae-Young; Hwang, Hyewon; Park, Jeesu; et al.

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By: Chen, Dengyu; Zhou, Jianbin; Zhang, Qisheng

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By: Wang, Shurong; Lin, Haizhou; Ru, Bin; et al.

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23. CO-PYROLYSIS OF VARIOUS LIGNINS WITH POLYCARBONATE

By: Brebu, Mihai; Nistor, Manuela

CELLULOSE CHEMISTRY AND TECHNOLOGY Volume: 48 Issue: 1-2 Pages: 69-74 Published: JAN-FEB 2014

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Preparation and characterization of adipic acid-modified starch microparticles/plasticized starch composite films reinforced by lignin

By: Spiridon, Iuliana; Teaca, Carmen-Alice; Bodirlau, Ruxanda

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By: de Miranda, Cleidiane Souza; Ferreira, Marina Santos; Magalhaes, Mariana Tibo; et al.

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By: da Cruz, Luana Conceicao; de Miranda, Cleidiane Souza; dos Santos, Wilton Jesus; et al.

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By: Shankar, Shiv; Reddy, Jeevan Prasad; Rhim, Jong-Whan

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ACS SUSTAINABLE CHEMISTRY & ENGINEERING Volume: 2 Issue: 5 Pages: 1072-1092

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