



Personal information

First name(s) / Surname(s) **Teodora Mocan**
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E-mail teodora_mocan@yahoo.com

Work experience Professional experience, former employers.

- ▶ **2020-present-** University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- Associate Professor (Habil)
- ▶ **2016-2020** University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department – Habilitated Lecturer
- ▶ **2018-present** Institute of Gastroenterology and Hepatology Cluj-Napoca, Romania, Nanomedicine Department- Senior Researcher
- ▶ **2007-2018** Institute of Gastroenterology and Hepatology Cluj-Napoca, Romania- Nanomedicine Department, Research Assistant/Researcher, team member in research projects
- ▶ **2008- 2016-**University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- Assistant Lecturer.
- ▶ **2007- 2011** University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, Physiology Department- PhD student;
- ▶ **2005-2008-** Adult Clinical Hospital “O. Fodor” Cluj-Napoca (presently: Institute of Gastroenterology and Hepatology Cluj-Napoca) - Resident Doctor;
- ▶ **2002-2003-** Emmergency Hospital, Cluj—Napoca- General Physician;

Education and training	<p>Education, degrees and diplomas.</p> <ul style="list-style-type: none"> ▶ 2020- Specialist Doctor in Laboratory Medicine ▶ 2018- Habilitation for PhD mentorship –Directeur de Research DR(OMEN 4290/08/08/2018) ▶ 2011- PhD in Medical Sciences (PhD thesis:” Implications of oxidative stress mechanisms in toxicity of nanoparticles). ▶ 2010 -Specialist Doctor Orthopedica and Tramatology ▶ 2003 - MA in Medical Informatics and Biostatistics, University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca ▶ 2002 - Doctor-Physician Degree University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca,. ▶ 1996 - BSc Degree at “Gh.M.Murgoci” High-School Braila;
Other language(s)	English (C2), French (B1/B2)

Project-based scientific and managerial experience:

- ▶ 2 national grant projects- director,
- ▶ 16 national grant projects- member of research team
- ▶ **Director:** ▶ VACCINAN 76/2012 PN-II-PT-PCCA-2011 , ▶ PN-III-P2.1-BG-2016-0446
- ▶ **Researcher (Team Member):**

Nr crt.	Grant/Proiect (date de identificare / tip)	Derulare
1	PN II:Contr.no.41-068 /2007 .Director: Georgescu Carmen	2007-2010
2	PN II:Contr.no.41-009/14.09.2007 Director: Iancu Cornel	2007-2010
3	PN II:Contr.no.42-112/01.10.2008 Director: Clichici Simona	2008-2011
4	PN II:Contr.no.42-110/01.10.2008 Director : Seicean Andrada	2008-2011
5	PN II:Contr.no 42-104/01.10.2008 Director: Filip Gabriela	2008-2011
6	PN II:Contr.no 12-131/2008 Director:Clichici Simona	2008-2011
7	PN II:Contr.no 42-111/2008 Director: Bala Ovidiu	2008-2011
8	PN II:Contr.no 42-115/2008 Director: Iancu Cornel,	2008-2011
9	PN II:Contr.no 99/2011 Director: Mocan Lucian	2011-2014
10	PN-II-ID-PCE- 2011-3-0954 Director: Stiufiuc Rares.	2011-2015
11	PN II:Contr.no. 133/2012. (PNII-PT-PCCA-2011-3.2-1289) Director: Mocan Lucian	2012-2016
12	PN II:Contr.no. 83/2012.(PN-II-PT-PCCA-2011-3.1-1551) Director: Iancu Cornel	2012-2016
13	PN II:Contr.no. 56/2013 (PN-II-ID-PCE-2012-4-0241) Director: Iancu Cornel	2013-2016
14	PN II:Contr.no..125/2014 (PN-II-PT-PCCA-2013-4-1553). Director: Zaharie Florin	2014-2016
15	PN II:Contr.no.284/2015. (PN-II-RU-TE-2014-4-2267) Director :: Matea Tudor Cristian	2015-2017
16	PNIII: PN-III-P2-2.1-PED-2016-1742. Director: Matea T Cristian	2016-2018
17	PNIII: PN-III-P1-1.1-TE-2016-2161, ctr 102/2018 Director: Mocan Lucian	2018-2020

List of publications:

Total number of articles in ISI-indexed journals: 84. Hirsch index : 33(Google Scholar); 21(ISI Web of Knowledge). The following represent articles in ISI journals, as principal author:

Nr. Crt.	Titlu și autori	Revista, volum, nr. Pagini	Anul	IF
1	Studies on antioxidant effects of the red grapes seed extract from <i>Vitis vinifera</i> , Burgund Mare, Receaș in pregnant rats. Mureșan A, Alb C, Suciuc S, Clichici S, Filip A, Login C, Decea N, Mocan T .	Acta Physiologica Hungarica Vol.97 Nr. 2 Pag. 240-246.	2010	1.22
2	Implication of oxidative stress mechanisms in toxicity of nanoparticles Mocan T , Clichici S, Agoșton-Coldea L, Mocan L, Șimon Ș, Ilie IR, Iancu C, Biriș AR, Mureșan A,	Acta Physiol Hung. Vol.97 Nr.3 Pag.247-255	2010	1.22
3	Cornel Iancu, Lucian Mocan, Enhanced laser thermal ablation for the in vitro treatment of liver cancer by specific delivery of multiwalled carbon nanotubes functionalized with human serum albumin Constantin Bele, Anamaria Ioana Orza, Flaviu Tabaran, Cornel Catoi, Rares Stiuftuc, Ariana Stir, Cristian Matea, Dana Iancu, Lucia Agoșton-Coldea, Florin Zaharie, Teodora Mocan	International Journal of Nanomedicine, Vol. 6 Pag. 129-141	2011	3.13
4	Left atrium systolic and diastolic function assessment in hypertensive patients with preserved ejection fraction. Agoșton-Coldea L, Lupu S, Hicea S, Mocan T	Acta Physiologica Hungarica Vol.100 Nr. 2 Pag. 140-152.	2013	0.74
5	Surface plasmon resonance-induced photoactivation of gold nanoparticles as mitochondria-targeted therapeutic agents for pancreatic cancer. Mocan L, Ilie I, Tabaran FA, Dana B, Zaharie F, Zdrehus C, Puia C, Mocan T , Muntean V, Teodora P, Ofelia M, Marcel T, Iancu C.	Expert Opin Ther Targets. Vol.17 Nr.12 Pag.1383-1393	2013	4.9
6	Serum levels of the soluble IL-1 receptor family member ST2 and right ventricular dysfunction. Agoșton-Coldea L, Lupu S, Hicea S, Paradis A, Mocan T .	Biomarkers In Medicine Vol.8 Nr. 1 Pag. 95-106	2014	2.85
7	Surface plasmons photoactivated gold nanoparticles as bactericidal agents against Methicilin resistant <i>Staphylococcus Aureus</i> . Lucian Mocan, Ioana Ilie, Flaviu Tabaran, Cristian Matea, Cornel Iancu, Teodora Mocan .	International Journal of Nanomedicine 2014, Vol.9 Pag.1453-1461	2014	4.38
8	Photothermal Treatment of Human Pancreatic Cancer Using PEGylated Multi-Walled Carbon Nanotubes Induces Apoptosis by Triggering Mitochondrial Membrane Depolarization Mechanism. Mocan T , Matea CT, Cojocar I, Ilie I, Tabaran FA, Zaharie F, Iancu C, Bartos D, Mocan L.	J Cancer. Vol.5 Nr.8 Pag.679-688	2014	3.27
9	Rational design of gold nanocarrier for the delivery of JAG-1 peptide. Matea CT, Mocan T , Tabaran F, Iancu C, Mocan LC.	J Nanobiotechnology. Vol.13 Nr.41 Pag.1-10	2015	4.11
10	Photothermal treatment of liver cancer with albumin-conjugated gold nanoparticles initiates Golgi Apparatus-ER dysfunction and caspase-3 apoptotic pathway activation by selective targeting of Gp60 receptor. Mocan L, Matea C, Tabaran FA, Mosteanu O, Pop T, Mocan T , Iancu C.	Int J Nanomedicine. 2015 Vol.10 Pag.5435-5445	2015	4.38
11	In Vitro Administration of Gold Nanoparticles Functionalized with MUC-1 Protein Fragment Generates Anticancer Vaccine Response via Macrophage Activation and Polarization Mechanism. Mocan T , Matea C, Tabaran F, Iancu C, Orasan R, Mocan L.	J Cancer. Vol.6 Nr.6 Pag.583-592	2015	3.27
12	Selective laser ablation of Methicillin-resistant <i>Staphylococcus aureus</i> with IgG functionalized multi-walled carbon nanotubes. Journal of Biomedical Nanotechnology in press Lucian Mocan, Ioana Ilie, Flaviu A. Tabaran, Cornel Iancu, Matea Cristian, Ofelia Mosteanu, Teodora Pop, Claudiu Zdrehus, Teodora Mocan .	Journal of Biomedical Nanotechnology Vol.12 Pag.1-8	2016	5.33
13	Selective in vitro photothermal nano-therapy of MRSA infections mediated by IgG conjugated gold nanoparticles. Mocan L, Matea C, Tabaran F, Mosteanu O, Pop T, Puia C, Agoșton-Coldea L, Gonciar D, Kalman E, Zaharie G, Iancu C, Mocan T.	Scientific Reports Vol 6 Pag 39466, DOI 10.1038/srep39466	2016	5.52
14	Matea TC, Mocan T , Tabaran F, Pop T, Mosteanu O, Puia C, Iancu C, Mocan L. Quantum dots in imaging, drug delivery and sensor applications.	International Journal of Nanomedicine 2017, Nr 12, Pag 5421-5431, ISSN: 1178-2013.	2017	4.32
15	Laser thermal ablation of multidrug-resistant bacteria using functionalized gold nanoparticles. Mocan L, Tabaran FA, Mocan T , Pop T, Mosteanu O, Agoșton-Coldea L, Matea CT, Gonciar D, Zdrehus C, Iancu C.	Int J Nanomedicine. Vol 23 Nr 12 Pag 2255-2263.	2017	4.32
16	Development of nanoparticle-based optical sensors for pathogenic	J Nanobiotechnology.	2017	4.2

	bacterial detection. Mocan T , Matea CT, Pop T, Mosteanu O, Buzoianu AD, Puia C, Iancu C, Mocan L.	2017 Mar 31;15(1):25.		
17	Selective ex vivo photothermal nano-therapy of solid liver tumors mediated by albumin conjugated gold nanoparticles. Mocan L, Matea C, Tabaran FA, Mosteanu O, Pop T, Puia C, Agoston-Coldea L, Zaharie G, Mocan T , Buzoianu AD, Iancu C.	Biomaterials. Vol 119 Pag.33-42.	2017	8.40
18.	Carbon nanotubes as antibacterial agents Mocan T , Matea TC, Pop Teodora, Mosteanu O, Buzoianu AD, Suciuc S, Puia C, Zdrehus C, Iancu C, Mocan L.	Cell.Mol.Life Sci DOI 10.1007/s00018-017-2532-y	2017	5.78
19.	Iron, Copper, and Zinc Homeostasis: Physiology, Physiopathology, and Nanomediated Applications. Szabo, R.; Bodolea, C.; Mocan, T.	<i>Nanomaterials</i> 2021 , <i>11</i> , 2958. https://doi.org/10.3390/nano11112958	2021	5.07
20	Titu, S.; Grapa, C.M.; Mocan, T. ; Balacescu, O.; Irimie, A. Tetraspanins: Physiology, Colorectal Cancer Development, and Nanomediated Applications.	<i>Cancers</i> 2021 , <i>13</i> , 5662. https://doi.org/10.3390/cancers13225662	2021	6.67
21	Margin, O.-C.; Dulf, E.-H.; Mocan, T.; Mocan, L. Modelling in Synthesis and Optimization of Active Vaccinal Components.	<i>Nanomaterials</i> 2021 , <i>11</i> , 3001. https://doi.org/10.3390/nano11113001	2021	5.07
22	Nedelcu, A.; Mocan, T.; Grapa, C.; Mocan, L. Recent Advances in Nanoparticle-Mediated Diagnosis and the Treatment of Pancreatic Cancer. <i>Int. J. Mol. Sci.</i> 2021 , <i>22</i> , 8060. https://doi.org/10.3390/ijms22158060	<i>Int. J. Mol. Sci.</i> 2021 , <i>22</i> , 8060. https://doi.org/10.3390/ijms22158060	2021	5.92

► Internationally published book chapters:11

- Lucia Agoston-Coldea, **T. Mocan**, L. Mocan. Apolipoproteins A-I and B in risk evaluation for coronary heart disease. In JE Rathbond, Handbook of Lipoprotein Research. Nova Science Publishers, New York. 2010. pg. 5-32. ISBN 978-1-61668-186-9.
- Iancu C, Ilie I, Mocan L, Georgescu C, Ilie R, Duncea I, **Mocan T**, Iancu D., Zaharie F. "Human Cord Blood-Derived Stem Cells in transplantation and regenerative medicine". In: "Stem Cells in Clinic and Research", InTech, 2011, pg 21-53 In Press, ISBN: 978-953-307-797-0.
- Lucia Agoston-Coldea, **T. Mocan**, S. Lupu. Non-invasive Imaging in approaching Ischemic Coronary Artery Disease. In Branislav Baskot, Coronary Angiography-Advances in Non-invasive Imaging for Evaluation of Coronary Artery Disease. InTech, sept. 2011, ISBN 978-953-307-675-1.
- Mocan T**, Iancu C, Agoston-Coldea L, Ilie IR, Mocan L, Muresan A., "Genotoxicity of Nanomaterials" In "Nanomaterials and Hazard Assessment", P.V. Mohanan, pag 116-131(total: 324), ISSN: 9788192 334707, ISBN: 9788190362615, 1st Edition Feb. 2012, Educational Book Centre, Mumbai 400080, India
- Ilie I, Ilie R, Mocan L, Georgescu (Pepene) C, Duncea I, **Mocan T**, Ghibu S, Iancu C. Statusul Sindromului de Ovar Polichistic – un Factor de Risc pentru Afecțiuni Cardiovasculare Viitoare. În: Mehnaz Atiq (Ed.) Progrese Recente în Factorii Riscului Cardiovascular, InTech, 2012, 9: 151-198, ISBN 978-953-51-0321-9
- Lucian Mocan , Lucia Agoston-Coldea , **Teodora Mocan** , Cristian Matea, Flaviu A. Tabaran, Teodora Pop, Ofelia Mosteanu, Cornel Iancu. Experimental Nanophotothermolysis of Human pancreatic Cancer Cells Using Gold Nanoparticles. Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 1-16
- Teodora Pop , **Teodora Mocan** , Lucia Agoston , Flaviu A. Tabaran , Cristian Matea , Ofelia Mosteanu , Cornel Iancu , Lucian Mocan Nanotherapeutic Strategies for the Selective Ablation of Human Liver Cancer Cells in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 17-40
- Teodora Mocan** , Flaviu A. Tabaran , Cristian Matea , Teodora Pop , Diana Gonciar , Ofelia Mosteanu , Lucian Mocan , Dana Bartos , Lucia Agoston-Coldea , Cornel Iancu Development of an in Vitro Anticancer Vaccine Platform Using Gold Nanoparticles Immunoconjugates in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 pag 41-69
- Diana Gonciar , **Teodora Mocan** , Lucia Agoston. Spectroscopic Techniques Used in Nanomedicine in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 93-116
- Diana Gonciar , Lucia Agoston, **Teodora Mocan**. Hybridization Techniques in Nanotechnology Present State and Future Trends in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 116-136
- Lucian Mocan , **Teodora Mocan** , Cristian Matea , Flaviu A. Tabaran , Lucia Agoston , Ofelia Mosteanu , Teodora Pop , Dana Bartos , Cornel Iancu Gold Nanoparticles for Multimodal Imaging in Nanomedicine in Molecular and Cellular Techniques with Applications in Nanomedicine Science Publishing Group, New York ISBN: 978-1-940366-05-0 p 136-146

► National patent applications : 15

Title	Publication Number	Publication Date	Inventor(S)	Application Number
PROCESS FOR PREPARING BIOCAPSULES APPLICABLE FOR ANTIFUNGAL PROTECTION PURPOSES, IN PATIENTS HAVING ANTIBACTERIAL THERAPY PER OS	RO132632 (A2)	2018-06-29	MOCAN TEODORA, MATEA CRISTIAN, MOȘTEANU OFELIA, ORĂȘAN REMUS, MOCAN LUCIAN, ORĂȘAN MEDA, CONEAC ANDREI, POP TEODORA	RO2016000951
PROCESS FOR PREPARING BIOCAPSULES MEANT FOR IMMUNOPROPHYLAXIS OF COLON ADENOCARCINOMA	RO132630 (A2)	2018-06-29	AGOSTON VAS COLDEA LUCIA, MOCAN TEODORA, IANCU CORNEL , MOCAN LUCIAN , TABARAN FLAVIU, MATEA CRISTIAN	RO2016000970
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN TARGETING NEOPLASTIC CELLS IN COLON CANCER AND RENDERING PHOTO-THERMAL EFFECT SELECTIVE	RO131845 (A2)	2017-05-30	MOCAN TEODORA , MATEA CRISTIAN, IANCU CORNEL , AGOSTON VAS COLDEA LUCICA, TABARAN FLAVIU, MOCAN LUCIAN	RO2015000906
PROCESS FOR PREPARING A PRODUCT TO BE USED IN TARGETED THERAPY OF HEPATIC NEOPLASM	RO131847 (A2)	2017-05-30	MOCAN LUCIAN, IANCU CORNEL, MOCAN TEODORA, MATEA CRISTIAN	RO2015000909
PROCESS FOR PREPARING A PRODUCT WITH REGENERATIVE AND ANTIMICROBIAL APPLICABILITY	RO131849 (A2)	2017-05-30	MATEA CRISTIAN, MOCAN LUCIAN, IANCU CORNEL , MOCAN TEODORA	RO2015000908
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE TREATMENT OF ANTIBIOTIC-RESISTANT INFECTIONS	RO131843 (A2)	2017-05-30	MATEA CRISTIAN , MOCAN LUCIAN, AGOSTON VAS COLDEA LUCICA, GONCIAR ANDREI IANCU CORNEL, ZDREHUS CLAUDIU, MOCAN TEODORA	RO2015000904

PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN OPTIMIZED CHEMOTHERAPY OF PANCREAS NEOPLASM	<u>RO131848</u> (A2)	2017-05-30	MOCAN TEODORA, MATEA CRISTIAN , IANCU CORNEL, POP TEODORA , MOSTEANU OFELIA, MOCAN LUCIAN	RO2015000902
PROCESS FOR PREPARING A CARCINOEMBRYONIC PRODUCT TO BE APPLIED IN PANCREATIC AND COLONIC CANCER IMMUNO-PROPHYLAXIS	<u>RO131850</u> (A2)	2017-05-30	MOCAN TEODORA, MATEA CRISTIAN, IANCU CORNEL, MOCAN LUCIAN	RO2015000903
PROCESS FOR PREPARATION OF A PRODUCT INTENDED FOR TARGETED CELLULAR INTERNALIZATION, APPLICABLE IN PANCREATIC ADENOCARCINOMA IMMUNOPROPHYLAXIS	<u>RO131853</u> (A2)	2017-05-30	MATEA CRISTIAN, IANCU CORNEL MOCAN LUCIAN, MOCAN TEODORA	RO2015000845
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN TARGETED PHOTO-THERMAL THERAPY OF PANCREATIC CANCER	<u>RO131846</u> (A2)	2017-05-30	MOCAN LUCIAN, MATEA CRISTIAN IANCU CORNEL, MOCAN TEODORA	RO2015000907
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN ANTIBACTERIAL-TARGETED PHOTO-THERMAL LASER TREATMENT	<u>RO131844</u> (A2)	2017-05-30	MOCAN LUCIAN, MATEA CRISTIAN POP TEODORA, MOSTEANU OFELIA MOCAN TEODORA	RO2015000905
PROCESS FOR PREPARING A NANOSTRUCTURED PRODUCT TO BE APPLIED IN IMMUNOPROPHYLAXIS OF PANCREATIC CANCER	<u>RO130792</u> (A2)	2015-12-30	MOCAN LUCIAN-CONSTANTIN, MATEA CRISTIAN-TUDOR, IANCU CORNEL TABARAN ALEXANDRU-FLAVIU, LIE IOANA-RADA, MOCAN TEODORA	RO20140000413
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE IMMUNOPROPHYLAXIS OF PANCREATIC ADENOCARCINOMA	<u>RO130791</u> (A2)	2015-12-30	MOCAN TEODORA, MATEA CRISTIAN-TUDOR IANCU CORNEL MOCAN LUCIAN-CONSTANTIN	RO20140000408
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED FOR PREVENTING COLON NEOPLASIA	<u>RO130790</u> (A2)	2015-12-30	MOCAN TEODORA MATEA CRISTIAN-TUDOR IANCU CORNEL GONCIAR ANDREI ZAHARIE VASILE-FLORIN TABARAN FLAVIU CATOI CORNEL MOCAN LUCIAN-CONSTANTIN	RO20140000407
PROCESS FOR PREPARING A PRODUCT TO BE APPLIED IN THE OPTIMIZED PHOTOTHERMAL THERAPY OF HEPATIC TUMOURS	<u>RO130737</u> (A2)	2015-12-30	MOCAN LUCIAN-CONSTANTIN, IANCU CORNEL, MATEA CRISTIAN-TUDOR ILIE IOANA-RADA, MOCAN TEODORA	RO20140000414

Data

11.05.2023