

C.1 CURRICULUM VITAE

Personal information

Name, Surname:	STAMATIN IOAN		
Date of birth:	05 September 1952	Sex:	M
Nationality:	Romanian		
Researcher unique identifier(s) (ORCID, Researcher ID etc.):	<p>ORCID ID: 0000-0002-9168-7180</p> <p>Scopus Author ID: 6603263090</p> <p>Scholar google: https://scholar.google.com/citations?user=VcFB8tUAAAAJ&hl=en</p>		
URL for personal website (if case):	www.3nanosae.org		

Education

Year	Faculty/department - University/institution - Country
1998 (dissertation defended)	Ph.D. – Physics-Solid state, Faculty of Physics, University of Bucharest
-1971-1976	Diploma Physics, Faculty of Physics, (specialization in Polymer sciences & technology 1975-1976) , University of Bucharest, Bucharest - ROMANIA

Profil

Profile	Description/
Teaching	Physical Chemistry (Transport&Thermal Phenomena, FuelCells&Hydrogen, nanomaterials&nanotechnologies, Polymers & membranes) for mașter and PhD schools in renewables and alternative energy sources
Schols founder& co-founderr	Master school: Renewable and Alternative Energy sources, 2010 Postdoctoral School: Fuel Cells & Hydrogen storage, 2005 Post university training, co-founder: Internet of Things și Inteligența Artificială , curs inovator postuniversitar, 2024
Academic	Supervisor: Doctoral and Postdoctoral school fields: renewable energies, fuel cells, storage, batteries, design related components
Research	Research: Fuel Cells (Solid acid, PEM, alcohol, urea) Batteries (Na ion), nanomaterials for energy and photoconversion/photodegradation, microbial fuel cells, thermoelectrics - for heat from standard sources to electriciy, Logistics: workshop laboratory – 3D- rapid prototyping for design and execution, testing experimental models

Membru in asociatii	<i>Romanian Association of Standards (ASRO)</i> , ISO member, committees hydrogen, fuels cells, energy systems, 2024 <i>European Materils research Society(E-MRS)</i> , 2005 <i>American Materials reserch Society (MRS)</i> - 2010
Expert evaluator si membru in organizatii EU	Europea Innovation Council-, program Pathfinder, 2010 FP 5, 6, 7- Transfer of knowledge (2005), SME- 2012, Fuel Cells program- 2010
Visiting Professor	- 1994_Leeds University- carbon nanostructures - 2000 Colorado state University, plasma polymerization - 2005- University NewCastle UponTyne- microbial fuel cells - 2023-Technical Varna University , advanced methods and devices fuel cells, microbial fuel cells
Inventor	20 patents registeres la OSIM: renewabls- capture and conversion CO2, baterii Na-ion, pile de combustie, materiale stocare energie termice-electric
Publications	Cumulativ din scholar-google: 170, H-33, citari ~2900 Web of science: 140 publicatii , H-26
Reviewer	Journals: Nano-Energy, Hydrogn& Fuel cells, Nature- materials, Advanced materials, and other 12 journals in Elsevier, Willey, Royal Soc of chemistrey, over 200 paper reviewed since 2005

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer - Country
Since 2005-	Director research center 3nanoSAE (Nanosciences& Renewable energy sources) In 2020- Senat of University granted title of Transfer & technological transfer research center, “ CTT-3nanosa”e
Since 2010	Member in Research institute of University of Bucharet (ICUB) Responsible with technological transfer and patent proposal
1994-2012	Member of the Administartive Council – Faculty of Physics, University of Bucharest, Romania
Since 2012	Supervisor Doctoral School- Physics, coordinator specialization Renewable & Alternative energy sources, University of Bucharets, Romania
Since 1991	University academic position: Assistant professor (1994), Lecturer (1994-2000), associate professor (2000-2008), full professor (2008)
Since 2023	Member in Romanian Association for Standards (ASRO)
1991-1980	Senior Reserecher in high pressure-high temperature technologies, diamond synthesis, cubic carbon boride and nitrides
1981-1976	Physiscist- Romanian Chemical Factory- polymer technologies

Career breaks (if case)

Year	Reason
-	-

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Year	Project title - Role – Funder – Budget – link to project webpage Only director of project
2005-2008	FP6, Marie Curie network, ToK, Contract No. MTKD-CT-2004-517215, Biological and Microbial Fuel Cells, 2005-2008, 300kEU
2010-2012	Renewable& Alternative Energy Sources Master program (R&AES) Sustainable Energy Europe. A European campaign to change the landscape of energy. EU campaign
2008-2009	Bilateral:2008-2009, RO11/2007 (ROID38)Pecs University-Univ of Bucharest,Carbon nanotubes based materials in development of microsensors for neurotransmitters in depressive patients;
2007-2009	Capacitati: Cp15/2007-2009 Surse de energie regenerabile si alternative
2006-2008	MENER 704/2006-2008 Pile de combustie de noua generatie cu electrolit acizi solizi si superacizi (safe), pentru exploatare la temperaturi 200-300
2006-2008	MENER: 760/2006-2008 Sistem de pile de combustie pentru electrooxidarea directa a bioalcoolor
2006- 2009	AMTRANS, X2C19,Cercetari pentru materiale si echipamente avansate de generare a hidrogenului in vederea utilizarii in sisteme reconvertite de transport si stocare a combustibilulu
2006-2008	320/2006-2008,CEEX-INVENT,320-CCH2SEE Cercetare, dezvoltare și tehnologii pentru celulă de combustie cu hidrogen sulfurat lichid în scopul producerii de energie electrică curată
2008	CEEX-VIASAN-110, 2006-2008, NUTRIMINEROS, Model experimental pentru studiul biodisponibilității unor factori nutriționali (Ca, B, fitosteroli) și influența lor asupra mineralizării osului la porc, suport științific în studiul osteoporozei

Other relevant professional experiences (e.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees and major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role
institutional responsibilities	Responsible with Renewable an alternative energy sources implementation in University of Bucharest

C.2 Track record of the last 10 years

Authors	Title	Publication	Volume	Number	Pages	Year
Balan, Adriana Elena; Al-Sharea, Ali; Lavasani, Esmaeil Jalali; Tanasa, Eugenia; Voinea, Sanda; Dobrica, Bogdan; Stamatina, Ioan;	Paraffin-Multilayer Graphene Composite for Thermal Management in Electronics	Materials	16	6	2310	2023
Balan, Adriana Elena; Bitu, Bogdan Ionut; Vizireanu, Sorin; Dinescu, Gheorghe; Stamatina, Ioan; Trefilov, Alexandra Maria Isabel;	Carbon-Nanowall Microporous Layers for Proton Exchange Membrane Fuel Cell	Membranes	12	11	1064	2022
Iordache, Stefan Marian; Ionete, Eusebiu Ilarian; Iordache, Ana Maria; Tanasa, Eugenia; Stamatina, Ioan; Grigorescu, Cristiana Eugenia Ana;	Pd-decorated CNT as sensitive material for applications in hydrogen isotopes sensing- Application as gas sensor	International Journal of Hydrogen Energy	46	18	11015-11024	2021
Iordache, Stefan-Marian; Ionete, Eusebiu Ilarian; Iordache, Ana-Maria; Stamatina, Ioan; Zoita, Nicolae Catalin;	Functionalized Carbon Nanotubes for Chemical Sensing: Electrochemical Detection of Hydrogen Isotopes	Coatings	11	8	968	2021

Sobetkii, Arcadie; Grigorescu, Cristiana Eugenia Ana;						
Mateescu, Alice O; Mateescu, Gheorghe; Balan, Adriana; Ceaus, Catalin; Stamatin, Ioan; Cristea, Daniel; Samoila, Cornel; Ursutiu, Doru;	Stainless steel surface nitriding in open atmosphere cold plasma: Improved mechanical, corrosion and wear resistance properties	Materials	14	17	4836	2021
Ionescu, Viorel; Balan, Adriana Elena; Trefilov, Alexandra Maria Isabel; Stamatin, Ioan;	Exergetic Performance of a PEM Fuel Cell with Laser- Induced Graphene as the Microporous Layer	Energies	14	19	6232	2021
Trefilov, Alexandra Maria Isabel; Balan, Adriana; Stamatin, Ioan;	Hybrid Proton-Exchange Membrane Based on Perfluorosulfonated Polymers and Resorcinol- Formaldehyde Hydrogel	Polymers	13	23	4123	2021
Trefilov, AMI; Balan, A; Stamatin, I;	Hybrid Proton-Exchange Membrane Based on Perfluorosulfonated Polymers and Resorcinol- Formaldehyde Hydrogel. Polymers 2021, 13, 4123					2021
Ionescu, V; Balan, AE; Trefilov, AMI; Stamatin, I;	Exergetic Performance of a PEM Fuel Cell with Laser- Induced Graphene as the Microporous Layer. Energies 2021, 14, 6232					2021
Tiliakos, Athanasios; Trefilov, Alexandra MI; Tanasă, Eugenia; Balan, Adriana; Stamatin, Ioan;	Laser-induced graphene as the microporous layer in proton exchange membrane fuel cells	Applied Surface Science	504		#####	2020

NICHITA, Cornelia; MIKHAILEF, AL-BEHADILI F.; VASILE, Eugen; STAMATIN, Ioan;	SILVER NANOPARTICLES SYNTHESIS. BIOREDUCTION WITH GALLIC ACID AND EXTRACTS FROM CYPERUS ROTUNDUS L	Digest Journal of Nanomaterials and Biostructures	15	2	419-433	2020
Iordache, AM; Rizea, Constantin; Giuglea, C; Zoita, CN; Stamatin, I; Iordache, SM; Stefan, CR; Rusu, Madalin Ion; Tortet, Laurence; Tonetto, Alain;	Preparation and Study of Core Shell Fe ₃ O ₄ /Au Nanoparticles for Traceability of Blood Vessels and Biosensing by Surface Enhanced Raman Spectroscopy	2020 22nd International Conference on Transparent Optical Networks (ICTON)			####	2020
Andronie, Adriana; Stamatin, Ioan; Girleanu, Valentin; VIOREL, IONESCU; Buzbuchi, Nicolae;	Experimental Study of a PEMFC System with Different Dimensions of the Serpentine Type Channels from Bipolar Plate Flow Fields	Mechanics	25	1	####	2019
Andronie, Adriana; Stamatin, Ioan; Girleanu, Valentin; Ionescu, Viorel; Buzbuchi, Nicolae;	Simplified mathematical model for polarization curve validation and experimental performance evaluation of a PEM fuel cell system	Procedia Manufacturing	32		810-819	2019
Ionescu, Viorel; Buzbuchi, Nicolae; Andronie, Adriana; Stamatin, Ioan; Girleanu, Valentin;	Exergy analysis of a PEM fuel cell system with different bipolar plate flow fields	2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE)			####	2019
Abdullah, MZ; Al-Timimi, MH; Albanda, WH; Dumitru, M;	Structural and Electrochemical Properties of P ₃ -Na _{0.67} Mn _{0.3} Co _{0.7} O ₂ Nanostructures Prepared by Citric-Urea Self-Combustion Route as	Digest Journal of Nanomaterials and Biostructures	14	4	1179-1193	2019

Balan, AE; Ceaus, C; Tanasa, E; Stamatin, I;	Cathode for Sodium Ion Battery					
Iordache, Ana-Maria; Cristescu, Rodica; Fagadar-Cosma, Eugenia; Popescu, Andrei C; Ciucu, Anton A; Iordache, Stefan M; Balan, Adriana; Nichita, Cornelia; Stamatin, Ioan; Chrisey, Douglas B;	Histamine detection using functionalized porphyrin as electrochemical mediator	Comptes Rendus Chimie	21	##	270-276	2018
Cuzminschi, M; Gherasim, R; Girleanu, V; Zubarev, A; Stamatin, I;	Innovative thermo-solar air heater	Energy and Buildings	158		964-970	2018
Tiliakos, Athanasios; Trefilov, Alexandra MI; Tanasă, Eugenia; Balan, Adriana; Stamatin, Ioan;	Space-Filling Supercapacitor Carpets: Highly scalable fractal architecture for energy storage	Journal of Power Sources	384		145-155	2018
Oancea, Laurentiu; Mamut, Timur; Bacu, Camelia; Mamut, Eden; STAMATIN, Ioan;	OPTIMAL FLUID FLOW CHANNEL ARCHITECTURES IN BIPOLAR PLATES DEDICATED TO THE OPERATION OF FUEL CELLS IN MICROGRAVITY CONDITIONS	PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A- MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE	19		261-266	2018
Saeed, FR; Al-Timimi, MHAA; Al-Banda, WHA; Abdullah, MZ; Stamatin, I; Voinea, S;	THERMAL PROPERTIES OF PARAFFIN/NANO-MAGNETITETREAVORITE PHASE CHANGE MATERIALS.	Journal of Ovonic Research	14	5		2018

Dobrica, B; Balan, AE;						
Andronie, Adriana; Stamatin, Ioan; Girleanu, Valentin; Ionescu, Viorel;	Experimental investigation of cathode back-pressure effect on voltage oscillations in a PEM fuel cell system	Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IX	####		238-244	2018
Buleandra, Mihaela; Rabinca, Andreea Alexandra; Tache, Florentin; Moldovan, Zenovia; Stamatin, Ioan; Mihailciuc, Constantin; Ciucu, Anton Alexandru;	Rapid voltammetric detection of kojic acid at a multi-walled carbon nanotubes screen-printed electrode	Sensors and Actuators B: Chemical	241		406-412	2017
Buleandra, Mihaela; Rabinca, Andreea Alexandra; Badea, Irinel Adriana; Balan, Adriana; Stamatin, Ioan; Mihailciuc, Constantin; Ciucu, Anton Alexandru;	Voltammetric determination of dihydroxybenzene isomers using a disposable pencil graphite electrode modified with cobalt-phthalocyanine	Microchimica Acta	184		1481-1488	2017
Saeed, FR; Serban, EC; Vasile, E; Al- Timimi, MHAA; Al- Banda, WHA; Abdullah, MZA; Stamatin, I; Cucu, A; Iordache, SM; Voinea, S;	Nanomagnetite enhanced paraffin for thermal energy storage applications	Digest Journal of Nanomaterials and Biostructures	12	2	273-280	2017
Fleaca, CT; Dumitrache, F; Morjan, I; Niculescu, A- M; Sandu, I;	Synthesis and characterization of polyaniline-Fe@C magnetic nanocomposite powder	Applied Surface Science	374		213-221	2016

Ilie, A; Stamatin, I; Iordache, A; Vasile, E; Prodan, G;						
Cucu, Ana; Tiliakos, Athanasios; Tanase, Iulian; Serban, Cristina Elena; Stamatin, Ioan; Ciocanea, Adrian; Nichita, Cornelia;	Microbial fuel cell for nitrate reduction	Energy Procedia	85		156-161	2016
Iordache, SM; Ciocanea, A; Balan, A; Stamatin, I; Budea, S; Ceaus, C; Trefilov, AMI; Voinea, S;	Recovering hydrogen sulfide from sulfurous waters with PEM fuel cells	Energy Procedia	85		273-278	2016
Ionita, Maria D; Vizireanu, Sorin; Stoica, Silviu D; Ionita, Mariana; Pandele, Andreea M; Cucu, Ana; Stamatin, Ioan; Nistor, Leona C; Dinescu, Gheorghe;	Functionalization of carbon nanowalls by plasma jet in liquid treatment	The European Physical Journal D	70		####	2016
Kiss, Laszlo; David, Vasile; David, Iulia Gabriela; Lazăr, Paul; Mihailciuc, Constantin; Stamatin, Ioan; Ciobanu, Adela; Ștefănescu, Cristian Dragoș; Nagy, Livia; Nagy, Géza;	Electropolymerized molecular imprinting on glassy carbon electrode for voltammetric detection of dopamine in biological samples	Talanta	160		489-498	2016

Tiliakos, Athanasios; Ceaus, Cătălin; Iordache, Stefan M; Vasile, Eugeniu; Stamatina, Ioan;	Morphic transitions of nanocarbons via laser pyrolysis of polyimide films	Journal of Analytical and Applied Pyrolysis	121		275-286	2016
Rasoi, Gabriel; Stamatina, Ioan; Raboaca, Simona; Balan, Adriana; Voinea, Sanda; Zarnescu, George;	HYBRID ENERGY SYSTEM BASED ON RENEWABLE SOURCES FOR BIO-ORGANIC AGRICULTURE IN GREENHOUSES	5th International Conference of Thermal Equipment, Renewable Energy and Rural Development			363	2016
Mateescu, OA; Balan, A; Mateescu, Gh; Stamatina, I; Samoila, C; Ursutiu, D; Nascov, V;	MICROSTRUCTURE & CORROSION RESISTANCE FOR WC-Ti-N LAYERS DEPOSITED BY REACTIVE MAGNETRON SPUTTERING.	Digest Journal of Nanomaterials & Biostructures (DJNB)	10	2		2015
Rabinca, Andreea Alexandra; Buleandra, Mihaela; Balan, Adriana; Stamatina, Ioan; Ciucu, Anton Alexandru;	Electrochemical Behaviour and Rapid Determination of L-Dopa at Electrochemically Pretreated Screen Printed Carbon Electrode	Electroanalysis	27	10	2275-2279	2015
Mateescu, AO; Mateescu, G; Bălan, A; Stamatina, I; Jinga, Vlad; Samoila, Cornel; Ursuțiu, Doru;	Thin Films based on Tungsten Carbide with Binary, Ternary and Quaternary Composition, Obtained by Magnetron Sputtering	Key Engineering Materials	660		138-142	2015
Sauciuc, R; Ciocânea, A; Lepădatu, I; Dumitrescu, L; Dumitrescu, C; Stamatina, I;	Using the reverse osmosis method to obtain drinking water from nitrate polluted sources for rural communities.					2015

Tiliakos, A; Cucu, A; Ceaus, C; Trefilov, AMI; Serban, EC; Stamatin, I;	Graphite oxide post-synthesis processing protocols	2nd CommScie International Conference “Challenges for Sciences and Society in the Digital Era				2015
Mirea, R; Oprina, G; Iordoc, M; Rimbu, G; Stamatin, I;	Research regarding the adsorption of hydrogen in platinum doped nanostructured carbonic materials	15th International Multidisciplinary Scientific GeoConference SGEM 2015			471-478	2015
Taqi, Amal; Mutihac, Lucia; Stamatin, Ioan;	Physical and Barrier Properties of Apple Pectin/Cassava Starch Composite Films Incorporating Laurus nobilis L. Oil and Oleic Acid	Journal of Food Processing and Preservation	38	4	1982–1993	2014
Barbinta-Patrascu, Marcela Elisabeta; Ungureanu, Camelia; Iordache, Stefan Marian; Iordache, Ana Maria; Bunghez, Ioana-Raluca; Ghiurea, Marius; Badea, Nicoleta; Fierascu, Radu-Claudiu; Stamatin, Ioan;	Eco-designed biohybrids based on liposomes, mint–nanosilver and carbon nanotubes for antioxidant and antimicrobial coating	Materials Science and Engineering: C	39		177-185	2014
Nan, G; Baciu, A; Borsos, Z; Tiliakos, A; Dobrica, B; Stamatin, I;	ELECTROCHEMICAL BEHAVIOUR OF MICROCELLULAR CARBON IN ACIDIC & BASIC ELECTROLYTES.	Digest Journal of Nanomaterials & Biostructures (DJNB)	9	1	333-336	2014
IONETE, E.I; IORDACHE, S. M.; IORDACHE, A.-M.; IONETE, R. E.; SALCEANU, A.; NICHITA, C.; DOBRICA,	CRYOGENIC SENSOR WITH CARBON NANOTUBES	Digest Journal of Nanomaterials & Biostructures (DJNB)	9	2	511-517	2014

B.; STAMATIN, I.;						
Buleandra, Mihaela; Rabinca, Andreea Alexandra; Mihailciuc, Constantin; Balan, Adriana; Nichita, Cornelia; Stamatin, Ioan; Ciucu, Anton Alexandru;	Screen-printed Prussian Blue modified electrode for simultaneous detection of hydroquinone and catechol	Sensors and Actuators B: Chemical	203		824-832	2014
Ionete, Eusebiu Ilarian; Monea, Bogdan Florian; Vijulie, Mihai; Soare, Amalia; Iordache, Stefan Marian; Iordache, Ana-Maria; Stamatin, Ioan; Salceanu, Alexandru;	Graphene layers used as cryogenic temperature sensor	2014 International Conference and Exposition on Electrical and Power Engineering (EPE)			774-777	2014
SERBAN, E. C.; BALAN, A.; IORDACHE, A. M.; CUCU, A.; CEAUS, C.; NECULA, M.; RUXANDA, G.; BACU, C.; MAMUT, E.; STAMATIN, I.;	UREA/ HYDROGEN PEROXIDE FUEL CELL	Digest Journal of Nanomaterials and Biostructures	9	4	1647 - 1654	2014
Taqi, Amal; Askar, Kasim Abass; Mutihac, Lucia; Stamatin, Ioan;	Effect of Laurus nobilis L. oil, Nigella sativa L. oil and oleic acid on the antimicrobial and physical properties of subsistence agriculture: the case of cassava/pectin based edible films	Food and Agricultural Immunology	24	2	241-254	2013

Iordache, S; Cristescu, R; Popescu, AC; Popescu, CE; Dorcioman, G; Mihailescu, IN; Ciucu, AA; Balan, A; Stamatina, I; Fagadar- Cosma, E;	Functionalized porphyrin conjugate thin films deposited by matrix assisted pulsed laser evaporation	Applied surface science	278		207-210	2013
Purcar, Violeta; Caprarescu, Simona; Donescu, Dan; Petcu, Cristian; Stamatina, Ioan; Ianchis, Raluca; Stroescu, Hermine;	Degradation of TiO ₂ and/or SiO ₂ hybrid films doped with different cationic dyes	Thin solid films	534		301-307	2013
NICHITA, C.; STAMATINA, I.;	THE ANTIOXIDANT ACTIVITY OF THE BIOHYBRIDES BASED ON CARBOXYLATED / HYDROXYLATED CARBON NANOTUBES- FLAVONOID COM- POUNDS	Digest Journal of Nanomaterials and Biostructures	8		445-455	2013
Comorosan, Sorin; Polosan, Silviu; Popescu, Irinel; Stamatina, Ioan; Ionescu, Elena; Avramescu, Sorin; Cune, Liviu Cristian; Apostol, Marian;	Optical manipulation of complex molecular systems by high density green photons: experimental and theoretical evidence	The European Physical Journal B	86		####	2013
Costache, TA; Acien Fernandez, F Gabriel; Morales, MM; Fernández- Sevilla, JM; Stamatina, I; Molina, E;	Comprehensive model of microalgae photosynthesis rate as a function of culture conditions in photobioreactors	Applied microbiology and biotechnology	97		7627-7637	2013

Cucu, A; Costache, TA; DIVONA, MI; Tiliakos, A; Stamatina, I; Ciocanea, A;	MICROBIAL ELECTROLYSIS CELL: HYDROGEN PRODUCTION USING MICROBIAL CONSORTIA FROM ROMANIAN WATERS.	Digest Journal of Nanomaterials & Biostructures (DJNB)	8	3		2013
Cheche, TO; Barna, V; Stamatina, I;	Theoretical approach for type-i semiconductor spherical core-shell quantum dots heterostructure with wide band gaps	Journal of Optoelectronics and Advanced Materials	15	##	615-620	2013
Cucu, A; Costache, TA; Tiliakos, A; Stamatina, I; Ciocanea, A;	MICROALGAE AS NATIVE OXYGEN SUPPLIERS IN BICAMERAL MICROBIAL FUEL CELLS.	Digest Journal of Nanomaterials & Biostructures (DJNB)	8	3		2013
COSTACHE, Teodor Alexandru, coord STAMATINA, Ioan;	Investigarea potențialului de utilizare a populației autohtone de microalge pentru obținerea de biocombustibili					2013
Andronie, A; Stamatina, I; Iordache, S; Cucu, Ana; Stamatina, S; Antohe, S;	Glycerine Treatment of Poly-Perfluorosulphonic Acid Membrane Modified by Sulfonamide Groups: Glycerine Treatment of PFSA-NH Membrane	Technological Innovations in Sensing and Detection of Chemical, Biological, Radiological, Nuclear Threats and Ecological Terrorism			227-230	2012
Cristescu, R; Popescu, C; Socol, G; Iordache, I; Mihaiiescu, IN; Mihaiiescu, DE; Grumezescu, AM; Balan, A; Stamatina, I; Chifiriuc, C;	Magnetic core/shell nanoparticle thin films deposited by MAPLE: Investigation by chemical, morphological and in vitro biological assays	Applied surface science	258	23	9250-9255	2012
Fleaca, CT; Dumitrache, F; Morjan, I; Alexandrescu, R; Sandu, I; Luculescu, C; Birjega, S; Prodan, G; Stamatina, I;	Fe-inserted and shell- shaped carbon nanoparticles by cluster-mediated laser pyrolysis	Applied surface science	258	23	9394-9398	2012

Purcar, Violeta; Stamatin, Ioan; Cinteza, Otilia; Petcu, Cristian; Raditoiu, Valentin; Ghiurea, Marius; Miclaus, Teodora; Andronie, Adriana;	Fabrication of hydrophobic and antireflective coatings based on hybrid silica films by sol-gel process	Surface and coatings technology	206	21	4449-4454	2012
FLOREA-SPIROIU, MANUELA; BALA, DANIELA; BALAN, ADRIANA; NICHITA, CORNELIA; STAMATIN, IOAN;	Alginate matrices prepared in sub and supercritical CO ₂	Digest Journal of Nanomaterials and Biostructures	7	4	1549-1555	2012
Cheche, Tiberius O; Barna, Valentin; Stamatin, Ioan;	Representative longitudinal optical phonon modes in polar semiconductor quantum dots	Chemical Physics	400		207-212	2012
Taqi, Amal; Askar, Kasim Abass; Nagy, Khaled; Mutihac, Lucia; Stamatin, L;	Effect of different concentrations of olive oil and oleic acid on the mechanical properties of albumen (egg white) edible films	African Journal of Biotechnology	10	60	12963-12972	2011
Emandi, ANA; Ileana Vasiliu, Cristina; Budrugaec, Petru; Stamatin, Ioan;	Quantitative investigation of wood composition by integrated FT-IR and thermogravimetric methods	Cellulose Chemistry and Technology	45	9	579	2011
Cheche, Tiberius O; Barna, Emil; Stamatin, Ioan;	Exciton-phonon interaction in cylindrical semiconductor quantum dots	Physica B: Condensed Matter	406	24	4590-4595	2011

C.3. Narrative CV

A narrative summarizing which work has had the greatest importance and impact.

Ioan Stamatin is a man of many scientific valences. A professor revered in the halls of academia, his name was synonymous with innovation and progress. With a keen mind and an insatiable curiosity, he delved into the realms of fuel cells, hydrogen storage, sodium ion batteries, and CO₂ conversion and capture.

In his cluttered laboratory, Ioan was a maestro orchestrating experiments that danced between the tangible and the theoretical. His days were a blur of equations, prototypes, and Eureka moments. Fuel cells hummed with energy, storing the promise of a greener future. Hydrogen whispered its potential as a clean fuel source, waiting to be harnessed. Sodium ions danced in batteries, powering the dreams of sustainable energy storage. But Ioan's pursuits didn't stop there. CO₂, once considered a villain of the environment, found redemption in his hands. Through his ingenuity, it transformed into useful chemical products, a testament to the power of human intellect in mitigating climate change.

In the quiet of his office, amidst the hum of machinery and the flicker of computer screens, Ioan was also a pioneer of the digital age. Proficient in AI and IoT, he bridged the gap between the physical and the virtual, unlocking new frontiers in automation and connectivity.

Yet, Ioan's brilliance wasn't confined to the laboratory or the digital realm. He was a prolific inventor, his mind a fertile ground for ideas that sprouted into patents and prototypes. Each invention bore the stamp of his intellect and the promise of a better tomorrow.

Ioan Stamatina, a man of science and invention, a beacon of hope in a world yearning for sustainable solutions. His legacy echoed in the halls of academia and resonated in the hearts of those inspired by his vision.

Patents- selection

- 1. Brevet nr: RO 130237 (B1), XEROGELURI CARBONICE COMPOZITE CU OXID DE GRAFENE SI PROCEDEU DE OBTINERE A ACESTORA, COMPOSITE CARBONIC XEROGELS WITH GRAPHENE OXIDE AND PROCESS FOR OBTAINING, Autori:., Stamatina Ioan, Trefilov Alexandra Maria Isabel, Bălan Adriana Elena, Nichita Cornelia, Iordache Ștefan Marian.**
- 2. Brevet nr: RO 130236 (B1)/29.05.2015, GRAFENE MULTI-STRAT SI PROCEDEU DE OBTINERE A ACESTORA, MULTI-LAYER GRAPHENES AND PROCESS FOR OBTAINING , Stamatina Ioan, Ceaus Cătălin, Bălan Adriana Elena, Iordache Ștefan Marian, Nichita Cornelia.**
- 3. Brevet nr: RO 133007(B1)/29.08.2017, ARII DE SENZORI CROMOGENICI PENTRU VERIFICAREA CALITĂȚII PRODUSELOR DIN CARNE PROASPĂTĂ ȘI PROCEDEU DE OBTINERE A ACESTORA, ARRAYS OF CHROMOGENIC SENSORS FOR CONTROLLING QUALITY OF FRESH MEAT PRODUCTS AND PROCESS FOR OBTAINING , Iordache Ana Maria, Nichita Cornelia, Iordache Ștefan Marian, Stamatina Ioan.**
- 4. Brevet nr: RO 133804 (B1)/26.02.2021 A/00431/14.06.2018, MATERIALE NANOSTRUCTURATE PENTRU ELECTROZI ÎN BATERII SODIU ION OBTINUTE PRIN PROCEDEU DE RECONSTRUCTIE MOLECULARĂ, NANO-STRUCTURED MATERIALS FOR ELECTRODES IN SODIUM-ION BATTERIES OBTAINED BY MOLECULAR RECONSTRUCTION PROCESS, Stamatina Ioan, Abdullah Mustafa Zaid Abdullah, Al Timimi Muhammad Hameed Abdulallah, Bălan Adriana Elena, Nichita Cornelia, Stamatina Serban Nicolae.**
- 5. Brevet nr: RO 133779 (B1)/A/00432/14.06.2018, COMPOZITE PE BAZĂ DE ALCANI CU CONȚINUT DE GRAFENE PENTRU STOCAREA ENERGIEI TERMICE ȘI PROCEDEU DE OBTINERE A ACESTORA, ALKANE-BASED COMPOSITION WITH GRAPHENE CONTENT FOR STORING THERMAL ENERGY AND PROCESS FOR OBTAINING, Stamatina Ioan, Farqad Rasheed Saeed Saeed, Bălan Adriana Elena, Nichita Cornelia, Stamatina Serban Nicolae, Ceaus Catalin.**
- 6. Brevet nr: RO 134886 (B1)/A/00670/23.10.2019, NANOSTRUCTURI FOTOCATALITICE PE BAZA DE DIOXID DE TITAN CU APLICATII IN DECONTAMINAREA MEDIULUI SI PROCEDEEE DE OBTINERE A ACESTORA, TITANIUM DIOXIDE-BASED PHOTOCATALYTIC NANOSTRUCTURES TO BE APPLIED IN ENVIRONMENTAL DECONTAMINATION AND PROCESSES FOR OBTAINING, Stamatina Ioan, Widad Hano Albanda Abba, Al Timimi Muhammad Hameed Abdullah, Nichita Cornelia**

7. **Brevet nr: A/00912/28.11.2016, SISTEM DE MICROCANALE CU APLICATII IN MICROFLUIDICA, IN CONDITII DE GRAVITATIE SIMULATA SI PROCEDEU DE OBTINERE A ACESTORA, Ceaus Cătălin, Bălan Adriana Elena, Girleanu Valentin, Nichita Cornelia, Stamatın Ioan, Eden Mamut, Oancea Laurentiu.**
8. **Brevet nr: A/00913/28.11.2016, DISPOZITIV OPTIC PENTRU IMAGISTICA HIPERSPECTRALA ȘI PROCEDEU DE OBTINERE A ACESTUIA, Stamatın Ioan, Girleanu Valentin, Ceaus Cătălin, Nichita Cornelia, Bălan Adriana Elena, Iordache Ana Maria, Caramizoiu Stefan.**
9. **Brevet nr: A/00274/21.05.2020, METODĂ SONO-ELECTROCHIMICĂ PENTRU RECUPERAREA METALELOR PLATINICE DIN CATALIZATORI AUTO UZAȚI ȘI PROCEDEU DE APLICARE A ACESTEIA, SONO-ELECTROCHEMICAL METHOD FOR RECOVERING PLATINUM METALS FROM WASTE MOTOR-VEHICLE CATALYSTS AND PROCESS FOR APPLYING, Stamatın Șerban Nicolae, Diac Cornelia, Vasile Eugeniu, Maxim Iuliana Florentina, Bălan Adriana Elena, Nichita Cornelia, Stamatın Ioan.**
10. **Brevet nr: A/00504/10.08.2020, FILME SUBȚIRI 2D DE CARBONITRURĂ GRAFITICĂ DEPUSE PRIN POLIMERIZARE ÎN PLASMĂ ȘI PROCEDEU DE OBTINERE A ACESTORA, 2D THIN FILMS OF GRAPHITIC CARBON NITRIDE DEPOSITED BY PLASMA POLYMERIZATION AND PROCESS FOR OBTAINING, Stamatın Șerban Nicolae, Nichita Cornelia, Stamatın Ioan.**
11. **Brevet nr: A/00206/26.04.2021, ELECTROCATALIZATORI PLATININICI OBTINUTI PRIN CONVERSIA BIO ELECTROCHIMICĂ A CATALIZATORILOR AUTO UZAȚI ȘI PROCEDEU DE OBTINERE A ACESTORA, PLATINUM ELECTROCATALYSTS OBTAINED BY BIOELECTROCHEMICAL CONVERSION OF SPENT MOTOR-VEHICLE CATALYSTS AND OBTAINING PROCEDURE Stamatın Serban Nicolae, Moisescu Cristina, Iacob Matei Tom, Ghinea Adrian, Diac Cornelia, Maxim Iuliana Florentina, Ardelean Ioan, Nichita Cornelia, Stamatın Ioan.**
12. **Brevet nr: A/00268.29.05.2023, NANOSTRUCTURI ELECTROCATALITICE PE BAZA DE OXID DE CUPRU PENTRU ELECTROREDUCEREA CO₂ ȘI PROCEDEU DE OBTINERE A ACESTORA, ELECTROCATALYTIC NANOSTRUCTURES BASED ON COPPER OXIDE FOR ELECTROREDUCTION OF CO₂ AND THEIR PROCEDURE, Stamatın Ioan, Mitrea Bogdan Ciprian, Iacob Matei Tom, Stamatın Serban Nicolae, Nichita Cornelia.**
13. **Brevet nr: A/00137/28.03.2024, METODA DE TESTARE IN SITU A CARACTERISTICILOR BIOELECTROCHIMICE ALE MICROORGANISMELOR ȘI PROCEDEU DE APLICARE A ACESTEIA, METHOD OF IN SITU TESTING OF THE BIOELECTROCHEMICAL CHARACTERISTICS OF MICROORGANISMS AND ITS APPLICATION PROCEDURE, Stamatın Ioan, Chifiriuc Mariana Carmen, Nichita Cornelia, Eden Mamut, Oancea Laurentiu, Iacob Matei Tom, Grigore Georgiana Alexandra.**