europass

Curriculum vitae Europass

Informaţii personale

Nume / Prenume	**Ionut Marius ENCULESCU**
Adresă(e)	Atomistilor 105 bis
Telefon(oane)	0213690170 int. 183
Fax(uri)	0213690177
E-mail(uri)	encu@infim.ro
Naţionalitate(-tăţi)	romana
Data naşterii	
Sex	barbatesc
Locul de muncă/ Domeniul ocupaţional	**Cercetator stiintific gradul 1, Dr./Director General INCD Fizica Materialelor/cercetare dezvoltare**

Experienţa profesională

Perioada	Februarie 2013 – Prezent
Funcţia sau postul ocupat	Director general (cu delegatie)/prin concurs
Activităţi şi responsabilităţi principale	Management INCD Fizica Materialelor, cercetare in domeniul materialelor noi si avansate si al nanotehnologiilor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare
Perioada	Ianuarie 2010 – Ianuarie 2013
Funcţia sau postul ocupat	Sef laborator 10 Materiale si structuri multifunctionale, cercetator stiintific gradul 1
Activităţi şi responsabilităţi principale	Management laborator (aprox. 40 de membri)/ management proiecte nationale si internationale/ cercetare in domeniul materialelor si al nanotehnologiilor

Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare
Perioada	2009 - 2010
Funcţia sau postul ocupat	cercetator stiintific gradul 1
Activităţi şi responsabilităţi principale	Management grup de cercetare/ management proiecte nationale si internationale/ cercetare in domeniul materialelor si al nanotehnologiilor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare
Perioada	2008 – 2009
Funcţia sau postul ocupat	cercetator stiintific gradul 2
Activităţi şi responsabilităţi principale	Management grup de cercetare/ management proiecte nationale si internationale/ cercetare in domeniul materialelor si al nanotehnologiilor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare
Perioada	2001 – 2008
Funcţia sau postul ocupat	Cercetator stiintific gradul 3
Activităţi şi responsabilităţi principale	Management proiecte nationale si internationale/cercetare in domeniul materialelor si nanotehnologiilor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare
Perioada	1998 – 2001
Funcţia sau postul ocupat	Cercetator stiintific
Activităţi şi responsabilităţi principale	Cercetare in domeniul materialelor piezoelectrice, a proprietatilor optice a materialelor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare

Perioada	1995 – 1998
Funcţia sau postul ocupat	Asistent cercetare
Activităţi şi responsabilităţi principale	Cercetare in domeniul materialelor piezoelectrice, a proprietatilor optice a materialelor
Numele şi adresa angajatorului	INCD Fizica Materialelor
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare

Educaţie şi formare

Perioada	Nov. 2003 – Martie 2004
Funcţia sau postul ocupat	Post Doc
Activităţi şi responsabilităţi principale	cercetare in domeniul materialelor si al nanotehnologiilor
Numele şi adresa angajatorului	The Angstrom Lab. University of Uppsala, Suedia
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare

Perioada	Aprilie. 2001 – Sept. 2003
Funcţia sau postul ocupat	Post Doc
Activităţi şi responsabilităţi principale	cercetare in domeniul materialelor si al nanotehnologiilor
Numele şi adresa angajatorului	Gesselschaft fuer Schwerionen Forschung, GSI Darmstadt, Germania
Tipul activităţii sau sectorul de activitate	Cercetare - dezvoltare

Perioada	1996 2001
Calificarea / diploma obţinută	Doctor in Fizica
Disciplinele principale studiate / competenţe profesionale dobândite	Fizica/Optica si spectroscopie
Numele şi tipul instituţiei de învăţământ / furnizorului de formare	Universitatea din Bucuresti, Facultatea de Fizica

Aptitudini şi competenţe personale

Limba Materna | Romana

Limbi străine cunoscute | **Engleza, franceza**

Autoevaluare	**Înţelegere**		**Vorbire**		**Scriere**
	Ascultare	Citire	Participare la conversaţie	Discurs oral	Exprimare scrisă
Engleza	Fluent	Fluent	Fluent	Fluent	Fluent
Franceza	intelegere	fluent	intelegere	intelegere	fluent

(*) Nivelul Cadrului European Comun de Referinţă Pentru Limbi Străine

Alte competente | Operare calculator, utilizare programe specifice Office, prelucrarea datelor experimentale (Origin, MathCad), programare (Visual Basic)

Anexe | memoriu de activitate, lista proiecte, lista lucrari, lista patente

Memoriu de activitate :

Etapa actuala a activitatii mele ca cercetator a inceput in 2001 cu o bursa postdoctorala in domeniul folosirii membranelor poroase nucleare (ion track membranes) in prepararea unor nanofire cu proprietati speciale. Bursa a fost finantata de Uniunea Europeana si s-a desfasurat in prima parte in GSI Darmstadt (aprilie 2001 – septembrie 2003) si a doua parte in Universitatea din Uppsala (octombrie 2003 – martie 2004). Principala directie de cercetare a fost legata de realizarea unor nanofire metalice cu proprietati speciale prin metoda template, principalul scop urmarit fiind realizarea unor nanofire cu proprietati de magnetorezistenta gigant.
O alta directie de cercetare deosebit de importanta demarata in perioada 2003 – 2005 este legata de cea a nanofirelor semiconductoare. Astfel am fost initiatorul unei colaborari bilaterale intre INCDFM si GSI Darmstadt ce da posibilitatea realizarii unor proiecte de cercetare comune intre cele doua institutii. Accesul la o facilitate de importanta acceleratorului de ioni grei din GSI s-a concretizat prin realizarea prin aceeasi metoda sablon a unor nanofire din PbSeTe, CdTe, CdS, ZnO pure si dopate. De asemenea in urma bursei postdoctorale obtinute prin concurs in cadrul sistemului Marie Curie am putut ulterior participa la un alt concurs de proiecte stiintifice de reintegrare obtinand din partea comunitatii europene finantarea proiectului de cercetare legat de studiul nanofirelor de calcogenite de cadmiu (acronim CdX nanowires) in cadrul FP 6.
Directia de cercetare deosebit de moderna a fost in continuare urmarita si prin proiecte la nivel national in cadrul PNCDI 1, 2, 3 si CEEX care aveau ca principale obiective prepararea si studiul proprietatilor unor nanofire metalice si semiconductoare a materialelor nanostructurate.
La revenirea in tara in anul 2004 am demarat constructia unui grup de cercetare care in prezent numara aproximativ 30 de membri, grup de cercetare angrenat in numeroase proiecte nationale si in colaborari internationale. Dat fiind evolutia infrastructurii INCDFM am largit domeniul de activitate al grupului integrand activitati ce folosesc camera curata si tehnologiile specifice materialelor semiconductoare, zona materialelor biomimetice. Am combinat astfel mai multe zoneale cercetarii, incluzand chimia si electrochimia, fizica, tehnologiile specifice microelectronicii.
In domeniul colaborarilor internationale trebuie mentionate doua poriecte de cercetare castigate ca si co - director avand ca parteneri INCDFM si Ecole Politechnique Federale de Lausanne (grupul condus de Prof. Jean Philippe Ansermet) in cadrul programului SCOPES si finantate de statul elvetian.
De asemenea am fost director pentru grupul roman al unui proiect desfasurat sub egida European Science Foundation (ESF), proiect in care colaboratori au fost Austrian Institute of Technology si Universitatea din Neuchatel.
Incepand cu ianuarie 2010 am ocupat functia de sef al laboratorului 10, Materiale si structuri multifunctionale, laborator din care faceau parte la acel moment aproximativ 40 de cercetatori, cu activitate atat in domeniul de cercetare stiintifica fundamentala cat si cu accente pe activitati de cercetare cu caracter aplicativ. In aceasta perioada activitatile au cuprins atat activitati de cercetare cat si activitati de management specifice – administrarea resurselor materiale, coordonarea resursei umane.
In anul 2013 am fost numit Director General al INCD Fizica Materialelor. In aceasta perioada activitatile de management au crescut in importanta. Atragerea de fonduri pentru modernizarea infrastructurii de cercetare a fost pe primul plan. A fost fructificata oportunitatea oferita de fondurile structurale prin aplicatia de proiect depusa (si in calitate de director de proiect) avand scopul de a dezvolta un centru nou, modern de cercetare in domeniul materialelor (Ritec – Research Innovation and Technology Center). Centrul a fost finalizat in decembrie 2015 cu o valoare totala a investitiei de aproximativ 10 000 000 euro.
In anul 2015 am castigat prin concurs functia de Director General si presedinte al CA. In perioada trecuta am continuat politica de crestere a vizibilitatii internationale a institutiei pe care o conduc precum si de crestere a impactului activitatii de cercetare. Astfel in cadrul INCD pentru Fizica Materialelor a fost realizata prima implicare intr-un ERIC din partea Romaniei (CERIC – ERIC este

activ incepand cu anul 2014), este functionala o subunitate CIFRA cu statut de Centru UNESCO, iar institutia este primul institut de cercetare parte a Asociatiei Universitatilor Francofone. Am asigurat un climat atractiv pentru cercetatori, avand in institut atat cercetatori reintorsi dupa stagii extinse in strainatate cat si cetateni straini angajati atat din UE cat si din tari terte.
In calitate de Director General am consolidat un sistem de evaluare profesionala obiectiv, am consolidat structura de grupuri de cercetare astfel incat sa fie asigurata masa critica pentru implementarea proiectelor si am mentinut infrastructura la un nivel state of the art.

8.10.2021

Dr. Ionut Enculescu

Anexa CV 1

Lista de proiecte
Dr. Ionut Enculescu

Programul/Proiectul	**Funcţia**	**Perioada:**de la... până la...
Centrul de Cercetare, Inovare si tehnologii pentru materiale noi RITecC ID: 1953 SMIS:49185 CTR 654/07.08.2015	Director de proiect	2014 - 2015
PNCDI 2 Idei Controlul sarcinii si spinului in tranzistori cu efect de camp cu canal nanofir	Director de Proiect	2013 - 2016
PNCDI 2 Parteneriate in Domeniile prioritare High efficiency electrospinning Heffes	Director de proiect	2012 - 2015
European Science Foundation Eurocore: „Insect Odorant-Binding Proteins on Conductive Polymer Nanofibers Based Biosensor to Diagnose Crop Disease"	Co-director proiect Responsabil partea Romana	2011 - 2014
Programul Nucleu: Cercetari avansate in domeniul fizicii materiei condensate si a materialelor (COMAFI) Proiectul: Materiale nanostructurate si nanocom-pozite :preparare, caracterizare, aplicatii	Dierector de proiect	2009-2012
SCOPES (proiecte finantate de Elvetia pentru colaborare cu Europa Centrala si de Est: Functional Nanowires	Co-director proiect Responsabil partea Romana	2009-2012
PNCDI 2 Nanofosfori cu conversie superioara pompati in infrarosu pentru aplicatii in biologie si medicina	Responsabil de proiect	2008 - 2011

PNCDI 2 Dispozitive electronice transparente realizate cu filme subtiri obtinute prin tehnologia PED	Responsabil de proiect	2008 – 2011
PNCDI 2 Microtraductoare cu elemente sensibile bazate pe nanofire magnetice	Responsabil de proiect	2008 – 2011
PNCDI 2 Fotodetectori bazati pe nanofire multisegment	Director de proiect	2007 – 2010
Programul Nucleu: Cercetari avansate in domeniul fizicii materiei condensate si a materialelor (COMAFI) Proiectul: Materiale nanostructurate si nanocom-pozite :preparare, caracterizare, aplicatii	Dierector de proiect	2006-2008
CEEX 28/2006	Director de proiect	2006-2008
CEEX 1/2006 Nanofire de oxizi metalici semiconductori magnetici diluati	Director de proiect	2006-2008
CEEX 21/2005 Nanofire multistrat cu structura de tip valva de spin. Proprietati de magnetorezistenta gigant.	Director de proiect	2005-2008
CERES C4/ Proprietati electrice si fotovoltaice ale nanofirelor cu structura metal-CdTe-metal	Director de proiect	2004-2006
SCOPES (proiecte finantate de Elvetia pentru colaborare cu Europa Centrala si de Est: Copper and Manganese dopped ZnO nanowires (proiect nr. 110869)	Co-director proiect Responsabil partea Romana	2005-2008
FP6/Marie Curie European Reintegration Grants : Cadmium Chalcogenite Nanowires	Director de Proiect	2004-2005
FP5/ European Network on Ion Track Technology	Participant	Aprilie 2001- Martie 2004

CERES/Efectele iradierii cu ioni grei in cristalele de halogenuri alcaline	Participant	2003-2005
Orizont 2000	Participant; responsabil faza	1995-2001
Grant ANSTI pentru tineret	Director proiect	1999-2001
Granturi MCT	Participant	1996-2001
Granturi Academia Romana	Participant	1996-2001

10.08.2021

Dr. Ionut Enculescu

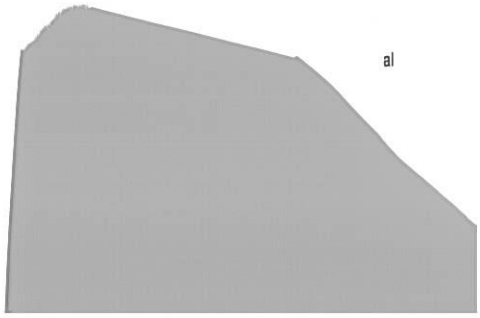
Lista de lucrari,
Dr. Ionut Enculescu, CS1

1) Aldea A., Leote R.J.B., Matei E., Evanghelidis A., Enculescu I., Diculescu V.C.,Gold coated electrospun polymeric fibres as new electrode platform for glucose oxidase immobilization,2021,Microchemical Journal,165,106108,10.1016/j.microc.2021.106108
2) Enculescu M., Costas A., Evanghelidis A., Enculescu I.,Fabrication of zno and tio2 nanotubes via flexible electro-spun nanofibers for photocatalytic applications,2021,Nanomaterials,11,5,1305,10.3390/nano11051305
3) Aldea A., Matei E., Leote R.J.B., Rau I., Enculescu I., Diculescu V.C.,Ionophore- Nafion™ modified gold-coated electrospun polymeric fibers electrodes for determination of electrolytes,2020,Electrochimica Acta,363,137239,10.1016/j.electacta.2020.137239
4) Locovei C., Filipoiu N., Kuncser A., Stanciu A.-E., Antohe Ş., Florica C.-F., Costas A., Enculescu I., Piraux L., Kuncser V., Antohe V.-A.,Unidirectional magnetic anisotropy in dense vertically-standing arrays of passivated nickel nanotubes,2020,Nanomaterials,10,12,2444,1,19,10.3390/nano10122444
5) Preda N., Costas A., Beregoi M., Apostol N., Kuncser A., Curutiu C., Iordache F., Enculescu I.,Functionalization of eggshell membranes with CuO–ZnO based p–n junctions for visible light induced antibacterial activity against Escherichia coli,2020,Scientific Reports,10,1,20960,10.1038/s41598-020-78005-x
6) Costas A., Florica C., Preda N., Kuncser A., Enculescu I.,Photodetecting properties of single CuO–ZnO core–shell nanowires with p–n radial heterojunction,2020,Scientific Reports,10,1,18690,10.1038/s41598-020-74963-4
7) Beregoi M., Preda N., Costas A., Enculescu M., Negrea R.F., Iovu H., Enculescu I.,Synthesis of core–double shell nylon-zno/polypyrrole electrospun nanofibers,2020,Nanomaterials,10,11,2241,1,11,10.3390/nano10112241
8) Serban A., Evanghelidis A., Onea M., Diculescu V., Enculescu I., Barsan M.M.,Electrospun conductive gold covered polycaprolactone fibers as electrochemical sensors for O2 monitoring in cell culture media,2020,Electrochemistry Communications,111,106662,10.1016/j.elecom.2020.106662
9) Preda N., Costas A., Enculescu M., Enculescu I.,Biomorphic 3D fibrous networks based on ZnO, CuO and ZnO–CuO composite nanostructures prepared from eggshell membranes,2020,Materials Chemistry and Physics,240,122205,10.1016/j.matchemphys.2019.122205
10) Florica C., Costas A., Preda N., Beregoi M., Kuncser A., Apostol N., Popa C., Socol G., Diculescu V., Enculescu I.,Core-shell nanowire arrays based on ZnO and CuxO for water stable photocatalysts,2019,Scientific Reports,9,1,17268,10.1038/s41598-019-53873-0
11) Diculescu V.C., Beregoi M., Evanghelidis A., Negrea R.F., Apostol N.G., Enculescu I.,Palladium/palladium oxide coated electrospun fibers for wearable sweat pH-sensors,2019,Scientific Reports,9,1,8902,10.1038/s41598-019-45399-2
12) Costas A., Florica C., Preda N., Apostol N., Kuncser A., Nitescu A., Enculescu I.,Radial heterojunction based on single ZnO-Cu x O core-shell nanowire for photodetector applications,2019,Scientific Reports,9,1,5553,10.1038/s41598-019-42060-w
13) Barsan M.M., Matei E., Enculescu M., Costescu R., Preda N., Enache T.A., Enculescu I., Diculescu V.C.,Nanostructured palladium doped nickel electrodes for immobilization of oxidases through nickel nanoparticles,2019,Electrochimica Acta,315,102,113,10.1016/j.electacta.2019.04.143

14) Evanghelidis A., Beregoi M., Diculescu V.C., Galatanu A., Ganea P., Enculescu I.,Flexible Delivery Patch Systems based on Thermoresponsive Hydrogels and Submicronic Fiber Heaters,2018,Scientific Reports,8,1,17555,10.1038/s41598-018-35914-2
15) Matei E., Busuioc C., Evanghelidis A., Zgura I., Enculescu M., Beregoi M., Enculescu I.,Hierarchical functionalization of electrospun fibers by electrodeposition of zinc oxide nanostructures,2018,Applied Surface Science,458,555,563,10.1016/j.apsusc.2018.06.143
16) Preda N., Costas A., Beregoi M., Enculescu I.,A straightforward route to obtain organic/inorganic hybrid network from bio-waste: Electroless deposition of ZnO nanostructures on eggshell membranes,2018,Chemical Physics Letters,706,24,30,10.1016/j.cplett.2018.05.073
17) Beregoi M., Preda N., Evanghelidis A., Costas A., Enculescu I.,Versatile Actuators Based on Polypyrrole-Coated Metalized Eggshell Membranes,2018,ACS Sustainable Chemistry and Engineering,6,8,10173,10181,10.1021/acssuschemeng.8b01489
18) Enculescu M., Evanghelidis A., Enculescu I.,White-light emission of dye-doped polymer submicronic fibers produced by electrospinning,2018,Polymers,10,7,737,10.3390/polym10070737
19) Costas A., Florica C., Matei E., Toimil-Molares M.E., Stavarache I., Kuncser A., Kuncser V., Enculescu I.,Magnetism and magnetoresistance of single Ni-Cu alloy nanowires,2018,Beilstein Journal of Nanotechnology,9,1,2345,2355,10.3762/bjnano.9.219
20) Beregoi M., Evanghelidis A., Diculescu V.C., Iovu H., Enculescu I.,Polypyrrole Actuator Based on Electrospun Microribbons,2017,ACS Applied Materials and Interfaces,9,43,38068,38075,10.1021/acsami.7b13196
21) Beregoi M., Evanghelidis A., Ganea P., Iovu H., Matei E., Enculescu I.,One side polyaniline coated fibers based actuator,2017,UPB Scientific Bulletin, Series B: Chemistry and Materials Science,79,4,119,130,
22) Beregoi M., Evanghelidis A., Matei E., Enculescu I.,Polyaniline based microtubes as building-blocks for artificial muscle applications,2017,Sensors and Actuators, B: Chemical,253,576,583,10.1016/j.snb.2017.06.128
23) Florica C., Costas A., Kuncser A., Preda N., Enculescu I.,High performance FETs based on ZnO nanowires synthesized by low cost methods,2016,Nanotechnology,27,47,475303,10.1088/0957-4484/27/47/475303
24) Busuioc C., Evanghelidis A., Galatanu A., Enculescu I.,Direct and contactless electrical control of temperature of paper and textile foldable substrates using electrospun metallic-web transparent electrodes,2016,Scientific Reports,6,34584,10.1038/srep34584
25) Beregoi M., Busuioc C., Evanghelidis A., Matei E., Iordache F., Radu M., Dinischiotu A., Enculescu I.,Electrochromic properties of polyaniline-coated fiber webs for tissue engineering applications,2016,International Journal of Pharmaceutics,510,2,465,473,10.1016/j.ijpharm.2015.11.055
26) Florica C., Preda N., Costas A., Zgura I., Enculescu I.,ZnO nanowires grown directly on zinc foils by thermal oxidation in air: Wetting and water adhesion properties,2016,Materials Letters,170,156,159,10.1016/j.matlet.2016.02.035
27) Matei E., Costas A., Florica C., Enculescu M., Pintilie I., Pintilie L., Enculescu I.,Electrical properties of templateless electrodeposited ZnO nanowires,2016,Materials Science in Semiconductor Processing,42,364,372,10.1016/j.mssp.2015.11.007

28) Florica C., Costas A., Boni A.G., Negrea R., Ion L., Preda N., Pintilie L., Enculescu I.,Electrical properties of single CuO nanowires for device fabrication: Diodes and field effect transistors,2015,Applied Physics Letters,106,22,223501,10.1063/1.4921914
29) Busuioc C., Evanghelidis A., Enculescu M., Enculescu I.,Electrospun fiber webs for thermochromic display applications,2015,Proceedings of the World Congress on New Technologies,310,
30) Busuioc C., Evanghelidis A., Matei E., Enculescu I., Beregoia M.,Polyaniline-coated electrospun fibers for electrochromic applications,2015,Proceedings of the World Congress on New Technologies,315,
31) Costas A., Florica C., Evanghelidis A., Enculescu M., Preda N., Enculescu I.,Electrospraying of ZnO microstructures for electrical contacting,2015,Digest Journal of Nanomaterials and Biostructures,10,4,1181,1188,
32) Busuioc C., Evanghelidis A., Enculescu M., Enculescu I.,Optical and photocatalytic properties of electrospun zno fibers,2015,Digest Journal of Nanomaterials and Biostructures,10,3,957,965,
33) Matei E., Florica C., Costas A., Toimil-Molares M.E., Enculescu I.,Electrical properties of single CdTe nanowires,2015,Beilstein Journal of Nanotechnology,6,1,444,450,10.3762/bjnano.6.45
34) Preda N., Evanghelidis A., Enculescu M., Florica C., Enculescu I.,Zinc oxide electroless deposition on electrospun PMMA fiber mats,2015,Materials Letters,138,238,242,10.1016/j.matlet.2014.10.021
35) Granville S., Matei E., Enculescu I., Toimil-Molares M.E.,Cu codoping control over magnetic precipitate formation in ZnCoO nanowires,2014,Applied Physics Letters,105,25,252403,10.1063/1.4904987
36) Mihalache V., Stefan N., Enculescu I., Mihailescu I.N., Socol M., Miroi M.,The Influence of the Microstructure and Morphology of CeO2 Buffer Layer on the Properties of YBCO Films PLD Grown on Ni Tape,2014,Journal of Superconductivity and Novel Magnetism,27,11,2475,2485,10.1007/s10948-014-2679-9
37) Florica C., Matei E., Costas A., Molares M.E.T., Enculescu I.,Field effect transistor with electrodeposited ZnO nanowire channel,2014,Electrochimica Acta,137,290,297,10.1016/j.electacta.2014.05.124
38) Matei E., Enculescu M., Preda N., Florica C., Costas A., Busuioc C., Toimil Molares M.E.T., Kuncser V., Enculescu I.,Metallic nanowires and nanotubes prepared by template replication,2014,Springer Series in Materials Science,205,137,165,10.1007/978-3-662-44479-5_6
39) Polosan S., Ciobotaru I.C., Enculescu I., Ciobotaru C.C.,Structural characteristics of iridium dual-emitter organometallic compound,2014,Journal of Materials Research,29,23,2898,2904,10.1557/jmr.2014.337
40) Florica C., Preda N., Enculescu M., Zgura I., Socol M., Enculescu I.,Superhydrophobic ZnO networks with high water adhesion,2014,Nanoscale Research Letters,9,1,385,1,10,10.1186/1556-276X-9-385
41) Preda N., Enculescu M., Zgura I., Socol M., Florica C., Evanghelidis A., Matei E., Enculescu I.,Zinc oxide and polysaccharides: Promising candidates for functional nanomaterials,2014,Springer Series in Materials Science,205,109,136,10.1007/978-3-662-44479-5_5

42) Enculescu M., Evanghelidis A., Enculescu I.,Influence of morphology on the emissive properties of dye-doped PVP nanofibers produced by electrospinning,2014,Journal of Physics and Chemistry of Solids,75,12,1365,1371,10.1016/j.jpcs.2014.07.008
43) Busuioc C., Evanghelidis A., Florica C., Enculescu I.,Influence of preparation steps on the properties of electrospun ZnO fibers,2014,Digest Journal of Nanomaterials and Biostructures,9,4,1569,1578,
44) Florica C., Preda N., Enculescu M., Enculescu I.,Micropatterned ZnO rod arrays prepared by Au-catalyzed electroless deposition,2014,Physica Status Solidi - Rapid Research Letters,8,7,648,652,10.1002/pssr.201409089
45) Enculescu M., Evanghelidis A., Busuioc C., Florica C., Costas A., Oancea M., Preda N., Matei E., Enculescu I.,Dependence on the dye's type and concentration of the emissive properties of electrospun dye-doped beaded nanofibers,2014,Digest Journal of Nanomaterials and Biostructures,9,2,809,816,
46) Preda N., Enculescu M., Enculescu I.,Polysaccharide-assisted crystallization of ZnO micro/nanostructures,2014,Materials Letters,115,256,260,10.1016/j.matlet.2013.10.081
47) Preda N., Enculescu M., Florica C., Costas A., Evanghelidis A., Matei E., Enculescu I.,Morphology-controlled synthesis of ZnO structures by a simple wet chemical method,2013,Digest Journal of Nanomaterials and Biostructures,8,4,1591,1600,
48) Matei E., Enculescu I., Toimil-Molares M.E., Leca A., Ghica C., Kuncser V.,Magnetic configurations of Ni-Cu alloy nanowires obtained by the template method,2013,Journal of Nanoparticle Research,15,8,1863,10.1007/s11051-013-1863-3
49) Gherendi F., Nistor M., Antohe S., Ion L., Enculescu I., Mandache N.B.,Self-assembled homojunction In2O3 transparent thin-film transistors,2013,Semiconductor Science and Technology,28,8,85002,10.1088/0268-1242/28/8/085002
50) Matei E., Enculescu M., Enculescu I.,Single bath electrodeposition of samarium oxide/zinc oxide nanostructured films with intense, broad luminescence,2013,Electrochimica Acta,95,170,178,10.1016/j.electacta.2013.02.044
51) Marcu A., Enculescu I., Vizireanu S., Birjega R., Porosnicu C.,Single crystal ZnO nanowire Luminescence shifting by nanostructured ZnO layers,2013,Digest Journal of Nanomaterials and Biostructures,8,2,597,605,
52) Preda N., Enculescu M., Zgura I., Socol M., Matei E., Vasilache V., Enculescu I.,Superhydrophobic properties of cotton fabrics functionalized with ZnO by electroless deposition,2013,Materials Chemistry and Physics,138,1,253,261,10.1016/j.matchemphys.2012.11.054
53) Preda N., Enculescu M., Enculescu I.,Polymer sphere array assisted ZnO electroless deposition,2013,Soft Materials,11,4,457,464,10.1080/1539445X.2012.693147
54) Stokker-Cheregi F., Acsente T., Enculescu I., Grisolia C., Dinescu G.,Tungsten and aluminium nanoparticles synthesized by laser ablation in liquids,2012,Digest Journal of Nanomaterials and Biostructures,7,4,1569,1576,
55) Enculescu M., Preda N., Matei E., Enculescu I.,Luminescent micro- and nanofibers based on novel europium phthalate complex,2012,Materials Chemistry and Physics,136,1,51,58,10.1016/j.matchemphys.2012.06.018
56) Preda N., Enculescu M., Gherendi F., Matei E., Toimil-Molares M.E., Enculescu I.,Synthesis of CdS nanostructures using template-assisted ammonia-free chemical bath deposition,2012,Journal of Physics and Chemistry of Solids,73,9,1082,1089,10.1016/j.jpcs.2012.05.003



57) Matei E., Enculescu M., Preda N., Enculescu I.,ZnO morphological, structural and optical properties control by electrodeposition potential sweep rate,2012,Materials Chemistry and Physics,134,3-Feb,988,993,10.1016/j.matchemphys.2012.03.101
58) Vizireanu S., Ionita M.D., Dinescu G., Enculescu I., Baibarac M., Baltog I.,Post-synthesis carbon nanowalls transformation under hydrogen, oxygen, nitrogen, tetrafluoroethane and sulfur hexafluoride plasma treatments,2012,Plasma Processes and Polymers,9,4,363,370,10.1002/ppap.201100153
59) Radu I.C., Polosan S., Enculescu I., Iovu H.,Cathodoluminescence and Raman analysis of the finite-size effects in mer-Alq3 structure,2012,Optical Materials,35,2,268,273,10.1016/j.optmat.2012.08.017
60) Petrescu L., Cinteza O., Voiculescu A.-M., Rosu T., Enculescu I., Matei E., Georgescu S., Birjega R., Avram S., Mihailescu D.A.N.,Interaction of NaYF4:Er:Yb nanoparticles with phospholipid monolayers as models of biological membranes,2012,Revista de Chimie,63,9,956,961,
61) Duta L., Popescu A.C., Dorcioman G., Mihailescu I.N., Stan G.E., Zgura I., Enculescu I., Dumitrescu I.,ZnO thin films deposited on textile material substrates for biomedical applications: ZnO thin films deposited on textiles,2012,NATO Science for Peace and Security Series A: Chemistry and Biology,207,210,10.1007/978-94-007-2488-4_20
62) Matei E., Enculescu I.,Electrodeposited ZnO films with high UV emission properties,2011,Materials Research Bulletin,46,11,2147,2154,10.1016/j.materresbull.2011.04.025
63) Popescu A.C., Duta L., Dorcioman G., Mihailescu I.N., Stan G.E., Pasuk I., Zgura I., Beica T., Enculescu I., Ianculescu A., Dumitrescu I.,Radical modification of the wetting behavior of textiles coated with ZnO thin films and nanoparticles when changing the ambient pressure in the pulsed laser deposition process,2011,Journal of Applied Physics,110,6,64321,10.1063/1.3639297
64) Preda N., Rusen E., Enculescu M., Matei E., Marculescu B., Enculescu I.,Polymer-assisted crystallization of low-dimensional lead sulfide particles,2011,Physica E: Low-Dimensional Systems and Nanostructures,43,10,1826,1832,10.1016/j.physe.2011.06.019
65) Florica C., Arghir I., Ion L., Enculescu I., Antohe V.A., Radu A., Radu M., Chisulescu G., Dina N., Antohe S.,Production and characterization of CdTe wire arrays for hybrid inorganic/organic photovoltaic cells,2011,Digest Journal of Nanomaterials and Biostructures,6,1,21,27,
66) Sima F., Axente E., Ristoscu C., Mihailescu I.N., Kononenko T.V., Nagovitsin I.A., Chudinova G., Konov V.I., Socol M., Enculescu I., Sima L.E., Petrescu S.M.,Tailoring immobilization of immunoglobulin by excimer laser for biosensor applications,2011,Journal of Biomedical Materials Research - Part A,96 A,2,384,394,10.1002/jbm.a.32991
67) Stan G.E., Pasuk I., Husanu M.A., Enculescu I., Pina S., Lemos A.F., Tulyaganov D.U., El Mabrouk K., Ferreira J.M.F.,Highly adherent bioactive glass thin films synthetized by magnetron sputtering at low temperature,2011,Journal of Materials Science: Materials in Medicine,22,12,2693,2710,10.1007/s10856-011-4441-1
68) Voiculescu A.M., Georgescu S., Toma O., Nastase S., Birjega R., Petrescu L., Enculescu I., Matei E.,Upconversion luminescence of Er, Yb-doped nanolanganite powders synthesized by a citrate sol-gel method,2011,Optoelectronics and Advanced Materials, Rapid Communications,5,11,1170,1173,

69) Sima M., Enculescu I., Sima A.,Preparation of graphene and its application in dye-sensitized solar cells,2011,Optoelectronics and Advanced Materials, Rapid Communications,5,4,414,418,
70) Sima M., Sima M., Visan T., Matei E., Ungureanu F., Enculescu I.,Electrochemical growth of eosin Y/manganese doped ZnO as hybrid films and nanowires,2011,Zeitschrift fur Physikalische Chemie,225,3,325,339,10.1524/zpch.2011.0042
71) Preda N., Matei E., Enculescu M., Rusen E., Mocanu A., Marculescu B., Enculescu I.,Effect of aqueous comonomer solubility on the surfactant-free emulsion copolymerization of methyl methacrylate,2011,Journal of Polymer Research,18,1,25,30,10.1007/s10965-009-9387-3
72) Matei E., Preda N., Enculescu M., Ansermet J.-P., Toimil Molares M.E., Enculescu I.,Sequential Deposition Of Multisegment Nanowires,2010,Digest Journal of Nanomaterials and Biostructures,5,4,1067,1076,
73) Preda N., Enculescu M., Matei E., Enculescu I.,The Influence Of Synthesis Parameters On Size And Morphology Of Poly(Styrene-Hydroxyethyl Methacrylate) Colloids,2010,Digest Journal of Nanomaterials and Biostructures,5,4,1055,1065,
74) Sima M., Grecu M.N., Enculescu I.,Growth and characterization of ZnO: Mn submicron wires via electrodeposition from nitrate-lactic acid solution,2010,ECS Transactions,25,27,163,171,10.1149/1.3318515
75) Dorcioman G., Ebrasu D., Enculescu I., Serban N., Axente E., Sima F., Ristoscu C., Mihailescu I.N.,Metal oxide nanoparticles synthesized by pulsed laser ablation for proton exchange membrane fuel cells,2010,Journal of Power Sources,195,23,7776,7780,10.1016/j.jpowsour.2009.09.060
76) Matei E., Enculescu I., Vasilache V., Teodorescu C.M.,Cobalt-doped ZnO prepared by electrochemistry: Chemistry, morphology, and magnetism,2010,Physica Status Solidi (A) Applications and Materials Science,207,11,2517,2522,10.1002/pssa.200925378
77) Preda N., Rusen E., Musuc A., Enculescu M., Matei E., Marculescu B., Fruth V., Enculescu I.,Synthesis and properties of poly(methyl methacrylate-2-acrylamido-2- methylpropane sulfonic acid)/PbS hybrid composite,2010,Materials Research Bulletin,45,8,1008,1012,10.1016/j.materresbull.2010.04.002
78) Georgescu S., Voiculescu A.M., Cotoi E., Toma O., Gheorghe L., Achim A., Matei C., Enculescu I., Matei E., Osiac M.,Optical and morphologic properties of YVO4:Eu phosphor,2010,Proceedings of SPIE - The International Society for Optical Engineering,7469, 74690C,10.1117/12.866769
79) Tiseanu C., Parvulescu V.I., Cojocaru B., Lorenz-Fonfria V.A., Kumke M., Gessner A., Enculescu I.,Polymer-microporous host interactions probed by photoluminescence spectroscopy,2010,Physical Chemistry Chemical Physics,12,12,3031,3037,10.1039/b922591a
80) Matei E., Ion L., Antohe S., Neumann R., Enculescu I.,Multisegment CdTe nanowire homojunction photodiode,2010,Nanotechnology,21,10,105202,10.1088/0957-4484/21/10/105202
81) Antohe S., Enculescu I., Besleaga C., Arghir I., Antohe V.A., Covlea V., Radu A., Ion L.,Hybrid nanostructured organic/inorganic photovoltaic cells,2010,Ceramic Engineering and Science Proceedings,31,7,71,82,10.1002/9780470944042.ch9
82) Ion L., Enculescu I., Iftimie S., Ghenescu V., Tazlaoanu C., Besleaga C., Mitran T.L., Antohe V.A., Gugiu M.M., Antohe S.,Effects of proton irradiation on the spectral performance of photovoltaic cells based on CdS/CdTe thin films,2010,Chalcogenide Letters,7,8,521,530,

83) Stanculescu A., Socol M., Albu A.-M., Rasoga O., Stanculescu F., Ionita I., Enculescu I.,Investigations of the correlation between the preparation method and the properties of anilinic derivative functionalised polymer thin films for non-linear optical applications,2010,Materials Science Forum,636-637,798,804,10.4028/www.scientific.net/MSF.636-637.798
84) Mateescu I., Georgescu S., Iliescu B., Enculescu I., Georgescu R., Oproiu C., Ghita G.,Influence of ionizing radiations (Electrons and Gamma) on the electrical characteristics of LGS resonators,2009,Ferroelectrics,389,1 PART 1,25,31,10.1080/00150190902987517
85) Enculescu I., Matei E., Vasilache V., Teodorescu C.M.,Cobalt doped ZnO prepared by electrochemistry: Chemistry, morphology, and magnetism,2009,Technical Proceedings of the 2009 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2009,3,231,234,
86) Sandu V., Popa S., Pasuk L., Enculescu I., Nicolescu M.S., Radicescu S.,Nanostructured ferrite formation in borosilicate glass,2009,Advanced Materials Research,79-82,445,448,10.4028/www.scientific.net/AMR.79-82.445
87) Matei E., Preda N., Enculescu M., Sima M., Sima M., Enculescu I.,Optical properties of CdS electrodeposited nanowires,2009,Optoelectronics and Advanced Materials, Rapid Communications,3,10,1018,1022,
88) Bazavan D., Bazavan R., Enculescu I., Matei E., Necula C., Ion L., Antohe S.,Magnetic properties of NiCu thin films obtained by electrodeposition,2009,Optoelectronics and Advanced Materials, Rapid Communications,3,5,484,488,
89) Enculescu M., Matei E., Preda N., Enculescu I.,Influence of dye concentration on optical properties of rhodamine 6G doped KAP crystals,2009,Optoelectronics and Advanced Materials, Rapid Communications,3,11,1210,1212,
90) Bazavan R., Ion L., Socol G., Enculescu I., Bazavan D., Tazlaoanu C., Lorinczib A., Mihailescu I.N., Popescu M., Antohe S.,Optical properties of pulsed-laser deposited ZnO thinfilms,2009,Journal of Optoelectronics and Advanced Materials,11,4,425,428,
91) Matei E., Sima M., Enculescu I., Sima M., Enculescu M., Neumann R., Granville S., Ansermet J-P.,Preparation and properties of transition metal doped ZnO nanowires,2008,ECS Transactions,16,12,41,46,10.1149/1.2985842
92) Diamandescu L., Vasiliu F., Tarabasanu-Mihaila D., Feder M., Vlaicu A.M., Teodorescu C.M., Macovei D., Enculescu I., Parvulescu V., Vasile E.,Structural and photocatalytic properties of iron- and europium-doped TiO2 nanoparticles obtained under hydrothermal conditions,2008,Materials Chemistry and Physics,112,1,146,153,10.1016/j.matchemphys.2008.05.023
93) Enculescu I., Matei E., Sima M., Neumann R., Granville S., Ansermet J.-P.,Preparation and properties of cobalt doped ZnO nanowires,2008,IEEE Transactions on Magnetics,44,11 PART 2,2678,2680,10.1109/TMAG.2008.2003242
94) Tazlaoanu C., Ion L., Enculescu I., Sima M., Enculescu M., Matei E., Neumann R., Bazavan R., Bazavan D., Antohe S.,Transport properties of electrodeposited ZnO nanowires,2008,Physica E: Low-Dimensional Systems and Nanostructures,40,7,2504,2507,10.1016/j.physe.2007.07.013
95) Ghenescu M., Ion L., Enculescu I., Tazlaoanu C., Antohe V.A., Sima M., Enculescu M., Matei E., Neumann R., Ghenescu O., Covlea V., Antohe S.,Electrical properties of electrodeposited CdS nanowires,2008,Physica E: Low-Dimensional Systems and Nanostructures,40,7,2485,2488,10.1016/j.physe.2007.09.188

96) Enculescu I., Sima M., Enculescu M., Matei E., Molares M.E.T., Cornelius Th.,Nickel nanotubes prepared by electroless deposition in ion track templates,2008,Optoelectronics and Advanced Materials, Rapid Communications,2,3,133,136,
97) Sima M., Enculescu I.,PbSe nanowires grown by the template method,2008,Optoelectronics and Advanced Materials, Rapid Communications,2,2,67,70,
98) Ion L., Enculescu I., Antohe S.,Physical properties of CdTe nanowires electrodeposited by a template method, for photovoltaic applications,2008,Journal of Optoelectronics and Advanced Materials,10,12,3241,3246,
99) Ghica C., Enculescu I., Nistor L.C., Matei E., Van Tendeloo G.,Electrochemical growth and characterization of nanostructured ZnO thin films,2008,Journal of Optoelectronics and Advanced Materials,10,12,3237,3240,
100) Bazavan D., Bazavan R., Enculescu I., Matei E., Ion L., Antohe S.,Structural and morphological properties of NiCu magnetic thin films,2008,Journal of Optoelectronics and Advanced Materials,10,11,3054,3057,
101) Marcu A., Sima C., Grigoriu C., Enculescu I., Iliescu B.,Luminescence tuning of Si/SiO2 nanoparticles in aqueous solutions,2008,Journal of Optoelectronics and Advanced Materials,10,11,3131,3134,
102) Zet C., Damian C., Fosalau C., Enculescu I.,Remote automated system for nanowire electrodeposition,2008,11th International Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2008,4602507,101,106,10.1109/OPTIM.2008.4602507
103) Sima M., Enculescu I., Grecu M.N., Secu M., Sima M., Matei E., Vasile V.,Luminescence and EPR study of ZnO:Mn:Cu nanowire array,2008,Physica E: Low-Dimensional Systems and Nanostructures,40,7,2494,2498,10.1016/j.physe.2007.08.075
104) Sima M., Enculescu I., Vasile E., Visan T., Sima M.,EIS studies of electrodeposition process of manganese and copper doped ZnO wires,2008,Surface and Interface Analysis,40,4-Mar,561,565,10.1002/sia.2721
105) Enculescu I., Matei E., Sima M., Enculescu M., Sima M., Ghica C.,Influence of polyvinylpyrolidone as an additive in electrochemical preparation of ZnO nanowires and nanostructured thin films,2008,Surface and Interface Analysis,40,4-Mar,556,560,10.1002/sia.2749
106) Matei E., Enculescu I., Enculescu M., Neumann R.,Effect of additives on nickel nanowires electrochemical deposition,2008,Journal of Optoelectronics and Advanced Materials,10,3,508,511,
107) Nicoara I., Lighezan L., Enculescu M., Enculescu I.,Optical spectroscopy of Yb2+ ions in YbF3-doped CaF2 crystals,2008,Journal of Crystal Growth,310,9-Jul,2026,2032,10.1016/j.jcrysgro.2007.11.183
108) Damian C., Zet C., Enculescu I., Spohr R.,Virtual potentiostat,2007,15th IMEKO Symposium on Novelties in Electrical Measurements and Instrumentation in Parallel with the 12th Workshop on ADC Modelling and Testing,4,
109) Ion L., Tazlaoanu C., Socol G., Magherusan L., Enculescu I., Bazavan D., Mihailescu I., Antohe S.,Electrical and photoelectrical properties of nanostructured ZnO thin films for photovoltaic applications,2007,Materials Research Society Symposium Proceedings,1013,31,36,
110) Enculescu M., Enculescu I.,Fractal characteristics of metal clusters self-assembled in alkali halide matrices,2007,Physica Status Solidi (C) Current Topics in Solid State Physics,4,3,727,731,10.1002/pssc.200673716

111) Damian C., Zet C., Enculescu I., Spohr R.,Virtual potentiostat,2007,15th IMEKO TC4 Symposium on Novelties in Electrical Measurements and Instrumentation,,
112) Enculescu M., Enculescu I., Sima M., Neumann R., Trautmann C.,Micro and nanorods of alkali halides grown in polymer templates,2007,Journal of Optoelectronics and Advanced Materials,9,5,1561,1563,
113) Sima M., Enculescu I., Sima M., Vasile E.,Semiconductor nanowires obtained by template method,2007,Journal of Optoelectronics and Advanced Materials,9,5,1551,1554,
114) Tazlaoanu C., Ion L., Socol G., Socol M., Mihailescu I.N., Stanculescu F., Enculescu I., Ionescu F., Magheruçan L., Antohe S.,Photosensitization of ZnO nanostructured thin films with organic dyes,2007,Journal of Optoelectronics and Advanced Materials,9,5,1342,1346,
115) Enculescu I., Sima M., Enculescu M., Ghica C., Enache M., Neumann R.,Preparation of metallic nanowires with magnetic properties using the template method,2007,Journal of Optoelectronics and Advanced Materials,9,5,1468,1470,
116) Enculescu I., Sima M., Enculescu M., Enache M., Vasile V., Neumann R.,Influence of geometrical properties on light emission of ZnO nanowires,2007,Optical Materials,30,1,72,75,10.1016/j.optmat.2007.01.002
117) Sima M., Enculescu L., Sima M., Enache M., Vasile E., Ansermet J.-P.,ZnO:Mn:Cu nanowires prepared by template method,2007,Physica Status Solidi (B) Basic Research,244,5,1522,1527,10.1002/pssb.200675126
118) Enculescu I., Sima M., Enculescu M., Enache M., Ion L., Antobe S., Neumann R.,Deposition and properties of CdTe nanowires prepared by template replication,2007,Physica Status Solidi (B) Basic Research,244,5,1607,1611,10.1002/pssb.200675109
119) Enculescu I., Toimil-Molares M.E., Zet C., Daub M., Westerberg L., Neumann R., Spohr R.,Current perpendicular to plane single-nanowire GMR sensor,2007,Applied Physics A: Materials Science and Processing,86,1,43,47,10.1007/s00339-006-3738-2
120) Ohgai T., Enculescu I., Zet C., Westerberg L., Hjort K., Spohr R., Neumann R.,Magneto-sensitive nickel nanowires fabricated by electrodeposition into multi- and single-ion track templates,2006,Journal of Applied Electrochemistry,36,10,1157,1162,10.1007/s10800-006-9200-5
121) Enculescu M., Enculescu I., Topa V.,Fractal structures of gold obtained by diffusion limited aggregation in alkali halide crystals,2006,Journal of Optoelectronics and Advanced Materials,8,3,1230,1233,
122) Sima M., Enculescu I., Vasile E.,Growth of ZnO micro and nanowires using the template method,2006,Journal of Optoelectronics and Advanced Materials,8,2,825,828,
123) Ghiordanescu V., Sima M., Enculescu I., Grecu M.N., Mihut L., Secu M., Neumann R.,Photoluminescence of manganese- And copper-doped CdS nanowires,2005,Physica Status Solidi (A) Applications and Materials Science,202,3,449,454,10.1002/pssa.200406927
124) Yousef H., Lehto M., Jäderblom T., Enculescu I., Hjort K.,A Device integrating paraffin microactuator, fluidic compartment and microneedle array for fluid injection or sampling,2005,Micro Total Analysis Systems - Proceedings of MicroTAS 2005 Conference: 9th International Conference on Miniaturized Systems for Chemistry and Life Sciences,1,157,159,
125) Zet C., Enculescu I., Spohr R.,Electronic setup for etching ion tracks and electrochemical deposition of materials inside nanopores,2005,14th Symposium on New

Technologies in Measurement and Instrumentation and 10th Workshop on ADC Modelling and Testing,183,188,

126) Sima M., Enculescu I., Ghiordanescu V., Mihut L.,Absorption and photoluminescence properties of CdS:Mn2+: Cu + nanostructures,2005,Journal of Optoelectronics and Advanced Materials,7,4,1949,1955,

127) Daub M., Enculescu I., Neumann R., Spohr R.,Ni nanowires electrodeposited in single ion track templates,2005,Journal of Optoelectronics and Advanced Materials,7,2,865,870,

128) Sima M., Enculescu I., Visan T., Spohr R., Trautmann C.,Electrochemical deposition of PbSe1-XTeX nanorod arrays using ion track ETCHED membranes as template,2004,Molecular Crystals and Liquid Crystals,418,21/[749],27/[755],10.1080/15421400490478885

129) Toimil Molares M.E., Chtanko N., Cornelius T.W., Dobrev D., Enculescu I., Blick R.H., Neumann R.,Fabrication and contacting of single Bi nanowires,2004,Nanotechnology,15,4,S201,S207,10.1088/0957-4484/15/4/015

130) Bercu B., Enculescu I., Spohr R.,Copper tubes prepared by electroless deposition in ion track templates,2004,Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms,225,4,497,502,10.1016/j.nimb.2004.06.011

131) Sima M., Enculescu I., Vişan T.,The electrodeposition of semiconductor nanowires with thermoelectric properties using "template" method [Electrodepunerea prin metoda "template" a nanofirelor semiconductoare cu proprietăţi termoelectrice],2004,Revista de Chimie,55,10,743,746,

132) Sima M., Enculescu I., Trautmann C., Neumann R.,Electrodeposition of CdTe nanorods in ion track membranes,2004,Journal of Optoelectronics and Advanced Materials,6,1,121,125,

133) Sima M., Enculescu I., Ioncea A., Visan T., Trautmann C.,Manganese and copper doped CdS nanowire arrays preparation,2004,Journal of Optoelectronics and Advanced Materials,6,4,1193,1198,

134) Enculescu I., Siwy Z., Dobrev D., Trautmann C., Toimil Molares M.E., Neumann R., Hjort K., Westerberg L., Spohr R.,Copper nanowires electrodeposited in etched single-ion track templates,2003,Applied Physics A: Materials Science and Processing,77,6,751,755,10.1007/s00339-003-2216-3

135) Enculescu M., Enculescu I., Topa V., Vasile E.,Fractal patterns formed by thermal treatment in alkali halide crystals,2002,Physica B: Condensed Matter,324,4-Jan,387,392,10.1016/S0921-4526(02)01451-5

136) Enculescu I., Iliescu B., Enculescu M., Covalcica I.,A model for structures growth by sodium electrodiffusion in quartz crystals,2002,Crystal Research and Technology,37,8,868,874,10.1002/1521-4079(200208)37:8<868::AID-CRAT868>3.0.CO;2-J

137) Enculescu I., Iliescu B., Teodorescu V.,Kinetics of silver structures growth by electrodiffusion in quartz crystals,2001,Solid State Ionics,138,4-Mar,315,321,10.1016/S0167-2738(00)00794-3

138) Iliescu B., Enculescu I., Pera I., Alexe G., Polosan S., Stanculescu A.,Chemical composition of structures obtained inside quartz crystals by sodium electrodiffusion,2001,Crystal Research and Technology,36,5-Apr,403,410,10.1002/1521-4079(200106)36:4/5<403::AID-CRAT403>3.0.CO;2-H

139) Iliescu B., Enculescu I., Vasiliu F., Secu M.,Growth of metal structures in quartz crystals by electrodiffusion,1999,Journal of Crystal Growth,198-199,PART I,507,510,10.1016/S0022-0248(98)01039-2
140) Iliescu B., Enculescu I., Klapper H., Stamatin I.,DLA type metal structures in quartz crystals,1999,EPJ Applied Physics,6,2,147,150,10.1051/epjap:1999164
141) Logofatu C., Iliescu B., Enculescu I., Grigorescu C.E.A., Manea S.A.,Study Al2O3 single-crystalline substrates for optoelectronic applications,1998,Proceedings of SPIE - The International Society for Optical Engineering,3405,897,901,10.1117/12.312684
142) Enculescu I., Iliescu B.,Ionic space charge limited currents in natural quartz crystal,1998,Proceedings of SPIE - The International Society for Optical Engineering,3405,262,266,10.1117/12.312762
143) Enculescu I., Iliescu B.,Current voltage characteristics of α-quartz,1998,EPJ Applied Physics,2,3,203,207,10.1051/epjap:1998185
144) Iliescu B., Enculescu I., Chirila R.,Dynamics of the dauphine twins in quartz crystal up to the transition point,1997,Ferroelectrics,190,4-Jan,119,124,10.1080/00150199708014103
145) Enculescu I., Iliescu B.,Electrical conductivity of quartz crystals,1997,Crystal Research and Technology,32,7,879,891,10.1002/crat.2170320702

Lista de patente,
Dr. Ionut Enculescu, CS1

1) RO134058-A0Microstructured substrate for performing surface plasmon resonance measurements, is made up of glass substrate, transparent metallic film, rarefied network of polymeric fibres, and additional optically transparent metallic film EVANGHELIDIS A I; ENCULESCU M M; ENCULESCU I M; MATEI E; PREDA N R; DICULESCU V C; FLORICA C F; COSTAS L A; BEREGOI M
2) RO133230-A0Method for preparing photodetector based on array of core-shell nanowire matrix of copper oxide and oxide zinc type, involves depositing thin film at different times to obtain three different thicknesses for film of zinc oxide COSTAS L A; FLORICA C F; PREDA N R; EVANGHELIDIS A I; BESLEAGA S C; BEREGOI M; ENCULESCU M M; MATEI E; DICULESCU V C; ENACHE T A; IGNAT B M M; ONEA M L; ALDEA A; APOSTOL M M; BUNEA M C; CRISAN D N; CONSTANTINESCU M O; ENCULESCU I M
3) RO132440-A2Thermochromic device based on transparent flexible electrodes obtained by electro-spinning BUSUIOC C; EVANGHELIDIS A I; ENCULESCU M; MATEI E; PREDA N; FLORICA C; COSTAS L; OANCEA M; ENCULESCU I
4) RO131565-A2; RO131565-A8; RO131565-B1 Process for preparing polymeric micro- and nano-fibres by electrospinning, using textile materials, for obtaining multiple jets EVANCHELIDIS A I; BUSUIOC C; MATEI E; ENCULESCU M; PREDA N; FLORICA C; COSTAS L; OANCEA M; ENCULESCU I; EVANGHELIDIS A I
5) RO131555-A0; RO131555-A3; RO131555-B1 Process for unidimensional zinc oxide nanostructures by thermal oxidation in air of zinc films FLORICA C; PREDA N; COSTAS L; EVANGHELIDIS A I; OANCEA M; ENCULESCU M; MATEI E; ENCULESCU I
6) RO131131-A2; RO131131-B1 Electrochromic Device Based On Transparent Flexible Electrodes Obtained By Electrospinning And Polyaniline Electrodeposition MATEI E; BUSUIOC C; EVANCHELIDIS A I; ENCULESCU M; PREDA N; FLORICA C; COSTAS L; OANCEA M; ENCULESCU I; EVANGHELIDIS A I
7) RO130857-A2; RO130857-B1 Process for making predefined micron-range areas made of zinc oxide structures, obtained by self-catalytic deposition FLORICA C; PREDA N; ENCULESCU M; EVANGHELIDIS A I; COSTAS L; OANCEA M; BUSUIOC C; MATEI E; ENCULESCU I
8) RO130846-A2; RO130846-B1 Process for obtaining nanostructured array-like films formed of monodisperse structures of zinc oxide, by chemical deposition PREDA N; FLORICA C; ENCULESCU M; ZGURA I; SOCOL M; EVANCHELIDIS A I; COSTAS L; OANCEA M; BUSUIOC C; MATEI E; ENCULESCU I; EVANGHELIDIS A I
9) RO129633-A0; RO129633-B1 Process for making transparent and flexible conductive electrodes by electrospinning and electrochemical deposition EVANGHELIDIS A I; BUSUIOC C; MATEI E; ENCULESCU M; PREDA N; FLORICA C; COSTAS L; OANCEA M; ENCULESCU I
10) RO129373-A0Process for producing zinc oxide fibres with submicronic diameters by electrospinning, using polymethyl methacrylate solution EVANGHELIDIS A I; BUSUIOC C; ENCULESCU M; PREDA N; MATEI E; FLORICA C; COSTAS L; OANCEA M; ENCULESCU I