

Lista de Lucrari

RUXANDRA VIDU, Ph.D

A.1. Capitoale în cărți de specialitate internaționale

1. **R. Vidu**, T. Ratto, M. Longo, P. Stroeve, "Domains, cushioning and patterning of bilayers by surface interactions with solid substrates and their sensing properties" in Planar Lipid Bilayers (BLMs) and their Applications, H.T. Tien and Ottova-Leitmannova (eds.), 2003, Chapter 32, Elsevier, 1044 pages, ISBN: 9780444509406, 886-915;
2. L. Predoana, M. Crisan, M. Gartner, M. Zaharescu, **R. Vidu**, F.T. Quinlan, C.D. Vidu, P. Stroeve, Lithium Cobalt Oxide (LiCoO₂) Films Obtained by Different Sol-Gel Methods, Emerging Fields in Sol-Gel Science and Technology, Eds. T.M. Lopez, D. Avnir, M. Aegerter, Kluwer Academic Publishers ISBN 1-4020-7458-1 (2003), p.341-347.
3. **R. Vidu**, N. Hirai, S. Hara, "Surface Nano-alloying" in Encyclopedia of Nanoscience and Nanotechnology edited by H. S. Nalwa, 2004, vol 10, ISBN: 1-58883-001-2, American Scientific Publishers, p.283-301.
4. **R. Vidu**, J-R. Ku, P. Stroeve, "Fabrication of Multiscale Nanostructures from Polymeric Membrane Templates" in Polymeric Nanostructures and Their Applications edited by H. S. Nalwa, 2006, Vol. 1: "Polymeric Nanostructures, Chapter 14, ISBN: 1-58883-068-3, 1000 pages, American Scientific Publishers, p.124-149;
5. M. Enachescu, **R. Vidu**, I. Opris, "Uncovering Cortical Modularity by Nanotechnology" Chapter 18 in Recent Advances on the Modular Organization of the Cortex, ISBN: 978-9401798990, Springer 436 pages (2015), 339-366; DOI: 10.1007/978-94-017-9900-3_18.

A.2. Capitoale /Cărți și capitoale în cărți de specialitate naționale

- 1) S. Zamfir, **R. Vdu**, *Coroziunea materialelor metalice*, Editura UPB, 1992, (261 pagini)
- 2) S. Zamfir, **R. Vdu**, *Coroziunea alamelor*, Editura UPB, 1993 (60 pagini),
- 3) S. Zamfir, **R. Vidu**, V. Branzoi, *Coroziunea Materialelor Metalice*, Editura Didactica si Pedagogica, Bucuresti, Romania, 1994 (ISBN 973-30-2928), (pag. 228);
- 4) **R. Vidu**, C. Predescu, E. Matei, A.M. Predescu, *Nanomateriale pentru epurarea apelor*, 2020, (pag. 150).

B.1. Cărți ca editor

- 1) **R. Vidu, N. Kamoun, (Eds.)**, *Nanostructured Oxide Thin Films Synthesized by Spray Pyrolysis: Characterizations and Applications*, ARA Publisher International Academic Press, 2018, ISBN 978-1935924-24-1, 290 pages;
- 2) D. Todoroi (Autor), **R. Vidu, I. Onica (Eds.)**, *Crearea Societatii Constiintei, Editia a VI-a: Materialele Teleconferintei internationale a tinerilor cercetatori* (2017), ISBN: 978-1935924210, 238 pg; ARA Publisher International Academic Press;
- 3) **R. Vidu, A. Mindicanu (Eds.)**, *The 40th ARA Proceedings (2016)*, 190 pg, ISBN-13: 978-1935924197; ARA Publisher International Academic Press;
- 4) I.N. Popescu (Autor), **R. Vidu (Ed.)**, *Materiale Compozite. Volumul 1: Obtinere, Proprietati si*

Aplicatii, 126 pg, 2013, ISBN: 978-1936629220; publicata de Reflection Publishing;

5) I.N. Popescu (Autor), **R. Vidu (Ed.)**, *Materiale Compozite. Volumul 2: Obținerea Prin Metalurgia Pulberilor a Compozitelor Pe Bază de Al*, 150 pg (2013), ISBN 978-1-936629-23-7, publicata de Reflection Publishing;

6) I. Peter (Autor), **R. Vidu (Ed.)**, *Metallic Alloys for Engineered Applications*, ARA Publisher International Academic Press (2018), 108 pages, ISBN-13: 978-1935924289.

B.2. Suport didactic: Manuale didactice, monografii

1) S. Zamfir, A. Dobre, **R. Vidu**, *Coroziunea Materialelor Metalice*, Indrumar de laborator pentru uzul studentilor, Editura UPB1992, 60 pagini, Kpi= nr.pag/(10 x nr.aurori);

2) **R. Vidu**, *From Nanocable Structures to Nanostructured Arrays and Nanodevices*, Reflection Publishing, 2005 (ISBN 978-0-9797618-1-2). 114 pages,

3) **R. Vidu**, *Surface Alloying in Electrochemistry*, ARA Publisher Academic Press (2020), 114 pages, ISBN-13: 978-1935924296,

C. Articole în reviste cotate ISI Thomson Reuters și în volume indexate cotate ISI proceedings

1) B. Alhalaili, **R. Vidu**, M.S. Islam, *The Growth of Ga₂O₃ Nanowires on Silicon for Ultraviolet Photodetector*, *Sensors*, 2019, 19, Articol Number: 5301, DOI: 10.3390/s19235301, WOS:000507606200244, IF: 3.302

2) M.N. Ardeleanu, I.N. Popescu, I.N. Udrioiu, E.M. Diaconu, S. Mihai, E. Lungu, B. Alhalaili, **R. Vidu**, *Novel PDMS-Based Sensor System for MPWM Measurements of Picoliter Volumes in Microfluidic Devices*, *Sensors*, 2019, 19, Articol Number: 4886, DOI: 10.3390/s19224886, WOS:000503381500065, IF: 3.302

3) **R. Vidu**, A.M. Predescu, E. Matei, A. Berbecaru, C. Pantilimon, C. Dragan and C. Predescu, *Template-Assisted Co-Ni Nanowire Arrays*, *Nanomaterials* 9(2019), Articol Number: 1446, DOI: 10.3390/nano9101446, WOS:000495666800101, IF: 4.358

4) B. Alhalaili, R. Bunk, **R. Vidu**, M.S. Islam, *Dynamics Contributions to the Growth Mechanism of Ga₂O₃ Thin Film and NWs Enabled by Ag Catalyst*, *Nanomaterials* 9(2019)9, Articol Number: 1272, DOI: 10.3390/nano9091272, WOS:000489101900089, IF: 4.358

5) O. Kamoun, A. Mami, M.A. Amara, **R. Vidu**, M. Amlouk, *Nanostructured Fe, Co-Codoped MoO₃ Thin Films*, *Micromachines* 10 (2019) 2, p. 138; DOI: 10.3390/mi10020138; WOS: 460798200063, IF: 2.48

6) A.M. Predescu, **R. Vidu**, A. Predescu, E. Matei, C. Predescu, *Synthesis and characterization of bimodal structured Cu-Fe₃O₄ nanocomposites*, *Powder Technology*, 342 (2019) pg.938-953, DOI: 10.1016/j.powtec.2018.10.015, WOS:000454375100093, IF: 3.476

7) A. Gassoumi, A. Al-Shahrani, S. Alfaify, H. Algarni, **R. Vidu**, *Modified Becke-Johnson calculations applied to the electronic and optical properties of Mg and Mn doped PbS*, *Journal of Optoelectronics and Advanced Materials*, 20(2018) 9-10, p.453-458, WOS:000452505200001, IF: 0.588

8) M. Souli, C. Nefzi, Z. Seboui, A. Mejri, **R. Vidu**, N. Kamoun-Turki, *Improved structural properties, morphological and optical behaviors of sprayed Cu₂ZnSnS₄ thin films induced by high gamma radiations for solar cells*, *Materials Science in Semiconductor Processing*, 2018,

Vol.83, p.50-57, DOI: 10.1016/j.mssp.2018.04.009, WOS: 000433236200008, IF: 2.722

9) B. Alhalaili, D.M. Dryden, **R. Vidu**, S. Ghandiparsi, H. Cansizoglu, Y. Gao, M.S. Islam, *High-aspect ratio micro-and nanostructures enabled by photo-electrochemical etching for sensing and energy harvesting applications*, Applied Nanoscience (2018), p.1-7, DOI: 10.1007/s13204-018-0737-5, WOS:000442669600025, IF: 3.583

10) A.M. Predescu, E.Matei, A.C.Berbecaru, C.Pantilimon, C.Dragan, **R.Vidu**, C.Predescu, V.Kuncser, *Synthesis and Characterization of Dextran-coated Iron Oxide Nanoparticles*, Royal Society Open Science, 5 (2018) 3, Article Number: 111525, DOI: 10.1098/rsos.171525, WOS:000428874600022, IF: 2.693

11) M. Mihai; V. Tanasiev; C. Dinca, A. Badea, **R. Vidu**, *Passive House Analysis in Terms of Energy Performance*, Energy and Buildings, 144 (2017), pages: 74-86, DOI: 10.1016/j.enbuild.2017.03.025, WOS: 000401393000006, IF: 4.823

12) P. Palade; C. Plapcianu; I. Mercioniu; C. Comanescu; G. Scinteie; A. Leca; **R. Vidu**, *Structural, Magnetic, and Mossbauer Investigation of Ordered Iron Nitride with Martensitic Structure Obtained from Amorphous Hematite Synthesized via the Microwave Route*, Industrial and Engineering Chemical Research, 56 (2017) 11, Pages: 2958-296, DOI: 10.1021/acs.iecr.6b04574, WOS:000397477800010, IF: 3.448

13) DM. Dryden, T. Sun, R. McCormick, R. Hickey, **R Vidu**, P. Stroeve, *Anomalous Deposition of Co-Ni Alloys in Film and Nanowire Morphologies from Citrate Baths*, Electrochimica Acta 220 (2016) 595-600, DOI: 10.1016/j.electacta.2016.10.073, WOS: 000389090800070, IF: 5.383

14) DM. Dryden, **R. Vidu**, P. Stroeve, *Nanowire formation is preceded by nanotube growth in templated electrodeposition of cobalt hybrid nanostructures*, Nanotechnology 27 (44), 445302, DOI: 10.1088/0957-4484/27/44/445302, WOS:000385487800002, IF: 3.403

15) M Pérez-Page, E Yu, J Li, M Rahman, DM Dryden, **R Vidu**, P Stroeve, *Template-based Syntheses for Shape Controlled Nanostructures*, Advances in Colloid and Interface Science, 234 (2016), p.51-79, DOI: 10.1016/j.cis.2016.04.001, WOS: 000381325600004, IF: 9.259

16) **R. Vidu**, M. Perez-Page, D.V. Quach, X. Y. Chen, Pieter Stroeve, *Electrodeposition of Ni and Te-Doped Cobalt Triantimonide in Citrate Solutions*, Electroanalysis 27 (2015) 12, 2845, DOI: 10.1002/elan.201500247, WOS:000368340300020, IF: 2.691

17) **R. Vidu**, M. Rahman, M. Mahmoudi, M. Enachescu, T.D. Poteca, I. Opris, *Nanostructures: a platform for brain repair and augmentation*, Frontiers in systems neuroscience, 8 (2014) Article 91, DOI: 10.3389/fnsys.2014.00091, WOS:000214852700091, IF: 3.928

18) **R. Vidu**, C. Plapcianu, C. Bartha, *Multivalence Ce and Sn Oxide Doped Materials with Controlled Porosity for Renewable Energy Applications*, Industrial and Engineering Chemical Research, 53 (2014) 7829-7839, DOI: 10.1021/ie500384t, WOS:000336078500001, IF: 3.448

19) M.M. Ombaba, **R. Vidu**, L.V. Jayaraman, M. Triplett, J. Hsu, and M. Saif Islam, *Seamless Integration of an Elastomer with Electrode Matrix and its In-Situ Conversion into a Solid-State Electrolyte for Robust Li-Ion Batteries*, Advanced Functional Materials, 23 (2013) 47, p. 5941-5951, DOI: 10.1002/adfm.201301124, WOS: 000328457000016, IF: 15.621

20) C. Plapcianu, A. Agostino, P. Badica, G.V. Aldica, E. Bonometti, G. Ieluzzi, S. Popa, M. Truccato, S. Cagliero, Y. Sakka, O. Vasykiv, **R. Vidu**, *Synthesis by Microwave Technique of MgB₂ Doped with Fullerene*, Industrial and Engineering Chemical Research, 51 (2012) 11005-11010, DOI: 10.1021/ie3005429, WOS: 000308043500002, IF: 3.448

21) **R. Vidu**, S.Li, D.V.Quach, P.Stroeve, *Electrochemical Deposition of Co-Sb Thin Films on*

- Nano-structured Gold*, Journal of Applied Electrochemistry, 42 (2012), 333-339, DOI: 10.1007/s10800-012-0401-9, WOS: 000302410900007, IF: 2.366
- 22) A. J. Moule, L. Chang, C. Thambidurai, **R. Vidu**, P. Stroeve, *Hybrid solar cells: basic principles and the role of ligands*, Journal of Materials Chemistry, 22 (2012) 6, 2351-2368, DOI: 10.1039/c1jm14829j, WOS:000299178500002, IF: 6.743
- 23) D. Barlev, **R. Vidu**, P. Stroeve, *Review: Innovation in Concentrated Solar Power*, Solar Energy Materials and Solar Cells 95 (2011) 2703-2725, DOI: 10.1016/j.solmat.2011.05.020, WOS:000293936300001, IF: 6.019
- 24) Y. Hou, **R. Vidu**, P. Stroeve, *Solar Energy Storage Methods*, Industrial & Engineering Chemistry Research, 50 (2011) 15, 8954-8964, DOI: 10.1021/ie2003413, "WOS:000293196700017, IF: 3.448
- 25) D.V. Quach, **R. Vidu**, J.R. Groza, P. Stroeve, *Electrochemical Deposition of Cobalt Antimonide Thin Films and Nanowires*, Industrial and Engineering Chemistry Research, 49 (2010), 11385-11392, DOI: 10.1021/ie101173u, WOS:000283916700032, IF: 3.448
- 26) **R. Vidu**, J-R. Ku, P. Stroeve, *Growth of ultrathin films of cadmium telluride and tellurium as studied by electrochemical atomic force microscopy*, Journal of Colloid and Interface Science, 300 (2006) 1, 404-412. DOI: 10.1016/j.jcis.2006.03.078, WOS:000238877700054, IF: 6.361
- 27) J.-R. Ku, **R. Vidu**, P. Stroeve, *Mechanism of Film Growth of Tellurium by Electrochemical Deposition in the Presence and Absence of Cadmium Ions*, Journal of Physical Chemistry, 2005, 109, 21779-21787. DOI: 10.1021/jp053833q, WOS:000233437100046, IF: 2.996
- 28) M. Carmichael, **R. Vidu**, A. Maksumov, A. Palazoglu, P. Stroeve, *Using Wavelets to Analyze AFM Images of Thin Films*, Langmuir, 20 (2004) 26, 11557-11568, DOI: 10.1021/la048753c, WOS:000225816800041, IF: 3.888
- 29) J.-R. Ku, **R. Vidu**, R. Talroze, P. Stroeve, *Fabrication of Nanocables by Electrochemical Deposition inside Metal Nanotubes*, Journal of the American Chemical Society, 2004, 126 (46), 15022-15023, DOI: 10.1021/ja0450657, WOS:000225233600012, IF: 14.695
- 30) **R. Vidu**, Stroeve, P.; *Improvement of the Thermal Stability of Li-Ion Batteries by Polymer Coating of LiMn2O4* Ind. Eng. Chem. Res.; 2004; 43(13); 3314-3324, DOI: 10.1021/ie034085z, WOS:000222142000013, IF: 3.448
- 31) Maksumov, **R. Vidu**, P. Stroeve, and A. Palazoglu, *Enhanced Feature Analysis Using Wavelets for Scanning Microscopy Images of surfaces*, Journal of Colloid and Interface Science, 2004, 272 (2), 365-377, DOI: 10.1016/j.jcis.2003.09.047, WOS:000220512900017, IF: 6.361
- 32) Quinlan, F. T., **R. Vidu**., Predoana, L., Zaharescu, M., Gartner, M., Groza, J., Stroeve, P., *Lithium Cobalt Oxide (LiCoO₂) Nanocoatings by Sol-Gel Methods*, Ind. Eng. Chem. Res.; 2004; 43(10); 2468-2477, DOI: 10.1021/ie034086r, WOS:000221287900023, IF: 3.448
- 33) **R. Vidu**, F. T. Quinlan, P. Strove, *Use of in situ Electrochemical Atomic Force Microscopy (EC-AFM) to Monitor Cathode Surface Reaction in Organic Electrolyte*, Ind.Res.Chem.Eng., 41 (2002) 25, 6546-6554, DOI: 10.1021/ie020519z, WOS:000179715300037, IF: 3.448
- 34) **R. Vidu**; Zhang, LQ; Waring, AJ; Lehrer, RI; Longo, ML; Stroeve, P.; *Phospholipid bilayers on a polyion-alkylthiol layer pair: microprobe imaging, electrochemical properties and peptide association*, Materials Science And Engineering B-Solid State Materials For Advanced Technology, 96 (2002) 2, Pages: 199-208, Article Number: PII S0921-5107(02)00318-5, DOI: 10.1016/S0921-5107(02)00318-5, WOS:000178888600024, IF: 1.756

- 35) A. A. Levchenko, B. P. Argo, **R. Vidu**, R.V. Talroze and P. Stroeve, *Kinetics of Sodium Dodecyl Sulfate Adsorption on and Desorption from Self-Assembled Monolayers Measured by Surface Plasmon Resonance*, Langmuir, 18 (2002) 22, 8464-8471, DOI: 10.1021/la0202576, WOS:000178839300029, IF: 3.888
- 36) L. Zhang, **R. Vidu**, A.J. Waring, R. Lehrer, M.L. Longo, P. Stroeve, *Electrochemical and Surface Properties of Solid-Supported, Mobile Phospholipid Bilayers on a Polyion/Alkylthiol Layer Pair used for Detection of Antimicrobial Peptide Insertion*, Langmuir, 18 (2002) 4, 1318-1331, DOI: 10.1021/la010501d, WOS:000174009300056, IF: 3.888
- 37) F. T. Quinlan, K. Sano, T. Willey, **R. Vidu**, K. Tasaki, P. Stroeve, *Surface Characterization of the Spinel LiMn₂O₄ Cathode before and After Storage at Elevated Temperatures*, Chemistry of Materials 13 (2001) 4207-4212, DOI: 10.1021/cm010335v, WOS:000172323700063, IF: 10.159
- 38) **R. Vidu**, N. Hirai, S. Hara, *Comparative Kinetic Study of Cd Diffusion into Au(100) and Ag(100) during Electrodeposition*, Phys. Chem. Chem. Phys., 3 (2001) 3320-3324, DOI: 10.1039/b010250o, WOS:000170703000012, IF: 3.963
- 39) **R. Vidu**, S. Hara, *Diffusion at Au(100)/Cd²⁺ Interface during Electrodeposition*, Surface Science, 452 (2000) 229-238, DOI: 10.1016/S0039-6028(00)00327-7, WOS:000086822100026, IF: 1.849
- 40) **R. Vidu**, S. Hara, *In situ Electrochemical Atomic Force Microscopy Study on Au(100)/Cd Interface in Sulphuric Acid Solution*, J. Vac. Sci. Tech. B 17 (1999) 6, 2423-2430, DOI: 10.1116/1.591105, WOS:000084282800004, IF: 1.351
- 41) **R. Vidu**, S. Hara, *Surface Alloying at the Cd|Au(100) Interface in the UPD Region. Electrochemical Studies and in situ EC-AFM Observation*, J. Electroanal. Chem., 475 (1999) 2, 171-180, DOI: 10.1016/S0022-0728(99)00354-X, WOS:000087881000008, IF: 3.218
- 42) **R. Vidu**, S. Hara, *Surface Alloyed Phase Formation at Au(100)/Cd²⁺ Interface During Electrodeposition*, Electrochemistry, 67 (1999) 12, 1240-1242, DOI: 10.5796/electrochemistry.67.1240, WOS: 000084294500046, IF: 1.293
- 43) **R. Vidu**, S. Hara, *In situ EC-AFM Observation of Cd Electrodeposition on Au(100)*, Scripta Materialia, 41 (1999) 6, 617-624, DOI: 10.1016/S1359-6462(99)00091-3, WOS: 000082265800008, IF: 4.559
- 44) N. Ikemiya, D. Iwai, K. Yamada, **R. Vidu**, S. Hara, *Atomic Structures and Growth Morphologies of Electrodeposited Te film on Au(100) and Au(111) Observed by in situ Atomic Force Microscopy*, Surface Science, 369 (1996), 199-208, DOI: 10.1016/S0039-6028(96)00881-3, WOS:A1996WD21600025, IF: 1.849

D. Articole în reviste și în volumele unor manifestări științifice indexate în alte baze de date internaționale

- 1) M.N. Ardeleanu, S. Mihai, **R. Vidu**, E.M. Diaconu, I.N. Popescu, *Design of Microfluidic Device and Measurements of MPWM for Single Cell/Particle Manipulation*, Scientific Bulletin of Valahia University-Materials and Mechanics 17 (16), 39-43, DOI: 10.2478/bsmm-2019-0006, ISSN 1844-1076, Document Type: Article,
- 2) I.N. Popescu, R. Vidu, *Densification Mechanism, Elastic-Plastic Deformations and Stress-Strain Relations of Compacted Metal-Ceramic Powder Mixtures*, Scientific Bulletin of Valahia University-Materials and Mechanics (De Gruyter) 16 (2018) 14, p.7-12, DOI: 10.1515/bsmm-2018-0001, ISSN 1844-1076, Document Type: Article,

- 3) I.N. Popescu, **R Vidu**, *Compaction Behavior Modelling of Metal-Ceramic Powder Mixtures. A Review*, Scientific Bulletin of Valahia University-Materials and Mechanics (De Gruyter) 16 (2018) 14, 28-37, DOI: 10.1515/bsmm-2018-0006, ISSN 1844-1076, Document Type: Article,
- 4) I.N. Popescu, **R Vidu**, V Bratu, *Porous Metallic Biomaterials Processing (Review) Part 1: Compaction, Sintering Behavior, Properties and Medical Applications*, Scientific Bulletin of Valahia University-Materials and Mechanics (De Gruyter) 15 (2017) 13, 28-40, DOI: 10.1515/bsmm-2017-0015, Document Type: Article,
- 5) M. Mihai, A. Badea, **R. Vidu**, *Analysis of The PV System Performance Through Simulation: A Case Study*, University Politehnica of Bucharest Scientific Bulletin Series C-Electrical Engineering and Computer Science (ISSN 2286-3540), 78 (2016) 4, p. 183-194, WOS:000393328400015, Document Type: Article,
- 6) G. Tepes, **R. Vidu**, D. Bojin, *Template Based Synthesis of Ni Nanowires by Electrochemical Deposition*, Advanced Materials Research, 1114 (2014) p.121. DOI: 10.4028/www.scientific.net/AMR.1114.121, ISSN: 1662-8985, Document Type: Article:
- 7) C. Predescu, C. Matei, A. Predescu, A. Berbecaru, **R. Vidu**, D. Fikai, L. Favier, *Application of Iron Oxides Nanoparticles as Adsorbent for Pb and Zn Removal from Industrial Wastewaters*, Materials Science and Materials Engineering (2014) p. 384, Document Type: Conference paper, WOS:000351041400059, Recenzii/Indexari: ISI,
- 8) Ku, J-R; **R. Vidu**; Talroze, R; Stroeve P., *Ion-mediated, Smooth Electrochemical Deposition of Nano Thick Tellurium and Cadmium Telluride Films*, Conference: 230th National Meeting of the American-Chemical-Society Location: Washington, DC (2005), ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, Volume: 230, Pages: U2255-U2255, 524-INOR, WOS:000236797304515, Document Type: Meeting Article,
- 9) **R. Vidu**, L. Zang, A. J. Waring, M. L. Longo, P. Stroeve, *Phospholipid Bilayers on a Polyion-Alkylthiol Layer Pair: Microprobe Imaging, Electrochemical Properties and Peptide Association*, Mat. Sci. Eng. B, 96 (2002) 2, 199-208. Document Type: Article,
- 10) I.N. Popescu, **R. Vidu**, V. Bratu, A. B. Olei, D. N. Ungureanu, F. V. Anghelina, *Effects of Silicon Carbide Proportion and Artificial Aging Parameters on Microstructure and Hardness of Al-Cu/SiCp Composites*, ADVANCED MATERIALS AND STRUCTURES V Book Series: Solid State Phenomena, 216 (2014) 122-127, DOI: 10.4028/www.scientific.net/SSP.216.122., WOS:000347924100021, Document Type: Article,
- 11) Predoana, L; Crisan, M; Gartner, M; Zaharescu, M; **Vidu, R**; Quinlan, FT; Vidu, CD; Stroeve, P.; *Lithium cobalt oxide (LiCoO₂) films obtained by different sol-gel methods*, Conference: Symposium on Sol-Gel and Vitreous Materials and Applications Location: Cancun, MEXICO (2002), EMERGING FIELDS IN SOL-GEL SCIENCE AND TECHNOLOGY (2003) p. 341-348. WOS:000223076500036, Document Type: Article,
- 12) **R. Vidu**, R; Hirai, N; Hara, S, *In situ electrochemical atomic force microscopy of surface alloying at the Au(100)/Cd²⁺ interface*, Conference: 7th International Symposium on Magnetic Materials, Processes and Devices/Electrodeposition of Alloy Symposium, SALT LAKE CITY, UT (2003), MAGNETIC MATERIALS, PROCESSES, AND DEVICES VII AND ELECTRODEPOSITION OF ALLOYS, PROCEEDINGS, Book Series: ELECTROCHEMICAL SOCIETY SERIES, Volume: 2002, Issue: 27, (2003), p: 628-636, WOS:000186183100053, Document Type: Article,
- 13) N. Hirai, **R. Vidu**, T. Tagawa, and S. Hara, *Electrodeposition of CdTe Thin Films on Au(111)/Polyethylene*, Journal of the Surface Science Society of Japan, 20 (1999) 4, 228-234, Document Type: Article,

- 14) **R. Vidu**, S. Zamfir, *Cemented Carbide Selection in Terms of Corrosion Resistance*, Metalurgia (English Ed.), II (1997) 3, 19-25, Document Type: Article,
- 15) .M. L. Angelescu, **R. Vidu**, *Determination of Cold Working Effects on the Corrosion Behaviour of an 18-8 Austenitic Stainless Steel*, Metalurgia (English Ed.), 1 (1996) 4, 41-43 Document Type: Article,
- 16) **R. Vidu**, L. Cazacu, M. Vancea, *Laser Chromium Alloying of Steel Parts*, Metalurgia (English Ed.), 1 (1996) 4, 38-40, Document Type: Article,
- 17) L. Cazacu, M. Vancea, **R. Vidu**, *Mathematical Modeling of the Superficial Tempering Processes with Laser*, Metalurgia, 48 (1996) 4-5, 71-74. Document Type: Article,
- 18) S. Zamfir, **R. Vidu**, *Researches on the Possibility to Improve the Wear Resistance of High-Speed Steel by TiN Plasma Deposition*, Metalurgia, 48 (1996) 4-5, 60-64, Document Type: Article,
- 19) S. Zamfir, **R. Vidu**, M. Balaceanu, *Researches on the Thin Layer of (Ti, Al, V)N Obtained by a Deposition with Discharging Method with Cylindrical Cathode in Arc Regime*, Metalurgia, 48 (1996) 3, 31-34. Document Type: Article,
- 20) A. Dobre, S. Zamfir, **R. Vidu**, *Structural Study of Some Titanium Alloys Subject to Some Corrosion Agents*, Metalurgia, 47 (1995) 9-10, 34-35. Document Type: Article,
- 21) S. Zamfir, **R. Vidu**, *Inter-crystalline Corrosion of Al-Zn-Cu-Mg Alloys*, Metalurgia, 47 (1995) 9-10, 31-33. Document Type: Article,
- 22) **R. Vidu**, M. Pana, *Aspects of Fracture Mechanism in WC-Co Alloys*, Metalurgia, 47 (1995) 8, 28-31. Document Type: Article,
- 23) S. Zamfir, **R. Vidu**, *Corrosion Behavior of a Double-Aged Hardened Al-Mg-Si-Cu Alloy*, Metalurgia, 47 (1995) 6, 18-21. Document Type: Article,
- 24) E. Florian, **R. Vidu**, S. Zamfir, *New Hard Coatings Produced by Plasma Enhanced CVD using Organo-Metallic Compounds*, Scientific Bulletin (Iasi), XL (1994) 3-4, 555-561. Document Type: Article,
- 25) S. Zamfir, **R. Vidu**, *Phosphorus Surface Treatment Applied to Low Alloyed Carbon Steel*, Journal of Heat Treatment and Surface Engineering (Cluj-Napoca), 2 (1993), 27-30. Document Type: Article,
- 26) S. Zamfir, **R. Vidu**, *Corrosion Behavior of Heat Treatment on Hardened Aluminum Alloys*, Metalurgia, 45 (1993) 11, 25-28. Document Type: Article,
- 27) S. Zamfir, **R. Vidu**, *Experimental Researches on Improving Corrosion Resistance of Steel by Plating*, Metalurgia, 45 (1993) 8, 30-32. Document Type: Article,
- 28) S. Zamfir, A. Dobre, **R. Vidu**, *Influence of the Heat Treatment on Al-Cu Alloy Inter-Crystalline Corrosion Behavior*, Metalurgia, 45 (1993) 6, 42-43, Document Type: Article,
- 29) P. Nicolae, **R. Vidu**, *New Composite Materials With High Abrasion Wear Resistance*, Journal of Mechanics, 45 (1993) 4-5, 23-27. Document Type: Article,
- 30) **R. Vidu**, P. Nicolae, L. Angelescu, *Ways to Increase the Life in Service of Sintered Cemented Carbides Cutting Tools*, Journal of Mechanics, 45 (1993) 4-5, 28-34. Document Type: Article
- 31) S. Zamfir, **R. Vidu**, *Influence of Cold Working on Corrosion Behavior of 18-8 Stainless Steel in Aqueous Solution*, Metalurgia, 45 (1993) 3, 31-34. Document Type: Article,

- 32) S. Zamfir, A. Dobre, **R. Vidu**, *Intergranular Corrosion Behavior of Certain Ferrite Stainless Steel Grades*, *Metalurgia*, 45 (1993) 1, 11-12. Document Type: Article,
- 33) I. Dragan, S. Zamfir, **R. Vidu**, *Corrosion resistance of 18-8 Austenitic Stainless Steel as a Function of Heat Treatment*, *Metalurgia*, 44 (1992) 6, 20-22. Document Type: Article,
- 34) S. Zamfir, **R. Vidu**, *Improvement in Corrosion Resistance of Austenitic Stainless Steel by Laser Irradiation*, *Chem. Mater. Sci. (Bucharest Univ.)*, 54 (1992) 1-2, 133-138. Document Type: Article,
- 35) S. Zamfir, **R. Vidu**, *The Effect of Heat Treatments on Corrosion Resistance Behavior of Al-Cu Alloys*, *Chem. Mater. Sci. (Bucharest Univ.)*, 53 (1991) 3-4, 159-164. Document Type: Article,
- 36) S. Zamfir, **R. Vidu**, *The Effect of Alloying on Corrosion Behaviour of Stainless Steel in Molten Salts*, *Chem. Mater. Sci. (Bucharest Univ.)*, 53 (1991) 1-2, 153-155. Document Type: Article,
- 37) P. Nicolae, **R. Vidu**, V. Stana, *Aspects of Technological Characteristics of New Powder Mixtures of WC-Co System*, *Metalurgia*, 41 (1989) 10, 473-476. Document Type: Article,

E. Brevete de inventie internationale

1. **Inventors:** C. Predescu, E. Matei, A.M. Predescu, A.C. Berbecaru, **R. Vidu**, **Title:** "Magnetic Nanostructures and Device Implementing Same".

Patent No. US 9,469,555 B2 (Oct.18, 2016)

2. **Inventors:** **R. Vidu**, B. Argo, J. Argo, P. Stroeve, S. Islam, J.-R. Ku, M. Chen, **Title:** "Methods for forming nanostructures and photovoltaic cells implementing same".

Patent No. US 8,906,733 (Dec. 9, 2014)

3. **Inventors:** B. Argo, **R. Vidu**, J. Argo, P. Stroeve, S. Islam, J.-R. Ku, M. Chen, **Title:** "Methods for forming nanostructures and photovoltaic cells implementing same".

Patent No. US 8,895,350 (Nov. 25, 2014)

4. **Inventors:** **R. Vidu**, B. Argo, J. Argo, P. Stroeve, J.-R. Ku, **Title:** "Nanostructure and Photovoltaic Cell Implementing Same".

Patent No. US 8,877,541 (Nov. 4, 2014)

5. **Inventors:** **R. Vidu**, B. Argo, J. Argo, P. Stroeve, J.-R. Ku, **Title:** "Nanostructure and Photovoltaic Cell Implementing Same".

Patent No. US 8,344,241 (Jan. 1, 2013)

6. **Inventors:** **R. Vidu**, B. Argo, P. Stroeve, J. Argo, S. Islam, J.-R. Ku, M. Chen, (see Certificate of Correction), **Title:** "Nanostructure and Photovoltaic Cell Implementing Same".

Patent No. US 7,847,180 (Dec. 7, 2010)

F. Lucrari in Conference Proceedings

26. I.N. Popescu, **R. Vidu**, *Compaction of Metal-Ceramic Powder Mixtures: Part II*, Proceedings of the 41th ARA Congress of the American-Romanian Academy of Art and Science, Craiova, Romania, July 28-31, 2017. <http://dx.doi.org/10.14510/ARAJ.2017.4124>

25. I.N. Popescu, **R. Vidu**, Compaction of Metal-Ceramic Powder Mixtures: Part I, Proceedings of the 41th ARA Congress of the American-Romanian Academy of Art and Science, Craiova, Romania, July 28-31, 2017. <http://dx.doi.org/10.14510/ARAJ.2017.4123>
24. MI. Mihai, **R. Vidu**, A. Badea, Effect of Nanoparticles Shape on the Efficiency of Hybrid Solar Cells, Proceedings of the 40th Congress of the American-Romanian Academy of Art and Science, Montreal, Canada, July 28-31, 2016 (ISBN: 978-1-935924-19-7).
23. G. Tepes, MD. Vranceanu, CM. Cotrut, D. Bojin, **R. Vidu**, Potential Controlled Co-Ni Nanowires with Compositional Gradient, Proceedings of the 40th Congress of the American-Romanian Academy of Art and Science, Montreal, Canada, July 28-31, 2016 (ISBN: 978-1-935924-19-7).
22. C. Pantilimon, A. Predescu, **R. Vidu**, E., Matei, C. Predescu. Comparison on depollution capabilities of two iron based magnetic nanopowders, Proceedings of the 40th Congress of the American-Romanian Academy of Art and Science, Montreal, Canada, July 28-31, 2016 (ISBN: 978-1-935924-19-7).
21. G. Tepes, A.A. Matei, M.D.Vranceanu, C.M. Cotrut, D. Bojin, V. Kuncser, **R. Vidu**, Influence of the electrochemical treatment on the magnetic properties of nanowires, the 39th Congress of the American-Romanian Academy of Art and Science, National Institute of Nuclear Physics, Frascati, Roma, July 28-31, 2015, ISBN: 978-1-935924-18-0, DOI: <http://dx.doi.org/10.14510/39ARA2015.3909>
20. C.Plapcianu, M.C.Bartha, M.Burdusel and **R. Vidu**, Modern routes for materials rapid processing, the 39th Congress of the American-Romanian Academy of Art and Science, National Institute of Nuclear Physics, Frascati, Roma, July 28-31, 2015, ISBN: 978-1-935924-18-0, DOI: <http://dx.doi.org/10.14510/39ARA2015.3912>
19. I.N. Popescu, L.G. Toma, **R. Vidu**, Composite Materials with Complex Compositions used in Vehicle Brake System: a Review, the 39th Congress of the American-Romanian Academy of Art and Science, National Institute of Nuclear Physics, Frascati, Roma, July 28-31, 2015, ISBN: 978-1-935924-18-0, DOI: <http://dx.doi.org/10.14510/39ARA2015.3913>
18. Mirela-Ionela Mihai, Vladimir Tanasiev, Adrian Badea and **Ruxandra Vidu**, The influence of climatic factors on the performance of photovoltaic panels, the 39th Congress of the American-Romanian Academy of Art and Science, National Institute of Nuclear Physics, Frascati, Roma, July 28-31, 2015, ISBN: 978-1-935924-18-0, DOI: <http://dx.doi.org/10.14510/39ARA2015.3915>
17. **R. Vidu**, Maria Perez-Page, Dat V. Quach, Pieter Stroeve, Electrodeposition Of Thermoelectric Films $\text{Co}_x\text{Ni}_{(1-x)}\text{Sb}_3$ AND $\text{Co-Sb}_x\text{Te}_{(1-X)}$ in Citrate Solutions, the 39th Congress of the American-Romanian Academy of Art and Science, National Institute of Nuclear Physics, Frascati, Roma, July 28-31, 2015, DOI: <http://dx.doi.org/10.14510/39ARA2015.3917>
16. S. Cetinkaya, **R. Vidu**, P. Stroeve, "Preparation of Cerium Oxide Films Using Puls and Constant Electrodeposition Techniques", the 38th Congress of the American-Romanian Academy of Art and Science, Caltech, Pasadena CA (USA), 23-27 July. 2014. DOI: <http://dx.doi.org/10.14510%2Faraproc.v0i0.1271>
15. A. Predescu, E. Matei, A. Berbecaru, **R. Vidu**, "Synthesis of Magnetic Nanoparticles for The Removal Of Heavy Metal Ions From Wastewaters", the 38th Congress of the American-Romanian Academy of Art and Science, Caltech, Pasadena CA (USA), 23-27 July. 2014. DOI: <http://dx.doi.org/10.14510%2Faraproc.v0i0.1270>
14. M. Rahman, N. Taghavinia, P. Sasanpour, **R.Vidu** and P. Stroeve, "Light management in nanostructured solar cells by designed hollow fibers", the 38th Congress of the American-

Romanian Academy of Art and Science, Caltech, Pasadena CA (USA), 23-27 July. 2014.

DOI: <http://dx.doi.org/10.14510%2Faraproc.v0i0.1278>

13. **R. Vidu**, "Template Synthesis for Energy Applications", the 37th Congress of the American-Romanian Academy of Art and Science, Chisinau, Republic of Moldavia. 4-9 June 2013.

DOI: <http://dx.doi.org/10.14510%2Faraproc.v37i0.1062>

12. **R. Vidu**, F. Golgovici, M. Prodana, D. Bojin, A. Negru and M. Enachescu, "Fe-Doped CoSb₃ Nanowires Using Electrochemical Methods" the 37th Congress of the American-Romanian Academy of Art and Science, Chisinau, Republic of Moldavia. 4-9 June 2013 DOI: <http://dx.doi.org/10.14510%2Faraproc.v37i0.1071>

11. **R. Vidu**, B. E. McCandless, J. Berkheimer, D. J. Duval, and P. Stroeve, Nanoscale Characterization of Metal/Semiconductor Nanocables, Mater. Res. Soc. Symp. Proc. Vol. 1080, 2008, Materials Research Society 1080-O03-12.

10. J.-R. Ku, **R. Vidu**, R. Talroze, P. Stroeve, A novel route to fabricate Au-Te nanocables AIChE 2004 Annual Meeting, November 7-12, 2004, Austin Convention Center, Austin, TX, Paper #599b.

9. **R. Vidu**, N. Hirai, S. Hara, *In situ* Electrochemical Atomic Force Microscopy on Surface Alloying at Au(100)/Cd²⁺ Interface, 202nd Meeting of The Electrochemical Society, Inc., Salt Lake City, Utah October 20-25, 2002, Proceedings.

8. L. Predoana, M. Crisan, M. Gartner, M. Zaharescu, **R. Vidu**, F. T. Quinlan, C. D. Vidu, P. Stroeve, Lithium Cobalt Oxide (LiCoO₂) Films Obtained by Different Sol-Gel Methods, XI-International Materials research Congress 2002, August 25-29, 2002, Cancun-Mexico.

7. **R. Vidu**, N. Hirai, S. Hara, Atomic Layer Epitaxy under Pure Water by Electrochemical Deposition, Proc. 2-nd Int. Conference on Materials and Manufacturing Technologies, MATEHN'98, Cluj-Napoca, Sept. 10-13, 1998, **2** (1998), 819-824.

6. **R. Vidu**, S. Hara, Surface Alloying Process During Cd Electrodeposition on Au(100) Observed by EC-AFM, Proc. Int. Symposium on Designing, Processing and Properties of Advanced Engineering Materials (ISAEM-97), Toyohashi, Japan, Oct. 29-31, 1997, pp. 541-546.

5. **R. Vidu**, S. Hara, Dynamics of Solid/Liquid Interfaces at Atomic Level. Enhanced Surface Diffusion and Alloying, Proc. of Osaka University-University of Nottingham Joint Symposium, 1-3 Sept. 1997, 98-106.

4. M. L. Angelescu, **R. Vidu**, E. Cazimirovici, S. Zamfir, Corrosion Behavior of a Certain Austenitic Stainless Steel After Cold Rolling, Proceedings (Florence) Italy, Met. A., 9404-72-0346, **3** (1994), 155-160.

3. S. Zamfir, **R. Vidu**, Corrosion Behavior of Austenitic Stainless Steel Irradiated by Laser, Proceedings (Florence) Italy Met. A. 9404-72-0346, **3** (1994), 161-166.

2. **R. Vidu**, The Effect of Ni/Co Ratio on the Properties of WC-(Co,Ni) Hardmetals, Proc. 1st Int. Conference on Materials and Manufacturing Technologies, MATEHN'94, May 18-20, 1994, Cluj-Napoca, Romania, **1** (1994), 81-86.

1. **R. Vidu**, S. Zamfir, T. Roxana, R. Zamfir, Plasma Enhanced MO-CVD of Ti(O,C,N) on Cemented Carbides, Proc. World Congress on Powder Metallurgy PM'94 Paris, France, June 6-9, 1994, **1** (1994), 119-122.

G. Invited Speaker

17. **R. Vidu**, A. Predescu, E. Matei, C. Pantilimon, A. Berbecaru, C. Predescu, "Template Assisted Ni-Co Nanowires by Electrochemical Deposition", **The International Conference on Functional Materials (ICFM 2019)**, Yasmine Hammamet, Tunisia, March 24-28, 2019.
16. **R. Vidu**, A. Predescu, E. Matei, C. Pantilimon, A. Berbecaru, C. Predescu, "Electrochemical Template Synthesis of Ni-Co Nanowires with Tunable Properties", **the 6th Congress on Nanotechnology and Materials Science**, Valencia, Spain, April 16-18, 2018.
15. M. Branzei, I. Pencea, **R. Vidu**, C.E. Sfat, R.N. Turcu, "A New Approach for Measurement Uncertainty Estimation in Material Testing", (Keynote Speaker) **the 41st Congress of the American Romanian Academy of Arts and Sciences**, University of Craiova, Romania, July 19-22, 2017.
14. **R. Vidu**, Template Synthesis of Multifunctional nanostructures, **the 6th International Conference on Materials Science and Technologies**, RoMat 2016 Bucharest, Romania, November 11, 2016.
13. **R. Vidu**, Invited Speaker to "Creating, nurturing and maximizing an innovation ecosystem", **Innoteque 2016**, Bucharest, Romania, October 5-6, 2016
12. **R. Vidu**, "Nanotechnology: a Platform for High-Efficiency Energy Materials", **Romanian Academy, Institute of Macromolecular Iasi (Romania)**, April 24, 2016
11. **R. Vidu**, "Nanotechnology: a Platform for High-Efficiency Energy Materials", **Romanian Academy, Institute of Macromolecular Iasi (Romania)**, April 24, 2016
10. **R. Vidu**, «Nanomaterials for Solar Energy», **SISOM 2016 and Session of the Commission on Acoustics**, Romanian Academy, Institute of Solid Mechanics, May 12-13, 2016.
9. R. Vidu, «Nanotechnology: a Platform for High-Efficiency Energy Materials», **Baia Mare. May 16, 2016**
8. **R. Vidu**, «Nanotechnology: a Platform for High-Efficiency Energy Materials», **MATERIAUX 2015**, Mahdia (Tunisie), 22-26 March 2015.
7. J.R.Groza, **R.Vidu et al (Key Note Speaker)** Field Assisted Sintering Technique Fundamental and Scale-up Studies, **International Conference of Physical Chemistry - RomPhysChem 15th Edition**, Romanian Academy, Bucharest, Romania, September 11-13, 2013.
6. **R. Vidu**, M. Predoana, F. Golgovici, A. Negru, D. Bojin, M. Enachescu, Template Synthesis of Fe-Doped CoSb₃ Nanowires Grown By Cathodic Electrodeposition, (invited) **The XXII International Materials Research Congress**, The Sociedad Mexicana de Materiales and The Materials Research Society (MRS), 7D Symposium: Advances In Functional Semiconducting Materials, Cancun, Mexico, August 11-15, 2013.
5. **R. Vidu**, (invited) "Nanostructures: synthesis and energetic applications", **the 16th Edition of the International Conference of Nonconventional Technologies**, Sibiu, Romania, June 12-15, 2013
4. **R. Vidu**, (invited speaker) "Nanomaterials for Solar Applications", **Conference Franco-Maghrebine sur le Nanomateriaux**, Universite du Maine, Sousse, Tunisia, May 2-5, 2013
3. R. Vidu, (invited speaker) "Materiale in conditii extreme – procesare, proprietati si aplicatii", **Diaspora and the Romanian Scientific Research and University Education - Seeds for the Future**, Exploratory Workshop WE 16, Bucuresti, Romania, 26-28 September 2012
2. **R. Vidu**, (invited speaker) "Stadiul actual al cercetarii in domeniul nanomaterialelor pentru energia solara" **Diaspora and the Romanian Scientific Research and University Education**

- Seeds for the Future, Exploratory Workshop WE 28, Bucuresti, Romania, 26-28 September 2012

1. **R. Vidu**, (invited speaker) N.Hirai, S. Hara, In situ Electrochemical Atomic Force Microscopy on Surface Alloying at Au(100)/Cd²⁺ Interface, **202nd Meeting of The Electrochemical Society, Inc., Salt Lake City, Utah October 20-25, 2002.**

H. Seminars

1. **R.Vidu**, Material research for energy applications, **University of Tunis El-Manar, Faculty of Sciences, Tunis, Tunisia, April 4, 2019.**

2. **R.Vidu**, Electrochemical template synthesis of nanowires/nanocables and characterization, **University of Tunis El-Manar, Faculty of Sciences, Tunis, Tunisia, April 5, 2019.**

3. **R. Vidu**,_2012-13_Fulbright Nanostructures and Nanotechnology Seminar, (10 seminars), **University "POLITEHNICA" of Bucharest, Faculty of Materials Science and Engineering, and the Center of Surface Science and Nanotechnology (CSSNT), Bucharest, Romania, Oct. 2012-June. 2013.**

4. **R. Vidu**, (invited) "Nanostructures: synthesis and energetic applications", University "POLITEHNICA" of Timisoara, **Scientific Seminar organized by the Institute of Renewable Energies (ICER) Timisoara, Romania, June 12, 2013**

5. **R. Vidu**, (invited) "Nanostructures: synthesis and energetic applications", **Renewable Energy seminar, University "Eftimie Murgu" Resita, Romania, June 10, 2013**

6. **R. Vidu**, (invited) "Nanostructures: Synthesis and Energy Application", **Scientific Seminar on "Advanced Solar Cells and Energy Applications" organized by the Renewable Energy Commission of the Romanian Academy, April 19, 2013**

7. **R. Vidu**, F. Golgovici, M. Prodana, D. Bojin and M. Enachescu, "CoSb₃ Nanowires Doped with Iron Obtained by Electrochemical Deposition", **the 12th Edition of the National Seminar on Nanoscience and Nanotechnology organized by the Romanian Academy, Bucharest, Romania, May 16, 2013**

8. **R. Vidu**, (invited) "Nanostructures: synthesis and energetic applications", **International Centre of Biodynamics, Bucharest, Romania, June 18, 2013**

9. **R. Vidu**, (invited) "Nanostructures for Energy Applications", **Solid State Physics group seminars, Torino, Italy, April 8, 2013**

10. **R. Vidu**, (invited) "Present and Future in Renewable Energy in Romania", **University of Craiova and Drobeta Turnu-Severin, Workshop on April 5, 2013**

11. **R. Vidu**, (invited) "Zero Net Energy Community at UC Davis West Village", **Bihar County Council, Oradea, Romania, February 5-8, 2012**

12. **R. Vidu**, (invited) "Stadiul actual al cercetarii in domeniul nanomaterialelor pentru energia solara", **Oradea University, Oradea, Romania, February 5-8, 2012**

13. **R. Vidu**, (invited) "Nanostructured Materials for Energy Applications", **Valahia University of Targoviste, Faculty of Materials and Mechanical Engineering, Targoviste, Romania, January 25, 2013**

I. Conference Presentations (posters, presentations and publications)

63. Luige Vladareanu, **R. Vidu**, Sergiu Boris Cononovici, Hongnian Yu, Mihai Radulescu, Real-time control system of the cooperative intelligent nano-micro manipulators platform for the design and characterization of semiconductor nanowires on the same layer, **XXVIII-th Annual Symposium of the Institute of Solid Mechanics SISOM 2019 and Session of the Commission of Acoustics, Opening session, Romanian Academy, Bucharest, Romania, May 16 – 17, 2019, CD Proceedings SISOM 2019.**
62. Ileana Nicoleta Popescu, **R. Vidu**, Nicolae Pop, Compressibility, densification mechanism and compaction behavior modeling of metallic or composite powders, **XXVIII-th Annual Symposium of the Institute of Solid Mechanics SISOM 2019 and Session of the Commission of Acoustics, Opening session, Romanian Academy, Bucharest, Romania, May 16 – 17, 2019, CD Proceedings SISOM 2019.**
61. Laslau A., Favier L., Sescu A.-M., Rusu L., Simion A. I., Harja M., Hlihor R., **Vidu R.**, Efficient TiO₂ assisted degradation of a relevant organic water pollutant under UV light irradiation. **International conference on multi-scale approaches in environmental chemistry (AMARE), Rennes, France, April 23-25, 2019.**
60. Kamoun O., **Vidu R.**, Amlouk M., MoO₃ Nanoparticles for photocatalytic Study, **6th International Renewable and Sustainable Energy Conference, Rabat, Morocco, Dec. 5-8, 2018.**
59. Favier L., Simion A.I., Rusu L., Couriol C., Kadmi Y., Barka N., **Vidu R.**, Titanium Oxide Nanomaterials as Highly Active Photocatalysts for Efficient Water Purification: Case Study with Carbamazepine, **the International Conference on Functional Materials ICFM 2019, Hammamet, Tunisia, March 24-28, 2019.**
58. B. Alhalaili, D. Dryden, **R. Vidu**, S. GhandiParsi, H. Cansizoglu, Y. Gao. M.S. Islam, “High-aspect ratio micro-and nanostructures enabled by photo-electrochemical etching for sensing and energy harvesting applications”, **Nanotech Middle East 2017 Conference and Exhibition, NANOTECH ME 2017, Dubai, United Arab Emirates, December 4-6, 2017.**
57. M. Mihai¹, V. Tanasiev, **R. Vidu**, Self-Sustaining and Energy Efficient Buildings in Residential Area, (Poster), **the 41st Congress of the American Romanian Academy of Arts and Sciences, University of Craiova, Romania, July 19-22, 2017.**
56. **R. Vidu**, L. Flavier, P. Stroeve, A. Predescu, E. Matei, A. Berbecaru, C. Pantilimon, C. Dragan, C. Predescu, “Template Synthesis of AB₃ Compound Nanowires for High-Temperature Thermoelectric Materials” (Poster), **the 41st Congress of the American Romanian Academy of Arts and Sciences, University of Craiova, Romania, July 19-22, 2017.**
55. L. Favier, A.I. Simion, L. Rusu, **R. Vidu**, Does the refractory organic molecules can be efficiently removed from aqueous solutions by advanced oxidation processes? (Poster) **the 41st Congress of the American Romanian Academy of Arts and Sciences, University of Craiova, Romania, July 19-22, 2017.**
54. P. Palade, C. Plapcianu, I. Mercioniu, C. Comanescu, G. Schinteie, A. Leca, **R. Vidu**, Ordered Iron Nitride with Martensitic Structure Synthesized from Amorphous Hematite via microwave route: structural, magnetic and Mössbauer investigation, (Poster) **the 41st Congress of the American Romanian Academy of Arts and Sciences, University of Craiova, Romania, July 19-22, 2017.**
53. L. Favier, E. Matei, A. Simion, Y. Kadmi, L. Rusu, AM. Predescu, **R. Vidu**, Experimental Study on the Degradation of a Blood Lipid Regulator Molecule with Nano-sized Catalyst and UV Irradiation, **the 8th International Conference on Materials Science and Technologies, RoMat 2016 Bucharest, Romania, November 9-12, 2016.**

52. D.M. Dryden, T. Sun, R. McCormick, R. Hickey, **R. Vidu**, and P. Stroeve, Growth and Characterization of Co-Ni Fluted Nanowires by Templated Electrodeposition, **UC Davis Prospective Graduate Students Open House, University of California Davis, March 17 & 18, 2016.**
51. MI. Mihai, A. Badea, **R. Vidu**, Contributions to the Development of an Integrated Management of Energy in a Passive House, **POSDRU 132397, Excellence in Research, University POLITEHNICA Bucharest, Romania, October 17, 2014.**
50. G. Tepes, D. Bojin, **R. Vidu**, Studies and research on the synthesis and Characterization of Nanostructures with Magnetic properties, **POSDRU 132397, Excellence in Research, University POLITEHNICA Bucharest, Romania, October 17, 2014.**
49. G. Tepes, **R. Vidu**, C.M. Cotrut, M.D. Vrânceanu, A. Matei, F. Miculescu, D. Bojin, Template Based Synthesis of Ni Nanowires by Electrochemical Deposition, **the 5th International Conference on Materials Science and Technologies, Bucharest, Romania, October 15-17, 2014.**
48. **R. Vidu**, M. Perez-Page, D.V. Quach, X. Chen, and P. Stroeve, Electrodeposition of Co(1-X)Sb₃ in Citrate Solutions: Effect of Doping with Ni and Te, **2014 UC Solar Research Symposium, California Public Utilities Commission Auditorium, San Francisco, October 17th, 2014.**
47. MI. Mihai, **R. Vidu**, C. Ionescu, A. Badea, The Efficiency of PV and Heating System Integrated in a Passive House, **2014 Fall Scientific Session, Academy of Romanian Scientists (AOSR), Constanta, Romania, September 19-20, 2014.**
46. A. Predescu, E. Matei, A. Berbecaru, **R. Vidu**, "Synthesis Of Magnetic Nanoparticles For The Removal Of Heavy Metal Ions From Wastewaters" (poster), **the 38th Congress of the American-Romanian Academy of Art and Science, Caltech, Pasadena CA (USA), 23-27 July. 2014.**
45. **R. Vidu**, D.V. Quach, P. Stroeve, On the Electrodeposition of Antimony and Cobalt in Citrate Solutions, **Materials Challenges in Alternative & Renewable Energy 2014 (MCARE 2014), Feb.16-20, 2014, Clearwater, FL.**
44. **R. Vidu**, University of California, Davis, CA/USA; M. Prodana, F. Golgovici, A. Negru, D. Bojin, M. Enachescu, CSSNT, "Electrochemically doped CoSb₃ nanowires for high-temperature thermoelectric materials", Poster# 1.02-08, **2nd International Conference on Materials for Energy, Convention Center Karlsruhe, Germany, May 12 – 16, 2013**
43. **R. Vidu**, "Template Synthesis for Energy Applications", **the 37th Congress of the American-Romanian Academy of Art and Science, Chisinau, Republic of Moldavia. 4-9 June 2013**
42. **R. Vidu**, F. Golgovici, M. Prodana, D. Bojin, A Negru and M. Enachescu, "Fe-Doped CoSb₃ Nanowires Using Electrochemical Methods" **the 37th Congress of the American-Romanian Academy of Art and Science, Chisinau, Republic of Moldavia. 4-9 June 2013**
41. **R. Vidu**, "Zero Net Energy Community at UC Davis West Village", **RAAS Conference: Remapping Urban Spaces – American Challenges, Constanta, Romania, October 4-6, 2012**
40. Joanna R. Groza (PI), Jean-Pierre Delplanque, Alan Williamson, Tien B. Tran, Dat V. Quach, Ruxandra Vidu, Adam MacMillan, MA GOALI: Rapid Sintering to Manufacture Fully Dense and Bioactive Nanocrystalline Hydroxyapatite, Grant #0523063, Grant Opportunities for Academic Liaison with Industry (GOALI), **NSF CMMI Engineering Research and Innovation**

Conference 2012 Engineering Transformation Through Partnerships July 9–12, 2012, Boston, MA National Science Foundation.

39. Joanna R. Groza, Jean-Pierre Delplanque, **R. Vidu**, Alan Williamson, Dat V. Quach, T. Tran, Field Activated Sintering Technique Vertebrae Scale-up Study, **MPIF Conference, June 12, 2012, Nashville, TN.**

38. **R. Vidu**, D.V. Quach, P. Stroeve, Electrochemically Doped CoSb₃ Nanowires for High-Temperature Thermoelectric Materials, **Session: Nanocomposites and Nanomaterials for Energy, Materials Challenges in Alternative & Renewable Energy, Feb.26-Mar.1, 2012, Clearwater, FL.**

37. C. Plapcianu, C. Bartha, L. Stanciu, **R. Vidu**, Thermal behavior studies of Ceria doped precursors produced by sol-gel method, **Session: Nanocomposites and Nanomaterials for Energy, Materials Challenges in Alternative & Renewable Energy, Feb.26-Mar.1, 2012, Clearwater, FL.**

36. **R. Vidu**, D.V. Quach, P. Stroeve, Doped CoSb₃ Nanowires for High Temperature Thermoelectric Materials Applications, **Session: Emerging Technologies, 2011 NanoTechnology for Defense Conference, October 24-27, 2011, Bellevue, WA.**

35. **R. Vidu**, D.V. Quach, P. Stroeve, Fabrication of Doped CoSb₃ Nanowires for High Temperature Thermoelectric Materials Applications, **Session T7: Nanoscale/Low Dimension, the 30th International Conference on Thermoelectrics, ICT 2011, July 17-21, 2011, Traverse City, MI.**

34. C. Thambidurai, P. Stroeve, **R. Vidu** and A. Moule, **the 241st ACS National Meeting & Exposition, Anaheim, CA, March 27-31, 2011**

33. C. Thambidurai, P. Stroeve, **R. Vidu** and A. Moule, Deposition of Ag Electrode on Bulk Heterojunction Layer in Organic Photovoltaic Cell., **2011MRS Spring Meeting in (San Francisco, April 25-29, 2011.**

32. D.V. Quach, **R. Vidu**, J.R. Groza, P. Stroeve, Synthesis of Thermoelectric CoSb₃ Nanowires by Electrochemical Methods, **Session DD: Thermoelectric Materials - Growth, Properties, Novel Characterization Methods, and Applications, 2010 MRS Spring Meeting in San Francisco, April 5-9, 2010.**

31. J.-R. Ku, **R. Vidu**, R. Talroze, P.Stroeve, Ion-Mediated, Smooth Electrochemical Deposition of Nano Thick Tellurium and Cadmium Telluride Films, **230th ACS National Meeting, (INOR 524), August 28-September 1, 2005, Washington DC.**

30. J.-R. Ku, **R. Vidu**, R. Talroze, P.Stroeve, Novel Concept on Multilayer Nanocable Preparation, **2005 NSTI Nanotechnology Conference, May 8-12, 2005, Anaheim, CA.**

29. **R. Vidu**, D. Quach, J.R.Groza, Nanostructured bulk solids by field activated sintering, **2005 NSTI Nanotechnology 28. Conference, May 8-12, 2005, Anaheim, CA.**

28. **R. Vidu**, J.-R. Ku, P.Stroeve, Role of Cadmium in the Electrochemical Deposition of Ultra-Thin Films of Cadmium Telluride and Tellurium, **Joe Smith Distinguished Lecture and Poster Session, University of California Davis, Chemical Engineer and Materials Science, April 19, 2005.**

27. J.-R. Ku, **R. Vidu**, P.Stroeve, Nanocables Fabrication Using Template Synthesis, **Joe Smith Distinguished Lecture and Poster Session, University of California Davis, Chemical Engineer and Materials Science, April19, 2005.**

26. J.-R. Ku, **R. Vidu**, R. Talroze, P. Stroeve, A novel route to fabricate Au-Te nanocables Presentation #599b, AIChE 2004 Annual Meeting, **November 7-12, 2004, Austin Convention Center, Austin, TX.**
25. **R. Vidu**, F. Quinlan, and P. Stroeve, Improvement of rechargeable Li-ion batteries performance by surface modification of the cathode, **Joe Smith Distinguished Lecture, February 14, 2003, "Engineering Challenges in the Post-Genomics Era" seminar**
24. **R. Vidu**, F. Quinlan, and P. Stroeve, Imaging Cathode Surface by Electrochemical Atomic Force Microscopy, **First University of California Symposium on Surface Science and its Applications, University of California, Riverside, California, February 13-14, 2003.**
23. **R. Vidu**, N. Hirai, S. Hara, In situ Electrochemical Atomic Force Microscopy on Surface Alloying at Au(100)/Cd²⁺ Interface, **202nd Meeting of The Electrochemical Society, Inc., Salt Lake City, Utah October 20-25, 2002 (invited presentation).**
22. L. Predoana, M. Crisan, M. Gartner, M. Zaharescu, **R. Vidu**, F. T. Quinlan, C. D. Vidu, P. Stroeve, Lithium Cobalt Oxide (LiCoO₂) Films Obtained by Different Sol-Gel Methods, **XI-International Materials research Congress 2002, August 25-29, 2002, Cancun-Mexico.**
21. A. Artyukhin, P. Stroeve, **R. Vidu**, *Corrosive treatment of supported lipid bilayers as an alternative for animal testing*, **The Third Annual UC System-wide Biomedical Engineering Symposium at the University of California, Berkeley, May 5-6, 2002.**
20. **R. Vidu**, Marjorie L. Longo and Pieter Stroeve Supported Lipid Bilayers as Model Membrane, **The Third Annual UC System-wide Biomedical Engineering Symposium at the University of California, Berkeley, May 5-6, 2002.**
19. **R. Vidu**, L. Zhang, A. J. Waring, R. I. Lehrer, M. L. Longo, P. Stroeve, Atomic Force Microscopy Studies on Lipid-induced Pore Formation of an Antimicrobial Peptide, **AIChE 2001 Annual Meeting, Biomembranes and Biosensors II, November 4 – 9, 2001, Reno Hilton, Reno, Nevada.**
18. **R. Vidu**, F. Quinlan, P. Stroeve, In Situ Electrochemical Atomic Force Microscopy of LiMn₂O₄ Cathode in Organic Electrolyte - **2001 Joint International Meeting, The 200th Meeting of The Electrochemical Society, Inc. and The 52nd Meeting of The International Society of Electrochemistry, September 2-7, 2001, San Francisco, CA.**
17. **R. Vidu**, L. Zang, A. J. Waring, M. L. Longo, P. Stroeve Atomic Force Microscopy Studies on Solid-Supported, Mobile Phospholipid Bilayers on a Polyion/Alkylthiol Layer Pair. **CPIMA Review 2001: A Center Odyssey, CPIMA (A Stanford / IBM Almaden / UC Davis Partnership) Summer Forum 2001 on Polymer Synthesis in the New Millennium, Stanford University, Aug. 9, 2001, Stanford, CA.**
16. L. Zang, **R. Vidu**, A. J. Waring, M. L. Longo, P. Stroeve, Solid-Supported, Mobile Electrochemical properties and Antimicrobial peptide Insertion in Phospholipid Bilayers on a Polyion/Alkylthiol Layer Pair, **CPIMA Review 2001: A Center Odyssey CPIMA (A Stanford / IBM Almaden / UC Davis Partnership) Summer Forum 2001 on Polymer Synthesis in the New Millennium, Stanford University, Aug. 9, 2001, Stanford, CA.**
15. **R. Vidu**, Imaging Metal/Electrolyte Interface by Atomic Force Microscopy, **The 26th Congress of the American-Romanian Academy of Art and Science, July 25-29, 2001, Montreal, Canada.**
14. **R. Vidu**, L. Zhang, M. Longo, P. Stroeve, Atomic Force Microscopy Studies of Antimicrobial Peptide Insertion into Phospholipid Bilayers on a Polyion-Alkylthiol Layer Pair, **The 6th International Conference on Atomically Controlled Surfaces, Interfaces and Nanostructures (ACSIN-6), July 9-12, 2001, Northstar-at Tahoe, Truckee, California, U.S.A.**

13. N. Hirai, **R. Vidu**, S. Hara, Behavior of metal surface in contact with the electrolyte. Decay of nano-features on surface and surface alloying with deposit (Nanostructures 2, 8e-2), **The Symposium on Surface Science, Jan 7-13, 2001, Furano Hokkaido, Japan.**
12. **R. Vidu**, L. Zhang, A. J. Waring, R. Lehrer, M. L. Longo, P. Stroeve, Electrochemical Properties and Atomic Force Microscopy Studies of Antimicrobial Peptide Insertion into Phospholipid Bilayers on a Polyion-Alkylthiol Layer Pair (IRG B – Biomolecular Membranes; Thrust 1 – Patterning and Stability of Supported and Tethered Membranes; Project 2 – Polymer-tethered or Polymer-supported Lipid Bilayers), **NSF On-Site Review of the Center on Polymer Interfaces and Macromolecular Assemblies**, a Stanford/IBM Almaden/UC Davis Partnership, Jan. 16-17, 2001 at Stanford, CA.
11. L. Zhang, **R. Vidu**, M. Longo, P. Stroeve, Mobile lipid bilayers on a polyion/alkylthiol support: peptide insertion and electrochemical properties (Section B32), **CPIMA Summer Forum 2000 on Polymer Synthesis in the New Millennium, Stanford University, Aug. 3-4, 2000, Stanford, CA.**
10. **R. Vidu**, S. Hara, Formation of a 2D surface alloy film at the Au/Cd interface during electrodeposition (Section B45), **CPIMA Summer Forum 2000 on Polymer Synthesis in the New Millennium, Stanford University, Aug. 3-4, 2000, Stanford, CA.**
9. **R. Vidu**, S. Hara, Surface Alloying Mechanism at Au(100)/Cd Interface Under Aqueous Solution, **Second International Symposium on “Atomic Scale Processing and Novel Properties in Nanoscopic Materials”, Dec. 9-10, 1999, Osaka, Japan.**
8. **R. Vidu**, S. Hara, Underpotential Alloy formation at Au(100)/Cd²⁺ Interface in Sulphuric Acid Solution, (abs#2165) **The 196th International Meeting of the Electrochemical Society, Oct. 17-22, 1999, (Honolulu) HI, USA.**
7. **R. Vidu**, S. Hara, *In situ* Electrochemical Atomic Force Microscopy Study on Au(100)/Cd Interface in Sulfuric Acid Solution (Paper MoP1-38), **10th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Related Proximal Probe Microscopy, STM99, July 18-23, 1999, Seoul, Korea.**
6. Y. Nakamoto, T. Tagawa, **R. Vidu**, N. Hirai, S. Hara, Electrodeposition of II-VI Semiconductor Compound on Au(111)/polyethylene, **30th Symposium on Molten Salts Chemistry (A11), Electrochemical Soc., Osaka Univ., Nov. 12, 1998, Osaka, Japan.**
5. **R. Vidu**, S. Hara, Surface Alloying at Cd/Au(100) Interface in the UPD Region. Electrochemical Studies and *in situ* EC-AFM Observation (Paper P-13), **International Symposium on Electrochemistry of Ordered Interfaces, the 49th Annual meeting of ISE, Sept. 11-12, 1998, Sapporo, Japan.**
4. M. Pana, **R. Vidu**, C. D. Vidu, Oxidation Mechanism at Aluminum-Lithium Alloys, **Junior Euromat'98, European Conference, Sept. 7-11, 1998, Lausanne, Switzerland.**
3. **R. Vidu**, S. Hara, Surface Alloying Process During Cd Electrodeposition on Au(100) Observed by EC-AFM, **The 6th Symposium of Japanese Institute of Metals on Crystal Growth, Structure and Characteristics of Metal Thin Films, Osaka University, 19 Dec. 1997, Osaka, Japan.**
2. **R. Vidu**, N. Ikemya, S. Hara, *In situ* Observation of Atomic Structures and Growth Morphology of Electrodeposited Cd on Au(100) Using EC-AFM, **International Symposium on Electrochemistry of Ordered Interfaces, Sept. 1996, Sapporo, Japan.**
1. **R. Vidu**, Multi-component Thin Films on Steel by Plasma Enhanced PVD, **International Exhibition for Creativity and Innovation 5-10 June 1995 Bucharest, Romania. (Award: Silver Medal).**