

Curriculum vitae

Name, academic position and degree
Milena Georgieva Beshkova, Assoc. Prof. , PhD
Affiliation – research organization, department
Bulgarian Academy of Sciences, Institute of Electronics
Education
<p>1998- SU “St. Kl. Ohridski” Faculty of Chemistry, Sofia MSc Inorganic and analytic chemistry</p> <p>2005- Ph.D in Inorganic Chemistry- Institute General and Inorganic Chemistry-BAS</p> <p>2001-2002 Materials Science Div., Linköping University, Sweden, training in the framework of Marie Curie Ph.D thesis "Synthesis and Characterization of Heteroepitaxial Layers in AlN-SiC systems"</p> <p>2008-2010 Pos-doc at Materials Science Div., Linköping University, Sweden, FP6-Marie Curie Research Training Network (RTN) program MANSiC "Promoting and structuring a Multidisciplinary Academic-Industrial Network through the heteropolytype growth, characterization and application of 3C-SiC on hexagonal substrates", Contract No MRTN-CT-2006-035735</p>
Academic positions in the last five years
2011- Assos. Prof. at IE-BAS, Sofia, Bulgaria
Main research area and subareas
<p>Technology for deposition of AlN, 3C-SiC by sublimation epitaxy, CeO and MgO by electron beam deposition, YBCO by dc magnetron sputtering. Study the kinetics of growth processes. Structural investigation by XRD and HR-XRD and Raman. Morphological investigation by optical microscope with Nomarski interference contrast or in transmission mode, and AFM.</p>
Additional research areas and subareas
Device application of epitaxial graphene on silicon carbide
Specializations abroad and international collaborations
<p>2001-2002-Ph.D training in the framework of Marie Curie , Materials Science Div., Linköping University, Sweden-"Synthesis and Characterization of Heteroepitaxial Layers in AlN-SiC systems"</p> <p>2008-2010-Post-Doc Materials Science Div., Linköping University, Sweden- FP6-Marie Curie Research Training Network (RTN) program MANSiC "Promoting and structuring a Multidisciplinary Academic-Industrial Network through the heteropolytype growth,</p>

characterization and application of 3C-SiC on hexagonal substrates”, Contract No MRTN-CT-2006-035735

Scientific awards and membership in scientific societies

Union of Electronics, Electrical Engineering and Telecommunications (CEEC)

Name, used in publications in foreign language: M. Beshkova

H index (according to Scopus or Web of Science): 4

Internet address with list of scientific publications (ResearcherID, Research gate, etc.):

<https://www.scopus.com/results/results.uri?sort=plf-f&src=s&st1=Beshkova&st2=M&nlo=1&nlr=20&nls=count-f&sid=72FFB2A5CE8A12CB1F1EECB8C267A874.wsnAw8kcdt7IPYLO0V48gA%3a53&sot=anl&sdt=aut&sl=36&s=AU-ID%28%22Beshkova%2c+Milena%22+6603401874%29&txGid=72FFB2A5CE8A12CB1F1EECB8C267A874.wsnAw8kcdt7IPYLO0V48gA%3a5>

Total number of scientific publications:28

From them with impact factor or impact rang: 24

Number of citations of the scientific publications: 41

Selected scientific publications

1. M.Beshkova, Z.Zakhariev, M.V. Abrashev, J.Birch, A.Kakanakova, R.Yakimova “Low-pressure sublimation epitaxy of AlN films-growth and characterization” Vacuum 76 (2004) 143-146
2. M.Beshkova, Z.Zakhariev, M.V. Abrashev, J.Birch and R.Yakimova “Properties of AlN layers grown by sublimation epitaxy in different gas ambient” Materials Science & Engineering B, 129(1-3) (2006) 228-231
3. G. Djanovski, M.Beshkova, S.Velinova, D.Mollov, P.Vlaev, D.Kovacheva, K.Vutova, G.Mladenov “Deposition of CeO₂ Films on Si(100) Substrate by Electron Beam Evaporation”, Plasma Process. Polym. 3 (2006), 197-200
4. M. Beshkova, K.G.Grigorov, Z. Zakhariev, M. Abrashev, M. Massi And R. Yakimova “Sublimation Epitaxy of AlN layers grown by different conditions on 4H-SiC substrates”, Journal of Optoelectronics and Advance Materials, 9 (2007) (1) 213-216.
5. M Beshkova, B Blagoev, D Kovacheva, G Mladenov, T Nurgaliev “Deposition and characterization of high temperature superconductor YBa₂Cu₃O_{7-δ} films obtained by DC magnetron sputtering and modification by thermal annealing”, Journal of Physics 113 (2008) 012021
6. M. Beshkova, B. Blagoev, D. Kovacheva, G. Mladenov and T. Nurgaliev, “Effect of

thermal annealing on the properties of the YBCO films grown by DC magnetron sputtering”
Journal of Optoelectronics and Advanced Materials, Vol. 11 (2009) pp. 1537-1540

7. M. Beshkova, J. Lorenzzi, N. Jegenyess, J. Birch, M.Syväjärvi, G. Ferro, R. Yakimova
“Properties of 3C-SiC Grown by Sublimation Epitaxy on Different Type of Substrates”,
Materials Science Forum- Vols. 645-648 (2010) pp.183-186

8. M. Beshkova, Z.Zakhariev, G. Spasov and R.Yakimova “Method for deposition of AlN
layers” patent BG 66077 B1 (2011)

9. M. Beshkova, J. Birch J, M. Syväjärvi, R. Yakimova , “Sublimation Epitaxy of 3C- SiC
grown at Si- and C-rich conditions”, Vacuum 86 (2012) 1595-1599

10. M. Beshkova , L. Hultman, R. Yakimova, “Device applications of epitaxial graphene on
silicon carbide” Vacuum Vol. 128, (2016), pp 186-197

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+ 359 889 399 691

Participation in projects supported by BNSF in the last five years

Competition (type and year): National Science Fund (2017-2020)

Number and date of the contract: ДН 18/6, 10. 12. 2017

Title: “Deposition and characterization of AlN films for surface acoustic wave device applications”

Project coordinator: Assoc. Prof. , PhD M. Beshkova

Status of the project: running

Evaluation of the project implementation (for completed projects):

Participation in projects supported by other sources in the last five years

Financing organization: EU FP7

Type of the competition and year: Starting date / Duration: October 1st, 2013 / 36 + 6 months

Number or acronym of the project: REGPOT-2012-2013-1 NMP, Grant agreement no: 316309

Title: INERA “Research and Innovation Capacity Strengthening of ISSP-BAS in Multifunctional Nanostructures”

Project coordinator: Academician Alexander G. Petrov

Status of the project: completed