

Publications and International Conferences

1. “*Transfer of Knowledge from Scientific Research Projects towards Middle School Scholars*”, J. Kováč, jr, R. Szobolovský, A. Kósa, L. Stuchlíková and J. Kováč, In : [Proceedings of 13th International Conference on Emerging eLearning Technologies and Applications, ICETA 2015](#), November 26 – 27, 2015, The HighTatras, Slovakia – Grandhotel Stary Smokovec, <http://www.iceta.sk/>
2. “*Surface properties of AlInN/GaN heterostructures*”, A. Minj, D. Skuridina, D. Cavalcoli, A. Cros, P. Vogt, M. Kneissl, H. Ben Ammar and P. Ruterana, Poster presentation at the [EMRS Spring meeting](#), 2-6 May 2016 Lille France, <http://www.european-mrs.com/meetings/2016-spring-meeting>
3. “*2/3-D Device Simulations as an Effective Tool in MicroelectrConics Education*”, Aleš Chvála, Juraj Marek, Arpád Kósa, Patrik Príbytný, Ľubica Stuchlíková and Daniel Donoval, In: [Proceedings of 11th European Workshop on Microelectronics Education, EWME 2016](#), Southampton, 11-13 May, 2016, <http://ewme2016.ecs.soton.ac.uk/>
4. “*Results on specific backside opening process dedicated to engineering package for SiC component*”, G. Bascoul, F. Infante in [Association d'analyse de défaillance Française \(ANADEF\)](#) meeting June 7-10 2016 Seignosse-Hossegor France, http://www.anadef.org/fileadmin/internet/Ateliers_Internet/2016/Atelier_2016_Programme_detaille_Infos_8P.pdf
5. “*The structure of (Al, Ga, In)N/GaN heterostructures for emission in the visible*”, P. Ruterana, invited talk at [7th International Conference on Optical, Optoelectronic and Photonic Materials and Applications](#) in Montreal, June 12-18, 2016
6. “*Thermal Management of multifingerPower HEMTs Supported by 3-D Simulation*”, A. Chvála, J. Marek, P. Príbytný, J. Kováč, S. Delage, J.-C. Jacquet and D. Donoval, In: [Proceedings of the 4th international conference on Advances in Electronic and Photonic Technologies ADEPT 2016](#), June 20 - 23, 2016, Hotel Slovan, TatranskáLomnica, Slovakia, <http://adept.fyzika.uniza.sk/index.php>
7. “*Investigation of electrophysical properties of semiconductor materials and devices*”, M. Petrus, **PhD dissertation thesis**, STUBA, **FEI-10843-36054, 2016**
8. “*Exploration of quality of semiconductor structures based on GaN*”, J. Drobný, **bachelor thesis**, STUBA, **FEI-5390-72627, 2016**

9. "Investigation of strain effects on phase diagrams in the ternary nitride alloys ($InAlN$, $AlGaN$, $InGaN$)", R. Mohamad, A. Béré, H. Ben Ammar, P. Gamarra, S. Lacam, A. Minj, J. Chen, and P. Ruterana, poster presentation at the **EMRS Fall meeting**, Warsaw, 19-22 September 2016
10. "On-axis Homoepitaxial Growth of V-Doped Semi-insulating 4H-SiC", J. Ul Hassan, R. Karhu, B. Magnusson, I. G. Ivanov, Ö. Danielsson, O. Kordina, and E. Janzén, Presented at the **11th European Conference on Silicon Carbide and Related Materials, ECSCRM**, 25-29 September 2016, Halkidiki, Greece. <https://ecscrm2016.org/>
11. "Structural investigations in nitride semiconductors for optoelectronic applications", P. Ruterana invited talk the **International Conference on Mechanics and Material Science, MMS 2016**, Guangzhou, China, on 15-16 October, 2016.
12. "Isotopic SiC epitaxy for microwave and power applications", S. L. Delage, P. Gamarra, O. Patard, C. Dua, J.-C. Jacquet, S. Piotrowicz, A. Schöner, S. Reshanov, P. Ruterana, M.-P. Chauvat, F. Infante, P. Spezzigu, B. Ceccaroli, Dag Eriksen, P. Hilaireau, J. Tai Chen, O. Kordina, Ö. Danielsson, E. Janzén, B. Magnusson, J. Kovac, J. Kovac Jr., D. Donoval, C. Chang, and D. Floriot, Presented at **WOCSEMMAD 2017**, February 19 - 22, 2017, Safety Harbor, FL, USA
13. "Atomic structure of extended defects in wurtzite semiconductors" Pierre Ruterana, Marie-Pierre Chauvat, Siqian Li, Hichem Ben Ammar, Quantong Li, Albert Minj, Jun Chen, invited talk at the **XXth Microscopy of semiconducting materials conference**, 9-13 April 2017, Oxford, <http://www.rms.org.uk/discover-engage/event-calendar/msm-xx.html>
14. "Thermal Analysis of Multifinger Power HEMTs Supported by 3-D Simulation", A. Chvála, J. Marek, P. Příbytný, J. Kováč, S. L. Delage, J.-C. Jacquet and D. Donoval In **Workshop on Compound Semiconductor Devices and Integrated Circuits** held in Europe, **WOCSDICE 2017**, Las Palmas de Gran Canaria, Spain, May 21-24, 2017
15. "Raman spectroscopy as an effective tool for temperature distribution measurement", J. Kovac jr., R. Szobolovszký, A. Chvála, J. Kováč, M. Florovič, submitted to: **5th international conference on Advances in Electronic and Photonic Technologies, ADEPT 2017**, Podbanské, Slovakia, 19-22 June, 2017, <http://adept.fyzika.uniza.sk/program.php>
16. "Channel temperature analysis of power AlGaIn/GaNHEMT", M. Florovič, R. Szobolovský, J. Kováč, jr., J. Kováč, A. Chvála, J.-C. Jacquet, S. L. Delage submitted to: **5th international conference on Advances in**

Electronic and Photonic Technologies, **ADEPT 2017**, Podbanské, Slovakia, 19-22 June, 2017

17. “*Characterization of Thermal Properties of Power HEMT Devices*”, A. Chvála, J. Kováč, J. Kováč jr., M. Florovič, R. Szobolovszký, J. Marek, P. Příbytný, S. L. Delage, J.-C. Jacquet and D. Donoval submitted to: **5th international conference on Advances in Electronic and Photonic Technologies, ADEPT 2017**, Podbanské, Slovakia, 19-22 June, 2017
18. “*Investigation of emission and capture processes in AlGaIn/GaN heterostructures*”, L. Stuchlikova, O. Pohorelec, A. Kósa, S.L. Delage, J.Kovac, , submitted to: **5th international conference on Advances in Electronic and Photonic Technologies, ADEPT 2017**, Podbanské, Slovakia, 19-22 June, 2017.
19. “*Probing the local electrical properties of III-nitride-based heterostructures by scanning probe microscopy*”, A. Minj, A. Cros, N. Garro, P. Gamarra, C. Lacam and P. Ruterana, , invited talk at the **International conference on Advances in Electronic and Photonic Technologies, ADEPT 2017**, Podbanské, High Tatras, Slovakia, June 19 - 22, 2017
20. “*Transmission electron microscopy of high electron mobility transistors for failure investigation: the use of FIB/SEM Dual Beam for sample preparation*”, M-P. Chauvat, A. Minj, P. Gamarra, C. Lacam, F. Medjdoub, C.Dua, O. Patard, S. Delage, P. Ruterana, oral presentation at **the International conference on Advances in Electronic and Photonic Technologies, ADEPT 2017**, Podbanské, High Tatras, Slovakia, June 19 - 22, 2017
21. “*Probing the electrical properties of thin nitride heterostructures below surface by electric force microscopy*”, A. Minj, A. Cros, N. Garro, and P. Ruterana, Oral presentation at the **12th ICNS conference**, Strasbourg 24-27 July 2017, <http://www.european-mrs.com/meetings/icns-12-12th-international-conference-nitride-semiconductors>
22. “*Theoretical calculations of miscibility of III nitride quaternary alloys: Indium concentration region for the epitaxial growth of the In_xAl_yGa_{1-x-y}N alloy*”, R. Mohamad, A. Béré, H. Ben Ammar, A. Minj, P. Gamarra, C. Lacam, J. Chen and P. Ruterana, **poster** presentation at the **12th ICNS conference**, Strasbourg 24-27 July 2017