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Vanya Darakchieva is Professor in Materials Science and a Wallenberg Scholar at Solid State Physics Division, Department of Physics, Lund University. She also holds a part-time position as Professor in Semiconductor Materials at Linköping University. Her background is in semiconductor physics with focus on development of (ultra)wide bandgap semiconductors for high-frequency and power electronics. She is also developing spectroscopic techniques and analytical methods for studying electronic transport materials from bulk to the nanoscale. She has been developing metalorganic vapor phase deposition of III-Nitrides and Ga_2O_3. She pioneered Terahertz Ellipsometry and optical Hall effect and she is currently developing Terahertz-Electron-Paramagnetic-Resonance-Ellipsometry. She has established and is leading two interdisciplinary centers: i) VINNOVA Competence center for III-Nitride technology - C3NiT-Janzén and ii) Terahertz Materials Analysis Center, as well as the first Swedish network on III-Nitrides for power, across academia, industry and public sector involving leading Swedish and international corporations (Ericsson, Saab, Volvo Cars, Hitachi Energy, On Semi, UMS), small and medium enterprises (SweGaN, Epiluvac, Gotmic, Hexagem), public bodies (Swedish Defense Agency – FMV) and universities (Chalmers University of Technology, Lund University, Linköping University). She is also coordinating the Swedish node of the Wide Bandgap Semiconductor Pilot Line within Chips JU. Her project portfolio includes awards from EU Commission, Knut and Alice Wallenberg Foundation, Swedish Innovation Agency VINNOVA, Swedish Research Council, Swedish foundation for strategic research, etc. She authored/co-authored 2200+ peer reviewed journal papers.