

BRANIȘTE, Tudor, ZHUKOV, Sergey, DRAGOMAN, Mircea L., ALYABYEVA, L., CIOBANU, Vladimir, ALDRIGO, Martino, DRAGOMAN, Daniela, IORDANESCU, Sergiu A., SHREE, Sindu, RAEVSCHI, Simion, ADELUNG, Rainer, GORSHUNOV, Boris, TIGINYANU, Ion. Terahertz shielding properties of aero-GaN . In: *Semiconductor Science and Technology*. 2019, Vol. 34, nr. 12, p. 0. ISSN 0268-1242.

The electrodynamic properties of the first aero-material based on compound semiconductor, namely of Aero-GaN, in the terahertz frequency region are experimentally investigated. Spectra of complex dielectric permittivity, refractive index, surface impedance are measured at frequencies 4-100  $\text{cm}^{-1}$  and in the temperature interval 4-300 K. The shielding properties are found based on experimental data. The aero-material shows excellent shielding effectiveness in the frequency range from 0.1 to 1.3 THz, exceeding 40 dB in a huge frequency bandwidth, which is of high interest for industrial applications. These results place the aero-GaN among the best THz shielding materials known today.