

Lista selectă a publicațiilor în reviste științifice (2009-2019)

1. Self-organized and self-propelled aero-GaN with dual hydrophilic-hydrophobic behavior.
Ion Tiginyanu, Tudor Braniste, Daria Smazna, Mao Deng, Fabian Schütt, Arnim Schuchardt, Marion A. Stevens-Kalceff, Simion Raevschi, Lorenz Kienle, Nicola Puglo, Yogendra K. Mishra, Rainer Adelung.
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2. Sensing up to 40 atm using pressure-sensitive aero-GaN.
Mircea Dragoman, Vladimir Ciobanu, Sindu Shree, Daniela Dragoman, Tudor Braniste, Simion Raevschi, Adrian Dinescu, Andrei Sarua, Yogendra K. Mishra, Nicola Pugno, Rainer Adelung, Ion Tiginyanu.
Physica Status Solidi – Rapid Research Letters (<https://doi.org/10.1002/pssr.201900012>, 2019).
3. Towards uniform electrochemical porosification of bulk HVPE-grown GaN.
Ed. Monaico, C. Moise, G. Mihai, V. V. Ursaki, K. Leistner, I. M. Tiginyanu, M. Enachescu, K. Nielsch.
Journal of the Electrochemical Society, Vol. 166, no 5, pp. H3159-H3166 (2019).
4. Improving gas sensing by CdTe decoration of individual Aerographite microtubes.
Julian Ströbel, Lidia Ghimpu, Vasile Postica, Oleg Lupan, Maximilian Zapf, Sven Schönherr, Robert Röder, Carsten Ronning, Fabian Schütt, Yogendra Kumar Mishra, Ion Tiginyanu, Rainer Adelung, Janik Marx, Bodo Fiedler, Lorenz Kienle.
Nanotechnology, Vol. 30, no 6, 065501 (2019).
5. Hierarchical Aerographite 3D flexible networks hybridized by InP micro/nanostructures for multifunctional applications.
Irina Plesco, Julian Strobel, Fabian Schütt, Cameliu Himcinschi, Nabiha Ben Sedrine, Teresa Monteiro, Maria Rosário Correia, Leonid Gorceac, Boris Cinic, Veaceslav Ursaki, Janik Marx, Bodo Fiedler, Yogendra K. Mishra, Lorenz Kienle, Rainer Adelung, Ion Tiginyanu.
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6. Learning mechanisms in memristor networks based on GaN nanomembranes.
Mircea Dragoman, Ion Tiginyanu, Daniela Dragoman, Adrian Dinescu, Tudor Braniste, Vladimir Ciobanu.
Journal of Applied Physics, Vol. 124, 152110 (2018).
7. Possible coherent backscattering of lightwaves from a strongly absorbing nanoporous medium.
Sergey V. Gaponenko, Eduard Monaico, Vladimir V. Sergentu, Sergey Ya. Prislopski, Ion M. Tiginyanu.
Journal of Optics, Vol. 20, 075606 (2018).
8. Flexible pressure sensor based on graphene aerogel microstructures functionalized with CdS nanocrystalline thin film.
Irina Plesco, Mircea Dragoman, Julian Strobel, Lidia Ghimpu, Fabian Schütt, Adrian Dinescu, Veaceslav Ursaki, Lorenz Kienle, Rainer Adelung, Ion Tiginyanu.
Superlattices and Microstructures, Vol. 117, pp. 418-422 (2018).
9. Characterization of core/shell structures based on CdTe and GaAs nanocrystalline layers deposited on SnO₂ microwires.
L. Ghimpu, V.V. Ursaki, A. Pantazi, R. Mesterca, O. Brancoveanu, Sindu Shree, R. Adelung, I.M. Tiginyanu, M. Enachescu.
Superlattices and Microstructures, Vol. 116, pp. 64-70 (2018).
10. ZnAl₂O₄-functionalized zinc oxide microstructures for highly selective hydrogen gas sensing applications.

Mathias Hoppe, Oleg Lupan, Vasile Postica, Niklas Wolff, Viola Duppel, Lorenz Kienle, Ion Tiginyanu, Rainer Adelung.

Physica Status Solidi (a), Vol. 215, no 7, 1700772 (2018).

11. Zinc oxide nanotetrapods with different arm morphologies for versatile nanosensors. Ingo Paulowicz, Vasile Postica, Oleg Lupan, Niklas Wolff, Sindu Shree, Mao Deng, Ala Cojocar, Yogendra K. Mishra, Ion Tiginyanu, Lorenz Kienle, Rainer Adelung.

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12. Ultrafast third-order optical nonlinearity in SnS₂ layered compound for photonic applications.

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13. Properties of a single SnO₂:Zn₂SnO₄-functionalized nanowire.

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14. A SnS₂-based photomemristor driven by sun.

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15. Perovskite solar cells with ZnS as electron transport layer.

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16. Targeting Endothelial Cells with Multifunctional GaN/Fe Nanoparticles.

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17. Mott type electrical conductivity in ZnS_xSe_{1-x} thin films.

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18. T. Braniste, Joachim Ciers, Ed. Monaico, D. Martin, J.-F. Carlin, V.V. Ursaki, V.V. Sergentu, I. M. Tiginyanu, N. Grandjean.

Multilayer porous structures of HVPE and MOCVD grown GaN for photonic applications.

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22. Size-dependent UV and gas sensing response of individual Fe₂O₃-ZnO:Fe micro- and nanowire based devices.

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Vasile Postica, Iris Hölken, Viktor Schneider, Victor Kaidas, Oleksandr Polonskyi, Vasiliu Cretu, Ion Tiginyanu, Franz Faupel, Rainer Adelung, Oleg Lupan.
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