Oleh Olikh

Most Relevant Publications List

1. Olikh O., Lozitsky O., Zavhorodnii O. «Estimation for iron contamination in Si solar cell by ideality factor: Deep neural network approach», Progress in Photovoltaics: Research and Applications, 2022, vol.30, is.6, p. 648-660; https://doi.org/10.1002/pip.3539
2. Olikh O., Lytvyn P. «Defect engineering using microwave processing in SiC and GaAs», Semiconductor Science and Technology, 2022, vol.37, Is.7, 075006; https://doi.org/10.1088/1361-6641/ac6f17
3. Olikh O., Kostylyov V., Vlasiuk V., Korkishko R., Chupryna R. «Intensification of iron–boron complex association in silicon solar cells under acoustic wave action », Journal of Materials Science: Materials in Electronics, 2022, vol.33, is.13, p. 13133-13142; https://doi.org/10.1007/s10854-022-08252-3
4. Olikh Ya., Lyubchenko O., Tymochko M., Lepikh Ya., Gapochenko S., Olikh O. «A new method for investigating the kinetics of acoustically induced processes in semiconductors with pulsed ultrasound loading», Conference Proceedings of 2022 IEEE 3rd KhPI Week on Advanced Technology (KhPIWeek), 2022, P.557-561; https://doi.org/10.1109/KhPIWeek57572.2022.9916334
5. Sachenko A.V., Kostylyov V.P., Korkishko R.M., Vlasiuk V.M., Sokolovskyi I.O., Evstigneev M., Olikh O.Ya., Shkrebtii A.I., Dvernikov B.F., Chernenko V.V. «Experimental investigation and theoretical modeling of textured silicon solar cells with rear metallization», Semiconductor Physics, Quantum Electronics & Optoelectronics, 2022, Vol. 25, N.3, P.331-341; https://doi.org/10.15407/spqeo25.03
6. Olikh O., Kostylyov V., Vlasiuk V., Korkishko R., Olikh Ya., Chupryna R. «Features of FeB pair light-induced dissociation and repair in silicon *n*+-*p*-*p*+ structures under ultrasound loading», Journal of Applied Physics, 2021, vol.130, is.23, 235703; https://doi.org/10.1063/5.0073135
7. Vlasiuk V., Korkishko R., Kostylyov V., Olikh O. «Kinetics of Light-Induced Processes Due to Iron Impurities in Silicon Solar Cells», Proceedings of 2021 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), 2021, P. 1-6; https://doi.org/10.1109/ICECCME52200.2021.9591025
8. Olikh O.Ya., Zavhorodnii O.V. «Modeling of ideality factor value in n+-p-p+-Si structure», Journal of Physical Studies, 2020, V. 24, №4, 4701; https://doi.org/10.30970/jps.24.4701
9. Olikh Ya. M., Tymochko M. D., Olikh O.Ya. «Mechanisms of two-stage conductivity relaxation in CdTe:Cl with ultrasound», Journal of Electronic Materials, 2020, vol.49, is.8, P. 4524-4530; https://doi.org/10.1007/s11664-020-08179-7
10. Gorb A.M., Korotchenkov O.A., Olikh O.Ya., Podolian A.O., Chupryna R.G. «Influence of γ-irradiation and ultrasound treatment on current mechanism in Au-SiO_2-Si structure», Solid State Electronics, 2020, vol.165, 107712; https://doi.org/10.1016/j.sse.2019.107712

11. Olikh O.Ya. «Relationship between the ideality factor and the iron concentration in silicon solar cells», Superlattices and Microstructures, 2019, vol.136, 106309; https://doi.org/10.1016/j.spmi.2019.106309
12. Olikh Ya. M., Tymochko M. D., Olikh O.Ya., Shenderovsky V. A. «Clusters of point defects near dislocations as a tool to control CdZnTe electrical parameters by ultrasound», Journal of Electronic Materials, 2018, vol.47, is.8, P. 4370-4378; https://doi.org/10.1007/s11664-018-6332-4
13. Olikh O.Ya. «Acoustically driven degradation in single crystalline silicon solar cell», Superlattices and Microstructures, 2018, vol.117, p. 173-188; https://doi.org/10.1016/j.spmi.2018.03.027
14. Olikh O.Ya., Gorb A.M., Chupryna R.G., Pristay-Fenenkov O.V. «Acousto-defect interaction in irradiated and non-irradiated silicon n^+–p structures», Journal of Applied Physics, 2018, vol.123, is.16, 161573; https://doi.org/10.1063/1.5001123
15. Olikh O. Ya., Voitenko K. V., Burbelo R. M., Olikh Ja. M. «Effect of ultrasound on reverse leakage current of silicon Schottky barrier structure», Journal of Semiconductors, 2016, vol.37, is.12, 122002; https://doi.org/10.1088/1674-4926/37/12/122002
16. Olikh O.Ya., Voytenko K.V. «On the mechanism of ultrasonic loading effect in silicon-based Schottky diodes», Ultrasonics, 2016, vol.66, p. 1-3; https://doi.org/10.1016/j.ultras.2015.12.001
17. Olikh O.Ya. «Review and test of methods for determination of the Schottky diode parameters», Journal of Applied Physics, 2015, vol.118, is.2, 024502; https://doi.org/10.1063/1.4926420
18. Olikh O.Ya., Voytenko K.V., Burbelo R.M. «Ultrasound influence on I–V–T characteristics of silicon Schottky barrier structure», Journal of Applied Physics, 2015, vol.117, is.4, 044505; https://doi.org/10.1063/1.4906844
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21. Olikh O.Ya. «Non-Monotonic γ-Ray Influence on Mo/n-Si Schottky Barrier Structure Properties», Nuclear Science, IEEE Transactions on, 2013, vol.60, is.1, part 2, p.394-401; https://doi.org/10.1109/TNS.2012.2234137
22. Olikh O.Ya. «Features of dynamic acoustically induced modification of photovoltaic parameters of silicon solar cells», Semiconductors, 2011, V. 45, p. 798-804; https://doi.org/10.1134/S1063782611060170
23. Gorb A.M., Korotchenkov O. A., Olikh O.Ya., Podolian A.O. «Ultrasonically Recovered Performance of γ-Irradiated Metal-Silicon Structures», Nuclear Science, IEEE Transactions on, 2010, vol.57, is.3, p.1632-1639; https://doi.org/10.1109/TNS.2010.2047655
24. Olikh O.Ya. «The variation in activity of recombination centers in silicon p-n structures under the conditions of acoustic loading», Semiconductors, 2009, V. 43, p. 745-750; https://doi.org/10.1134/S1063782609060116