

**Azərbaycan Dövlət İqtisad Universitetinin (UNEC)**  
**“Laboratoriyaların işinin təşkili mərkəzi”nin direktoru,**  
**fizika üzrə fəlsəfə doktoru TURAL QULU OĞLU NAĞIYEVin**  
***Elmi əsərlərinin siyahısı***

***I. SCOPUS və WEB of Science bazalarında indekslənmə məqalələr:***

1. E.M. Huseynov, T.G. Naghiyev, N.R. Abasov. The paramagnetic approach of the color-changing of nano h-BN particle under the neutron irradiation // *Physica E: Low-dimensional Systems and Nanostructures*, **139** (2022) 115124  
<https://doi.org/10.1016/j.physe.2021.115124>
2. O.B. Tagiev, E.G. Asadov, K.O. Tagiev, G.S. Gadzhieva, T.G. Naghiyev. Influence of external factors on photoluminescence of  $\text{Ca}(\text{Al}_x\text{Ga}_{1-x})_2\text{S}_4:\text{Eu}^{2+}$  solid solutions // *Solid State Communications*, **342** (2022) 114587  
<https://doi.org/10.1016/j.ssc.2021.114587>
3. E.M. Huseynov, T.G. Naghiyev. Various thermal parameters investigation of 3C-SiC nanoparticles at the different heating rates // *Applied Physics A*, **128**(2) (2022) 1-8  
<https://doi.org/10.1007/s00339-022-05265-x>
4. A.S. Alekperov, A.O. Dashdemirov, T.G. Naghiyev, S.H. Jabarov. Effect of Gamma Irradiation on the Thermal Switching of a GeS:Nd Single Crystal // *Semiconductors*, **55** (2021) 574–577  
<https://doi.org/10.1134/S1063782621070034>
5. T.G. Naghiyev, R.M. Rzayev. Thermodynamical study of  $(\text{CaGa}_2\text{S}_4)_x(\text{BaGa}_2\text{S}_4)_{1-x}$  solid solutions // *Modern Physics Letters B*, **35**(31) (2021) 2150469  
<https://doi.org/10.1142/S0217984921504698>
6. T.G. Naghiyev. Neutron-alpha reactions in nano  $\alpha\text{-Si}_3\text{N}_4$  particles by neutrons // *Modern Physics Letters A*, **36**(24) (2021) 2150181  
<https://doi.org/10.1142/S0217732321501819>
7. M.S. Leanenia, E.V. Lutsenko, M.V. Rzhetski, G.P. Yablonskii, T.G. Naghiyev, O.B. Tagiev. Photoluminescence study of  $\text{Pr}^{3+}$  doped  $\text{CaGa}_2\text{S}_4$  in wide excitation intensity and temperature range // *Journal of Applied Physics*, **129**(24) (2021) 243104  
<https://doi.org/10.1063/5.0051319>
8. S.G. Asadullayeva, Z.A. Jahangirli, T.G. Naghiyev, D.A. Mammadov. Optical and dynamic properties of  $\text{ZnGa}_2\text{S}_4$  // *Physica Status Solidi (B)*, **258**(8) (2021) 2100101  
<https://doi.org/10.1002/pssb.202100101>
9. T.G. Naghiyev. The study of neutron capture processes in AlN nanoparticle // *International Journal of Modern Physics B*, **35**(9) (2021) 2150127  
<https://doi.org/10.1142/S0217979221501277>
10. E.M. Huseynov, T.G. Naghiyev. Study of thermal parameters of nanocrystalline silicon carbide (3C-SiC) using DSC spectroscopy // *Applied Physics A*, **127**(4) (2021) 267  
<https://doi.org/10.1007/s00339-021-04410-2>
11. E.M. Huseynov, T.G. Naghiyev, A.A. Garibov, N.R. Abbasov, O.A. Samedov, R.C. Gasimov, M.A. Bayramov. EPR spectroscopy of neutron irradiated nanocrystalline boron nitride (h-BN) particles // *Ceramics International*, **47**(5) (2021) 7218-7223  
<https://doi.org/10.1016/j.ceramint.2020.11.075>
12. T.G. Naghiyev. An investigation of silicon nitride ( $\text{Si}_3\text{N}_4$ ) nanoparticles interaction with neutrons // *Modern Physics Letters B*, **35**(6) (2021) 2150104  
<https://doi.org/10.1142/S0217984921501049>
13. T.G. Naghiyev. Computer modeling for the study of (n, p) and (n,  $\alpha$ ) modifications in AlN nanoparticles // *Journal of the Korean Physical Society*, **78** (2021) 232-235.  
<https://doi.org/10.1007/s40042-020-00007-9>

14. T.G. Naghiyev. Computer simulation of (n, p) modifications in silicon nitride (Si<sub>3</sub>N<sub>4</sub>) nanoparticles // *International Journal of Modern Physics B*, **34**(32) (2020) 2050318.  
<https://doi.org/10.1142/S021797922050318X>
15. Y.G. Asadov, Y.I. Aliyev, A.O. Dashdemirov, S.H. Jabarov, T.G. Naghiyev. High-temperature X-ray diffraction study of Ag<sub>2</sub>S-Cu<sub>2</sub>S system // *Modern Physics Letters B*, **34**(supp.1) (2020) 2150018.  
<https://doi.org/10.1142/S0217984921500184>
16. F.G. Agayev, S.H. Jabarov, G.Sh. Ayyubova, A.V. Trukhanov, S.V. Trukhanov, M.N. Mirzayev, T.G. Naghiyev, N.T. Dang. Ferrimagnetic-paramagnetic phase transition in BaFe<sub>11.7</sub>In<sub>0.3</sub>O<sub>19</sub> compound // *Journal of Superconductivity and Novel Magnetism*, **33** (2020) 2867–2873  
<https://doi.org/10.1007/s10948-020-05544-9>
17. E.M. Huseynov, T.G. Naghiyev, U.S. Aliyeva. Thermal parameters investigation of neutron-irradiated nanocrystalline silicon carbide (3C-SiC) using DTA, TGA and DTG methods // *Physica B: Condensed Matter*, **577** (2020) 411788  
<https://doi.org/10.1016/j.physb.2019.411788>
18. Y.I. Aliyev, Y.G. Asadov, T.M. Ilyasli, F.M. Mammadov, T.G. Naghiyev, Z.A. Ismayilova, M.N. Mirzayev, S.H. Jabarov. Structural aspects of thermal properties of AgCuS compound // *Modern Physics Letters B*, **34**(5) (2020) 2050066  
<https://doi.org/10.1142/S0217984920500669>
19. D.T. Khan, N.T. Dang, S.H. Jabarov, T.G. Naghiyev, R.M. Rzayev, T.Q. Nguyen, H.V. Tuyen, N.T. Thanh, L.V.T. Son. Study on luminescent properties of Tb<sup>3+</sup> and Sm<sup>3+</sup> co-doped CaSiO<sub>3</sub> phosphors for white light emitting diodes // *Material Research Express*, **7** (2020) 016507.  
<https://doi.org/10.1088/2053-1591/ab5ab8>
20. R.S. Madatov, F.G. Asadov, E.G. Asadov, T.G. Naghiyev. Thermostimulated luminescence of GaS:Yb crystals // *Journal of the Korean Physical Society*, **74**(5) (2019) 508-511  
<https://doi.org/10.3938/jkps.74.508>
21. Y.I. Aliyev, Y.G. Asadov, A.O. Dashdemirov, R.D. Aliyeva, T.G. Naghiyev and S.H. Jabarov. Polymorphic transformations and thermal expansion of some modifications in Ag<sub>1.5</sub>Cu<sub>0.5</sub>Se and Ag<sub>0.4</sub>Cu<sub>1.6</sub>Se // *International Journal of Modern Physics*, **33**(23) (2019) 1950271  
<https://doi.org/10.1142/S0217979219502710>
22. Y.I. Aliyev, Y.G. Asadov, R.D. Aliyeva, T.G. Naghiyev, SH Jabarov. Influence of partial substitution of Cu atoms by Zn and Cd atoms on polymorphic transformation in the Cu<sub>1.75</sub>Te crystal // *Modern Physics Letters B*, **33**(11) (2019) 1950128  
<https://doi.org/10.1142/S0217984919501288>
23. R.S. Madatov, A.S. Alekperov, N.N. Gadzhieva, F.G. Asadov, Sh.A. Allahverdiev, E.G. Asadov and T.G. Naghiyev. Features of the edge photoconductivity of gamma-irradiated layered crystals GaS and GaS:Yb under the strong electric field // *International Journal of Modern Physics B*, **33**(9) (2019) 1950066  
<https://doi.org/10.1142/S0217979219500668>
24. M.S. Leanenia, E.V. Lutsenko, M.V. Rzhetski, V.N. Pavlovskii, G.P. Yablonskii, T.G. Naghiyev, B.G. Tagiev, S.A. Abushev, O.B. Tagiev. Photoluminescence of Ca<sub>x</sub>Ba<sub>1-x</sub>Ga<sub>2</sub>S<sub>4</sub>:Eu<sup>2+</sup> solid solutions in wide excitation intensity and temperature intervals // *Journal of Luminescence*, **181** (2017) 121-127  
<https://doi.org/10.1016/j.jlumin.2016.09.017>
25. M.S. Leanenia, E.V. Lutsenko, M.V. Rzhetski, G.P. Yablonskii, T.G. Naghiyev, H.B. Ganbarova, O.B. Tagiev. High photoluminescence stability of CaGa<sub>4</sub>O<sub>7</sub>:Eu<sup>3+</sup> red phosphor in wide excitation intensity interval // *Optical Materials*, **54** (2016) 45-49  
<https://doi.org/10.1016/j.optmat.2016.02.005>
26. B.G. Tagiyev, O.B. Tagiyev, A.I. Mammadov, Vu Xuan Quang, T.G. Naghiyev, S.H. Jabarov, M.S. Leonenya, G.P. Yablonskii, N.T. Dang. Structural and luminescence properties of Ca<sub>x</sub>Ba<sub>1-</sub>

$x\text{Ga}_2\text{S}_4:\text{Eu}^{2+}$  chalcogenide semiconductor solid solutions // *Physica B: Condensed Matter*, **478** (2015) 58-62

<https://doi.org/10.1016/j.physb.2015.08.061>

27. B.G. Tagiev, O.B. Tagiev, T.G. Nagiev, S.G. Asadullaeva, M.S. Leonenya, G.P. Yablonskii, S.A. Abushov. Luminescence of  $\text{Ca}_{0.5}\text{Ba}_{0.5}\text{Ga}_2\text{S}_4$  crystals activated by  $\text{Eu}^{2+}$  and  $\text{Er}^{3+}$  ions // *Optics and Spectroscopy*, **118**(3) (2015) 389-392  
<https://doi.org/10.1134/S0030400X15030200>
28. M.S. Leanenya, E.V. Lutsenko, V.N. Pavlovskii, G.P. Yablonskii, T.G. Nagiev, B.G. Tagiev, O.B. Tagiev, S.A. Abushev. Luminescence and lasing in ZnSe micropowders at high optical excitation levels // *Journal of Applied Spectroscopy*, **82**(1) (2015) 53-57  
<https://doi.org/10.1007/s10812-015-0063-6>
29. M.S. Leanenia, E.V. Lutsenko, N.V. Rzhetskij, V.N. Pavlovskii, G.P. Yablonskii, T.G. Nagiev, B.G. Tagiev, S.A. Abushev, O.B. Tagiev. Photoluminescence of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$  solid solutions activated by  $\text{Eu}^{2+}$  ions // *Journal of Applied Spectroscopy*, **82**(2) (2015) 248-253.  
<https://doi.org/10.1007/s10812-015-0093-0>

## **II. *Beynəlxalq nüfuzlü elmi jurnallarda nəşr olunan məqalələr, o cümlədən AAK - tövsiyə edilən dövri elmi nəşrlər:***

1. S.G. Asadullayeva, T.G. Naghiyev, G.A. Gafarova. Room temperature photoluminescence study of undoped  $\text{ZnGa}_2\text{S}_4$  compound // *Advanced Physical Research*, **1**(2) (2019) 81-85  
<http://jomardpublishing.com/UploadFiles/Files/journals/APR/V1N2/Asadullayeva%20et%20al.pdf>
2. E.M. Huseynov, T.G. Naghiyev, N.R. Abbasov. Radioactivity study of 3C-SiC nanoparticles under the neutron flux at the TRIGA Mark II type research reactor // *Adv. Phys. Res.*, **1**(1) (42-45)  
<http://jomardpublishing.com/UploadFiles/Files/journals/APR/HuseynovE%20et%20al.pdf>
3. E.M. Huseynov, T.G. Naghiyev. (n,  $\alpha$ ) transmutation of AlN nanoparticles under the neutron flux // *Adv. Phys. Res.*, **1**(2) (2019) 99-104  
<http://jomardpublishing.com/UploadFiles/Files/journals/APR/V1N2/Huseynov%20Naghiyev.pdf>
4. M.S. Leanenia, E.V. Lutsenko, M.V. Rzhetskii, V.N. Pavlovskii, G.P. Yablonskii, T.G. Naghiyev, B.G. Tagiev, S.A. Abushev, O.B. Tagiev. Photoluminescence in the visible range of the trivalent praseodymium ions activated calcium thiogallate in the temperature range of the 10÷300 K // *Reports of the National Academy of Sciences of Belarus*, **59**(6) (2015) 57-61  
<https://doklady.belnauka.by/jour/article/view/162>
5. Sh.A. Ahmadova, T.G. Naghiyev, Sh.N. Aliyeva, A.A. Sadigova, T.T. Mehdiyev. Photoluminescence properties of  $\text{Ni}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$  nanopowders // *Azerbaijan Journal of Physics*, **XXV**(2) (2019) 25-30
6. B.G. Tagiyev, O.B. Tagiyev, T.G. Nagiyev, S.G. Asadullayeva. Photoluminescence of solid solutions  $\text{Ca}_{0.5}\text{Ba}_{0.5}\text{Ga}_2\text{S}_4:\text{Eu},\text{Er}$  // *Azerbaijan Journal of Physics*, **XX**(3) (2014) 30-34  
[http://physics.gov.az/Dom/2014/AJP\\_Fizika\\_03\\_2014\\_en.pdf](http://physics.gov.az/Dom/2014/AJP_Fizika_03_2014_en.pdf)
7. T.G. Нагиев, О.Б. тагиев, А.Н. Мамедов, Е.Г. Асадов. Синтез и термодинамическая стабильность твердых растворов  $(\text{CaGa}_2\text{S}_4)_x(\text{BaGa}_2\text{S}_4)_{1-x}$  и  $(\text{CaGa}_2\text{S}_4)_x(\text{CaAl}_2\text{S}_4)_{1-x}$  // *AMEA-nın Xəbərləri*, **5** (2016) 56-63  
[http://physics.gov.az/Transactions/2016/journal2016\(5\).pdf](http://physics.gov.az/Transactions/2016/journal2016(5).pdf)

## **III. *Beynəlxalq konfranslarda məruzələr***

1. Rare earth doped sulphide materials for white light generation / 7<sup>th</sup> international conference: photoluminescence in rare-earth. Photonic materials and devices (PRE'17) 2017

2. Luminescent properties of  $\text{Ca}_{0.1}\text{Ba}_{0.9}\text{Ga}_2\text{S}_4$  compounds activated by Eu and Ce rare-earth elements. / International student, postgraduate and young scientists conference Lomonosov 2013, p.241-241.
3. Photoluminescence and random lasing of light in the wideband chalcogenide phosphors and semiconductors micropowders / XX All-Russian Conference Optics and Spectroscopy of Condensed Matter, Krasnodar 2014, p. 23-26. (in russian).
4. Luminescent properties of  $\text{Eu}^{2+}$  and  $\text{Er}^{3+}$  activated  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$  ( $x=0.1\div 0.5$ ) solid solutions. / XX International conference of students and young scientists on fundamental sciences Lomonosov, Moscow 2014, p.282-283. (in russian).
5. Radiative properties of the  $\text{Ca}_{0.5}\text{Ba}_{0.5}\text{Ga}_2\text{S}_4$ : Eu, Er crystal / IX International Conference “Amorphous and microcrystalline semiconductors”, Saint Petersburg, 2014, p.205-206. (in russian).
6. Photoluminescence of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$  chalcogenide semiconductor activated by  $\text{Eu}^{2+}$  ions / IX International Conference “Amorphous and microcrystalline semiconductors”, Saint Petersburg 2014, p.207-208. (in russian).
7. Obtaining and investigation luminescent properties of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$ : Eu, Ce solid solutions / Dedicated to the 91<sup>th</sup> Anniversary of the National Leader of Azerbaijan, Haydar Aliyev. II International Scientific Conference of Young Researchers, Baku 2014, p.64.
8. Synthesis and luminescent properties of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$ : Eu, Er solid solutions / Baku World Forum of Young Scientists 2014, Baku 2014, p.205-206.
9. Influence of excitation level in the 104-108  $\text{W}/\text{cm}^2$  range on the spectra, kinetics and efficiency of photoluminescence of  $\text{Eu}^{3+}$  doped  $\text{CaGa}_4\text{O}_7$  chalcogenide semiconductor / The collection of articles of the 10<sup>th</sup> Belarusian-Russian workshop “Semiconductor lasers and systems based on them”. Institute of Physics of NAS Belarus, 2015. p. 142–145. (in russian).
10. Photoluminescence in wide temperature range and excitation level by trivalent europium and praseodymium ions activated of thio- and oxigallate calcium / XXI All-Russian Conference Optics and Spectroscopy of Condensed Matter (September 13-19, 2015 Krasnodar): Kuban State. Univ. Krasnodar, Russia, 2015. p. 190-194. (in russian).

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