

CURRICULUM VITAE

Nizami M. Hasanli

Professor , Doctor



PERMANENT

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PRESENT

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PERSONAL: Born September 15, 1941, Bolnisi, Republic of Georgia
Nationality : Azerbaijanian

EDUCATION: Baku State University , Physics Department , 1958–1963

Post-Graduate Studentship -
Institute of Semiconductors, USSR Academy of Sciences ,
Leningrad , 1968–1972

Cand. Sci. Thesis: Institute of Semiconductors, USSR Academy of Sciences , 1972

Thesis Title: "Vibrational Spectra and Absorption Edge of Solid
Solutions on the Basis of InSb"

Doctor Sci. Thesis: Institute of Physics , Azerbaijan Academy of Sciences , 1986

Thesis Title: " Spectroscopy of Optical Vibrational States of A³B⁶-Type
Anisotropic Semiconductive Crystals "

PROFESSIONAL

POSITIONS:

Research Assistant , Physics Department ,
Baku State University , 1964–1967

Post-Graduate Student , Institute of Semiconductors,
USSR Academy of Sciences , Leningrad , 1968–1972

Teacher, Senior Teacher, Associate-Professor, Professor,
Physics Department, Baku State University , 1972–1991

Vice-Dean, Physics Department , Baku State University ,
1989–1991

Visiting Professor , Physics Department ,
Middle East Technical University , Ankara , Turkey, 1992 –

SCIENTIFIC WORK

IN THE FOREIGN

UNIVERSITIES:

Institute of Physics II – Solid State Physics ,
University of Regensburg , Regensburg , Germany , 1984

Wihuri Physical Laboratory , University of Turku ,
Turku , Finland , 1991

Main Interests

Investigation of Raman Scattering and Infrared Reflection in Layered Binary, Ternary and Quaternary Crystals.

Study of Temperature and Excitation Intensity Dependence of Photoluminescence in Layered and Chain Crystals.

Thermally Stimulated Conductivity and Thermoluminescence Study in Layered and Chain Crystals.

Effect of Magnetic Field, Temperature, Doping and Gamma Irradiation on Structural and Electrical Properties of Superconducting Ceramics and Tapes.

TOTAL NUMBER OF PUBLICATIONS

included to WEB of Science:

- 258 papers

Number of publications at Middle East Technical University, Turkey - 207 papers.

PUBLISHED PAPERS

by Prof. Dr. Nizami M. Hasanli

Middle East Technical University , Ankara , Turkey

(1993 – 2014)

1. **N.M. Gasanly**, B.G. Akinoglu and R. Laiho.
Brillouin Scattering in $TlGa(S_{1-x}Se_x)_2$ and $TlIn_{1-x}Ga_xS_2$ Layered Mixed Crystals.
Japan. J. Appl. Phys. vol. 32, No. 3, 541-542 (1993).
2. **N.M. Gasanly**, H. Ozkan and A. Culfaz.
Composition Variations of Lattice Parameters of $TlGa(S_{1-x}Se_x)_2$ Layer Mixed Crystals.
Phys. Status Solidi (a) vol. 140, No. 1, K1-K4 (1993).
3. A. Aydinli, R. Ellialtioglu, K.R. Allahverdiev, S. Ellialtioglu and **N.M. Gasanly**.
Low-Temperature Phase Transitions in $TlGaS_2$ Layer Crystals.
Solid State Commun. vol. 88, No. 5, 387-390 (1993).
4. **N.M. Gasanly**, A.Z. Magomedov and N.N. Melnik.
Raman and Infrared Studies of $AgIn_5S_8$ and $CuIn_5S_8$ Single Crystals.
Phys. Status Solidi (b) vol. 177, No. 1, K31-K35 (1993).
5. **N.M. Gasanly**, B.G. Akinoglu, S. Ellialtioglu and R. Laiho.
Elastic Coefficients in $TlGa(S_{1-x}Se_x)_2$ and $TlIn_{1-x}Ga_xS_2$ Layered Mixed Crystals by Brillouin Scattering.
Physica B vol. 192, No. 4, 371-377 (1993).
6. **N.M. Gasanly**, B.G. Akinoglu and S. Ellialtioglu.
Elastic Properties of $GaS_{1-x}Se_x$ Layer Mixed Crystals by Brillouin Scattering
Phys. Status Solidi (b) vol. 177, No. 2, K59-K62 (1993).

7. **N.M. Gasanly**, A. Culfaz, H. Ozkan and S. Ellialtioglu.
Lattice Parameters of $TlGa_{1-x}In_xS_2$ and $TlGa(S_{1-x}Se_x)_2$ Layer Mixed Crystals.
Cryst. Res. Technol. vol. **29** , No. **3** , **K51-K55** (1994).
8. **N.M. Gasanly**, S.S. Babaev, Z. Ibragimov and B. Akinoglu.
Pressure Dependence of The Raman Spectra of $CdInAlS_4$ Layer Crystal.
High Pressure Research vol. **13**, No. **3**, **115-120** (1994).
9. **N.M. Gasanly**, H. Ozkan and A. Culfaz.
*Composition Variations of Lattice Parameters of $TlIn(S_{1-x}Te_x)_2$,
 $TlIn(S_{1-x}S_x)_2$ and $TlIn_{1-x}Ga_xSe_2$ Mixed Crystals.*
Cryst. Res. Technol. vol. **30** , No. **1** , **109-113** (1995).
10. K.R. Allakhverdiev, **N.M. Gasanly** and A. Aydinli.
*Low-Temperature Photoluminescence Spectra of $TlIn_{1-x}Ga_xS_2$ Layer
Mixed Crystals.*
Solid State Commun. vol. **94** , No. **9** , **777-782** (1995).
11. **N.M. Gasanly**, H. Ozkan and A. Culfaz.
Lattice Parameters of $TlIn_{1-x}Ga_xTe_2$ and $TlTl(S_{1-x}S_x)_2$ Mixed Crystals.
Phys. Status Solidi (a) vol. **151**, No. **1** , **K23-K26** (1995).
12. M. Parlak, C. Ercelebi, I. Gunal, H. Ozkan and **N.M. Gasanly**.
Anisotropy of Electrical Resistivity and Hole Mobility in $InTe$ Single Crystals.
Cryst. Res. Technol. vol. **31** , No. **5** , **673-678** (1996).
13. H. Ozkan, **N.M. Gasanly** and A. Culfaz.
*Effect of Isomorphous Atom Substitution on Lattice Parameters of
 $TlBX_2$ -Type Mixed Crystals.*
Turkish J. Phys. vol. **20**, No. **7** , **800-804** (1996).
14. U. Schwarz, A. Goncharov, K. Syassen and **N.M. Gasanly**.
Structural Phase Transformation of InS at High Pressures.
**Proc., Joint XV AIRAPT & XXXIII EHPRG International Conference
"High Pressure Science and Technology"** , World Scientific Publ. Co.,
Singapore (1996), pp. **427-429**.
15. H. Bocuk, B.A. Albiss, I. Ercan, H. Ozkan and **N.M. Gasanly**.
*Effect of Magnetic Field and Temperature on the Voltage-Current
Characteristics of $YBCO$ Superconductor.*
J. Low Temp. Phys. vol. **105** , No. **3/4** , **975-980** (1996).
16. B.A. Albiss, H. Bocuk, **N.M. Gasanly** and H. Ozkan.
*Voltage-Current Characteristics of Polycrystalline $(Bi,Pb)_2Sr_2Ca_2Cu_3O_{10}$
Superconductor at Different Magnetic Fields and Temperatures.*
J. Low Temp. Phys. vol. **105** , No. **3/4** , **957-962** (1996).

17. M. Parlak, C. Ercelebi, I. Gunal, H. Ozkan, **N.M. Gasanly** and A. Culfaz.
Crystal Data, Electrical Resistivity and Mobility in $Cu_3In_5Se_9$ and $Cu_3In_5Te_9$ Single Crystals.
Cryst. Res. Technol. vol. 32, No. 3, 395-400 (1997).
18. **N.M. Gasanly** and A. Aydinli.
Low-temperature Photoluminescence Spectra of InS Single Crystals.
Solid State Commun. vol. 101, No. 11, 797-799 (1997).
19. B.A. Albiss, H. Ozkan, H. Bocuk and **N.M. Gasanly**.
Effect of Gamma Irradiation on Structure and Electrical Properties of $(Bi,Pb)_2Sr_2Ca_2Cu_3O_{10}$ Superconductor.
Superlattices and Microstructures vol. 21, Suppl. A, 23-26 (1997).
20. M. Parlak, C. Ercelebi, I. Gunal, H. Ozkan and **N.M. Gasanly**.
Structural and Electrical Characterization of $Ag_3Ga_5Te_9$ and $Ag_3In_5Se_9$ Crystals.
Cryst. Res. Technol. vol. 33, No. 6, 923-928 (1998).
21. **N.M. Gasanly**, A. Aydinli, A. Bek and I. Yilmaz.
Low-temperature Photoluminescence Spectra of Layered Semiconductor $TlGaS_2$.
Solid State Commun. vol. 105, No. 1, 21-24 (1998).
22. H. Ozkan, **N.M. Gasanly**, I. Yilmaz and A. Culfaz.
Crystal Data for $A_3B_5C_9$ -type Ternary Compounds.
Turkish J. Phys. vol. 22, No. 6, 519-524 (1998).
23. **N.M. Gasanly**, A. Serpenguzel, O. Gurlu, A. Aydinli and I. Yilmaz.
Dependence of the Photoluminescence of Tl_2InGaS_4 Layered Crystal on Temperature and Excitation Intensity.
Solid State Commun. vol. 108, No. 8, 525-530 (1998).
24. **N.M. Gasanly**, A. Serpenguzel, A. Aydinli, O. Gurlu and I. Yilmaz.
Donor-acceptor Pair Recombination in $AgIn_5S_8$ Single Crystals.
J. Appl. Phys. vol. 85, No. 6, 3198-3201 (1999).
25. **N.M. Gasanly**, H. Ozkan, A. Aydinli and I. Yilmaz.
Temperature Dependence of the Raman-active Phonon Frequencies in Indium Sulfide.
Solid State Commun. vol. 110, No. 4, 231-236 (1999).
26. A. Aydinli, **N.M. Gasanly**, I. Yilmaz and A. Serpenguzel.
Radiative Donor-acceptor Pair Recombination in $TlInS_2$ Single Crystals.
Semicond. Sci. Technol. vol. 14, No. 7, 599-603 (1999).
27. H. Ozkan, U. Topal, **N. Gasanly**, B. Albiss and T. Kayed.
Voltage-current Characteristics of the Thallium Based Ceramic Superconductors.

- Supercond. Sci. Technol.** vol. 12 , No. 9 , 592-596 (1999).
28. **N.M. Gasanly**, A. Serpenguzel, A. Aydinli and S.M.A. Baten.
Low Temperature Visible Photoluminescence Spectra of TlGaSe₂ Layered Crystal.
J. Luminescence, vol. 86 , No. 1 , 39-43 (2000).
29. H. Ozkan, **N. Gasanly** and T. Kayed.
Effect of Magnetic Field and γ Irradiation on the Electrical Properties and Structure of the Tl-Based Ceramic Superconductors.
Supercond. Sci. Technol. vol. 13 , No. 2 , 161-164 (2000).
30. **N.M. Gasanly**, H. Ozkan and M. Tas.
Composition Dependence of Lattice Anisotropy of TlBX₂-type Chain Mixed Crystals.
Crystal Res. Technol. vol. 35 , No. 2 , 185-188 (2000).
31. **N.M. Gasanly**, A. Aydinli, H. Ozkan, C. Kocabas.
Temperature Dependence of the First-order Raman Scattering in GaS Layered Crystals..
Solid State Commun. vol. 116 , No. 3 , 147-151 (2000).
32. A. Aydinli, **N.M. Gasanly**, K. Goksen.
Donor-acceptor Pair Recombination in Gallium Sulfide.
J. Appl. Phys. vol. 88 , No. 12 , 7144-7149 (2000).
33. T. Kayed, H. Ozkan, **N. M. Gasanly**, I. Ercan.
Critical Currents of Bi-223 Tapes Near T_c under Magnetic Field and γ Irradiation.
Supercond. Sci. Technol. vol. 33 , No. 12, 1625-1628 (2000).
34. **N.M. Gasanly** , A. Aydinli, O. Salihoglu.
Thermally Stimulated Current Observation of Trapping Centers in Undoped GaSe Layered Single Crystals.
Crystal Res. Technol. , vol. 36 , No. 3 , 295-301 (2001).
35. A.M. Panich and **N.M. Gasanly**.
Indirect Nuclear Exchange Coupling and Electronic Structure of Chain Semiconductor TlSe: ²⁰³Tl and ²⁰⁵Tl NMR Study.
Phys. Rev. B , vol. 63 , No. 19 , 195201 (2001).
36. A. F. Qasrawi and **N.M. Gasanly**.
Crystal Data, Electrical Resistivity, and Hall Mobility of n-type AgIn₅S₈ Single Crystals.
Crystal Res. Technol. , vol. 36 , No. 4-5 , 457-464 (2001).
37. A. Aydinli, **N.M. Gasanly** , and K. Goksen.
Low-temperature Photoluminescence Study of GaS_{0.5}Se_{0.5} Layered Crystals.

Mat. Res. Bull. , vol. 36 , No. 10 , 1823-1832 (2001).

38. **N.M. Gasanly** , A. Aydinli, and H. Ozkan.
Resonant Raman scattering near the free-to-bound transition in undoped p-GaSe
Crystal Res. Technol. , vol. 36 , No. 12 , 1393-1398 (2001).
39. T.S. Kayed, H. Ozkan, and **N.M. Gasanly**.
Effect of Lithium Doping on the Properties of Tl-based Superconductors.
Supercond. Sci. Technol. , vol. 14 , No. 9 , 738-740 (2001).
40. A. F. Qasrawi and **N.M. Gasanly**.
Crystal Data, Photoconductivity and Carrier Mechanisms in CuIn₅S₈ Single Crystals.
Crystal Res. Technol. , vol. 36 , No. 12 , 1399-1410 (2001).
41. A. Aydinli, **N.M. Gasanly** , and K. Goksen.
Defect Luminescence in Undoped p-GaSe.
Phil. Mag. Lett. , vol. 81 , No. 12 , 859-867 (2001).
42. **N.M. Gasanly** , A. Aydinli, H. Ozkan and C. Kocabas.
Temperature-dependent Raman Scattering Spectra of ϵ -GaSe Layered Crystal.
Mat. Res. Bull. , vol. 37 , No. 1, 169-176 (2002).
43. **N.M. Gasanly**, K. Goksen and H. Ozkan.
Photoluminescence Spectra of GaS_{0.75}Se_{0.25} Layered Single Crystals.
Crystal Res. Technol. , vol. 37 , No. 6 , 581-586 (2002).
44. **N.M. Gasanly** , A. Aydinli, C. Kocabas and H. Ozkan.
Anharmonicity of Zone-center Optical Phonons: Raman Scattering Spectra of GaS_{0.5}Se_{0.5} Layered Crystal.
Physica Scripta , vol. 65 , No. 6 , 534-538 (2002).
45. A. F. Qasrawi and **N.M. Gasanly**.
Carrier Scattering Mechanisms in GaS_{0.5}Se_{0.5} Layered Crystals.
Crystal Res. Technol. , vol. 37 , No. 6 , 587-594 (2002).
46. A. F. Qasrawi and **N.M. Gasanly**.
Investigation of Localized Levels in GaS_{0.5}Se_{0.5} Layered Crystals by Means of Electrical, Space-Charge Limited Current and Photoconductivity Measurements.
Phys. Stat. Sol. (a), vol. 194 , No. 1 , 81-88 (2002).
47. **N.M. Gasanly** and A. Aydinli.
Low-temperature Raman Scattering Spectra of GaSe_xS_{1-x} Layered Mixed Crystal.
Crystal Res. Technol. , vol. 37, No. 9, 1011-1017 (2002).
48. A. F. Qasrawi and **N.M. Gasanly**.
Carrier Transport Properties of InS Single Crystals

- Crystal Res. Technol. , vol. 37 , No. 10 , 1104-1112 (2002).**
49. **N.M. Gasanly.**
Temperature Dependence of the First-order Raman Phonon Lines in GaS_{0.25}Se_{0.75} Layered Crystals
Acta Physica Polonica A , vol. 102, No. 6 , 703-712 (2002).
50. **N.M. Gasanly** and R. Pala.
Anharmonic Line Shift and Linewidth of the Raman Modes in GaS_{0.75}Se_{0.25} Layered Crystals
Phys. Stat. Sol. (b) , vol. 234, No. 2, 665-673 (2002).
51. A. Aydinli and **N.M. Gasanly.**
Defect Luminescence in Some Layered Binary Chalcogenide Semiconductors.
Defect and Diffusion Forum, vol. 210-212, No. 1, 61-69 (2002).
52. A. Aydinli, **N.M. Gasanly**, A. Uka, H. Efeoglu.
Anharmonicity in GaTe Layered Crystals.
Crystal Res. Technol. , vol. 37, No. 12, 1303-1309 (2002).
53. A.F. Qasrawi and **N.M. Gasanly.**
Optoelectronic and Electrical Properties of InS Crystals.
Semicond. Sci. Technol. , vol. 17, No. 12, 1288-1292 (2002).
54. **N.M. Gasanly**, A. Aydinli, and N.S. Yuksek.
Temperature- and Excitation Intensity-dependent Photoluminescence in TlInSeS Single Crystals.
J. Phys. Condensed Matter, vol. 14, No. 49, 13685-13692 (2002).
55. **N. M. Gasanly**, A. Aydinli and N. S. Yuksek.
Thermally Stimulated Currents in n-InS Single Crystals.
Mat. Res. Bull., vol. 38, No. 4, 699-704 (2003).
56. S. Ozdemir, **N. M. Gasanly** and M. Bucurgat.
Trap Levels in Layered Semiconductor TlInS_{1.9}Se_{0.1}.
Phys. Stat. Sol. (a) , vol. 196, No. 2, 422-428 (2003).
57. **N. M. Gasanly** , A. Aydinli, N. S. Yuksek and O. Salihoglu.
Trapping Centers in Undoped GaS Layered Single Crystals.
Appl. Phys. A – Mat. Sci. Proces., vol. 77, No. 3-4, 603-606 (2003).
58. S. E. Ogun, H. Ozkan and **N. M. Gasanly.**
Effect of LiCO₃ Doping on the Properties of Bi-based Superconductors.
IEEE Transact. Appl. Supercond., vol. 13, No. 2 , 3158-3160 (2003)

59. N. S. Yuksek , **N. M. Gasanly** and H. Ozkan.
TSC Analysis of Shallow Levels in TlGaS₂ Layered Single Crystals.
Semicond. Sci. Tech., vol. **18**, No. **9**, 834-838 (2003).
60. A. F. Qasrawi and **N. M. Gasanly**.
Photoelectronic, Optical, and Electrical Properties of TlInS₂ Single Crystals.
Phys. Status Solidi (a), vol. **199**, No. **2**, 277-283 (2003).
61. S. Cavdar, E. Aksu, H. Koralay, H. Ozkan, **N. M. Gasanly** and I. Ercan.
Effect of B₂O₃ Addition on the Formation and Properties of Tl-2212 and Tl-2223 Superconductors.
Phys. Status Solidi (a), vol. **199**, No. **2**, 272-276 (2003).
62. **N. M. Gasanly**.
Effect of Crystal Disorder on Line Width Broadening of Phonon Modes in GaS_{1-x}Se_x Layered Mixed Crystals.
Crystal Res. Technol. , vol. **38** , No. **11**, 962-967 (2003).
63. A. F. Qasrawi and **N. M. Gasanly**.
Photoelectronic and Electrical Properties of CuIn₅S₈ Single Crystals.
Crystal Res. Technol., vol. **38** , No. **12**, 1063-1070 (2003).
64. N. S. Yuksek , **N. M. Gasanly** and A. Aydinli.
Anharmonic Line Shift and Linewidth of the Raman Modes in TlInS₂ Layered Crystals.
J. Raman Spectroscopy, vol. **35**, No. **1**, 55-60 (2004).
65. N.S. Yuksek, H. Kavas, **N.M. Gasanly** and H. Ozkan.
Trapping Center Parameters of TlGaSe₂ Layered Crystals.
Physica B , vol. **344**, No. **1-4** , 249-254 (2004).
66. A. F. Qasrawi and **N. M. Gasanly**.
Hall effect, Space-charged Limited Current and Photoconductivity Measurements on TlGaSe₂ Layered Crystals.
Semicond. Sci. Tech., vol. **19**, No. **3**, 505-509 (2004).
67. A. F. Qasrawi and **N. M. Gasanly**.
Investigation of Carrier Scattering Mechanisms in TlInS₂ Single Crystals by Hall Effect Measurements.
Crystal Res. Technol., vol. **39** , No. **5**, 439-447 (2004).
68. A. F. Qasrawi and **N. M. Gasanly**.
Electrical Conductivity and Hall Mobility in p-type TlGaSe₂ Crystals.
Mat. Res. Bull., vol. **39**, No. **9**, 1351-1357 (2004).
69. N.S. Yuksek, **N.M. Gasanly** , A. Aydinli, H. Ozkan and M. Acikgoz.
Infrared Photoluminescence from TlGaS₂ Layered Single Crystals.
Crystal Res. Technol., vol. **39** , No. **9**, 800-806 (2004).

70. A.M. Panich, D.C. Ailion, S. Kashida and **N. M. Gasanly**.
Gallium and Thallium NMR Study of Phase Transitions and Incommensurability in the Layered Semiconductor TlGaSe₂.
Phys. Rev. B, vol. **69**, No. **245319** (2004).
71. N. S. Yuksek, **N. M. Gasanly**, H. Ozkan and A. Aydinli.
Temperature Dependence of Raman-active Modes of TlGaS₂ Layered Crystals: an Anharmonicity Study.
J. Korean Phys. Soc., vol. **45**, No. **2**, **501-506** (2004).
72. N.S. Yuksek, **N.M. Gasanly**, H. Ozkan and O. Karci.
Trapping Center Parameters of TlInS₂ layered Crystals by Thermally Stimulated Current Measurements.
Acta Physica Polonica A, vol. **106**, No. **1**, **95-103** (2004).
73. S. Aytakin, N. S. Yuksek, **N. M. Gasanly**, M. Goktepe and A. Aydinli.
Thermally Stimulated Currents in Layered Ga₄SeS₃ Semiconductor.
Phys. Stat. Solidi (a), vol. **201**, No. **13**, **2980-2985** (2004).
74. A. Aydinli, **N. M. Gasanly** and S. Aytakin,
Trap Levels in Layered Semiconductor Ga₂SeS.
Solid State Commun., vol. **132**, No. **12**, **857-861** (2004).
75. O. Karabulut, M. Parlak, K. Yilmaz and **N. M. Gasanly**.
Electrical and Photoconductive Properties of GaS_{0.75}Se_{0.25} Mixed Crystal.
Crystal Res. Technol., vol. **40**, No. **3**, **253-258** (2005).
76. N. S. Yuksek and **N. M. Gasanly**.
Temperature Dependence of Raman-active Mode Frequencies and Linewidths in TlGaSe₂ Layered Crystals.
Crystal Res. Technol., vol. **40**, No. **3**, **264-270** (2005).
77. A. F. Qasrawi and **N. M. Gasanly**.
Temperature effect on dark electrical conductivity, Hall coefficient, space charge limited current and photoconductivity of TlGaS₂ single crystals.
Semicond. Sci. Technol., vol. **20**, No. **5**, **446-452** (2005).
78. S. E. Ogun, H. Goktas, H. Ozkan and **N. M. Gasanly**.
Effect of Low-energy Electron Irradiation on (Bi, Pb)-2212 Superconductors.
Surface and Coatings Technol., vol. **196**, No. **1-3**, **118-122** (2005).
79. K. Goksen, **N.M. Gasanly**, A. Aydinli and H. Ozkan.
Donor-acceptor Pair Recombination in Tl₂InGaS₄ Layered Crystals.
J. Korean Phys. Soc., vol. **47**, No. **2**, **267-271** (2005).

80. **N.M. Gasanly.**
Compositional dependence of the Raman line shapes in GaS_xSe_{1-x} layered mixed crystals.
J. Raman Spectroscopy , vol. **36**, No. **9**, **879-883 (2005).**
81. A. F. Qasrawi and **N. M. Gasanly.**
Optoelectronic and electrical properties of $TlGaS_2$ single crystal
Physica Status Solidi (a), vol. **202**, No. **13**, **2501-2507 (2005).**
82. **N. M. Gasanly** and N. S. Yuksek.
Low Temperature Raman Scattering in $TlGa_xIn_{1-x}S_2$ Layered Mixed Crystals: Compositional Dependence of the Mode Frequencies and Lineshapes
Acta Phys. Polonica A , vol. **108**, No. **1**, **997-1003 (2005).**
83. N. S. Yuksek, **N.M. Gasanly** and H. Ozkan.
Thermally Stimulated Current Observation of Trapping Centers in Layered Thallium Dichalcogenide Semiconductors.
Focus on Semiconductor Research (Book, Chapter No. 3), Nova Science Publishers, NY, USA, **2005.**
84. A. F. Qasrawi and **N. M. Gasanly.**
Electron-phonon short-range interactions mobility and p- to n-type conversion in $TlGaS_2$ crystals.
Crystal Res. Technol., vol. **41**, No. **2**, **174-179 (2006).**
85. K. Goksen, **N. M. Gasanly**, A. Seyhan and R. Turan.
Temperature- and excitation intensity-dependent photoluminescence in Ga_4Se_3S layered crystals
Mater. Sci. Engin. B , vol. **127**, No. **1**, **41-46 (2006).**
86. A. F. Qasrawi and **N. M. Gasanly.**
Light illumination effect on the electrical and photovoltaic properties of In_6S_7 crystals.
J. Phys.: Cond. Matter., vol. **18**, No. **19**, **4609-4614 (2006).**
87. **N. M. Gasanly.**
Effect of Isomorphic Atom Substitution on Lattice Parameters and Optical Absorption Edge of $TlGaSe_2-TlInSe_2$ Mixed Crystals.
J. Korean Phys. Soc., vol. **45**, No. **5**, **914-918 (2006).**
88. K. Goksen, **N. M. Gasanly** and R. Turan.
Low-temperature Photoluminescence from $Tl_4Ga_3InSe_8$ Layered Crystals.
Crystal Res. Technol., vol. **41**, No. **8**, **822-828 (2006).**
89. N. A. P. Mogaddam, N. S. Yuksek, **N. M. Gasanly** and H. Ozkan.
Determination of Trapping Center Parameters of Tl_2InGaS_4 Layered Crystals by Thermally Stimulated Current Measurements.

- J. Alloys Compd., vol. 417, No. 1-2, 23-28 (2006).**
90. **N. M. Gasanly** and K. Goksen
Visible photoluminescence from chain $Tl_4In_3GaSe_8$ semiconductor.
J. Phys.: Cond. Matter., vol. 18, No. 26, 6057-6064 (2006).
 91. A. F. Qasrawi and **N. M. Gasanly.**
Optical Properties of $TlInS_2$ Layered Single Crystals near the Absorption Edge.
J. Mater. Sci., vol. 41, No. 11, 3569-3572 (2006).
 92. **N. M. Gasanly**, H. Ozkan and N. A. P. Mogaddam.
Thermally stimulated currents in layered semiconductor $Tl_4In_3GaS_8$.
Semicond. Sci. Technol., vol. 21, No. 9, 1250-1255 (2006).
 93. **N. M. Gasanly**, N. A. P. Mogaddam and H. Ozkan.
Thermally Stimulated Current Observation of Trapping Centers in Undoped $Tl_4Ga_3InSe_8$ Layered Single Crystals.
Cryst. Res. Technol., vol. 41, No. 11, 1100-1105 (2006).
 94. **N. M. Gasanly.**
Influence of Isomorphic Atom Substitution on Lattice Anisotropy of Thallium Dichalcogenide Layered Mixed Crystals.
Acta Phys. Pol. A , vol. 110, No. 4, 471-477 (2006).
 95. A. F. Qasrawi and **N. M. Gasanly.**
Acoustic phonons scattering mobility and carrier effective mass in In_6S_7 crystals.
J. Alloys Compd., vol. 426, No. 1-2, 64-66 (2006).
 96. I. Guler, K. Goksen and **N. M. Gasanly**
Excitation and temperature tuned photoluminescence in $Tl_2In_2S_3Se$ layered semiconductor
Acta Phys. Pol. A , vol. 110, No. 6, 823-831 (2006).
 97. A. F. Qasrawi and **N. M. Gasanly.**
Photoelectronic and electrical properties of Tl_2InGaS_4 layered crystals.
Solid State Commun., vol. 141, No. 3, 117-121 (2007).
 98. A. F. Qasrawi and **N. M. Gasanly.**
Thermal lattice scattering mobility and carrier effective mass in the intrinsic $Tl_2InGaTe_4$ single crystals
J. Phys.: Cond. Matter, vol. 19, No. 15, 156206 (2007).
 99. **N. M. Gasanly**, I. Guler, and K. Goksen
Specific features of the optical spectra in $Tl_2In_2S_3Se$ layered single crystals
Cryst. Res. Technol., vol. 42, No. 6, 621-625 (2007).
 100. **N. M. Gasanly**
Trapping Center Parameters and Optical Absorption in Quaternary $Tl_4In_3GaS_8$, $Tl_4InGa_3Se_8$ and Tl_2InGaS_4 Semiconductors"

- J. Korean Phys. Soc., vol. 50, No. 4, 1104-1108 (2007).**
101. I. Guler, K. Goksen, **N. M. Gasanly** and R. Turan
Low-temperature visible photoluminescence and optical absorption in $Tl_2In_2Se_3S$ semiconductor.
Physica B, vol. 395, No. 1-2, 116-120 (2007).
102. A. F. Qasrawi and **N. M. Gasanly.**
Energy band gap and oscillator parameters of Ga_4Se_3S single crystals
Solid State Commun., vol. 142, No. 10, 566-568 (2007).
103. A. F. Qasrawi and **N. M. Gasanly.**
Crystal data and some physical properties of $Tl_2InGaTe_4$ crystals
Cryst. Res. Technol., vol. 42, No. 8, 807-811 (2007).
104. K. Goksen, **N. M. Gasanly** and H. Ozkan.
Dispersive optical constants and temperature tuned band gap energy of Tl_2InGaS_4 layered crystals
J. Phys.: Cond. Matter, vol. 19, No. 25, 256210 (2007).
105. A. F. Qasrawi and **N. M. Gasanly.**
Optical properties of Tl_2InGaS_4 layered single crystals.
Optical Mat., vol. 29, No. 12, 1763-1767 (2007).
106. A. F. Qasrawi and **N. M. Gasanly.**
Dispersive optical constants of $Tl_2InGaSe_4$ single crystals
Phys. Scripta, vol. 73, No. 3, 249-252 (2007).
107. K. Goksen, **N. M. Gasanly** and H. Ozkan.
Optical absorption and reflection studies of $Tl_4InGa_3S_8$ layered single crystals
Acta Phys. Pol. A, vol. 112, No. 1, 93-100 (2007).
108. A. F. Qasrawi and **N. M. Gasanly.**
Refractive index, static dielectric constant, energy band gap and oscillator parameters of Ga_2SeS single crystals
Phys. Stat. Solidi (a), vol. 244, No. 9, 3165-3169 (2007).
109. K. Goksen and **N. M. Gasanly.**
Optical constants of $Tl_4Ga_3InSe_8$ layered single crystals.
Physica B, vol. 400, No. 1, 266-272 (2007).
110. K. Goksen and **N. M. Gasanly.**
Below and above bandgap excited photoluminescence in $Tl_4InGa_3S_8$ layered single crystals.
J. Phys.: Condens. Matter, vol. 19, No. 45, 456221 (2007).
111. A. F. Qasrawi and **N. M. Gasanly.**

Study of trapping and recombination centers in $Tl_2InGaTe_4$ chain crystals by dark- and photo-conductivity measurements
Philosophical Magazine, vol. 87, No. 36, 5741-5747 (2007).

112. I. Guler and **N. M. Gasanly**.
Optical properties of $TGaSSe$ layered single crystals.
J. Korean Phys. Soc., vol. 51, No. 6, 2031-2035 (2007).
113. M. Isik, K. Goksen, **N. M. Gasanly** and H. Ozkan.
Trap Distribution in $TlInS_2$ Layered Crystals from Thermally Stimulated Current Measurements
J. Korean Phys. Soc., vol. 52, No. 2, 367-373 (2008).
114. A. F. Qasrawi and **N. M. Gasanly**.
Electron-lattice interactions scattering mobility in $Tl_2InGaSe_4$ single crystals
J. Phys.: Cond. Matter, vol. 20, No. 15, 155204 (2008).
115. K. Goksen and **N. M. Gasanly**.
Temperature and excitation intensity tuned photoluminescence in $Tl_4GaIn_3S_8$ layered single crystals
Cryst. Res. Technol., vol. 43, No. 5, 514-521 (2008).
116. A. F. Qasrawi and **N. M. Gasanly**.
Crystal data and indirect optical transitions in $Tl_2InGaSe_4$ single crystals
Materials Res. Bul., vol. 43, No. 6, 1497-1501 (2008).
117. A. F. Qasrawi, **N. M. Gasanly** and K. F. Ilaiwi.
Optoelectronic properties of Ga_4Se_3S layered single crystals.
Physica Scripta, vol. 78, No. 1, 015701 (2008).
118. A. F. Qasrawi and **N. M. Gasanly**.
Determination of carrier effective mass, impurity energy levels and compensation ratio in Ga_4Se_3S layered crystals by Hall effect measurements
Phys. Stat. Sol. (a), vol. 205, No. 7, 1662-1665 (2008).
119. K. Goksen and **N. M. Gasanly**.
Refractive index, oscillator parameters and temperature tuned energy band gap of $Tl_4In_3GaS_8$ layered single crystals.
J. Phys. Chem. Sol., vol. 69, No. 10, 2385-2389 (2008).
120. **N. M. Gasanly** and I. Guler.
Temperature-tuned band gap energy and oscillator parameters of $TlInSeS$ layered single crystals.
Int. J. Modern Physics B, vol. 22, No. 22, 3931-3939 (2008).
121. A. F. Qasrawi and **N. M. Gasanly**.

- Hopping conduction in Ga₄Se₃S layered single crystals.*
Solid State Commun., vol. 148, No. 5-6, 190-193 (2008).
122. A. F. Qasrawi and **N. M. Gasanly**.
Space charge limited currents and photoconductive properties of Tl₂InGaSe₄ crystals
Philosophical Magazine, vol. 88, No. 22, 2899-2906 (2008).
123. A. F. Qasrawi and **N. M. Gasanly**.
Dark electrical conductivity and photoconductivity of Ga₄Se₃S layered single crystals
J. Phys. Chem. Sol., vol. 70, No. 11, 2719-2722 (2008).
124. **N. M. Gasanly**.
Temperature-tuned band gap energy and oscillator parameters of Tl₂InGaSe₄ layered single crystals
Crystr. Res. Technol., vol. 44, No. 3, 322-326 (2009).
125. A. F. Qasrawi and **N. M. Gasanly**.
Temperature- and photo-excitation effects on the electrical properties of Tl₄Se₃S crystals.
J. Phys.: Cond. Matter, vol. 21, No. 11, 115801 (2009).
126. K. Goksen and **N. M. Gasanly**.
Determination of trapping parameters in n-Ga₄Se₃S by thermally stimulated current measurements.
Philosophical Magazine, vol. 89, No. 5, 435-447 (2009).
127. M. Isik, **N. M. Gasanly** and H. Ozkan.
Deep Traps Distribution in TlInS₂ Layered Crystals.
Acta Phys. Polonica A, vol. 115, No. 3, 732-737 (2009).
128. A. F. Qasrawi and **N. M. Gasanly**.
Analysis of the Hall effect in TlGaTe₂ single crystals.
J. Phys.: Cond. Matter, vol. 21, No. 23, 235802 (2009).
129. I. Guler and **N. M. Gasanly**.
Determination of trapping center parameters in Tl₂In₂S₃Se layered single crystals by thermally stimulated current measurements
Physica B, vol. 404, No. 14-15, 2034-2038 (2009).
130. T. Yildirim and **N. M. Gasanly**.
Thermally stimulated current measurements in as-grown TlGaSeS layered single crystals.
Current Applied Physics, vol. 9, No. 6, 1278-1282 (2009).
131. M. Isik and **N. M. Gasanly**.

- Trapping centers and their distribution in $Tl_2Ga_2Se_3S$ layered single crystals*
J. Phys. Chem. Sol., vol. 70, No. 6, 1048-1053 (2009).
132. A. F. Qasrawi and N. M. Gasanly.
Hole-polar phonon interactions scattering mobility in $TlSe_{0.75}S_{0.25}$ single crystals
Phys. Stat. Sol. (a), vol. 206, No. 7, 1565-1568 (2009).
133. A. F. Qasrawi and N. M. Gasanly.
Structural, electrical and anisotropic properties of Tl_4Se_3S chain crystals
Mater. Res. Bulletin, vol. 44, No. 10, 2009-2013 (2009).
134. T. Yildirim and N. M. Gasanly.
Determination of deep trapping center parameters in as-grown $Tl_2Ga_2S_3Se$ layered crystals.
Solid State Sciences, vol. 11, No. 9, 1562-1566 (2009).
135. I. Guler and N. M. Gasanly.
Trapping Center Parameters in $TlInSSe$ Layered Single Crystals by Thermally Stimulated Currents Measurements
J. Alloys Comp., vol. 485, No. 1-2, 41-45 (2009).
136. T. Yildirim and N. M. Gasanly.
Thermally stimulated current observation of trapping centers and their distributions in as-grown $TlGaSeS$ layered single crystals.
Mater. Chem. Phys., vol. 118, No. 1, 32-36 (2009).
137. A. F. Qasrawi and N. M. Gasanly.
Transport and recombination kinetics in $TlGaTe_2$ crystals.
Phys. Stat. Sol. (a), vol. 206, No. 11, 2555-2558 (2009).
138. T. Yildirim and N. M. Gasanly.
Shallow trapping center parameters in as-grown $AgIn_5S_8$ crystals by thermally stimulated current measurements.
Cryt. Res. Technol., vol. 44, No. 12, 1267-1271 (2009).
139. M. Isik, N. M. Gasanly and H. Ozkan.
Thermally stimulated currents study of traps in $Tl_2Ga_2Se_3S$ layered crystals
J. Optoelectr. Adv. Mater. - Symposia, vol. 1, No. 3, 305-308 (2009).
140. A. F. Qasrawi and N. M. Gasanly.
Properties of Tl_4Se_3S single crystals and characterization of Ag/Tl_4Se_3S Schottky barrier diodes
Current Applied Physics, vol. 10, No. 2, 592-596 (2010).
141. I. Guler and N. M. Gasanly.

- Trapping centers and their distribution in $Tl_2In_2Se_3S$ layered single crystals*
Solid State Comm., vol. 150, No. 3-4, 176-180 (2010).
142. A. F. Qasrawi and **N. M. Gasanly**.
Anisotropic electrical and dispersive optical parameters in InS layered crystals.
Solid State Comm., vol. 150, No. 7-8, 325-328 (2010).
143. A. F. Qasrawi and **N. M. Gasanly**.
Influence of photonic excitations on the electrical parameters of $TlInS_2$ crystals.
Cryst. Res. Technol., vol. 45, No. 4, 433-438 (2010).
144. **N. M. Gasanly**.
Effect of temperature and isomorphous atom substitution on the optical absorption edge of $TlInS_{2x}Se_{2(1-x)}$ mixed crystals ($0.25 \leq x \leq 1$).
Cryst. Res. Technol., vol. 45, No. 5, 525-528 (2010).
145. I. Guler and **N. M. Gasanly**.
Optical Properties of $Tl_2In_2Se_3S$ Layered Single Crystals.
Phil. Mag., vol. 90, No. 13, 1799-1806 (2010).
146. **N. M. Gasanly**.
Composition- and temperature-tuned energy band gap in $TlGa_xIn_{1-x}S_2$ layered mixed crystals ($0 \leq x \leq 1$).
J. Alloys Comp., vol. 498, No. 2, 148-151 (2010).
147. T. Yildirim, H. A. Nasser and **N. M. Gasanly**.
Determination of trapping center parameters of $Tl_2Ga_2S_3Se$ layered crystals by thermally stimulated current measurements
Int. J. Mod. Phys. B, vol. 24, No. 14, 2149-2161 (2010).
148. **N. M. Gasanly**.
Composition-tuned refractive index and oscillator parameters in $TlGa_xIn_{1-x}S_2$ layered mixed crystals ($0 \leq x \leq 1$).
Solid State Commun., vol. 150, No. 35-36, 1656-1659 (2010).
149. A. F. Qasrawi and **N. M. Gasanly**.
Optoelectronic properties of Tl_3InSe_4 single crystals.
Phil. Mag., vol. 90, No. 29, 3845-3854 (2010).
150. Ilker Kucuk, Tacettin Yildirim, **Nizami M. Gasanly** and Husnu Ozkan.
Computational modeling of isothermal decay curves of trapping centers in $TlGaSeS$ layered single crystals.
J. Alloys Compd., vol. 507, No. 2, 517-520 (2010).
151. **N. M. Gasanly**.

- Coexistence of indirect and direct optical transitions, refractive index, and oscillator parameters in TlGaS₂, TlGaSe₂, and TlInS₂ layered single crystals.*
J. Korean Phys. Soc., vol. 57, No. 1, 164-168 (2010).
152. **N. M. Gasanly.**
Effect of isomorphous atom substitution on the refractive index and oscillator parameters of TlInS_{2x}Se_{2(1-x)} layered mixed crystals (0.25 ≤ x ≤ 1).
Cryst. Res. Technol., vol. 45, No. 11, 1141-1144 (2010).
153. **N. M. Gasanly.**
Refractive index and oscillator parameters in TlGaS₂, TlGaSe₂ and TlInS₂ layered crystals.
JOAM, vol.13, No. 1, 49-52 (2011).
154. **N. M. Gasanly** and T. Yildirim.
Thermally Stimulated Currents Study of Shallow Traps in As-grown TlInSe₂ Chain Crystals.
Acta Physica Polonica A, vol. 119, No. 3, 279-283 (2011).
155. Ilker Kucuk, Tacettin Yıldırım, **Nizami M. Gasanly**, Husnu Ozkan.
Estimation of thermally stimulated current in as grown TlGaSeS layered single crystals by multilayered perceptron neural network.
Expert Systems with Applications, vol. 38, No. 6, 7192-7194 (2011).
156. **N. M. Gasanly.**
Temperature- and excitation-dependent photoluminescence in TlGaSeS Layered Crystals
J. Alloys Compd., vol. 509, No. 11, 4205-4209 (2011).
157. M. Isik and **N. M. Gasanly.**
Thermally stimulated current measurements in undoped Ga₃InSe₄ single crystals
J. Phys. Chem. Sol., vol. 72, No. 6, 768-772 (2011).
158. M. Isik and **N. M. Gasanly.**
Trapping center parameters in In₆S₇ crystals.
Physica B, vol. 406, No. 13, 2650-2653 (2011).
159. A. F. Qasrawi, Faten G. Aljammal, Nisreen M. Taleb and **N. M. Gasanly.**
Design and characterization of TlInSe₂ varactor diodes.
Physica B, vol. 406, No. 14, 2740-2744 (2011).
160. A. F. Qasrawi and **N. M. Gasanly.**
Transient and steady state photoelectronic analysis in TlInSe₂ crystals
Materials Research Bulletin, vol. 46, No. 8, 1227-1230 (2011).
161. A. F. Qasrawi and **N. M. Gasanly.**
Growth and characterization of Tl₃InSe₄ single crystals.
Mat. Sci. Semicond. Process., vol. 14, No. 2, 175-178 (2011).

162. I. Guler and **N. M. Gasanly**.
Raman scattering in $TlInS_{2x}Se_{2(1-x)}$ layered mixed crystals ($0.25 \leq x \leq 1$): Compositional dependence of the mode frequencies and line widths
Physica B, vol. **406**, No. **18**, 3374-3376 (2011).
163. A. F. Qasrawi and **N. M. Gasanly**.
Characterization of Ag/TlInSe₂/Ag structure.
Phys. Status Sol. (a), vol. **208**, No. **7**, 1688-1692 (2011).
164. Ahmet Karatay, Çağla Aksoy, H. Gul Yaglioglu, Ayhan Elmali, Ulaş Kürüm, Aytunç Ateş, **Nizami Gasanly**.
The nonlinear and saturable absorption characteristics of $Ga_{0.90}In_{0.10}Se$ and $Ga_{0.85}In_{0.15}Se$ semiconductor crystals and their amorphous thin films.
J. Optics, vol. **13**, No. **7**, 75203 (2011).
165. M. Isik , S.S. Cetin , **N.M. Gasanly**, S. Ozcelik.
Optical constants of layered structured $Ga_{0.75}In_{0.25}Se$ crystals from the ellipsometric measurements.
Solid State Commun., vol. **152**, No. **9**, 791-793 (2012).
166. M. Isik , **N.M. Gasanly**.
Absorption edge and optical constants of $Tl_2Ga_2S_3Se$ crystals from reflection and transmission, and ellipsometric measurements.
Physica B: Physics of Condensed Matter, vol. **407**, No. **12**, 2229-2233 (2012).
167. M. Isik and **N. M. Gasanly**.
Determination of optical parameters of $Ga_{0.75}In_{0.25}Se$ layered crystals.
Cryst. Res. Technol. , vol. **47**, No. **5**, 530-534 (2012).
168. A. F. Qasrawi and **N. M. Gasanly**.
Temperature-dependent capacitance-voltage biasing of the highly tunable $TlGaTe_2$ crystals.
Physica B: Physics of Condensed Matter, vol. **407**, No. **14**, 2753-2756 (2012).
169. **N. M. Gasanly**.
Absorption edge and optical constants of layered structured $Tl_2Ga_2Se_3S$ single crystals.
Physica Scripta , vol. **85**, No. **6**, 065701 (2012).
170. A. F. Qasrawi , Shadia M. S. Elayyat, and **N. M. Gasanly**.
Dynamical and passive characteristics of the Ag/TlGaSeS/Ag RF resonators.
Cryst. Res. Technol. , vol. **47**, No. **6**, 615-619 (2012).
171. A. F. Qasrawi, Tasneem R. Yaseen, Bothaynah Eghbariy and **N. M. Gasanly**.
Photovoltaic effect and space charge limited current analysis in $TlGaTe_2$ crystals.

Acta Physica Polonica A, vol. 122, No. 1, 152-155 (2012).

172. A. F. Qasrawi and **N. M. Gasanly**.
Investigation of the electrical parameters of Ag/p-TlGaSeS/C Schottky contacts.
Mat. Sci. Engin. B. , vol. 177, No. 12, 981-985 (2012).
173. M. Isik, **N.M. Gasanly**.
Ellipsometry study of interband transitions in TlGaS_{2x}Se_{2(1-x)} mixed crystals (0 ≤ x ≤ 1).
Optics Communications, vol. 285, No. 20, 4092-4096 (2012).
174. **N. M. Gasanly**.
Compositional dependence of refractive index and oscillator parameters in TlGaS_{2x}Se_{2(1-x)} layered mixed crystals (0 ≤ x ≤ 1).
Mater. Chem. Phys., vol. 136, No. 1, 259-263 (2012).
175. M. Isik , **N.M. Gasanly**, R. Turan.
Spectroscopic ellipsometry study of above-band gap optical constants of layered structured TlGaSe₂, TlGaS₂ and TlInS₂ single crystals.
Physica B: Physics of Condensed Matter, vol. 407, No. 21, 4193-4197 (2012).
176. **N. M. Gasanly**.
Low-temperature absorption edge and photoluminescence in layered structured Tl₂Ga₂S₃Se single crystals
Physica B: Physics of Condensed Matter, vol. 407, No. 21, 4318-4322 (2012).
- 177 . M. Isik , E. Bulur, **N.M. Gasanly**.
Low-temperature thermoluminescence in layered structured Ga_{0.75}In_{0.25}Se single crystals.
Journal of Alloys and Compounds, vol. 545, No. 1, 153-156 (2012).
178. **N. M. Gasanly**.
Tuning optical absorption edge by composition and temperature in TlGaS_{2x}Se_{2(1-x)} layered mixed crystals (0 ≤ x ≤ 1)
Acta Phys. Polonica A, vol. 122, No. 4, 728-731 (2012).
179. M. Isik , **N. M. Gasanly**.
Dielectric functions and interband critical points of anisotropic chain structured TlSe single crystals
J. Appl. Phys., vol. 112, No. 8, 083526 (4 pages) (2012).
180. **N. M. Gasanly**.
Low-temperature photoluminescence in layered structured TlGa_{0.5}In_{0.5}Se₂ crystals
Journal of Alloys and Compounds, vol. 547, No. 1, 33-36 (2013).

181. M. Isik , **N.M. Gasanly**, R. Turan.
Optical constants and interband transitions of anisotropic layered structured Tl_2GaInS_4 crystals by spectroscopic ellipsometry.
Journal of Alloys and Compounds, vol. **549**, No. **1**, **179-183 (2013).**
182. I. Guler, M. Ambrico, T. Ligonzo, **N. M. Gasanly**.
Temperature-Dependent Absorption Edge and Photoconductivity of $Tl_2In_2S_3Se$ Layered Single Crystals
Journal of Alloys and Compounds, vol. **550**, No. **1**, **471-474 (2013).**
- 183 . M. Isik , E. Bulur, **N.M. Gasanly**.
Low-temperature thermoluminescence in $TlGaS_2$ single crystals.
J. Lumin., vol. **135**, No. **1**, **60-65 (2013).**
184. M. Isik, I. Guler **N.M. Gasanly**.
Dependence of the photoluminescence of $Ga_{0.75}In_{0.25}Se$ layered crystals on temperature and excitation intensity.
Optical Materials, vol. **35**, No. **3**, **414-418 (2013).**
185. A. F. Qasrawi, **N. M. Gasanly**.
Hall mobility and photoconductivity in $TlGaSeS$ crystals.
Journal of Applied Physics, vol. **113**, No. **2**, **023712 (2013).**
186. **N. M. Gasanly**.
Excitation intensity- and temperature-dependent photoluminescence in layered structured $Tl_2GaInSe_2S_2$ crystals.
Journal of Applied Physics, vol. **113**, No. **7**, **073504 (2013).**
187. Pınar Isık, Ahmet Karatay, H. Gul Yaglioglu, Ayhan Elmali, Ulaş Kürüm, Aytunç Ateş, **Nizami Gasanly**.
The effect of film thickness, Se/S ratio and annealing temperature on the nonlinear and saturable absorption behaviors in amorphous $GaSe_xS_{1-x}$ ($0 \leq x \leq 1$) thin films.
Optics Communications, vol. **288**, No. **1**, **107-113 (2013).**
188. M. Isik , **N.M. Gasanly**, R. Turan.
Interband transitions in gallium sulfide layered crystals by ellipsometry measurements.
Physica B, vol. **408**, No. **1**, **43-45 (2013).**
- 189 . M. Isik , **N.M. Gasanly**, F. Korkmaz.
Infrared and Raman scattering spectra of layered structured Ga_3InSe_4 crystals.
Physica B, vol. **412**, No. **1**, **61-63 (2013).**
190. T. Yıldırım, **N.M. Gasanly** , R. Turan.

- Trapping center parameters in N-implanted $Tl_2Ga_2S_3Se$ single crystals by thermally stimulated currents measurements*
Acta Physica Polonica A, vol. 123, No. 4, 766-769 (2013).
191. M. Isik , N.M. Gasanly, F. Korkmaz.
Multiphonon absorption processes in layered structured $TlGaS_2$, $TlInS_2$ and $TlGaSe_2$ single crystals.
Physica B, vol. 421, No. 1, 50-52 (2013).
192. M. Isik, N. M. Gasanly.
Temperature-dependent electrical resistivity, space-charge-limited current and photoconductivity of $Ga_{0.75}In_{0.25}Se$ single crystals
Physica B, vol. 421, No. 1, 53-56 (2013).
193. S. Delice, M. Isik , E. Bulur, N.M. Gasanly.
Thermoluminescence properties of $Tl_2Ga_2S_3Se$ layered single crystals
Journal of Applied Physics, vol. 113, No. 19, 193510 (2013).
194. N. M. Gasanly.
Radiative donor-acceptor pair recombination in $Tl_2Ga_2Se_3S$ layered single crystals
Acta Physica Polonica A, vol. 124, No. 1, 128-132 (2013).
195. A. F. Qasrawi and N. M. Gasanly.
Mixed conduction and anisotropic single oscillator parameters in low dimensional $TlInSe_2$ crystals.
Mater. Chem. Phys., vol. 141, No. 1, 63-68 (2013).
196. M. Isik , E. Bulur, N.M. Gasanly.
TL and TSC studies on $TlGaSe_2$ layered single crystals
J. Lumin., vol. 144, No. 1, 163-168 (2013).
197. M. Isik , N.M. Gasanly
Interband critical points in $TlGa_xIn_{1-x}S_2$ mixed crystals ($0 \leq x \leq 1$).
Journal of Alloys and Compounds, vol. 481, No. 1, 542-546 (2013).
198. A.F. Qasrawi, M. M. Abd-Alrazq, N. M. Gasanly.
Optical dynamics of MgO/Ga_4Se_3S Interface Devices.
Journal of Alloys and Compounds, vol. 583, No. 1, 180-185 (2014).
- 199 . S. Delice, M. Isik, N.M. Gasanly
Thermoluminescence characteristics of $Tl_4GaIn_3S_8$ layered single crystals.
Phil. Mag., vol. 94, No. 2, 141-151 (2014).
200. S. Delice, M. Isik, N.M. Gasanly
Trapping centers and their distribution in $Tl_2InGaSe_4$ single crystals by thermally stimulated luminescence.
J. Mat. Sci., vol. 49, No. 6, 2542-2547 (2014).

201. S. Delice, **N. M. Gasanly**
Determination of trapping parameters in $Tl_4Ga_3InSe_8$ single crystals by thermally stimulated luminescence
Phys. B, vol. **441**, No. **1**, 37-41 (2014).
202. A.F. Qasrawi, Samah F. Abu-Zaid, Salam A. Ghanameh, **N.M. Gasanly**
Dielectric and photo-dielectric properties of $TlGaSeS$ layered crystals.
Bul. Mat. Science, vol. **137**, No. **3**, 505-509 (2014).
203. M. Isik, W. Hadibrata, **N. M. Gasanly**
Annealing effect on the thermoluminescence properties of $GaSe$ single crystals
J. Lum., vol. **154**, No. **1**, 131-135 (2014).
204. S. Delice, **N. M. Gasanly**
Thermoluminescence study on $TlGaSSe$ layered single crystals
Modern Phys. Lett. B, vol. **28**, No. **16**, 1450133 (2014).
205. I. Guler, **N. M. Gasanly**
Compositional dependence of Raman-active mode frequencies and line widths in $TlInS_{2x}Se_{2(1-x)}$ mixed crystals
Appl. Surf. Sci., vol. **312**, No. , (2014). (accepted)
206. M. Isik, S. Delice, **N. M. Gasanly**
Optical properties of $TlGa_xIn_{1-x}Se_2$ layered mixed crystals ($0.5 \leq x \leq 1$) by spectroscopic ellipsometry, transmission and reflection measurements
Phil. Mag., vol. , No. , (2014). (accepted)
207. M. Isik, **N. M. Gasanly**, F. Korkmaz
Compositional dependence of optical modes frequencies in $TlGa_xIn_{1-x}S_2$ layered mixed crystals
Acta Phys. Pol. A, vol. , No. , (2014). (accepted)