

**CURRICULUM VITAE OF
PROF. DR. HÜSNÜ ÖZKAN**

Personal Data

Name, Last Name: Hüsnü Özkan

Birth Date and Place: 1944, Kastamonu, Türkiye

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Education

B.S. 1968, Department of Physics, Middle East Technical University, Ankara 06531, Turkey

B.S. 1968, High Teacher Training College-Yüksek Öğretmen Okulu, Ankara 06531, Turkey

M.S. 1971, Department of Physics, Middle East Technical University, Ankara 06531, Turkey

Ph.D. 1975, Department of Mechanical Engineering, Material Science Division, Marquette
University, Milwaukee, WI, USA

Academic Duties

1968-71 Assistant, Physics Department, METU, Ankara, Turkey

1971-73 Research Assistant, Material Science Division, Department of Mechanical Engineering,
Marquette University, Milwaukee, WI (USA)

1974-76 Guest Scientist, Material Science Division, Argonne National Laboratory, Argonne, IL
(USA)

1976-81 Assistant Professor, Department of Physics, METU, Ankara, Turkey

1981-88 Associate Professor, Department of Physics, METU, Ankara, Turkey

1989-2010 Professor, Department of Physics, METU, Ankara, Turkey

1988-89 Fulbright Professor, Material Science Division, Department of Mechanical Engineering,
Marquette University. WI, USA

1989-90 Fulbright Professor, Collage of Science Engineering and Technology, Saginaw Valley
State University, University Center, MI (USA)

1993-93 Visiting Professor, Summer School, Collage of Science Engineering and Technology,
Saginaw Valley State University, University Center, MI (USA)

1999- 99 Visiting Professor, Summer School, Collage of Science Engineering and Technology,
Saginaw Valley State University, University Center, MI (USA)

1990-2010 Chairman, Condensed Matter Division, Department of Physics, METU

1990-2007 Chairman, Ph.D. Committee, Physics Department, METU,

1998-2008 Committee member for the development of the Central Lab at METU

1995-2010 Member of the BAP (Scientific research projects) committee of METU

2007-2010 Member of Micro and Nano-Technology (MNT), an interdisciplinary graduate
program of METU.

2010-2011 Professor, Department of Physics, METU, Ankara, Turkey

2011-2015 Professor, Department of Mechanical Engineering, IAU, Istanbul, Turkey

Teaching Experience

1975-88 METU, SU, AU:

General Physics I, General Physics II, Electricity and Magnetism, Introduction to Solid State Physics I, Introduction to Solid State Physics II, X-Ray Diffraction and Ultrasonic I, X-Ray Diffraction and Ultrasonic II, Properties of Matter I, Properties of Matter II, Advanced Solid State Physics I, Advanced Solid State Physics II, Electromagnetic Theory, Superconductivity, Numerical methods, Various advanced and special topics about the mechanical, thermal, electrical, optical and structural properties of materials conducted as thesis and graduation projects.

1988-89 Marquette University, Material Science Division, Department of Mechanical Engineering (WI, USA):

Physical Metallurgy, X-Ray Diffraction and Crystallography

1989-90 College of Science, Engineering and Technology, Saginaw Valley State University (MI, USA):

Analytical Mechanics, Conceptual Physics, Mathematical Methods for Science and Engineering

1993- 93 College of Science Engineering and Technology, Saginaw Valley State University, MI, USA,

Summer School: Conceptual Physics, Analytical Mechanics

1999- 99 College of Science Engineering and Technology, Saginaw Valley State University, MI, USA,

Summer School: Analytical Mechanics

1990-11 METU: Continued to give the undergraduate and graduate courses listed above.

Additional courses can be taught: Introduction to material science and engineering, Thermodynamics of materials, Physical properties of materials, Physical metallurgy, Materials characterizations, and Mechanical properties of materials, Diffusion in solids, Nuclear physics and nuclear energy, Radiation effects in solids.

2010- 15 IAU, General Physics I, General Physics II, Material Science, General Physics for Teacher Education, Physics for Dental School. Calculus II.

Research Interests

Mechanical and Thermal Properties of materials, Structure-property Relationships in solids, Phase Transformations in materials, Radiation Damage in solids, Superconductivity, Semi conductivity, Thermally stimulated currents, Defects in materials, Ceramics, Science and Physics Education.

Membership

Turkish Physical Society

Neutron scattering Society of America

International Union of Crystallography

Yüksek Öğretmeniler Derneği

Awards

1973-75 A. Schmitt Research Award, Department of Mechanical and Industrial Engineering, Marquette University, Milwaukee, WI, USA

1988-89 Fulbright Scholar, Department of Mechanical and Industrial Engineering Marquette University, WI, USA

1989-90 Fulbright Scholar, Collage of Science Engineering and Technology, Saginaw Valley State University, MI, USA

2003-04 Best Thesis Advisor Award, METU, Ankara, Turkey

2003-06 Performance award, ODTÜ, Ankara, Turkey

2007-09 Performance award, ODTÜ, Ankara, Turkey

Graduate M. S. and Ph. D. Thesis Supervised

<i>Name of Student</i>	<i>Title of Thesis</i>	<i>Degree</i>	<i>Year</i>
Ali Tatlı	Ultrasonic Investigation of the Variation Elastic Properties of Tourmalines with Structures Composition and Temperature	Ph.D.	1980
Bahar Dirican	Structural Properties of the Boron Containing Crystals	M.S.	1981
Marwan El Kawni	Elastic Constants of Cordierite and Hambergite Crystals	M.S.	1987
Rafiq Al-Khader	Thermal Expansion of Low Cordierite	M.S.	1988
N.M. Hamdan	Variation of the Lattice Parameters of Tourmaline Crystal with Temperature	M.S.	1988
B.A. Albiss	Effect of Silver Doping and Gamma Irradiation on Y-Ba-Cu-O Superconductor	M.S.	1992
N.M. Hamdan	Effect of Temperature and Irradiation on the Properties of Bi-Based Superconductors	Ph.D.	1993
H. Böcük	Effect of Magnetic Field on Resistivity and I-V Characteristics of YBCO Superconductor	M.S.	1996

B.A. Albiss	Effect of Gamma Irradiation on Structure and I-V Characteristics of Bi-Based Superconductors	Ph.D.	1997
U. Topal	Effect of Magnetic Field, Temperature and Gamma Irradiation on Electrical and Structural Properties of Thallium-Based Superconductors	M.S.	1997
T. Kayed	Properties of the Tl- and Bi-Based Superconducting Ceramics and Tapes Under Magnetic Field and Gamma Irradiation	Ph.D.	2000
H. Böcük	Effects of Vortex Motion in Magnetic Properties of High Temperature Superconductors	Ph.D.	2002
S. E. Ogün	Effect of Li Addition on the Properties of Bi-based Superconductors	M.S.	2003
D. Köseoğlu	Effects of B ₂ O ₃ Addition on the Formation and Properties of Bi-based Superconductors	M.S.	2003
U. Topal	Effects of Boron Doping and Thermal Neutron Irradiation on the Flux Pinning in Bulk High Temperature Superconductors	Ph.D.	2003
N. S. Yüksek	Thermally Stimulated Current Observations of Trapping Centers in Layered Thallium Dichalgonite Semiconductors	M.S.	2004
M. Açıkgöz	Temperature Dependence of the Spectroscopic and Structural Properties of TlGaS ₂ and TlInS ₂ Crystals	M.S.	2004
Nader Ghazanfari	Effects of Nb ₂ O ₅ Addition on the Formation and Properties of the Bi*based Superconductors	M. S	2006

Research Projects Completed

1977-80 Effect of Thermal Neutron Irradiation on the Elastic Constants and Structure of the

- Boron Containing Crystals, International Atomic Energy Agency (IAEA).
- 1988-90 Effect of Neutron Irradiation on the Structure and Properties of Lithium Containing Crystals, Fulbright Research Proposal.
- 1993-94 Structure and Properties of High T_c Superconductors, METU (AFP).
- 1994-95 Effects of Various Doping and Radiation on Properties of the High T_c Superconductors, METU, AFP.
- 1996-97 Variation of Flux-Flow Resistance with Gamma Irradiation, METU (AFP).
- 1997-98 Voltage-Current Characteristics of the TI-Based Superconductors, METU (AFP).
- 1998-99 Electrical Properties of the TI-Based Superconductors, METU (AFP).
- 2000-04 METU, AFP and BAP, in 4 years 4 projects were completed
- 2004-06 METU, AFP and BAP, in years 3 projects were completed
- 2006-08 Süper iletkenlere Fe ve Nb Nano Tanecik Katkılama Etkileri, TUBITAK, Proje no: 106T039
- 2008-09 Bazı Ferromanyetik, Süper İletken ve Yarı İletken Malzemelere Nano-Tanecik Katkılama Etkileri, TÜBİTAK destekli, ODTÜ- DOSAP projesi.

Citations, Scientific Evaluations and Refereeing

Prof. Dr. H. Özkan's scientific articles were cited in about 600 international publications.

Prof. Dr. H. Özkan has served as a member of several associate professorship juries.

Prof. Dr. H. Özkan has refereed many articles in international journals.

Prof. Dr. H. Özkan has evaluated many national and international research proposals and reports.

Prof. Dr. H. Özkan has served as a member for several TUBITAK panels to evaluate many research proposals.

Research Labs Established

Superconductivity Laboratory, METU:

The Superconductivity Laboratory has a close cycle cryostat to cool samples down to 8 K for both electrical and optical applications, an electromagnet up to 1.0 T, constant current sources, nano-voltmeters, temperature control units, several furnaces and other facilities for synthesis, characterization and electromagnetic measurements on semiconductors and superconductors.

In the same laboratory thermally stimulated current researches studies have been carried out.

X-Ray Diffraction Laboratory, METU:

The X-Ray Diffraction Laboratory has RIGAKU Miniflex Powder Diffractometer, the cooling system, sample preparation units and the related software for material characterizations and structural analysis.

Prof. Dr. H. Özkan has contributed for the development of the central laboratory at METU.

Publications

- T.G. Worlton, L. Cartz, A. Niravath, and H. Özkan, "Anisotropic Thermal Expansion and Compressibility of ZrSiO₄," *High Temperature High Pressures*, 4, 463-469 (1972).
- H. Özkan and L. Cartz, "Anisotropic Thermophysical Properties of Zircons," AIP Proceedings, No. 17, *Thermal Expansion 1973*, pp. 21-33, Editors: R.E. Taylor and G.L. Denman, AIP New York (1974).
- H. Özkan, L. Cartz, and J.C. Jamieson, "Elastic Constants of Non-Metamict Zirconium Silicate," *J. Appl. Phys.*, 45(2), 556-562 (1974).
- H. Özkan, L. Cartz, and E.S. Fisher, "Temperature Dependence of the Elastic Constants of Zircon," *Rev. Int. Htes. Temp. et Refract.*, 12, 52-57 (1975).
- H. Özkan, "Effect of Natural Radiation on the Elastic Moduli of Zircon," *Am. Phys. Soc. Bull.*, 20(3), 377 (1975).
- H. Özkan, "Effect of Nuclear Radiation on the Elastic Moduli of Zircon," *J. Appl. Phys.*, 47(11), 4772-4780 (1976).
- H. Özkan, "Effect of Thermal Neutron Irradiation on the Elastic Constants and Structure of the Boron Containing Crystals," Research Proposal, International Atomic Energy Agency (IAEA), Contract No. 1800/RB, Vienna (1977).
- H. Özkan, Progress Reports I, II, III, IV and the Final Report to IAEA for the Research Contract 1800/RB (1977-80).
- H. Özkan and J.C. Jamieson, "Pressure Dependence of the Elastic Constraints of Non-Metamict Zircon," *Phys. Chem. Minerals*, 2, 215-224 (1978).
- L. Cartz, R. Fournelle, R.S. Srinivasa, and H. Özkan, "Metamict Zircon Formed by Heavy Ion Bombardment," *Amer. Ceram. Soc. Bull.*, 57, 353 (1978).
- H. Özkan, "Elastic Constants of Tourmaline," *J. Appl. Phys.*, 50(9), 6006-6009 (1979).
- H. Özkan, "Effect of Thermal Neutron Irradiation on the Elastic Constants and Structure of the Boron Containing Crystals," *Atomindex*, 11(9), 2743 (1980).
- H. Özkan, "Elastic Properties of Zircon, Tourmaline and Danburite," TUBITAK Solid State Colloquium, p. 46, ODTÜ, Ankara (1982).
- H. Özkan, "Elastic Properties of Calcium Boron Silicate," TFD V. Physics Congress, Abstracts, p. 28, I.Ü. Fen Fakültesi, İstanbul (1983).
- H. Özkan, "Variation of Elastic Constants of Tourmaline with Thermal Neutron Irradiation," Türkiye Atom Enerjisi Kurumu II. Ulusal Nükleer Bilimler Kongresi, Bildiri Özetleri, p. 88, CNAEM, İstanbul (1984).
- H. Özkan and L. Cartz, "Elastic Constants of Calcium Borosilicate," in 10th **ETPC Proceedings**, p. 199, Editor G. Rufino, Pion Publication (1986).

- H. **Özkan** and L. Cartz, "Elastic Constants of Calcium Boron Silicate ($\text{Ca}_2\text{B}_2\text{Si}_2\text{O}_8$)," ***High Temperature-High Pressures***, 18, 675-678 (1986).
- H. **Özkan**, "Effect of Thermal Neutron Irradiation on the Elastic Constants of Tourmaline," ***Materials Modifications by High Fluence Ion Beams***, NATO, ASI, Viana Do Castelo, Portekiz, 1987.
- H. **Özkan**, "Effect of Thermal Neutron Irradiation on the Elastic Constants of Tourmaline," ***Radiation Effects***, 102(1), 31-38 (1987).
- A. Tatlı and H. **Özkan**, "Variation of the Elastic Properties of Tourmaline with Chemical Composition," ***Phys. Chem. Minerals***, 14, 172-176 (1987).
- H. **Özkan**, "Effect of α - recoil damage on the elastic moduli of Zircon and Tourmaline", ***Nuclear Physics Applications in Material Science***, p: 447, Editors: E. Recknagel and J. C. Soares, Kluwer Academic Publisher, London (1988)
- H. **Özkan**, "Effect of α -Recoil Damage on the Elastic Moduli of Zircon and Tourmaline, Nato ASI Series," ***Materials Modifications by High Fluence Ion Beams***, pp. 541-545, (eds) R. Kelly and M. Fernando da Silva, Kluwer Academic Publishers (1989).
- H. **Özkan**, and N. Türetken, ***College Physics One***, Hitit Publications, Ankara (1989).
- N. Türetken, H. **Özkan**, and M. Özbakan, ***College Physics Two***, Hitit Publications, Ankara (1989).
- H. **Özkan**, N. Türetken, and M. Özbakan, ***College Physics Three***, Hitit Publications, Ankara (1989).
- M. Özbakan, N. Türetken, Hüsnu **Özkan**, ***College Physics One, Teacher's Solution Manual***, Hitit Publications, Ankara (1989).
- M. Özbakan, N. Türetken, Hüsnu **Özkan**, ***College Physics Two, Teacher's Solution Manual***, Hitit Publications, Ankara (1989).
- M. Özbakan, N. Türetken, Hüsnu **Özkan**, ***College Physics Three, Teacher's Solution Manual***, Hitit Publications, Ankara (1989).
- H. **Özkan**, F.G. Karioris, J. Eridon, and L. Cartz, "Radiation Damage of Lithium Ceramics by Ion Bombardment," ***Radiation Effects in Insulators – 5***, Hamilton, Canada (1989).
- F.G. Karioris, H. **Özkan**, S.B. Luyckx, and L. Cartz, "The Stability of WC to Ion Bombardment," ***Radiation Effects in Insulators – 5***, Hamilton, Canada (1989).
- H. **Özkan**, F.G. Karioris, E.R. Vance, J. Eridan, and L. Cartz, "Damage of $\text{YBa}_2\text{Cu}_3\text{O}_x$ by Ion Irradiation," ***Radiation Effects in Insulators – 5***, Hamilton, Canada (1989).
- H. **Özkan**, F.G. Karioris, J. Eridon, and L. Cartz, "Radiation Damage of Lithium Ceramics by Ion Bombardment," ***Nuclear Instruments and Methods in Physical Research***, B46, 202-205 (1990).
- F.G. Karioris, H. **Özkan**, S.B. Luyckx, and L. Cartz, "The Stability of WC to Ion Bombardment," ***Nuclear Instruments and Methods in Physics Research***, B46, 176-

- 179 (1990).
- H. Özkan**, F.G. Karioris, E.R. Vance, J. Eridan, and L. Cartz, "Damage of $\text{YBa}_2\text{Cu}_3\text{O}_x$ by Ion Irradiation," ***Nuclear Instruments and Methods in Physics Research***, B46, 291-294 (1990).
- M.Y. Kao, P. Thoma, **H. Özkan**, and L. Cartz, "Characterization of NiTi Shape Memory Wires by Differential Scanning Calorimetry and Transmission X-ray Diffraction" ***Mat. Res. Soc. Symp. Proc.***, vol. 246, Materials Research Society (1992).
- B.A. Albiss**, **N. Hamdan**, **A. Menard**, and **H. Özkan**, "Effect of Gamma Irradiation on Pure and Silver Doped YBCO Superconductor," ***Solid State Communications***, 88(3), 237 (1993).
- N.M. Gasanly, **H. Özkan**, and A. Culfaz, "Compositional Variations of Lattice Parameters of $\text{TlGa}(\text{S}_{1-x}\text{Se}_x)_2$ Layer Mixed Crystals," ***Phys. Stat. Sol. (a)***, 140 KI (1993).
- N.M. Hamdan, Kh. A. Zig, B.A. Hallak, and **H. Özkan**, "Anisotropic Changes Induced by Ion Irradiation on Bi-Based High Tc Superconductors," ***Solid State Communications***, 87, 1129 (1993).
- H. Özkan**, B.A. Albiss, N. Hamdan, and A. Menard, "Effect of Gamma Irradiation and Silver Doping in YBCO Superconductor," presented at **International Conference, Molecular and Oxide Superconductors**, Eugene, Oregon (1993).
- H. Özkan**, B.A. Albiss, N. Hamdan, and A. Menard, "Effect of Gamma Irradiation and Silver Doping in YBCO Superconductor", ***Journal of Superconductivity***, 7 (6): 885-888 Dec. (1994)
- N.M. Gasanly, A. Culfaz, **H. Özkan**, and Ellialtioglu, "Lattice Parameters of $\text{TlGa}_{1-x}\text{In}_x\text{S}_2$ and $\text{TlGa}(\text{S}_{1-x}\text{Se}_x)_2$ Layer Mixed Crystal," ***Cryst. Res. Technol.***, 29(3) K51-K55 (1994).
- B.A. Albiss, **H. Özkan**, H. Böcük, and N. Gasanly, "I-V Characteristics of Polycrystalline $(\text{Bi, pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Superconductor at Different Magnetic Field and Temperature," **International Conference on Physics and Chemistry of Molecular and Oxide Superconductors**. Karlsruhe, Germany (1996).
- H. Özkan**, H. Gasanly, and A. Çulfaz, "Effect of Isomorphic Atom Substitution on the Lattice Parameters of $\text{A}^3\text{B}^3\text{C}$ Type Mixed Crystals." ***Turkish Journal of Physics***, 20, 800-804 (1996).
- H. Böcük, B.A. Albiss, İ. Ercan, **H. Özkan**, and N. Gasanly, "Effect of Magnetic Field and Temperature on the Voltage-Current Characteristics of YBCO Superconductor," ***Journal of Low Temperature Physics***, 105, No:3/3, 978 (1996).
- B.A. Albiss, H. Böcük, N.M. Gasanly, and **H. Özkan**, "Voltage-Current Characteristics of Polycrystalline $(\text{Bi, Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Superconductor at Different Magnetic Fields and Temperatures," ***Journal of Low Temperature Physics***, 105, No: 3/4, 957 (1996).
- M. Parlak, Ç. Erçelebi, İ. Günal, **H. Özkan**, and N.M. Gasanly, "Anisotropy of Electrical

- Resistivity and Hole Mobility in InTe Single Crystals,” **Cryst. Research and Technology**, 31, 673-678 (1996).
- B.A. Albiss, **H. Özkan**, H. Böcük, and N.M. Gasanly, “Effect of Gamma Irradiation on Structure and Electrical Properties of $(\text{Bi, Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Superconductor,” **Superlattices and Microstructures**, 21, Suppl. A, 23-26 (1997).
- M. Parlak, Ç. Erçelebi, İ. Günal, **H. Özkan**, N.M. Gasanly, and A. Çulfaz, “Crystal Data, Electrical Resistivity and Mobility in $\text{Cu}_3\text{In}_5\text{Se}_q$ and $\text{Cu}_3\text{In}_5\text{Te}_q$ Single Crystals” **Cryst. Research and Technology**, 32, 395-400 (1997).
- M. Parlak, Ç. Erçelebi, İ. Günal, H. Özkan, and N.M. Gasanly, “Low Temperature Electrical Resistivity and Mobility in $\text{Cu}_3\text{In}_5\text{Te}_q$ and $\text{Ag}_3\text{Ga}_5\text{Te}_q$ Single Crystals” Abstracts, XIth International Conference on Ternary and Multinary Compounds, (ICTMC-11) Salford, United Kingdom, p. 132, (1997).
- U. Topal, T. Kayed, H. Özkan, and N.M. Gasanly, “Effect of Gamma Irradiation on the Structure and Voltage Current Properties of $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Superconductor,” **CIMITEL 98**, 9th International Conference on Modern Materials and Technology, 57, (1998).
- U. Topal, T. Kayed, N. Gasanly, and H. Özkan, “Effect of Magnetic Field and Temperature on the Voltage Current Characteristics of Polycrystalline $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Superconductor,” **CIMTEC 98**, 9th International Conference on Modern Materials and Technology, 57, (1998).
- M. Parlak, Ç. Erçelebi, İ. Günal, H. Özkan, and N.M. Gasanly, “Structural and Electrical Characterization of $\text{Ag}_3\text{Ga}_5\text{Te}_q$ and $\text{Ag}_3\text{In}_5\text{Se}_q$ Crystals” **Cryst. Research and Technology**, 33(6), 923-928 (1998).
- H. Özkan**, N.M. Gasanly, Yilmaz, A. Culfaz, and V. Nagier, “Crystal Data for $\text{A}_3\text{B}_5\text{C}_q$ -Type Ternary Compounds” **Tr. J. Phys.**, 22, 519-524 (1998).
- N.M. Gasanly, **H. Özkan**, A. Aydinli, and Yilmaz, “Temperature Dependence of the Raman-active Phonon Frequencies in Indium Sulfide,” **Solid State Communications**, 110, 231-236 (1999).
- H. Özkan**, U. Topal, N.M. Gasanly, B. Albiss, and T. Kayed, “Voltage-current Characteristics of the Thallium-based Ceramic Superconductor,” **Supercond. Sci. Technol.**, vol. 12, No. 9, 592-596 (1999).
- H. Özkan**, U. Topal, N.M. Gasanly, and T. Kayed, “Effect of Magnetic Field and Gamma Irradiation on Voltage-current Characteristics of the Thallium-based Ceramic Superconductor,” 9th International Workshop on Critical Currents, Madison, WI (1999), p. 192-193.
- N. Gasanly, **H. Özkan**, V. Nagiev, M. Caferova, TIBX2-tipi Kristallerde Orgu Anizotropisinin Bilesim ile Degisimi. Bildiri, Turk Fizik Dernegi 18. Fizik Kongresi, Adana, 25-28 Ekim, 1999, s. 227.

- U. Topal, **H. Özkan**, N. Gasanly, "Tabletleme Basincinin Talyum Bazli Superiletkenlerin Elektriksel ve Yapisal Ozelliklerine Etkisi". Bildiri, Turk Fizik Dernegi 18. Fizik Kongresi, Adana, 25-28 Ekim, 1999, s. 364.
- Kayed TS, **Özkan H**, Gasanly NM, et al., "Critical currents in Bi-2223 tapes near T_c under magnetic field and gamma irradiation" *Supercond. Sci. Technol* 13, 1625-1628, 2000
- Gasanly NM, Aydinli A, **Ozkan H**, et al., "Temperature dependence of the first order Raman Temperature dependence of the first-order Raman scattering in GaS layered crystals", *Solid State Communications* 116: (3) 147-151 2000
- Albiss BA, Hasan MK, Al-Akhras MA, **Özkan H**, et al., "Dissipative behavior and gamma irradiation of silver sheathed $Bi_{1.8}Pb_{0.4}Sr_2Ca_2Cu_3O_x$ tape", *Physica C* 331: 297-301, (2000)
- Gasanly NM, **Özkan H**, Tas M, "Composition dependence of lattice anisotropy of $TiBX_2$ -type chain mixed crystals", *Cryst. Res. Technol.* 35: (2) 185-188 2000
- Özkan H**, Gasanly NM, Kayed T, "Effect of magnetic field and gamma irradiation on the electrical properties and structure of the TI-based ceramic superconductors" *Supercond. Sci. Technol* 13: (2) 161-164 (2000)
- Gasanly NM, Aydinli A, **Özkan, H**, "Resonant Raman scattering near the free-to-bound transition in undoped p-GaS", *Cryst. Research and Technology* 36 (12): 1393-1398, 2001
- Kayed TS, **Özkan H**, Gasanly NM, "Effect of lithium doping on the properties of TI-based superconductors", *Supercond. Sci. Technol* 14 (9): 738-740 (2001)
- Gasanly NM, Aydinli A, **Ozkan H**, et al, "Temperature dependence of the first-order Raman scattering in GaS layered crystal", *Solid State Communications* 117 (6): 393-394 2001
- Gasanly NM, Aydinli A, **Özkan H**, "Resonant Raman scattering near the free-to-bound transition in undoped p-GaSe" *Cryst. Research and Technology* 36 (12): 1393-1398 2001
- N. M. Gasanly, A. Aydınli, **H. Özkan**, V. M. Nagiev, M. Caferova, 'GaS_{1-x}Se_x Karışık kristallerin raman spektrumlarının sıcaklık ile değişimi', Türk Fizik Derneği 21. Fizik Kongresi, s: 342, İsparta, Türkiye, 2002.
- N. S. Yüksek, N. M. Gasanly, A. Aydınli, **H. Özkan**, InS kristallerde ısı uyarılmış akımlar, Türk Fizik Derneği 21. Fizik Kongresi, s: 347, İsparta, Türkiye, 2002.
- Ş. Çavdar, E. Aksu, H. Koralay, **H. Özkan**, İ. Ercan, N. Hasany,

' $Tl_2Ba_2Ca_2Cu_3O_x$ Süperiletkenlerine γ radyasyon etkisi', Türk Fizik Derneği 21. Fizik Kongresi, s: 364, İsparta, Türkiye, 2002.

K. Gökşen, N. M. Gasany, **H. Özkan**,

' $GaS_{0.75}Se_{0.25}$ Katmanlı kristallerin fotoışıma spektrumu', Türk Fizik Derneği 21. Fizik Kongresi, s: 399, İsparta, Türkiye, 2002.

Gasany NM, Aydınli A, **Özkan H**, et al., "Temperature-dependent Raman scattering spectra of GaSe layered crystal", *Mater Res. Bull.* 37 (1): 169-176 JAN 2002

Gasany NM, Goksen K, **Özkan H**

"Photoluminescence spectra of $GaS_{0.75}Se_{0.25}$ layered single crystals"

Cryst. Research and Technology 37 (6): 581-586 2002

Gasany NM, Aydınli A, Kocabas C, et al.

"Anharmonicity of zone-center optical phonons: Raman scattering spectra of $GaSe_{0.5}S_{0.5}$ layered crystal" *Phys. Scripta* 65 (6): 534-538 Jun 2002

Topal U, Dorosinskii L, **Özkan H**, et al.

"Effect of thermal neutron irradiation on the pinning properties of TSMG Sm-123 superconductor", *Physica C* 388: 403-404 May 2003

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"Effect of thermal neutron irradiation in boron-doped melt-textured YBCO superconductors, *Physica C* 388: 401-402 MAY 2003

Ogun SE, **Özkan H**, Gasany NM

"Effect of Li addition on the properties of Bi-based superconductors"

IEEE Transaction Appl Supercond. 13 (2): 3158-3160 Part 3 Jun 2003

Yukse NS, Gasany NM, **Özkan H**

"Thermally stimulated current analysis of shallow levels in $TlGaS_2$ layered single crystals"

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