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Education

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| Aug. 2004 | Ph.D., Department of Physics, Gazi University
Supervisor: Abdullah Günen
Dissertation Title: ‘Investigations of electrical and magnetic properties of thallium based superconductors’. |
| Aug. 1998 | M.S., Department of Physics, Gazi University
Supervisor: Abdullah Günen
Thesis Title: Four-Dimension Ising model Investigation of the Creutz Cellular Automaton |
| 1989 - 1993 | B.S. Student, Department of Physics, İnönü University, Malatya, Turkey |

Work Experience

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| 2012- - | Assoc. Professor, Gazi University Department of Physics |
| 2009 – 2012 | Assistant Professor, Gazi University Department of Physics |
| 2006 – 2009 | Researcher, Turkish Atomic Energy Authority, Saraykoy Nuclear Research and Training Center, Department of Technology, <ul style="list-style-type: none">- Worked Scanning Electron microscope (SEM) (Jeol 7000F)- Termal Analyses systems (SII 7300 Exstar thermal analyzer (TGA-DTA)- X-Ray Diffraction (XRD) (D8 Advance- Bruker) |
| 2000-2006 | Turkish Atomic Energy Authority, Ankara Nuclear Research and Training Center, Department of Material Science <ul style="list-style-type: none">- Worked on Characterization laboratories for superconducting projects |

- Depend on superconductivity laboratory in the Middle East
Technical University, Department of Physic (2001-2003)

1996-2000 Republic of Turkey, Ministry of National Education, Turkey

Professional Membership

Turkish Physical Society

Language Skills

English – Upper intermediate
Turkish – native

Personal Information

Date of Birth: April 23, 1972
Gender: Male

Publications

Peer-reviewed Journal Publications

- 1- H. Koralay, S. Cavdar, M.A. Aksan “Kinetics of non-isothermal crystallization of $\text{Bi}_3\text{Sr}_2\text{Ca}_2\text{Cu}_{3-x}\text{Sn}_x\text{O}_{10+\delta}$ glass–ceramics” Physica B: Condensed Matter, 405, 23, 4801-4805 (2010)
- 2- S. Cavdar, F. Yakuphanoglu , H. Koralay and A. Günen, “The electrical transport properties and Hall effect measurements on a (TBCCO) superconductor” Physica C, 434, 85-89 (2006)
- 3- Z. Merdan, A. Gunen and S. Cavdar, “Dynamical finite-size scaling function of the four dimensional ising model for Creutzalgorithm” Physica A 359, 415-422 (2006)
- 4- H. Koralay, F. Yakuphanoglu, S. Cavdar, A. Günen, E. Aksu “Crystallization kinetics of $\text{Bi}_{1.7}\text{V}_{0.3}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ glass-ceramic superconductor” Physica B, 355, 64-71 (2005)

- 5- S. Cavdar, H Koralay, N Tuğluoğlu and A Günen “Frequency-dependent dielectric characteristics of Tl–Ba–Ca–Cu–O bulk superconductor” Supercon. Sci. and Tech. 18, 1204, (2005)
- 6- E. Aksu, A. Gencer, N. Calınlı, H. Koralay and S. Cavdar “Investigation of odd-order harmonic susceptibilities of a bulk $Tl_2Ba_2Ca_2Cu_3O_{10}$ superconductors using critical state approach” Physica B: Condensed Matter, Volume 363, Issues 1-4, 158-165 (2005)
- 7- T S Kayed , N Calınlı, E Aksu, H Koralay, A Günen, İ Ercan, S Aktürk and Ş. Cavdar “Microstructural, thermal, and “electrical properties of $Bi_{1.7}V_{0.3}Sr_2Ca_2Cu_3O_x$ glass-ceramic superconductor” Crystal Research and Technology, 12, 39 (2004)
- 8- S. Cavdar, E. Aksu, H. Koralay, H. Özkan, N. M. Gasanly, and I. Ercan “Effect of B_2O_3 Addition On The Formation of High T_c Phase In The Bulk Tl-Based Superconductor” Physica Status Solidi, 199 272-276. (2003)
- 9- Çavdar, S., Koralay, H., Altındal, Ş. “Effect of vanadium substitution on the dielectric properties of glass ceramic Bi-2212 superconductor” Journal of Low Temperature Physics, (ISI) 164, 102-114 pp, 2011
- 10- S. Cavdar, E. Deniz, H. Koralay, O. Ozturk, M. Erdem, A. Gunen “The Effect of PbSe Addition on the Mechanical Properties of Bi-2212 Superconductors” J. Supercond Nov Magn 25, 2297, 2012
- 11- A. Arslan, H. Koralay, Ş. Çavdar, A. Günen “Crystallization kinetic studies on $Bi_{1.75}Pb_{0.25}Sr_2Ca_2Cu_{3-x}Sn_xO_8$ glass-ceramic by using non-isothermal technique” Journal of Non-Crystalline Solids 358 1190–1195, 2012
- 12- E. Erbilen, Ş. Çavdar, H. Koralay, A. Günen, "Effect of Vanadium Substitution on the Microstructural and Superconducting Properties of $Tl_2Ba_2Ca_{2-x}V_xCu_3O_y$ Superconductors", Physica B, DOI Number: 10.1016/j.physb.2012.12.038, 2013

Other Journal Publications

1. Elif ÇAVDAR, Neslihan GÖKDEMİR, İrfan AKGÜN ve Sükrü ÇAVDAR “Ni-45,2 Ti Alasımının Farklı Tavlama Sıcaklıklarında Termal Özelliklerinin İncelenmesi” Fırat Ü. Fen Bilimleri Dergisi 20, pp 265 2008

Conference Papers

1. T. S. Kayed, H. Özkan, R.Turan, N. Gasanly, İ. Ercan, Ş. Çavdar, E. Aksu, H. Koralay

- Tl-Tabanlı Süperiletkenlere Bor Katkılama ve Işınlama Etkisi", Türk Fizik Derneği 19. Fizik Kongresi, Fırat Üniversitesi, Elazığ, 26-29 Eylül 2000.
2. S. Çavdar, E. Aksu, H. Koralay, H. Özkan, İ. Ercan, N. Gasanly, TlBaCaCuO(2223) Süperiletkenine B₂O₃ Katkılama Etkileri", Ulusal Yüksek Sıcaklık Süperiletkenler Sempozyumu, İnönü Üniversitesi, Malatya, 11-13 Temmuz, 2001.
 3. H. Koralay, S. Çavdar, E. Aksu, İ. Ercan ve N. Akduran, Bi_{1,7}V_{0,3}Sr₂Ca₂Cu₃O_{10+x} Cam-Seramik Süperiletkeninin Sentezlenmesi ve Karakterizasyonu, 21. Fizik Kongresi (TFD21), 11-14 Eylül 2002, Isparta
 4. S. Çavdar, E. Aksu, H. Koralay, H. Özkan, İ. Ercan ve N. Gasanly, Tl₂Ba₂Ca₂Cu₃O_x Süperiletkenine γ Radyasyon Etkisi, 21. Fizik Kongresi (TFD21), 11-14 Eylül 2002, Isparta
 5. H. Özkan, N. Gasanly, S. Çavdar, H. Koralay, E. Aksu, İ. Ercan, Effect of B₂O₃ Doping on the Properties of Tl-Based Superconductors, Applied Superconductivity Conference, ASC-2002, August 4-9, 2002 Houston, Texas USA
 6. S. Çavdar, H. Koralay, E. Aksu, A. Günen, H. Özkan, N. Gasanly, S. Acar, "Tl-2223 Süperiletkeninin Yapısal, Elektriksel ve Manyetik Özelliklerine B₂O₃ Katkılama Etkisi", Türk Fizik Derneği 22. Fizik Kongresi, Bodrum 14-17 Eylül 2004
 7. H. Koralay, S. Çavdar, E. Aksu, A. Günen, H. Özkan, N. Gasanly "Tl-2223 Süperiletken Yapının Sıcaklıkla Değişimi", Türk Fizik Derneği 22. Fizik Kongresi, Bodrum 14-17 Eylül 2004

8. E. Çavdar, N. Gökdemir, I. Akgün, H. Koralay , S. Çavdar “Thermal Transitions And Structure Properties Of Cu-11 % Al-3,82 % Ni Shape Memory Alloys” Türk Fizik Derneği 23. Fizik Kongresi, Muğla 14-17 Eylül 2005
9. H. Koralay, S. Çavdar, A. Günen “Thermal And Phase Characterization Of $\text{Bi}_{2-x}\text{V}_x\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ Superconductor” Türk Fizik Derneği 23. Fizik Kongresi, Muğla 14-17 Eylül 2005
10. N. Gökdemir., E. Çavdar, I. Akgün, S. Çavdar, H. Koralay “The Effect Of The Annealing And Cooling Temperature For Phase Transformation TiNi Shape Memory Alloys” Türk Fizik Derneği 23. Fizik Kongresi, Muğla 14-17 Eylül 2005
11. S. Çavdar, H. Koralay, Y. Aydogdu, A. Günen “Frequency-Dependent Dielectrical Characteristics Of $\text{Bi}_{1.7}\text{V}_{0.3}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ Glass-Ceramic Superconductor” Türk Fizik Derneği 23. Fizik Kongresi, Muğla 14-17 Eylül 2005
- a. Günen, H. Koralay, S. Cavdar “Frequency-Dependent Dielectric Characteristics Of $\text{Bi}_{1.7}\text{V}_{0.3}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$ Glass-Ceramic” Physics 2010 International Conference Azerbaijan, Bakü 2010
12. Haluk Koralay, Sükrü Cavdar, Abdullah Günen “kinetics of crystallization of amorphous $\text{Bi}_{1.5}\text{V}_{0.5}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{x+\square}$ glass” Physics 2010 international Conference Azerbaijan Bakü 2010, pp 163-165
13. S. Cavdar H. Koralay H. Dişbudak, A. Günen “A New Catalyst To Synthesize Carbon Nanospheres At Low Temperature” Physics 2010 International Conference Azerbaijan, Bakü 2010
14. H. Koralay, Ş. Çavdar, A. Günen “T-Irradiation Effects On Crystallization Kinetics Of $\text{Bi}_{1.7}\text{V}_{0.3}\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ Glass-Ceramic” Azerbaijan Milli Bilimler akademisi Fizik Kongresi Bakü 2009
15. S. Çavdar, H. Koralay, A. Günen “ ^{60}Co gamma radiation effect on $\text{Ti}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ superconductor” 7. International Conference nuclear and Radiation Physic (ICNRP 09) Amaata Kazakistan 2009