

# Prof. ENVER BULUR

## Personal Information

**Office Phone:** [+90 0312 210 5048](tel:+9003122105048)

**Fax Phone:** [+90 0312 210 5099](tel:+9003122105099)

**Email:** [ebulur@metu.edu.tr](mailto:ebulur@metu.edu.tr)

**Web:** <https://avesis.metu.edu.tr/ebulur>

## Education Information

Doctorate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1990 - 1998

Post Graduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1987 - 1990

Under Graduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1981 - 1987

## Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Electronic and magnetic devices, microelectronics, Materials Science, General Physics, Measurement Science, General Laboratory Techniques, and Metrology, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Magnetic Properties and Materials, Optical Properties, Spectroscopy of Matter, Natural Sciences

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2013 - Continues

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2009 - 2013

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2004 - 2009

Assistant Professor, Oklahoma State University, Physics, 2002 - 2004

Lecturer PhD, Technische Universitaet Darmstadt, Materials Science, Mawi, 2001 - 2002

Expert, Riso National Laboratory, Radiation Research, 1999 - 2001

Expert, GSF Forschungszentrum (Helmholtz Zentrum-München), Institute für Strahlenschutz, ISAR, 1996 - 1999

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1988 - 1996

## Courses

Modern Physics, Under Graduate, 2019 - 2020

Analog Electronics, Under Graduate, 2019 - 2020

## Research Infrastructure Information

Bulur E., İflazoğlu S., Thermally and Optically Stimulated Luminescence Laboratory (TOSL), January 2005

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Structural, photo, optical and thermal luminescent properties of beta barium metaborate**  
İflazoglu S., YILMAZ A., BULUR E.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.829, 2020 (Journal Indexed in SCI)

- **Afterglow, TL and OSL properties of Mn<sup>2+</sup>-doped ZnGa<sub>2</sub>O<sub>4</sub> phosphor**

Luhechko A., Zhdachevskyy Y., Ubizskii S., Kravets O., Popov A. I., Rogulis U., Elsts E., BULUR E., Suchocki A. SCIENTIFIC REPORTS, vol.9, 2019 (Journal Indexed in SCI)

- **Optically stimulated luminescence characteristics of BeO nanoparticles synthesized by sol-gel method**

ALTUNAL V., YEĞİNGİL Z., TÜKEN T., Depci T., ÖZDEMİR A. C. , Guckan V., Nur N., Kurt K., BULUR E. RADIATION MEASUREMENTS, vol.118, pp.54-66, 2018 (Journal Indexed in SCI)

- **TL and OSL properties of Mn<sup>2+</sup>-doped MgGa<sub>2</sub>O<sub>4</sub> phosphor**

LUCHECHKO A., ZHDACHEVSKYY Y., MARABA D., BULUR E., UBIZSKII S., KRAVETS O. OPTICAL MATERIALS, vol.78, pp.502-507, 2018 (Journal Indexed in SCI)

- **Design and construction of an automated OSL reader with open source software and hardware**

MARABA D., BULUR E. RADIATION MEASUREMENTS, vol.106, pp.632-637, 2017 (Journal Indexed in SCI)

- **Photo-transferred thermoluminescence of shallow traps in beta-irradiated BeO ceramics**

Isik M., BULUR E., Gasanly N. JOURNAL OF LUMINESCENCE, vol.187, pp.290-294, 2017 (Journal Indexed in SCI)

- **Time-resolved OSL studies of YAlO<sub>3</sub>:Mn<sup>2+</sup> crystals**

Zhdachevskii Y., LUCHECHKO A., MARABA D., MARTYNYUK N., GLOWACKI M., BULUR E., UBIZSKII S., BERKOWSKI M., SUCHOCKI A. RADIATION MEASUREMENTS, vol.94, pp.18-22, 2016 (Journal Indexed in SCI)

- **Plasma Generation in a Gas Discharge System With Irradiated Porous Zeolite**

Ozturk S., Ozner M., BULUR E., Salamov B. G. IEEE TRANSACTIONS ON PLASMA SCIENCE, vol.43, pp.1839-1844, 2015 (Journal Indexed in SCI)

- **Low temperature thermoluminescence of quaternary thallium sulfide Tl<sub>4</sub>InGa<sub>3</sub>S<sub>8</sub>**

DELICE S., Isik M., BULUR E., Gasanly N. INDIAN JOURNAL OF PHYSICS, vol.89, pp.571-576, 2015 (Journal Indexed in SCI)

- **Thermoluminescence in gallium sulfide crystals: an unusual heating rate dependence**

DELICE S., BULUR E., Gasanly N. PHILOSOPHICAL MAGAZINE, vol.95, pp.998-1006, 2015 (Journal Indexed in SCI)

- **Anomalous heating rate dependence of thermoluminescence in Ti<sub>2</sub>GaInS<sub>4</sub> single crystals**

DELICE S., BULUR E., Gasanly N. JOURNAL OF MATERIALS SCIENCE, vol.49, pp.8294-8300, 2014 (Journal Indexed in SCI)

- **More on the TR-OSL signal from BeO ceramics**

Bulur E. RADIATION MEASUREMENTS, vol.66, pp.12-20, 2014 (Journal Indexed in SCI)

- **Time-resolved OSL of natural zircon: A preliminary study**

BULUR E., KARTAL E., Sarac B. E. RADIATION MEASUREMENTS, vol.60, pp.46-52, 2014 (Journal Indexed in SCI)

- **Time-resolved OSL studies on BeO ceramics**

BULUR E., Sarac B. E. RADIATION MEASUREMENTS, vol.59, pp.129-138, 2013 (Journal Indexed in SCI)

- **TL and TSC studies on TiGaSe<sub>2</sub> layered single crystals**

Isik M., BULUR E., Gasanly N. JOURNAL OF LUMINESCENCE, vol.144, pp.163-168, 2013 (Journal Indexed in SCI)

- **Thermoluminescence properties of Ti<sub>2</sub>Ga<sub>2</sub>S<sub>3</sub>Se layered single crystals**

DELICE S., Isik M., BULUR E., Gasanly N. JOURNAL OF APPLIED PHYSICS, vol.113, 2013 (Journal Indexed in SCI)

- **Low-temperature thermoluminescence in TiGaS<sub>2</sub> layered single crystals**

Isik M., BULUR E., Gasanly N. JOURNAL OF LUMINESCENCE, vol.135, pp.60-65, 2013 (Journal Indexed in SCI)

- **Low-temperature thermoluminescence in layered structured Ga<sub>0.75</sub>In<sub>0.25</sub>Se single crystals**

Isik M., BULUR E., Gasanly N. JOURNAL OF ALLOYS AND COMPOUNDS, vol.545, pp.153-156, 2012 (Journal Indexed in SCI)

- **Optically stimulated luminescence from BeO ceramics: An LM-OSL study**  
BULUR E., YELTIK A.  
RADIATION MEASUREMENTS, vol.45, pp.29-34, 2010 (Journal Indexed in SCI)
- **PRELIMINARY OSL STUDIES ON BEIGE SEPIOLITES**  
Bulur E.  
RADIATION PROTECTION DOSIMETRY, vol.131, pp.390-393, 2008 (Journal Indexed in SCI)
- **Photo-transferred luminescence from BeO ceramics**  
Bulur E.  
RADIATION MEASUREMENTS, vol.42, pp.334-340, 2007 (Journal Indexed in SCI)
- **Experimental determination of the dose deposition profile of a Sr-90 beta source**  
GAZA R., Bulur E., McKeever S. W. S. , Soares C. G.  
RADIATION PROTECTION DOSIMETRY, vol.120, pp.33-37, 2006 (Journal Indexed in SCI)
- **An optical fiber radiation sensor for remote detection of radiological materials**  
Klein D., Yukihara E., Bulur E., Durham J., Akselrod M., McKeever S.  
IEEE SENSORS JOURNAL, vol.5, pp.581-588, 2005 (Journal Indexed in SCI)
- **Recent advances in dosimetry using the optically stimulated luminescence of Al<sub>2</sub>O<sub>3</sub> : C**  
MCKEEVER S., BLAIR M., Bulur E., Gaza R., Gaza R., KALCHGRUBER R., KLEIN D., YUKIHARA E.  
RADIATION PROTECTION DOSIMETRY, vol.109, pp.269-276, 2004 (Journal Indexed in SCI)
- **Photo-stimulated luminescence of calcium co-doped BaFBr : Eu<sup>2+</sup> x-ray storage phosphors**  
SCHLAPP M., Bulur E., VON SEGGERN H.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.36, pp.103-108, 2003 (Journal Indexed in SCI)
- **Electrons in feldspar I: on the wavefunction of electrons trapped at simple lattice defects**  
POOLTON N., Wallinga J., MURRAY A., Bulur E., Botter-Jensen L.  
PHYSICS AND CHEMISTRY OF MINERALS, vol.29, pp.210-216, 2002 (Journal Indexed in SCI)
- **ENHANCEMENTS IN LUMINESCENCE MEASUREMENTTECHNIQUES**  
BOTTERJENSEN L., BULUR E., MURRAY A., POOLTON N.  
Radiation Protection Dosimetry, vol.101, pp.119-124, 2002 (Journal Indexed in SCI Expanded)
- **LM-OSL from single grains of quartz: A preliminary study**  
Bulur E., Duller G., SOLONGO S., Bøtter-Jensen L., Murray A.  
Radiation Measurements, vol.35, pp.79-85, 2002 (Journal Indexed in SCI)
- **A multi-spectroscopic study of luminescence sensitivity changes in natural quartz induced by high-temperature annealing**  
SCHILLES T., POOLTON N., Bulur E., Botter-Jensen L., MURRAY A., Smith G., RIEDIP., WAGNER G.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.34, pp.722-731, 2001 (Journal Indexed in SCI)
- **An automated system for the analysis of variable temperature radioluminescence**  
Poolton N., Bulur E., Wallinga J., Botter-Jensen L., Murray A., WILLUMSEN F.  
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.179, pp.575-584, 2001 (Journal Indexed in SCI)
- **Frequency modulated pulsed stimulation in optically stimulated luminescence**  
Bulur E., Bøtter-Jensen L., Murray A.  
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.179, pp.151-159, 2001 (Journal Indexed in SCI)
- **LM-OSL signals from some insulators: An analysis of the dependency of the detrapping probability on stimulation light intensity**  
Bulur E., Bøtter-Jensen L., Murray A.  
Radiation Measurements, vol.33, pp.715-719, 2001 (Journal Indexed in SCI)
- **Advances in luminescence instrument systems**  
Bøtter-Jensen L., Bulur E., Duller G., Murray A.  
Radiation Measurements, vol.32, pp.523-528, 2000 (Journal Indexed in SCI)
- **Optically stimulated luminescence from quartz measured using the linear modulation technique**  
Bulur E., Bøtter-Jensen L., Murray A.  
Radiation Measurements, vol.32, pp.407-411, 2000 (Journal Indexed in SCI)
- **Use of the LM-OSL technique for the detection of partial bleaching in quartz**

Agersnap Larsen N., Bulur E., Bøtter-Jensen L., McKeever S.

Radiation Measurements, vol.32, pp.419-425, 2000 (Journal Indexed in SCI)

- **Luminescence sensitivity changes in natural quartz induced by high temperature annealing: a high frequency EPR and OSL study**

Poolton N., SMITH G., RIEDI P., Bulur E., Botter-Jensen L., MURRAY A., ADRIAN M.

JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.33, pp.1007-1017, 2000 (Journal Indexed in SCI)

- **Simple transformation for converting CW-OSL curves to LM-OSL curves**

Bulur E.

Radiation Measurements, vol.32, pp.141-145, 2000 (Journal Indexed in SCI)

- **Beta Dosimetry Using Thin Layer  $\text{Al}_2\text{O}_3$  C TL Detectors**

GÖKSU H. Y. , BULUR E., WAHL W.

Radiation Protection Dosimetry, vol.84, pp.451-455, 1999 (Journal Indexed in SCI Expanded)

- **Infrared (IR) stimulated luminescence from feldspars with linearly increasing excitation light intensity**

Bulur E., Göksu H.

Radiation Measurements, vol.30, pp.505-512, 1999 (Journal Indexed in SCI)

- **Phototransferred thermoluminescence from  $\alpha$ - $\text{Al}_2\text{O}_3$ :C using blue light emitting diodes**

Bulur E., Göksu H.

Radiation Measurements, vol.30, pp.203-206, 1999 (Journal Indexed in SCI Expanded)

- **Characteristic features of an ionization system with semiconducting cathode**

SALAMOV B., ALTINDAL Ş., ÖZER M., Colakoglu K., Bulur E.

EUROPEAN PHYSICAL JOURNAL-APPLIED PHYSICS, vol.2, pp.267-273, 1998 (Journal Indexed in SCI)

- **OSL from BeO ceramics: New observations from an old material**

Bulur E., Göksu H.

Radiation Measurements, vol.29, pp.639-650, 1998 (Journal Indexed in SCI)

- **Infrared (IR) stimulated luminescence from  $\alpha$  -  $\text{Al}_2\text{O}_3$ :C**

Bulur E., Göksu H., WAHL W.

Radiation Measurements, vol.29, pp.625-638, 1998 (Journal Indexed in SCI Expanded)

- **IR stimulated luminescence from ZnS and SrS based storage phosphors A re examination with linear modulation technique**

BULUR E., GÖKSU H. Y.

Physica Status Solidi A-Applications And Materials Science, vol.161, pp.9-10, 1997 (Journal Indexed in SCI Expanded)

- **Pulsed optically stimulated luminescence from  $\alpha$ - $\text{Al}_2\text{O}_3$ :C using green light emitting diodes**

Bulur E., Göksu H.

Radiation Measurements, vol.27, pp.479-488, 1997 (Journal Indexed in SCI Expanded)

- **Computer analysis of pendulum motion: An alternative way of collecting experimental data**

Bulur E., ANILTURK S., ÖZER A.

AMERICAN JOURNAL OF PHYSICS, vol.64, pp.1333-1337, 1996 (Journal Indexed in SCI)

- **Thermoluminescence properties of fluorescent materials used in commercial lamps**

BULUR E., ALBRECHT W., GÖKSU H. Y. , MARCUS F., ÖZER A.

Radiation Protection Dosimetry, vol.65, pp.373-379, 1996 (Journal Indexed in SCI Expanded)

- **An alternative technique for optically stimulated luminescence (OSL) experiment**

BULUR E.

Radiation Measurements, vol.26, pp.701-709, 1996 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **Detection of gamma irradiated spices with OSL method and its reliability**

AYGÜN Ş. G. , BOZOĞLU T. F. , BULUR E.

Natural Science and Discovery, vol.2, pp.11-19, 2016 (Refereed Journals of Other Institutions)

## Refereed Congress / Symposium Publications in Proceedings

- **Systematic development of an OSL dosimeter based on BeO**  
ALTUNAL V., Güçkan V., Özdemir A., BULUR E., YEĞİNGİL Z.  
5th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2018), Nevşehir, Turkey, 4 - 06 October 2018
- **OSL properties of BeO:Al Ceramics**  
ALTUNAL V., Özdemir A., Güçkan V., BULUR E., YEĞİNGİL Z.  
11th International Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07 September 2018
- **Optically Stimulated Luminescence (OSL) from BeO:Al,Ca Ceramics Synthesized via Sol-Gel Method**  
ALTUNAL V., Güçkan V., Özdemir A., BULUR E., YEĞİNGİL Z.  
11st International Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07 September 2018
- **Luminescence properties of Calcium doped BeO Ceramics**  
Özdemir A., ALTUNAL V., Güçkan V., BULUR E., YEĞİNGİL Z.  
11th International Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07 September 2018
- **Studies of Mn<sup>2+</sup>-doped MgGa<sub>2</sub>O<sub>4</sub> phosphor for TL and OSL dosimetry**  
LUCHECHKO A., ZHYDACHEVSKYY Y., MARABA D., UBİZSKII S., BULUR E., KRAVETS O.  
PS-IWASOM'xx2017, 9 - 14 July 2017
- **Unusual heating rate dependence of thermoluminescence glow peaks of GaS single crystals.**  
DELİCE S., HASANLİN., BULUR E.  
17th International Balkan Workshop on Applied Physics and Materials Science, 11 - 14 July 2017
- **Pulsed OSL readout of detectors based on YAl<sub>3</sub>:Mn crystals**  
ZHYDACHEVSKYY Y., LUCHECHKO A., MARABA D., MARTYNYUK N., GLOWACKI M., BULUR E., UBİZSKII S., BERKOWSKI M., SUCHOCKI A.  
RAD 2017, Budva, KARADAĞ, 12 - 16 June 2017
- **Time Resolved Optically Stimulated Luminescence From Phosphors with Long Emission Lifetimes**  
BULUR E.  
LUMIDOZ 10 10th International Conference on Luminescence and ESR Dosimetry, Adana, Turkey, 5 - 07 September 2016
- **Structural and Luminescence Characteristics of Orange Emitting Persistent Phosphor Based on SrS**  
KARSU E. C. , YILDIRIM S., KARALI T., BULUR E.  
Lumidoz 10 10th International Conference on Luminescence and ESR Dosimetry, Adana, Turkey, 5 - 07 September 2016
- **Optically stimulated luminescence from CaF<sub>2</sub> Mn at high temperatures**  
MARABA D., BULUR E.  
Solid State Dosimetry 18 Munich-Germany, Munich, Germany, 3 - 08 July 2016
- **Design and construction of an automated OSL Reader with open source software and hardware**  
Maraba D., BULUR E.  
Solid State Dosimetry 18 Munich-Germany, Munich, Germany, 3 - 08 July 2016
- **Time resolved luminescence studies of Mn<sup>2+</sup> ions in YAlO<sub>3</sub>**  
Zhydachevskii Y., Luchechko A., Maraba D., Martynyuk N., Glowacki M., BULUR E., Ubizskii S., Berkowski M., Suchocki A.  
Solid State Dosimetry 18 Munich-Germany, Munich, Germany, 3 - 08 July 2016
- **OSL from BeO ceramics Characteristics of the TR OSL signal**  
BULUR E.  
Solid State Dosimetry 18 Munich-Germany, Munich, Germany, 3 - 08 July 2016
- **Optically stimulated luminescence properties and characteristic analysis of beryllium oxide nano phosphors synthesized using sol gel method**  
Altunal V., YEĞİNGİL Z., Depçi T., Özdemir A., Güçkan V., Yan Y., NUR N., BULUR E.  
Solid State Dosimetry 18 Munich-Germany, Munich, Germany, 3 - 08 July 2016

## Supported Projects

BULUR E., Project Supported by Higher Education Institutions, Spektral-Zaman Tanımlı Osl Sistemi Geliştirilmesi, 2009 - Continues

HASANLI N., Delice S., Işık M., KÖKTEN H., BULUR E., Project Supported by Higher Education Institutions, Y2O3 nanoparçacıkların termolüminesans özelliklerinin incelenmesi, 2018 - 2019

HASANLI N., Delice S., Işık M., KÖKTEN H., BULUR E., Project Supported by Higher Education Institutions, GaInSe ince filmlerin büyütülmesi ve elektriksel özelliklerinin incelenmesi, 2017 - 2017

HASANLI N., Işık M., KÖKTEN H., BULUR E., Project Supported by Higher Education Institutions, GaS(x)Se(1-x) yarıiletken kristallerinin yapısal ve optiksel özelliklerinin incelenmesi, 2016 - 2016

HASANLI N., KÖKTEN H., BULUR E., Project Supported by Higher Education Institutions, Sol-jel yöntemi ile üretilen ZnO nanokristal ve ince filmlerin yapısal, optiksel ve termolüminesans özelliklerinin incelenmesi, 2015 - 2015

HASANLI N., BULUR E., Project Supported by Higher Education Institutions, BeO malzemesinde sıg tuzak merkezlerinin termolüminesans ölçümleri ile belirlenmesi, 2014 - 2014

HASANLI N., BULUR E., Project Supported by Higher Education Institutions, TlInS2 ve TlGaSe2 yarıiletken kristallerinde düşük sıcaklıklarda termolüminesans ölçümleri, 2013 - 2013

## Activities in Scientific Journals

Radiation Measurements, Committee Member, 2016 - Continues

## Scientific Refereeing

RADIATION MEASUREMENTS, SCI Journal, April 2020

RADIATION MEASUREMENTS, SCI Journal, February 2020

## Tasks In Event Organizations

Bulur E., Yazıcı A. N. , LÜMİDOZ 11, Scientific Congress, Gaziantep, Turkey, Eylül 2018

Bulur E., Lumidoz 10, Scientific Congress, Adana, Turkey, Eylül 2017

Bulur E., Lumidoz 8, Scientific Congress, Ankara, Turkey, Ağustos 2014

## Invited Congress and Symposium Activities

Lumidoz 10, Invited Speaker, Adana, Turkey, 2016

SSD 18, Invited Speaker, Munich, Germany, 2016

SSD 18 Solid State Dosimetry, Attendee, Munich, Germany, 2016

## Citations

Total Citations (WOS):1516

h-index (WOS):19