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Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2016 - 2022

Postgraduate, Cukurova University, Fen Bilimleri, Fizik, Turkey 2013 - 2016

Undergraduate Double Major, Cukurova University, Fen Edebiyat Fakültesi, Matematik, Turkey 2010 - 2013

Undergraduate, Cukurova University, Fen Edebiyat Fakültesi, Fizik, Turkey 2008 - 2013

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Development of BeO Ceramic OSL Dosimeters: Their Synthesis, Sintering and Luminescence Studies, Cukurova University, Fen Bilimleri Enstitüsü, 2020

Postgraduate, BeO OSL DOSIMETER: ITS SYNTHESIS AND LUMINESCENCE MECHANISMS, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, 2016

Research Areas

Physics, Nuclear physics, Natural Sciences

Academic Titles / Tasks

Research Assistant, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

1. Luminescence properties of SrB6O10:Ce,Gd phosphor for applications in OSL dosimetry and lighting

Ozdemir A., ALTUNAL V., Guckan V., Kurt K., Kavgaci M., Takci K., Yigit O., Yegingil Z.

Journal of Luminescence, vol.273, 2024 (SCI-Expanded)

- II. **Investigation of the electronic band gap tuning by Si doping on BeO using UV–VIS spectroscopy and density functional theory**
Özcan M., Altunal V., Yeğingil Z.
MATERIALS TODAY COMMUNICATIONS, vol.39, pp.109328, 2024 (SCI-Expanded)
- III. **Luminescence properties of Ce and Be-doped CaAl₁₂O₁₉ for dosimetric and light-emitting applications**
ALTUNAL V., Ozdemir A., Kurt K., Yigit O., Guckan V., Isik B., Yegingil Z.
Journal of Alloys and Compounds, vol.985, 2024 (SCI-Expanded)
- IV. **Nanostructured TLDs: Studying the impact of crystalline size on the Thermoluminescence glow-curve shape and electron trapping parameters**
Tsoutsoumanos E., Saleh M., P.G. Konstantinidis., Altunal V., Sahare P. D., Yeğingil Z., T. Karakasidis., Kitis., Polymeris G.
RADIATION PHYSICS AND CHEMISTRY, vol.212, pp.111067, 2023 (SCI-Expanded)
- V. **Thermoluminescence and optically stimulated luminescence properties of NaMgF₃:Dy,Eu synthesized by hydrothermal method and DFT calculations for the bandgap**
Guckan V., Bokhari S., Altunal V., Varan N. E., Kurt K., Yildiz I., Gao W., Yegingil Z.
MATERIALS RESEARCH BULLETIN, vol.167, pp.112373, 2023 (SCI-Expanded)
- VI. **Studies of OSL properties of alkali- and rare earth-doped BeO based novel dosimeters for applications in external beam radiotherapy**
Abusaid W., Altunal V., Akdeniz Y., Güçkan V., Ceyran G., Khandaker., Yeğingil Z.
RADIATION PHYSICS AND CHEMISTRY, vol.212, pp.111136, 2023 (SCI-Expanded)
- VII. **Experimental and Monte Carlo study of energy response of BEO-based OSL detectors within photon energy range up to 15 MeV**
Chumak V., Bakhanova E., Altunal V., Lawrence Y., Dubinski S., Yu Y., Liao L., Yeğingil Z.
RADIATION PROTECTION DOSIMETRY, vol.199, no.15-16, pp.1829-1833, 2023 (SCI-Expanded)
- VIII. **Structural, mechanical, dielectric and defect properties of Eu-doped BeO ceramics: A computational and experimental approach**
Fonseca D. P. D., Otsuka A., Rezende M. V. D. S., Santos J. L., Altunal V., Souza A. S., Yeğingil Z., Lima H.
CERAMICS INTERNATIONAL, vol.49, no.18, pp.29647-29658, 2023 (SCI-Expanded)
- IX. **Effects of oxygen vacancies on luminescence characteristics of BeO ceramics**
Altunal V., Guckan V., Yegingil Z.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.938, 2023 (SCI-Expanded)
- X. **Luminescence properties of Tb and Eu activated CaSO₄ phosphor**
Guckan V., Bereket S., Altunal V., Abusaid W., Yegingil Z.
RADIATION PHYSICS AND CHEMISTRY, vol.203, 2023 (SCI-Expanded)
- XI. **Structural and thermoluminescence properties of borate mineral ulexite**
Altunal V., Mesto A., Guckan V., Kavgaci M., Ozdemir A., Abusaid W., Kurt K., Yegingil Z.
JOURNAL OF LUMINESCENCE, vol.251, 2022 (SCI-Expanded)
- XII. **Development of BeO:Na,Yb,Dy ceramics for optically stimulated luminescence dosimetry**
Altunal V., Jain M., Hayat S., Guckan V., Yegingil Z.
RADIATION MEASUREMENTS, vol.158, 2022 (SCI-Expanded)
- XIII. **TL and OSL characteristics of the fluoroperovskite KMgF₃:Eu,Yb, Li for dosimetry applications**
Guckan V., Altunal V., Polymeris G. S., Ozdemir A., Zhydachevskyy Y., Yegingil Z.
JOURNAL OF LUMINESCENCE, vol.251, 2022 (SCI-Expanded)
- XIV. **Luminescence characterization of Ce and Gd doped MgB₄O₇ phosphors**
Altunal V., Abusaid W., Guckan V., Özdemir A., Yeğingil Z.
JOURNAL OF LUMINESCENCE, vol.246, pp.118815, 2022 (SCI-Expanded)
- XV. **Impact of Li concentration in KMgF₃:Eu,Yb fluoroperovskite on structure and luminescence properties**

- Güçkan V., Kaya D., Altunal V., Ekicibil A., Karadağ F., Özdemir A., Yeğingil Z.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.902, pp.163810, 2022 (SCI-Expanded)
- XVI. **Three newly developed BeO-based OSL dosimeters**
Altunal V., Guckan V., Ozdemir A., Zydhachevskyy Y., Lawrence Y., Yu Y., Yegingil Z.
JOURNAL OF LUMINESCENCE, vol.241, 2022 (SCI-Expanded)
- XVII. **Thermoluminescence dosimetry properties of Tm³⁺ doped fluoroeplasilite Cs₂NaYF₆ crystals synthesized under hydrothermal conditions**
Khaidukov N., Makhov V., Guckan V., Altunal V., Ozdemir A., Kurt K., Abusaid W., Yeğingil Z.
JOURNAL OF LUMINESCENCE, vol.239, 2021 (SCI-Expanded)
- XVIII. **A systematic study on luminescence characterization of lanthanide-doped BeO ceramic dosimeters**
Altunal V., Guckan V., Ozdemir A., Ekicibil A., Karadağ F., Yegingil I., Zydhachevskyy Y., Yeğingil Z.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.876, 2021 (SCI-Expanded)
- XIX. **Luminescence of Ce³⁺ and Li⁺ co-doped MgO synthesized using solid-state reaction method**
Guckan V., Bokhari S. W., Altunal V., Ozdemir A., Gao W., Yeğingil Z.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.503, pp.53-61, 2021 (SCI-Expanded)
- XX. **Use of infrared light-emitting diodes to determine dosimetric characteristics of MgO:Tb,Gd,Li via the optically stimulated luminescence technique**
Guckan V., Altunal V., Ozdemir A., Kurt K., Yeğingil Z.
JOURNAL OF LUMINESCENCE, vol.235, 2021 (SCI-Expanded)
- XXI. **Luminescence characteristics of newly-developed MgB₄O₇:Ce³⁺, Na⁺ phosphor as an OSL dosimeter**
Ozdemir A., Altunal V., Guckan V., Kurt K., Yeğingil Z.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.865, 2021 (SCI-Expanded)
- XXII. **Thermoluminescence in MgB₄O₇:Pr,Dy dosimetry powder synthesized by solution combustion synthesis method**
Ozdemir A., Guckan V., Altunal V., Kurt K., Yegingil Z.
JOURNAL OF LUMINESCENCE, vol.230, 2021 (SCI-Expanded)
- XXIII. **Cu, Li and K activated MgO: A metal oxide thermoluminescent synthesized using solution combustion technique for dosimetry**
Guckan V., Altunal V., Ozdemir A., Kurt K., Yegingil Z.
JOURNAL OF LUMINESCENCE, vol.230, 2021 (SCI-Expanded)
- XXIV. **Investigation of luminescence properties of BeO ceramics doped with metals for medical dosimetry**
Altunal V., Guckan V., Özdemir A. C., Kurt K., Ekicibil A., Yeğingil Z.
OPTICAL MATERIALS, vol.108, 2020 (SCI-Expanded)
- XXV. **A calcination study on BeO ceramics for radiation dosimetry**
ALTUNAL V., GUCKAN V., ÖZDEMİR A. C., YEĞİNGİL Z.
Materials Research Bulletin, vol.130, 2020 (SCI-Expanded)
- XXVI. **Optically stimulated luminescence of MgO:Na,Li phosphor prepared using solution combustion method**
Guckan V., ALTUNAL V., ÖZDEMİR A. C., YEĞİNGİL Z.
Journal of Alloys and Compounds, vol.835, 2020 (SCI-Expanded)
- XXVII. **A newly developed OSL dosimeter based on beryllium oxide: BeO:Na,Dy,Er**
ALTUNAL V., GUCKAN V., YU Y., DICKER A., YEĞİNGİL Z.
Journal of Luminescence, vol.222, 2020 (SCI-Expanded)
- XXVIII. **Calcination effects on europium doped zinc oxide as a luminescent material synthesized via sol-gel and precipitation methods**
Guckan V., Altunal V., Ozdemir A., Tsiurma V., Zhydachevskyy Y., Yegingil Z.
Journal of Alloys and Compounds, vol.823, 2020 (SCI-Expanded)
- XXIX. **Radiation dosimeter utilizing optically stimulated luminescence of BeO:Na,Tb,Gd ceramics**
Altunal V., Guckan V., Ozdemir A., Yegingil Z.

Journal of Alloys and Compounds, vol.817, 2020 (SCI-Expanded)

- XXX. **Luminescence characteristics of Al-and Ca-doped BeO obtained via a sol-gel method**
Altunal V., Guckan V., Ozdemir A., Can N., Yegingil Z.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.131, pp.230-242, 2019 (SCI-Expanded)
- XXXI. **Studies of blue light induced phototransferred thermoluminescence in CaSO₄:Mg**
Guckan V., Ozdemir A., Altunal V., Yegingil I., Yegingil Z.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.448, pp.31-38, 2019 (SCI-Expanded)
- XXXII. **Effect of sintering temperature on dosimetric properties of BeO ceramic pellets synthesized using precipitation method**
ALTUNAL V., GUCKAN V., ÖZDEMİR A. C., SOTELO A., YEĞİNGİL Z.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.441, pp.46-55, 2019 (SCI-Expanded)
- XXXIII. **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 (SCI-Expanded)
- XXXIV. **Characterization and some fundamental features of Optically Stimulated Luminescence measurements of silver activated lithium tetraborate**
ÖZDEMİR A. C., ALTUNAL V., Guckan V., Can N., Kurt K., Yegingil I., YEĞİNGİL Z.
Journal of Luminescence, vol.202, pp.136-146, 2018 (SCI-Expanded)
- XXXV. **Radiometric measurement of lignite coal and its by-products and assessment of the usability of fly ash as raw materials in Turkey**
Turhan Ş., GÖREN E., Garad A. M., Altlkulaç A., Kurnaz A., Duran C., Hançerlioğulları A., ALTUNAL V., GÜÇKAN V., ÖZDEMİR A.
Radiochimica Acta, vol.106, no.7, pp.611-621, 2018 (SCI-Expanded)
- XXXVI. **Thermoluminescence properties of Li₂B₄O₇:Cu, B phosphor synthesized using solution combustion technique**
ÖZDEMİR A. C., ALTUNAL V., Kurt K., Depci T., YU Y., LAWRENCE Y., Nur N., GUCKAN V., YEĞİNGİL Z.
RADIATION PHYSICS AND CHEMISTRY, vol.141, pp.352-362, 2017 (SCI-Expanded)
- XXXVII. **Studying CaSO₄:Eu as an OSL phosphor**
Güçkan V., Altunal V., Nur N., Depci T., ÖZDEMİR A., Kurt K., Yu Y., Yegingil I., YEĞİNGİL Z.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.407, pp.145-154, 2017 (SCI-Expanded)
- XXXVIII. **Thermoluminescence properties of non-stoichiometric Li₂Si₂O₅ synthesized from natural amethyst quartz**
Nur N., GUCKAN V., Kizilkaya N., Depci T., Ahmedova C., ÖZDEMİR A. C., ALTUNAL V., YEĞİNGİL Z.
JOURNAL OF LUMINESCENCE, vol.179, pp.366-371, 2016 (SCI-Expanded)
- XXXIX. **Determination of dosimetric properties of MgO doped natural amethyst samples**
Nur N., GUCKAN V., Kizilkaya N., Depci T., Ahmedova C., YÜCEL A., ÖZDEMİR A. C., ALTUNAL V., Koc V., YEĞİNGİL Z.
APPLIED RADIATION AND ISOTOPES, vol.116, pp.150-156, 2016 (SCI-Expanded)
- XL. **Thermoluminescence study of Mn doped lithium tetraborate powder and pellet samples synthesized by solution combustion synthesis**
ÖZDEMİR A. C., YEĞİNGİL Z., Nur N., Kurt K., TÜKEN T., Depci T., TANSUĞ G., ALTUNAL V., GUCKAN V., SIĞIRCIK G., et al.
JOURNAL OF LUMINESCENCE, vol.173, pp.149-158, 2016 (SCI-Expanded)
- XLI. **Study of thermoluminescence response of purple to violet amethyst quartz from Balıkesir, Turkey**
Nur N., Yegingil Z., Topaksu M., Kurt K., Doğan T., Sarıgül N., Yüksel M., Altunal V., Özdemir A. C., Guckan V., et al.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.358, pp.6-15, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Structural and Luminescence Characterization of LiAlO₂ Ceramics Synthesized by Sol-Gel Technique**
ALTUNAL V.
Adıyaman Üniversitesi Fen Bilimleri Dergisi, vol.14, no.1, pp.51-63, 2024 (Peer-Reviewed Journal)
- II. **The Effect of Calcination Conditions on Luminescence Efficiency of BeO Ceramics Synthesized Using Co-Precipitation Method**
ALTUNAL V., Güçkan V., ÖZDEMİR A., YEĞİNGİL Z.
Journal of Investigations on Engineering Technology, vol.2, no.2, pp.40-44, 2019 (Peer-Reviewed Journal)
- III. **Structure Characterization and Luminescence Studies of MgO:Li Calcinated at Different Temperatures via Solution Combustion and Sol-Gel Methods**
Güçkan V., ALTUNAL V., ÖZDEMİR A., YEĞİNGİL Z.
Journal of Investigations on Engineering and Technology, vol.2, no.2, pp.45-48, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Optically Stimulated Luminescence of MgB₄O₇ Doped with Ce³⁺ and Gd³⁺**
Abusaïd W., Altunal V., Özdemir A., Güçkan V., Ekicibil A., Karadağ F., Yeğingil Z.
International Conference on Oxide Materials for Electronic Engineering - fabrication, properties and applications, Lviv, Ukraine, 28 September - 02 October 2021, pp.120
- II. **Luminescence Characterization of BeO:Na5%,Ce0.01%,Er0.01% Ceramic**
Altunal V., Güçkan V., Özdemir A., Abusaïd W., Ekicibil A., Karadağ F., Yeğingil Z.
International Conference on Oxide Materials for Electronic Engineering -fabrication, properties and applications, Lviv, Ukraine, 28 September - 02 October 2021, pp.104
- III. **Developing new MgO luminophors with different dopants for dosimetry applications and determination of ESR properties**
Güçkan V., ALTUNAL V., ÖZDEMİR A., ERÜNAL E., YEĞİNGİL Z.
6th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2019), Niğde, Turkey, 16 - 18 October 2019
- IV. **A Study of BeO Luminophosphores Synthesized with Different Calcination Conditions**
ALTUNAL V., ÖZDEMİR A., Güçkan V., YEĞİNGİL Z.
6th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2019), Niğde, Turkey, 16 - 18 October 2019
- V. **Developing new MgO luminophors with different dopants for dosimetry applications and determination of ESR properties**
Güçkan V., ALTUNAL V., Özdemir A., ERÜNAL E., YEĞİNGİL Z.
6th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2019), Nevşehir, Turkey, 16 - 18 October 2019, pp.1-4
- VI. **Blue light sensitivity of calcium sulfate doped with rare earth elements using luminescence technique**
Güçkan V., ALTUNAL V., ÖZDEMİR A., YEĞİNGİL Z.
5th International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Amasya, Turkey, 2 - 04 May 2019
- VII. **Development of Lithium Tetraborate (Li₂B₄O₇:Ag,Eu) Compound Doped with Silver (Ag) and Europium (Eu) as a Luminescence Dosimeter Using TL-OSL Technique**
ÖZDEMİR A., ALTUNAL V., Güçkan V., YEĞİNGİL Z.
International Symposium on Boron, Nevşehir, Turkey, 17 - 19 April 2019
- VIII. **Systematic development of an OSL dosimeter based on BeO**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., BULUR E., YEĞİNGİL Z.
5th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2018),

Nevşehir, Turkey, 4 - 06 October 2018

- IX. **A preliminary study of TL and OSL properties of MgO doped with Gd and Tb**
GÜÇKAN V., ÖZDEMİR A., ALTUNAL V., YEĞİNGİL Z.
5th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2018),
Nevşehir, Turkey, 4 - 06 October 2018
- X. **Annealing Effect on Deep Traps as PTTL Sources of CaSO₄:Mg**
GÜÇKAN V., ALTUNAL V., ÖZDEMİR A., YEĞİNGİL Z.
11st Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XI. **Optically Stimulated Luminescence (OSL) from BeO:Al,Ca Ceramics Synthesized via Sol-Gel Method**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., BULUR E., YEĞİNGİL Z.
11st Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XII. **TL-OSL Correlation in CaSO₄:Mg dosimetric phosphor**
GÜÇKAN V., ÖZDEMİR A., ALTUNAL V., YEĞİNGİL Z.
11st Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XIII. **Luminescence properties of Calcium doped BeO Ceramics**
ÖZDEMİR A., ALTUNAL V., GÜÇKAN V., BULUR E., YEĞİNGİL Z.
11th Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XIV. **The studying kinetic parameters of thermoluminescence glow peaks-from Li₂B₄O₇:Ag,Gd phosphor**
ÖZDEMİR A., POLYMERİS G., ŞAHİNER E., AŞLAR E., GÜÇKAN V., ALTUNAL V., MERİÇ N., YEĞİNGİL Z.
11st Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XV. **OSL properties of BeO:Al Ceramics**
ALTUNAL V., ÖZDEMİR A., GÜÇKAN V., BULUR E., YEĞİNGİL Z.
11th Internatinal Conferences on Luminescence and ESR Dosimetry (LUMIDOZ11), Gaziantep, Turkey, 5 - 07
September 2018
- XVI. **OSL Properties Of BeO:Na,Gd,Tb Synthesized Using Precipitation Method**
ALTUNAL V., ÖZDEMİR A., GÜÇKAN V., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June
2018
- XVII. **OSL Response of BeO pellets doped with Al, Ca dopants and various Ln co-dopants**
GÜÇKAN V., ÖZDEMİR A., ALTUNAL V., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June
2018
- XVIII. **Temperature dependence of OSL signals from BeO ceramic pellets synthesized using Sol-Gel and
Precipitation Methods**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June
2018
- XIX. **Synthesis and Luminescence Characterization of Non-stoichiometric Li₂B₄O₇:Ag,Tb**
ÖZDEMİR A., ALTUNAL V., GÜÇKAN V., KURT K., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June
2018
- XX. **Optically Stimulated Luminescence (OSL) and Thermoluminescence (TL) Properties of Ag₁, Tb₃ and
Gd₃ Doped Li₂B₄O₇ Phosphor**
ÖZDEMİR A., GÜÇKAN V., ALTUNAL V., KURT K., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June
2018

- XXI. **Preparation of BeO ceramic pellets doped with Mg dopants and different co-dopants for OSL dosimetry**
GÜÇKAN V., ALTUNAL V., ÖZDEMİR A., YEĞİNGİL Z.
International Conferences on Physical Chemistry and Functional Materials (PCFM18), Elazığ, Turkey, 19 - 21 June 2018
- XXII. **ESTIMATION of THE TRAPPING PARAMETERS of Li₂B₄O₇:Ag,Gd PHOSPHOR by FGC, ID AND CGCD METHODS**
ÖZDEMİR A., ŞAHİNER E., POLYMERİS G., AŞLAR E., GÜÇKAN V., ALTUNAL V., MERİÇ N., YEĞİNGİL Z.
Nükleer Bilimler Lisansüstü Öğrenci Kongresi, Ankara, Turkey, 11 - 13 May 2018
- XXIII. **Luminescence Spectrum Of ZrO₂ Doped Gd₃ Under X-ray Excitation At Room Temperature.**
KURT K., YALAZ E., YILMAZ S., ÖZDEMİR A., ALTUNAL V., GÜÇKAN V., YEĞİNGİL Z.
15th International Conference On Luminescence And Electron Spin Resonance Dating, Cape-Town, South Africa, 11 - 15 September 2017
- XXIV. **A Study For The Estimation Of Osl Trap Parameters In Li₂B₄O₇:ag,gd Phosphor**
ÖZDEMİR A., KURT K., GÜÇKAN V., ALTUNAL V., CAVDAR T., YEĞİNGİL Z.
15th International Conference On Luminescence And Electron Spin Resonance Dating, Cape-Town, South Africa, 11 - 15 September 2017
- XXV. **Effect Of Sintering Temperature On Dosimetric Properties Of Beo Ceramic Pellets Synthesized Using Precipitation Method**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., KURT K., YEĞİNGİL Z.
International Conference on Oxide Materials for Electronic Engineering – fabrication, properties and application, Lviv, Ukraine, 29 May - 02 June 2017
- XXVI. **BeOMgOas A Mixture Dosimeter: Its Luminescence Mechanism**
ALTUNAL V., ÖZDEMİR A., GÜÇKAN V., KURT K., YEĞİNGİL Z.
International Conference on Oxide Materials for Electronic Engineering – fabrication, properties and applications, Lviv, Ukraine, 29 May - 02 June 2017
- XXVII. **Optically Stimulated Luminescence Properties Of BeO:Ti²⁺ As A Mixture Dosimeter**
GÜÇKAN V., ALTUNAL V., ÖZDEMİR A., KURT K., YEĞİNGİL Z.
International Conference on Oxide Materials for Electronic Engineering – fabrication, properties and application, Lviv, Ukraine, 29 May - 02 June 2017
- XXVIII. **A Preliminary Study For Optically Stimulated Luminescence Characterization Of BeO:SiO₂ as A Mixture Dosimeter**
GÜÇKAN V., ALTUNAL V., ÖZDEMİR A., KURT K., YEĞİNGİL Z.
International Conference On Oxide Materials For Electronic Engineering ? Fabrication, Properties And Application, Lviv, Ukraine, 29 May - 02 June 2017
- XXIX. **Synthesis And Optically Stimulated Luminescence (osl) Characterization Of BeO:Al₂O₃ mixture Dosimeter**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., KURT K., YEĞİNGİL Z.
International Conference on Oxide Materials for Electronic Engineering – fabrication, properties and application, Lviv, Ukraine, 29 May - 02 June 2017
- XXX. **Investigation Of Optically Stimulated Luminescence Characteristics Of Li₂B₄O₇: Pr, K, Cu, Na Phosphor**
GÜÇKAN V., DEPCİ T., ALTUNAL V., ÖZDEMİR A., KURT K., NUR N., TÜKEN T., SIĞIRCIK G., TANSUĞ G., YAN Y., et al.
3rd International Conference On Theoretical And Experimental Studies In Nuclear Applications And Technology, Adana, Turkey, 10 - 12 May 2017
- XXXI. **Determination Of Potential Use Of Li₂B₄O₇:ag,tb For Dosimetry Purposes Using Osl Technique**
ÖZDEMİR A., GÜÇKAN V., ALTUNAL V., DEPCİ T., NUR N., KURT K., AKYOL M., TÜKEN T., HEREY TANİ E., TANSUĞ G., et al.
3rd International Conference On Theoretical And Experimental Studies In Nuclear Applications And Technology, Adana, Turkey, 10 - 12 May 2017
- XXXII. **Osl Study Of Li₂B₄O₇:nd, K, Cu, Na Samples Synthesized By Solid State Method**
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3rd International Conference On Theoretical And Experimental Studies In Nuclear Applications And Technology, Adana, Turkey, 10 - 12 May 2017
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3rd International Conference On Theoretical And Experimental Studies In Nuclear Applications And Technology, Adana, Turkey, 10 - 12 May 2017
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GÜÇKAN V., ÖZDEMİR A., ALTUNAL V., KURT K., YEĞİNGİL Z.
3rd International Conference On Theoretical And Experimental Studies In Nuclear Applications And Technology, Adana, Turkey, 10 - 12 May 2017
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ALTUNAL V., Depci T., Özdemir A., Güçkan V., Kurt K., Nur N., TÜKEN T., TANSUĞ G., SİĞİRCİK G., Yu Y., et al.
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4th World Congress And Expo On Nanotechnology And Materials Science, Barcelona, Spain, 5 - 07 April 2017
- XLI. **A Comparison Study Of Beryllium Oxide (beo) Synthesized Using Different Methods: Their Structural Characterization And Dosimetric Properties**
ALTUNAL V., GÜÇKAN V., ÖZDEMİR A., DEPCİ T., NUR N., KURT K., YEĞİNGİL Z.
4th World Congress And Expo On Nanotechnology And Materials Science, Barcelona, Spain, 5 - 07 April 2017
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Altunal V., AKYOL M., Özdemir A., Güçkan V., EKİCİBİL A., YEĞİNGİL Z.
1st International Mediterranean Science and Engineering Congress, Adana, Turkey, 26 - 28 October 2016, pp.1
- XLIII. **The Effect of Sintering Temperature on Magnetic and Luminescence Characteristics of Beryllium Oxide**
ALTUNAL V., AKYOL M., ÖZDEMİR A., GÜÇKAN V., EKİCİBİL A., YEĞİNGİL Z.
1st International Mediterranean Science and Engineering Congress, 26 October - 28 September 2016
- XLIV. **Investigation Of OSL Characteristics Of CaSO4 Eu**
VEYSİ G., ALTUNAL V., ÖZDEMİR A., DEPCİ T., NUR N., LAWRENCE Y., YU Y., YEĞİNGİL Z.
Turkish Physical Society 32nd International Physics Congress, 6 - 09 September 2016

- XLV. Thermoluminescence In LiB3O5:Sr,Al Dosimetry Powder**
 Özdemir A., Depçi T., Yücel A., Altunal V., Güçkan V., Kızılkaya N., Nur N., Yu Y., Lawrance Y., YEĞİNGİL Z.
 Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 09 September 2016, pp.434
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 ALTUNAL V., ÖZDEMİR A., GÜÇKAN V., NUR N., DEPCI T., YU Y., LAWRENCE Y., YEĞİNGİL Z.
 Turkish Physical Society 32nd International Physics Congress, 6 - 09 September 2016
- XLVII. Comparison of Optically Stimulated Luminescence Characteristics of Doped and Undoped Calcium Sulfate Phosphors Synthesized Using Precipitation Synthesis Method**
 GÜÇKAN V., DEPCI T., ALTUNAL V., ÖZDEMİR A., NUR N., KURT K., YEĞİNGİL Z.
 IX. International Workshop On Nuclear Structure Properties, 1 - 03 September 2016
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 Özdemir A., Depçi T., NUR N., Altunal V., Güçkan V., KURT K., TÜKEN T., TANSUG G., SIGIRCIK G., Lawrence Y., et al.
 18th International Conference on Solid State Dosimetry, Munich, Germany, 3 - 08 July 2016, pp.403
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 Özdemir A., Depçi T., Nur N., ALTUNAL V., Güçkan V., Kurt K., TÜKEN T., TANSUĞ G., SİĞIRCIK G., Lawrence Y., et al.
 18th International Conference on Solid State Dosimetry, Münih, Germany, 3 - 08 July 2016
- L. Thermoluminescence Properties of MgO Doped Natural Amethyst Quartz Samples**
 Güçkan V., NUR N., Depçi T., Ahmadova C., Özdemir A., Altunal V., Kızılkaya N., Lawrance Y., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Munich, Germany, 3 - 08 July 2016, pp.402
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 NUR N., Depçi T., Veliyev C., Güçkan V., YUCEL A., Özdemir A., Altunal V., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Munich, Germany, 3 - 08 July 2016, pp.141-142
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 Altunal V., YEĞİNGİL Z., Depçi T., Özdemir A., Güçkan V., Yu Y., NUR N., Bulur E.
 18th International Conference on Solid State Dosimetry, Munich, Germany, 3 - 08 July 2016, pp.393
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 DEPCI T., ÖZDEMİR A., KIZILKAYA N., YUCEL A., ALTUNAL V., GÜÇKAN V., NUR N., KURT K., YU Y., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Munich, Germany, 3 - 08 July 2016
- LIV. Thermoluminescence Properties of MgO Doped Natural Amethyst Quartz Samples**
 GUCKAN V., NUR N., DEPCI T., ÖZDEMİR A., ALTUNAL V., LAWRENCE Y., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Münih, Germany, 3 - 08 June 2016, pp.402
- LV. Thermoluminescence study of lithium disilicate (Li2Si2O5) synthesized by using natural amethyst samples**
 NUR N., DEPCI T., GUCKAN V., OZDEMİR A., ALTUNAL V., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Münih, Germany, 3 - 08 June 2016, pp.141
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 OZDEMİR A., NUR N., DEPCI T., ALTUNAL V., GUCKAN V., KURT K., LAWRENCE Y., YU Y., YEĞİNGİL Z.
 18th International Conference on Solid State Dosimetry, Münih, Germany, 3 - 08 June 2016, pp.403
- LVII. Optically Stimulated Luminescence Properties and Characteristic Analysis of Beryllium Oxide Nanophosphors Synthesized Using Sol-Gel Method**
 ALTUNAL V., OZDEMİR A., NUR N., DEPCI T., GUCKAN V., YU Y., YEĞİNGİL Z., Bulur E.
 18th International Conference on Solid State Dosimetry, Münih, Germany, 3 - 08 June 2016, pp.393
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 Özdemir A., YEĞİNGİL Z., NUR N., KURT K., TÜKEN T., DEPCI T., TANSUĞ G., ALTUNAL V., Güçkan V.
 The 9th International Conference on Luminescence and ESR Dosimetry, 2 - 04 September 2015
- LIX. Thermoluminescence Properties of Doped Natural Amethyst Samples with Some of I-IV Group Elements**

Güçkan V., Nur N., YEĞİNGİL Z., Veliyev C., Depci T., Koç V., Kurt K., Altunal V., Özdemir A., Kızılkaya N., et al.
Lumidoz 9: The 9th International Conference on Luminescence and Esr Dosimetry, Antalya, Turkey, 2 - 04
September 2015, pp.75

LX. Intercomparison of OSL Dose Characteristics Obtained From BeO Nanophosphors Synthesized Using SOL-GEL and Polyacrylamide Methods

Altunal V., YEĞİNGİL Z., TÜKEN T., TANSUĞ G., Kurt K., Depci T., SIĞIRCIK G., Özdemir A., Güçkan V., Nur N., et al.
Lumidoz 9: The 9th International Conference on Luminescence and Esr Dosimetry, Antalya, Turkey, 2 - 04
September 2015, pp.76

LXI. Thermoluminescence study of Mn doped lithium tetraborate powder and pellet samples synthesized by Solution Combustion Synthesis

Özdemir A., YEĞİNGİL Z., Nur N., Kurt K., TÜKEN T., Depci T., TANSUĞ G., Altunal V., Güçkan V., SIĞIRCIK G., et al.
Lumidoz 9: The 9th International Conference on Luminescence and Esr Dosimetry, Antalya, Turkey, 2 - 04
September 2015, pp.39

Supported Projects

YEĞİNGİL Z., ALTUNAL V., ÖZDEMİR A., Güçkan V., Project Supported by Higher Education Institutions, Yeni Termoluminesans ve Optiksel Uyarılmalı Lüminesans Foton ve Nötron Dozimetresi Malzemelerinin Geliştirilmesi, 2020 - 2022

YEĞİNGİL Z., Güçkan V., ALTUNAL V., Project Supported by Higher Education Institutions, BeO'in sistematik olarak lantanitlerle ve geçiş metal iyonlarıyla katkılanarak yeni lüminesans dozimetrelerinin geliştirilmesi, 2020 - 2021

YEĞİNGİL Z., AKYOL M., EKİCİBİL A., Güçkan V., ALTUNAL V., Project Supported by Higher Education Institutions, Farklı iyonlarla katkılanmış ZnO kristallerinin sentezlenmesi, yapısal, manyetik, manyetokalorik özelliklerinin ve lüminesans karakteristiklerinin belirlenmesi, 2019 - 2021

Scientific Refereeing

RADIATION MEASUREMENTS, SCI Journal, August 2021

RADIATION MEASUREMENTS, SCI Journal, August 2021

CRYSTALS, SCI Journal, January 2021

MATERIALS LETTERS, SCI Journal, January 2021

MATERIALS LETTERS, SCI Journal, June 2020

CRYSTAL RESEARCH AND TECHNOLOGY, SCI Journal, February 2020

CLINICAL ONCOLOGY, Journal Indexed in SCI-E, February 2019

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