

Articles Published in International Peer-Reviewed Journals in the Last Five Years

1. **Altunal, V.**, Guckan, V., & Yegingil, Z. (2023). Effects of oxygen vacancies on luminescence characteristics of BeO ceramics. *Journal of Alloys and Compounds*, 938, 168670 (<https://doi.org/10.1016/j.jallcom.2022.168670>). (Q1; Journal Impact Factor: 6.2)
2. Fonseca, D.P., Otsuka, A., Rezende, M. V. S., Santos, J. L. O., **Altunal, V.**, Yegingil, Z., Lima, H. (2023). Structural, mechanical, dielectric and defect properties of Eu-doped BeO ceramics: an atomistic simulation approach. *Ceramics International*, (Basımda), (<https://doi.org/10.1016/j.ceramint.2023.06.193>) (Q1; Journal Impact Factor: 5.2)
3. Guckan, V., Bokhari, S.W., **Altunal, V.**, Varan, N.E., Kurt, K., Yildiz, I., Gao, W., Yegingil, Z. (2023). Thermoluminescence and Optically Stimulated Luminescence Properties of NaMgF₃:Dy,Eu Synthesized by Hydrothermal Method and DFT Calculations for the Bandgap. *Materials Research Bulletin*, 167, 112373 (<https://doi.org/10.1016/j.materresbull.2023.112373>) (Q2; Journal Impact Factor: 5.4)
4. Abusaid, W., **Altunal, V.**, Akdeniz, Y., Guckan, V., Ceyran, G., Khandaker, M. U., Yegingil, Z. (2023). Studies of OSL properties of alkali- and rare earth- doped BeO based novel dosimeters for applications in external beam radiotherapy. *Radiation Physics and Chemistry*, 212, 111136 (<https://doi.org/10.1016/j.radphyschem.2023.111136>) (Q1; Journal Impact Factor: 2.9)
5. Tsoutsoumanos, E., Saleh, M., Konstantinidis, P.G., **Altunal, V.**, Sahare, P.D., Yengigil, Z., Karakasidis, T., Kitis, G., Polymeris, G.S. (2023). Nanostructured TLDs: Studying the impact of crystalline size on the Thermoluminescence glow-curve shape and electron trapping parameters. *Radiation Physics and Chemistry*, 111067, (<https://doi.org/10.1016/j.radphyschem.2023.111067>) (Q1; Journal Impact Factor: 2.9)
6. Guckan, V., Bereket, S., **Altunal, V.**, Abusaid, W., & Yegingil, Z. (2023). Luminescence properties of Tb and Eu activated CaSO₄ phosphor. *Radiation Physics and Chemistry*, 203, 110620 (<https://doi.org/10.1016/j.radphyschem.2022.110620>). (Q1; Journal Impact Factor: 2.9)
7. Chumak, V., **Altunal, V.**, Lawrence, Y., Dubinski, S., Yu, Y., Liao, L., Yegingil, Z., Bakhanova, E. (2023) Experimental And Monte Carlo Study of Energy Response of BeO-Based OSL Detectors Within Photon Energy Range Up To 15 Mev. *Radiation Protection Dosimetry*, (<https://doi.org/10.1093/rpd/ncad131>). (Q3; Journal Impact Factor: 1.0)

8. Guckan, V., **Altunal, V.**, Polymeris, G. S., Ozdemir, A., Zhydachevskyy, Y., and Yegingil, Z. (2022). TL and OSL characteristics of the fluoroperovskite KMgF_3 : Eu, Yb, Li for dosimetry applications. *Journal of Luminescence*, 119213 (<https://doi.org/10.1016/j.jlumin.2022.119213>) (Q2; Journal Impact Factor: 3.6)
9. **Altunal, V.**, Jain, M., Hayat, S., Guckan, V., and Yegingil, Z. (2022). Development of BeO : Na, Yb, Dy ceramics for optically stimulated luminescence dosimetry. *Radiation Measurements*, 106852 (<https://doi.org/10.1016/j.radmeas.2022.106852>) (Q2; Journal Impact Factor: 2.0)
10. **Altunal, V.**, Mesto, A., Guckan, V., Kavgacı, M., Ozdemir, A., Abusaid, W., Kurt, K., and Yegingil, Z. (2022). Structural and thermoluminescence properties of borate mineral ulexite. *Journal of Luminescence*, 119253. (<https://doi.org/10.1016/j.jlumin.2022.119253>) (Q2; Journal Impact Factor: 3.6)
11. **Altunal, V.**, Abusaid, W., Guckan, V., Ozdemir, A., and Yegingil, Z. (2022). Luminescence characterization of Ce and Gd doped MgB_4O_7 phosphors. *Journal of Luminescence*, 246, 118815. (<https://doi.org/10.1016/j.jlumin.2022.118815>) (Q2; Journal Impact Factor: 3.6)
12. Guckan, V., Kaya, D., **Altunal, V.**, Ekicibil, A., Karadag, F., Ozdemir, A., & Yegingil, Z. (2022). Impact of Li concentration in KMgF_3 : Eu, Yb fluoroperovskite on structure and luminescence properties. *Journal of Alloys and Compounds*, 163810. (<https://doi.org/10.1016/j.jallcom.2022.163810>) (Q1; Journal Impact Factor: 6.2)
13. **Altunal, V.**, Guckan, V., Ozdemir, A., Zydachevskyy, Y., Lawrence, Y., Yu, Y., & Yegingil, Z. (2021). “Three newly developed BeO -based OSL dosimeters.” *Journal of Luminescence*, 241, 118528. (<https://doi.org/10.1016/j.jlumin.2021.118528>) (Q2; Journal Impact Factor: 3.6)
14. Khaidukov, N., Makhov, V., Guckan, V., **Altunal, V.**, Ozdemir, A., Kurt, K., ... & Yegingil, Z. (2021). Thermoluminescence dosimetry properties of Tm^{3+} doped fluoroelpasolite Cs_2NaYF_6 crystals synthesized under hydrothermal conditions. *Journal of Luminescence*, 239, 118391. (<https://doi.org/10.1016/j.jlumin.2021.118391>) (Q2; Journal Impact Factor: 3.6).
15. Ozdemir, A., Guckan, V., **Altunal, V.**, Kurt, K., Yegingil, Z. (2021). Thermoluminescence in MgB_4O_7 :Pr,Dy dosimetry powder synthesized by solution combustion synthesis method. *Journal of Luminescence*, 230, 117761, (<https://doi.org/10.1016/j.jlumin.2020.117761>) (Q2; Journal Impact Factor: 3.6).

16. Guckan, V., Bokhari, W. S., **Altunal, V.**, Ozdemir, Gao, W., Yegingil, Z. (2021). Luminescence of Ce³⁺ and Li⁺ co-doped MgO synthesized using solid-state reaction method. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 503, 53-61. (<https://doi.org/10.1016/j.nimb.2021.07.012>) (Q3; Journal Impact Factor: 1.3)
17. Guckan, V., **Altunal, V.**, Ozdemir, A., Kurt, K., Yegingil, Z. (2021). Use of infrared light-emitting diodes to determine dosimetric characteristics of MgO: Tb, Gd, Li via the optically stimulated luminescence technique. *Journal of Luminescence*, 235, 118005, (<https://doi.org/10.1016/j.jlumin.2021.118005>) (Q2; Journal Impact Factor: 3.6).
18. Ozdemir, A., **Altunal, V.**, Guckan, V., Kurt, K., Yegingil, Z. (2021). Luminescence characteristics of newly-developed MgB₄O₇:Ce³⁺,Na⁺ phosphor as an OSL dosimetry. *Journal of Alloys and Compounds*, 865, 158498, (<https://doi.org/10.1016/j.jallcom.2020.158498>) (Q1; Journal Impact Factor: 6.2).
19. **Altunal, V.**, Guckan, V., Ozdemir, A, Ekicibil, A., Karadag, F, Yegingil, I, Yegingil, Z. (2021). A systematic study on luminescence characterization of lanthanide-doped BeO ceramic dosimeters. *Journal of Alloys and Compounds*, 876, 160105, (<https://doi.org/10.1016/j.jallcom.2021.160105>) (Q1; Journal Impact Factor: 6.2).
20. **Altunal, V.**, Guckan, V., Ozdemir, A., Kurt, K., Ekicibil, A., Yegingil, Z. (2020). Investigation of luminescence properties of BeO ceramics doped with metals for medical dosimetry. *Optical Materials*, 108, 110436, (<https://doi.org/10.1016/j.optmat.2020.110436>) (Q2; Journal Impact Factor: 3.9)
21. **Altunal, V.**, Guckan, V., Ozdemir, A., Yegingil, Z. (2020). A Calcination Study on BeO Ceramics for Radiation Dosimetry. *Materials Research Bulletin*, 110921, (<https://doi.org/10.1016/j.materresbull.2020.110921>) (Q2; Journal Impact Factor: 5.4).
22. **Altunal, V.**, Guckan, V., Yu, Y., Dicker, A., Yegingil, Z. (2020), “A newly developed OSL dosimeter based on beryllium oxide: BeO:Na,Dy,Er” *Journal of Luminescence*, 222, 117140, (<https://doi.org/10.1016/j.jlumin.2020.117140>) (Q2; Journal Impact Factor: 3.6).
23. **Altunal, V.**, Guckan, V., Ozdemir, A., Yegingil, Z. (2020), “Radiation dosimeter utilizing optically stimulated luminescence of BeO: Na, Tb, Gd ceramics” *Journal of Alloys and Compounds*, 817, 152809, (<https://doi.org/10.1016/j.jallcom.2019.152809>) (Q1; Journal Impact Factor: 6.2).

24. Guckan, V., **Altunal, V.**, Ozdemir, A., Kurt, K., Yegingil, Z. (2020). Cu, Li and K activated MgO: A metal oxide thermoluminescent synthesized using solution combustion technique for dosimetry. *Journal of Luminescence*, 230, 117751, (<https://doi.org/10.1016/j.jlumin.2020.117751>) (Q2; Journal Impact Factor: 3.6).
25. Guckan, V., **Altunal, V.**, Ozdemir, A., Tsiunra, V., Zhydachevskyy, Y., Yegingil, Z. (2020). Calcination effects on europium doped zinc oxide as a luminescent material synthesized via sol-gel and precipitation methods. *Journal of Alloys and Compounds*, 153878. (<https://doi.org/10.1016/j.jallcom.2020.153878>) (Q1; Journal Impact Factor: 6.2).
26. Guckan, V., **Altunal, V.**, Ozdemir, A., Yegingil, Z. (2020). Optically stimulated luminescence of MgO:Na,Li phosphor prepared using solution combustion method. *Journal of Alloys and Compounds*, 155253, (<https://doi.org/10.1016/j.jallcom.2020.155253>) (Q1; Journal Impact Factor: 6.2).
27. Ozdemir, A., Polymeris, G. S., Şahiner, E., Aşlar, E., Guckan, V., **Altunal, V.**, Yegingil, Z. (2019), "Evaluation of thermoluminescence trapping parameters in Li₂B₄O₇ co-doped with Ag⁺ and Gd³⁺ using various experimental techniques" *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 461, 70-76 (<https://doi.org/10.1016/j.nimb.2019.09.021>) (Q3; Journal Impact Factor: 1.3)
28. **Altunal, V.**, Guckan, V., Ozdemir, A., Sotelo, A., Yegingil, Z., (2019), "Effect of sintering temperature on dosimetric properties of BeO ceramic pellets synthesized using precipitation method", *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 441, 46-55 (<https://doi.org/10.1016/j.nimb.2018.12.036>) (Q3; Journal Impact Factor: 1.3)
29. **Altunal, V.**, Guckan, V., **Ozdemir, A.**, Can, N., Yegingil, Z., (2019), "Luminescence characteristics of Al-and Ca-doped BeO obtained via a sol-gel method", *Journal of Physics and Chemistry of Solids*, 131, 230-242 (<https://doi.org/10.1016/j.jpics.2019.04.003>) (Q2; Journal Impact Factor: 4.0)
30. Guckan, V., Ozdemir, A., **Altunal, V.**, Yegingil, I., Yegingil, Z., (2019), "Studies of blue light induced phototransferred thermoluminescence in CaSO₄: Mg", *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 448, 31-38. (<https://doi.org/10.1016/j.nimb.2019.03.058>) (Q3; Journal Impact Factor: 1.3)

31. Ozdemir, A., **Altunal, V.**, Guckan, V., Can, N., Kurt, K., Yegingil, I., Yegingil, Z., (2018), “Characterization and some fundamental features of optically stimulated luminescence measurements of silver activated lithium tetraborate”, *Journal of Luminescence*, 202, 136-146. (<https://doi.org/10.1016/j.jlumin.2018.05.054>) (Q2; Journal Impact Factor: 3.6)
32. Turhan, Ş., Gören, E., Garad, A. M., Altıkulaç, A., Kurnaz, A., Duran, C., Hancerliogullari, A., **Altunal, V.**, Guckan, V., Ozdemir, A. (2018), “Radiometric measurement of lignite coal and its by-products and assessment of the usability of fly ash as raw materials in Turkey”, *Radiochimica Acta*, (<https://doi.org/10.1515/ract-2017-2863>) (Q2; Journal Impact Factor: 1.8)
33. **Altunal, V.**, Yegingil, Z., Tuken, T., Depci, T, **Ozdemir, A.**, Guckan, V., Bulur, E., (2018), “Optically stimulated luminescence characteristics of BeO nanoparticles synthesized by sol-gel method”, *Radiation Measurements*, 118, 54-66. (<https://doi.org/10.1016/j.radmeas.2018.08.009>) (Q2; Journal Impact Factor: 2.0)