

## Asst. Prof. AHMET UĞUR KAYA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: A-5524-2018

Yoksis Researcher ID: 24874

### Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 1998 - 2006

Postgraduate, Kocaeli University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1994 - 1998

Undergraduate, Yıldız Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 1989 - 1994

### Dissertations

Doctorate, İki yönlü yönlendirilmiş polimerlerin mekaniksel anizotropinin tek yönlü yönlendirilmiş polimerlerin mekaniksel anizotropisi cinsinden ifadesi, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2006

Postgraduate, PVD kaplama tekniği ile hazırlanan TiN ince filmlerin temel karakteristiklerinin incelenmesi, Kocaeli Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1998

### Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Thermal Properties of Condensed Matter, Surfaces, Interfaces, Thin Films and Nanosystems, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Kocaeli University, Fizik Bölümü, 2018 - Continues

Assistant Professor, Kocaeli University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2013 - 2018

### Courses

Uzmanlık alan dersi, Doctorate, 2023 - 2024

Uzmanlık alan, Doctorate, 2023 - 2024

Fizik 2, Undergraduate, 2022 - 2023

Fizik 1, Undergraduate, 2023 - 2024

Fizik 1, Undergraduate, 2023 - 2024

Doktora Yeterlilik, Doctorate, 2022 - 2023

Fizik 2, Undergraduate, 2022 - 2023  
Doktora Tez önerisi, Doctorate, 2023 - 2024  
Uzmanlık Alan, Doctorate, 2023 - 2024  
Fizik 2, Undergraduate, 2017 - 2018  
Materyallerin Elektriksel Özellikleri, Postgraduate, 2016 - 2017

## Advising Theses

KAYA A. U., Farklı oksit-polimer kompozitlerin yapısal ve dielektrik özelliklerinin incelenmesi, Postgraduate, G.KÖSEM(Student), 2016  
KAYA A. U., PMMA-baryum stronsiyum titanyum oksit katkılı kompozitlerin yapısal ve dielektrik özelliklerinin incelenmesi, Postgraduate, E.ÖZCAN(Student), 2016

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Free-volume analysis of the structural and dielectric properties of PMMA/TeO<sub>2</sub> composites via positron annihilation lifetime spectroscopy**  
Kuzeci S., Ozcan E., KAYA A. U., Bakar R., TAV C., YAHŞI U., ESMER K.  
Journal of Alloys and Compounds, vol.1004, 2024 (SCI-Expanded)
- II. **Investigation of structural, thermal and dielectric properties of PVA/Na-Bentonite composites**  
**PVA/Na-Bentonit kompozitlerinin yapısal, ve dielektrik özelliklerinin incelenmesi**  
Akar Y., KAYA A. U.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.40, no.1, pp.287-295, 2024 (SCI-Expanded)
- III. **Structural and dielectrical properties of PMMA/TiO<sub>2</sub> composites in terms of free volume defects probed by positron annihilation lifetime spectroscopy**  
KAYA A. U., Kösem G., YENER M. D., TAV C., YAHŞI U., ESMER K.  
Polymers and Polymer Composites, vol.29, pp.107-116, 2021 (SCI-Expanded)
- IV. **Immobilisation of cellulase on vermiculite and the effects on enzymatic kinetics and thermodynamics**  
Duman Y., Tufan G., Kaya A. U.  
Applied Clay Science, vol.197, pp.105792-106802, 2020 (SCI-Expanded)
- V. **Three-phase partitioning and immobilization of Bacillus methylotrophicus Y37 cellulase on organo-bentonite and its kinetic and thermodynamic properties**  
Duman Y., Kaya A. U., Yağcı Ç.  
Clay Minerals, vol.55, no.2, pp.120-131, 2020 (SCI-Expanded)
- VI. **Effect of Microwave Radiation on Regeneration of a Granulated Micelle-Clay Complex after Adsorption of Bacteria**  
Kaya A. U., GÜNER S., Ryskin M., Lameck A. S., Benitez A. R., Shuali U., Nir S.  
APPLIED SCIENCES-BASEL, vol.10, no.7, 2020 (SCI-Expanded)
- VII. **Influence of wax content on the electrical, thermal and tribological behaviour of a polyamide 6/graphite composite**  
Unal H., Kaya U. A., ESMER K., Mimaroglu A., POYRAZ B.  
JOURNAL OF POLYMER ENGINEERING, vol.36, no.3, pp.279-286, 2016 (SCI-Expanded)
- VIII. **Effects of Solution Mixing Temperature on Dielectric Properties of PMMA/Pristine Bentonite Nanocomposites**  
KAYA A. U., GÜNER S., Esmer K.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.131, no.4, 2014 (SCI-Expanded)
- IX. **Parameter optimization of nanosecond laser for microdrilling on PVC by Taguchi method**  
CANEL T., KAYA A. U., CELIK B.

OPTICS AND LASER TECHNOLOGY, vol.44, no.8, pp.2347-2353, 2012 (SCI-Expanded)

X. **Adsorption and dielectric properties of poly(1-vinylimidazole) on sepiolite**

TEKİN N., KAYA A. U., ESMER K., Kara A.

APPLIED CLAY SCIENCE, vol.57, pp.32-38, 2012 (SCI-Expanded)

XI. **Investigation of Temperature, Thermodynamic Parameters and Dielectrical Properties of Poly(vinylimidazole)-Na-Bentonite Nanocomposite**

KAYA A. U., ESMER K., TEKİN N., Beyaz S. K.

JOURNAL OF APPLIED POLYMER SCIENCE, vol.120, no.2, pp.874-879, 2011 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Poliytilen-Ham Bentonit Kompozitlerin Yapısal ve Dielektrik Özelliklerinin İncelenmesi Investigation of Structural and Dielectric Properties of Polyethylene -Pristine Bentonite Composites**  
Akar Y., KAYA A. U., GÜNER S.  
19. ulusal Kil Sempozyumu, Eskişehir, Turkey, 6 - 09 September 2023
- II. **Selulöz Ksantat-Bentonit Kompozitlerin Yapısal Özelliklerinin İncelenmesi Investigation of the Structural Properties of Cellulose Xantate-Bentonite Composites**  
ŞARİ A., GÜNER S., KAYA A. U.  
19. ulusal Kil Sempozyumu, Eskişehir, Turkey, 06 September 2023
- III. **İki Farklı (Esan, İmerys) Na-Bentonitin Dielektrik özelliklerinin İncelenmesi**  
KAYA A. U.  
17. ULUSAL KİL SEMPOZYUMU, Muğla, Turkey, 4 - 07 October 2017, pp.225
- IV. **POLİ (BİSFENOL A) KARBONAT KATKILI HAM VE NA-BENTONİTİN YAPISAL VE DİELEKTRİK ÖZELLİKLERİNİN İNCELENMESİ**  
GÖZÜAK F., AKAR Y., TATOĞLU E., KAYA A. U., GÜNER S., CAN E.  
17. Ulusal Kil Sempozyumu, Muğla, Turkey, 4 - 07 October 2017, pp.262-264
- V. **POLİ (BİSFENOL A) KARBONAT KATKILI HAM VE NA-BENTONİTİN YAPISALVE DİELEKTRİK ÖZELLİKLERİNİN İNCELENMESİ**  
GÖZÜAK F., AKAR Y., TATOĞLU E., KAYA A. U., GÜNER S., CAN E.  
17. ULUSAL KİL SEMPOZYUMU, Muğla, Turkey, 4 - 07 October 2017, pp.262
- VI. **Investigation of structural and thermal properties of poly-vinylalcohol-added Na-Bentonite**  
Akar Y., Tatoğlu E., Gözüak F., Kaya A. U.  
17. ULUSAL KİL SEMPOZYUMU, Muğla, Turkey, 4 - 10 October 2017, pp.245-246
- VII. **Investigation of the UV-VIS Spectra of UV-Irradiated CDI2 Particles**  
CANEL T., Gezer Z., KAYA A. U., GÜNER S.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.623
- VIII. **DIELECTRIC RESPONSE OF POLYPROPYLENECARBONATE-PRISTINEBENTONITE COMPOSITES**  
CAN E., KAYA A. U., GÜNER S., GÖZÜAK F.  
XVI International Clay Conference, Granada, Spain, 17 - 21 July 2017, pp.117
- IX. **DIELECTRIC PROPERTIES OF POLYVINYLCHLORIDE-PRISTINEBENTONITE COMPOSITES**  
KAYA A. U., GÜNER S., CAN E., GÖZÜAK F.  
XVI International Clay Conference, Granada, Spain, 17 - 21 July 2017, pp.395
- X. **DIELECTRIC BEHAVIOUR OF POLYBISPHENOL A CARBONATEPRISTINEBENTONITE COMPOSITES**  
GÜNER S., KAYA A. U., CAN E., GÖZÜAK F.  
XVI International Clay Conference, Granada, Spain, 17 - 21 July 2017, pp.313
- XI. **THE EFFECT of MICROWAVE IRRADIATION on PMMA BENTONITE COMPOSITES**  
GÜNER S., KAYA A. U., CAN E.  
5th Mediterranean Clay Meeting, İzmir, Turkey, 25 - 29 September 2016
- XII. **DIELECTRIC PROPERTIES OF PMMA SEPIOLITE COMPOSITESPREPARED AT DIFFERENT TEMPERATURES**

KAYA A. U., TEKİN N., GÜNER S., ESMER K.

5th Mediterranean Clay Meeting (MCM2016), 25 - 29 September 2016

- XIII. **DIELECTRIC STUDIES ON PMMA TiO<sub>2</sub> COMPOSITES PREPARED UNDER UV IRRADIATION**  
KÖSEM G., ÖZCAN E., TARHAN B., KAYA A. U., ESMER K.  
TÜRK FİZİK DERNEĞİ 32. ULUSLARARASI FİZİK KONGRESİ, Muğla, Turkey, 6 - 09 September 2016
- XIV. **DIELECTRIC PROPERTIES OF PMMA Ba Sr TiO<sub>3</sub> COMPOSITES PREPARED UNDER UV IRRADIATION**  
ÖZCAN E., KÖSEM G., TARHAN B., KAYA A. U., ESMER K.  
TÜRK FİZİK DERNEĞİ 32. ULUSLARARASI FİZİK KONGRESİ, Muğla, Turkey, 6 - 09 September 2016
- XV. **MİKRODALGA UYARIMININ DOĞAL BENTONİTİN YAPISAL ÖZELLİKLERİNE ETKİSİ**  
GÜNER S., KAYA A. U., ESMER K., KÖSEM G.  
16. Ulusal Kil Sempozyumu, Çanakkale, Turkey, 2 - 05 September 2015
- XVI. **Polimetilmetakrilat PMMA Katkılı Doğal Bentonitin Dielektrik Özelliklerinin İncelenmesi**  
KAYA A. U., ESMER K., GÜNER S., ÖZCAN E.  
16. ULUSAL KİL SEMPOZYUMU, Çanakkale, Turkey, 2 - 05 September 2015
- XVII. **INVESTIGATION OF STRUCTURAL AND DIELECTRIC PROPERTIES OF Ba Sr TiO<sub>3</sub> PMMA NANOCOMPOSITES**  
ÖZCAN e., GAMZE k., KAYA A. U., ESMER K.  
9th International Physics Conference of the Balkan Physical Union, 24 - 27 August 2015
- XVIII. **INVESTIGATION OF STRUCTURAL AND DIELECTRIC PROPERTIES OF TiO<sub>2</sub> PMMA COMPOSITES**  
GAMZE k., ÖZCAN e., KAYA A. U., ESMER K.  
9th International Physics Conference of the Balkan Physical Union, İstanbul, Turkey, 24 - 27 August 2015
- XIX. **The Effects Of Nanosecond Pulsed Laser Parameters On The Cavity Which Was Formed On Polymer**  
Çelik B., CANEL T., KAYA A. U.  
Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 02 September 2011, pp.553
- XX. **Bentonit ve sepiyolit killerinin elektrik ve dielektrik özelliklerinin polivinylimidazole adsorpsiyonuyla iyileştirilmesi**  
ESMER K., TEKİN N., KAYA A. U., KARA A., SAADET B., DEMİRBAŞ Ö.  
14. Ulusal Kil Sempozyumu, Turkey, 1 - 03 October 2009
- XXI. **Bentonit ve sepiyolit yüzeyine polivinylimidazol adsorpsiyonunun termodinamik denge ve kinetik parametrelerinin incelenmesi**  
TEKİN N., ESMER K., KARA A., SAADET B., KAYA A. U., DEMİRBAŞ Ö.  
14. Ulusal Kil Sempozyumu, Turkey, 1 - 03 October 2009
- XXII. **Slovene Yapıların ve Gözenekli Silisyumun İnfrared Spektrumlarının İncelenmesi**  
YÜKSEL B., KAYAHAN E., CANEL T., ÖZKAZANÇ E., KAYA A. U.  
TFD Ulusal Fizik Kongresi 17, Turkey, 27 - 31 October 1998
- XXIII. **Heat Effect of Exposed MOS Structure**  
CANEL T., Bektöre Y., Doğan N., KAYA A. U.  
3. General Conference of The Balkan Physics Union, Cluj-Napoca, Romania, 08 September 1997, pp.2429-2432

## Supported Projects

KAYA A. U., AKAR Y., Project Supported by Higher Education Institutions, POLİVİNİLALKOL-BENTONİT VE POLİETİLENGLİKOL-BENTONİT KOMPOZİTLERİN YAPISAL VE DİELEKTRİK ÖZELLİKLERİNİN İNCELENMESİ, 2018 - 2019

KAYA A. U., TATOĞLU E., Project Supported by Higher Education Institutions, POLİMETİLMETAKRİLAT-HAM BENTONİT VE POLİMETİLMETAKRİLAT-NA-BİENTONİT KOMPOZİTLERİN YAPISAL VE DİELEKTRİK ÖZELLİKLERİNİN İNCELENMESİ, 2018 - 2019

KAYA A. U., Project Supported by Higher Education Institutions, DEĞİŞİK METAL TUZ-POLİMER, POLİMER-KİL NANOKOMPOZİT HAZIRLANMASI VE ÖZELLİKLERİNİN İNCELENMESİ, 2014 - 2015

## **Tasks In Event Organizations**

Güner S., KAYA A. U., 18. Ulusal Kil Sempozyumu, Scientific Congress, Kocaeli, Turkey, Eylül 2019

### **Metrics**

Publication: 38

Citation (WoS): 87

Citation (Scopus): 94

H-Index (WoS): 5

H-Index (Scopus): 5