

Prof. CUMALİ TAV

Personal Information

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Education Information

Doctorate, University of Tennessee, Knoxville, Atom Ve Molekül, Department of Physics, United States Of America 1996 - 2000

Postgraduate, University of Wisconsin-Madison, Graduate School, Department of Physics, United States Of America 1991 - 1993

Undergraduate, Cukurova University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1985 - 1989

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Simha-Somcynsky ve Cahn Hilliard kuramlarını kullanarak polimerlerin yüzey serbest hacim derinlik profillerinin çıkarılması, Marmara University, Fen - Edebiyat Fakültesi, Fizik Bölümü, 2011

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Marmara University, Faculty Of Arts And Sciences, Physics, 2002 - Continues

Advising Theses

TAV C., YAHŞİ U., Automated data acquisition and analysis system for positron annihilation spectroscopy, Postgraduate, M.Adil(Student), 2019

YAHŞİ U., TAV C., Statistical thermodynamics of macromolecular system in terms of simha-somcynsky theory in conjunction with lattice cluster theory = Örgü küme teorisiyle birleşimli simha somcynsky teorisinden makromoleküler sistemlerin istatistiksel termodinamiği, Postgraduate, A.Awati(Student), 2019

TAV C., YAHŞİ U., Katkılanırılmış PNN-PZT piezoelektrik seramiklerin pozitron yokolma (PALS) tekniğiyle incelenmesi, Postgraduate, F.Çetin(Student), 2019

Tav C., Characteristic properties of thermoplastic polyurethane/boron nitride composite using thermal and positron annihilation lifetime spectroscopy techniques, Postgraduate, M.YAVUZ(Student), 2017

Tav C., Sımha-Somcynsky kuramı kullanılarak polimerlerin Newtonyen ve Newtonyen olmayan viskoz davranışının

serbest hacim cinsinden incelenmesi, Doctorate, F.DİNÇ(Student), 2013

TAV C., Tav C., Neodyum (Nd+3) katkılı yitriyumsilikat (Nd+3 : YSO) nanofosfor sentezi, optiksel ve yapısal özellikleri, Doctorate, M.Erdem(Student), 2011

Tav C., Simha-Somcynsky ve Cahn Hilliard kuramlarını kullanarak polimerlerin yüzey serbest hacim derinlik profillerinin çıkarılması, Doctorate, S.KUZECI(Student), 2011

Tav C., Hacimsel malzemelerin hızlı nötron radyografisi ile tahribatsız analizi, Doctorate, E.KAM(Student), 2011

YAHŞI U., TAV C., Simha-somcynsky ve Cahn Hillard kuramlarını kullanarak polimerlerin yüzey serbest hacim derinlik profiline çıkarılması, Doctorate, S.Küzeci(Student), 2011

Tav C., Neodyum (Nd+3) katkılı yitriyumsilikat (Nd3+:YSO) nanofosfor sentezi, optiksel ve yapısal özellikleri, Doctorate, M.ERDEM(Student), 2011

Tav C., Pozitron teknikleriyle polimer elektrolitlerin iletkenlik-serbest hacim ilişkisinin incelenmesi, Postgraduate, G.ERDEMCİ(Student), 2009

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

- I. **Electronic ionisation-induced annealing of pre-existing defects in Al₂O₃ and CaF₂ single crystals**
Izerrouken M., Hazem R., Kuzeci S., Tav C., Yahsi U., Lemam S.
PHILOSOPHICAL MAGAZINE, vol.102, no.4, pp.283-298, 2022 (Journal Indexed in SCI)
- II. **Effect of Free Volume on Curcumin Release from Various Polymer-Based Composite Films Analyzed Using Positron Annihilation Lifetime Spectroscopy**
Rhim J., Kuzeci S., Roy S., Akti N., TAV C., YAHŞI U.
MATERIALS, vol.14, no.19, 2021 (Journal Indexed in SCI)
- III. **Heavy ion irradiation induced defects in Zircaloy-4**
Izerrouken M., Hazem R., Yahsi U., Naceri S. E., Tav C., Kuzeci S., Sari A., Haid F., Ishaq A., Menchi O., et al.
PHYSICA SCRIPTA, vol.96, no.4, 2021 (Journal Indexed in SCI)
- IV. **Free volume, thermal and morphological properties of photo-crosslinked thiol-Ene/nanodiamond hybrid network**
Cigil A. B., MADAKBAŞ S., TAV C., YAHŞI U., KAHRAMAN M. V.
PIGMENT & RESIN TECHNOLOGY, vol.50, no.2, pp.113-120, 2021 (Journal Indexed in SCI)
- V. **Structural and dielectrical properties of PMMA/TiO₂ 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 (Journal Indexed in SCI)
- VI. **Optical and photoluminescence spectroscopy analysis and Doppler broadening annihilation radiation studies of perovskites based on La_{1-x}Ni_xMnO_{2.75} thin layers**
Arrar A., Benhaliliba M., Boukhachem A., YAHŞI U., TAV C., Yumak A., Amlouk M.
OPTIK, vol.224, 2020 (Journal Indexed in SCI)
- VII. **A detailed survey for determination of the grafted semifluorinated acrylic compound effect on thermal, microstructural, free volume, mechanical and morphological features of HDPE**
Soykan U., Sen B. O., Cetin S., YAHŞI U., TAV C.
JOURNAL OF FLUORINE CHEMISTRY, vol.233, 2020 (Journal Indexed in SCI)
- VIII. **A method for obtaining the pure annihilation peak of Na-22 radioisotope**
Celiktas C., Tav C.
RADIATION MEASUREMENTS, vol.39, no.5, pp.569-572, 2005 (Journal Indexed in SCI)
- IX. **Dissociative electron attachment to laser-excited benzene**
Tav C., Pinnaduwa L.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.33, no.19, pp.2391-2397, 2000 (Journal Indexed in SCI)
- X. **The role of high Rydberg states in enhanced O⁻ formation in a pulsed O₂-2 discharge**
Ding W., Pinnaduwa L., Tav C., McCorkle D.
PLASMA SOURCES SCIENCE & TECHNOLOGY, vol.8, no.3, pp.384-391, 1999 (Journal Indexed in SCI)

- XI. **Temperature dependence of electron attachment to methylene chloride**
Pinnaduwege L., Tav C., McCorkle D., Ding W.
JOURNAL OF CHEMICAL PHYSICS, vol.110, no.18, pp.9011-9016, 1999 (Journal Indexed in SCI)
- XII. **Electron attachment to boron trichloride**
Tav C., Datskos P., Pinnaduwege L.
JOURNAL OF APPLIED PHYSICS, vol.84, no.10, pp.5805-5807, 1998 (Journal Indexed in SCI)
- XIII. **Electron attachment to photofragments and Rydberg states in laser-irradiated CCl₂F₂**
Pinnaduwege L., Datskos P., Tav C.
JOURNAL OF APPLIED PHYSICS, vol.84, no.7, pp.3442-3450, 1998 (Journal Indexed in SCI)
- XIV. **Electron attachment to thermally excited trichlorotrifluoroethane (1,1,2-C₂Cl₃F₃)**
Datskos P., Tav C., Sauers I., Pinnaduwege L.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.30, no.18, pp.2596-2602, 1997 (Journal Indexed in SCI)

Books & Book Chapters

- I. **Fen ve Mühendislik için Teknoloji Güncellemeli Serway**
SAÇLI Ö. A. , KESKİN S. S. , TAV C., DUMLUDAĞ F., YUMAK YAŞI A., AVGIN İ.
PALME Yayınevi, İstanbul, 2021

Refereed Congress / Symposium Publications in Proceedings

- I. **Some Studies Related to the Determination of Factors Affecting Positronium Formation of High Density Polyethylene (HDPE) via Positron Annihilation Lifetime Spectroscopy (PALS)**
ÖZTÜRK ŞEN B., YAŞI U., TAV C.
ICACCHE 2nd International Conference on Applications in Chemistry and Chemical Engineering, Belgrade, Serbia And Montenegro, 10 - 14 October 2018
- II. **Correlation between Free Volume Holes and Mechanical Properties of Side Chain LCP-HDPE Graft Products**
ÖZTÜRK ŞEN B., YAŞI U., ÇETİN S., TAV C., YENER M. Y. , SOYKAN U.
ICACCHE 2nd International Conference on Applications in Chemistry and Chemical Engineering, Belgrade, Serbia And Montenegro, 10 - 14 October 2018
- III. **Ionic Conductivity of PVdF-co-HFP with Li-salts in terms of Free Volume Probed by Positron Annihilation Lifetime Spectroscopy**
YAŞI U., TAV C., ERDEMCİ TANDOĞAN G., COŞKUN B., DELİGÖZ H., YILMAZTÜRK S., YILMAZOĞLU M., ULUTAŞ H. K. , DEGER D., YAKUT Ş.
Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi, Eskişehir, Turkey, 9 - 12 September 2018
- IV. **Ionic Conductivity of PVdF-co-HFP with Li-salts In Terms of Free Volume Probed by Positron Annihilation Lifetime Spectroscopy**
TAV C., ULUTAŞ H. K. , DELİGÖZ H., YILMAZOĞLU M., ULUTAŞ D., YAKUT Ş., COŞKUN B., ERDEMCİ G., YILMAZTÜRK S., YAŞI U.
Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi (Polimer 2018), 9 - 12 September 2018
- V. **DC Conductivity, Thermal and Free Volume Properties of Thermoplastic polyurethane/boron nitride compounds**
YAŞI U., YENER M. Y. , MADAKBAŞ S., TAV C., DUMLUDAĞ F., UMER M. A.
Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi (Polimer 2018), 9 - 12 September 2018
- VI. **Temperature and Pressure Dependent Relaxation of Polymers In Terms of Free Volume Fraction**
YAŞI U., COŞKUN B., YUMAK YAŞI A., TAV C.
Uluslararası Katılımlı VII. Polimer Bilim ve Teknoloji Kongresi (Polimer 2018), Eskişehir, Turkey, 9 - 12 September 2018

- VII. **Investigation of a Relationship Between Free Volume and Ionic Conductivity of PVdF-co-HFP with Ionic Liquid**
 YAŞI U., TAV C., ULUTAŞ H. K. , DELİGÖZ H., ÇOŞKUN B., ERDEMCİ G., YILMAZTÜRK S., YILMAZOĞLU M., ULUTAŞ D., YAKUT Ş.
 The International Joint Science Congress of Materials Polymers, 25 - 28 August 2017
- VIII. **Free Volume Properties of Side Chain LCP-HDPE Graft Coproducts Probed by Positron Annihilation Lifetime Spectroscopy**
 ÖZTÜRK ŞEN B., YAŞI U., TAV C., ÇETİN S., YENER M. Y. , SOYKAN U.
 The International Joint Science Congress of Materials Polymers, 25 - 28 August 2017
- IX. **The Surface Gradient Profile of Free Volume of PS, PMMA, and SAN using Simha-Somcynsky and Cahn-Hilliard Theories**
 YUMAK YAŞI A., KUZECİ S., TAV C., YAŞI U.
 The International Joint Science Congress of Materials Polymers, 25 - 28 August 2017
- X. **The Surface Gradient Profile of Free Volume of PS, PMMA, and SAN using Simha-Somcynsky and Cahn-Hilliard Theories**
 YUMAK YAŞI A., YAŞI U., TAV C., Kuzeci S.
 The International Joint Science Congress of Materials Polymers ISCMP 2017, Ohrid, Macedonia, 25 - 28 August 2017
- XI. **Investigation of relationship between Free volume and Ionic conductivity of pvdf-co-hfp with Ionic liquid**
 YAŞI U., TAV C., ERDEMCİ TANDOĞAN G., çoşkun b., DELİGÖZ H., yilmaztürk s., YILMAZOĞLU M., ULUTAŞ H. K. , DEĞER D., Şahin Y.
 The International Joint Science Congress of Materials Polymer, 25 - 28 August 2017
- XII. **Morphology and Luminescence Characteristics of Yttriumdisilicate doped with Yb³⁺ Er³⁺ Ho³⁺ and Tm³⁺**
 BOYRAZ C., ERDEM M., EKMEKÇİ M. K. , TAV C., ERYÜREK G.
 2 nd world congress on new technologies ICNFA, 18 - 19 August 2016
- XIII. **Pressure Effect On The Yb³⁺ Y₂Si₂O₇ Nano Powders**
 ERDEM M., TAV C., MERGEN A., ERYÜREK G., BALDASSARE D. B.
 International Powder Porous Materials 2015, 15 September - 18 April 2015
- XIV. **Phase dependent Spectroscopic properties of Neodymium or Erbium doped Yttriumdisilicates**
 ERDEM M., EKMEKÇİ M. K. , Collins J., TAV C., MERGEN A., ERYÜREK G., Di Bartolo B.
 International Powder Porous Materials, 15 - 19 September 2015
- XV. **Pressure Effect On The Yb³⁺ Y₂Si₂O₇ Nano Powders International Powder Porous Materials**
 TAV C., ERDEM M., ERYÜREK G., MERGEN A., Di Bartolo .
 International Powder Porous Materials, 15 - 17 September 2015
- XVI. **Structural and spectroscopic properties of sol gelderived neodymium doped yttrium silicate**
 ERDEM M., TAV C., ERYÜREK G.
 7. Türkiye Nanobilim ve Nanoteknoloji Konferansı, Turkey, 27 June - 01 July 2011
- XVII. **Synthesis and characterization of nanocrystallineyttrium silicatematerials doped with neodymium**
 ERDEM M., TAV C., ERYÜREK G.
 6th Nanoscience and Nanotechnology Conference (NanoTR-VI), Turkey, 15 - 18 June 2010

Citations

Total Citations (WOS):112

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