

# SELÇUK OKTAY SOLAKCI

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: C-1889-2016

Yoksis Araştırmacı ID: 221016

## Öğrenim Bilgisi

Doktora

2014 - 2023

Akdeniz Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, Türkiye

Yüksek Lisans

2011 - 2014

Akdeniz Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, Türkiye

Lisans

2006 - 2010

Akdeniz Üniversitesi, Fen Fakültesi, Fizik, Türkiye

## Yabancı Diller

İngilizce, B2 Orta Üstü

## Sertifika, Kurs ve Eğitimler

Eğitim Yönetimi ve Planlama, Akdeniz Üniversitesi Pedagojik Formasyon, Eğitim Fakültesi, 2010

## Yaptığı Tezler

Doktora, LABR3:CE KRİSTALİ KULLANILARAK İNORGANİK SİNTİLASYON DEDEKTÖRÜ GELİŞTİRİLMESİ, Akdeniz Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Bilimleri, 2022

Yüksek Lisans, F tayf türünden yüksek öz hareketli yıldızların gözlemsel bir çalışması, Akdeniz Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, 2014

## Desteklenen Projeler

- BOZTOSUN İ., YILDIRIM A., SOLAKCI S. O., ÇOBAN A., Yükseköğretim Kurumları Destekli Proje, LaBr3(Ce) Sintilatör Dedektörü Geliştirilmesi ve Yapımı, 2017 - 2021
- TÜBİTAK Projesi, RV Tauri türünden IRAS yıldızlarının radyal hız ölçümleri (PI: T. SAHİN), 2011 - 2013

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- 1. Analysis of one-proton transfer reaction in O 18 + Se 76 collisions at 275 MeV**  
Ciraldo I, Cappuzzello F, Cavallaro M, Carbone D, Gargano A, De Gregorio G, Garcia-Tecocoatz H, Santopinto E, Magaña-Vsevolodovna R, Acosta L, et al.  
Physical Review C, cilt.109, sa.2, 2024 (SCI-Expanded)
- 2. Multichannel experimental and theoretical approach to the C 12 (O 18, F 18) B 12 single-charge-exchange reaction at 275 MeV: Initial-state interaction and single-particle properties of nuclear wave functions**  
Spatafora A, Carbone D, Cappuzzello F, Cavallaro M, Acosta L, Agodi C, Amador-Valenzuela P, Borello-Lewin T, Brischetto G, Calabrese S, et al.  
Physical Review C, cilt.107, sa.2, 2023 (SCI-Expanded)
- 3. Analysis of the one-neutron transfer reaction in  $^{18}\text{O}+^{76}\text{Se}$  collisions at 275 MeV**  
Ciraldo I, Cappuzzello F, Cavallaro M, Carbone D, Burrello S, Spatafora A, Gargano A, De Gregorio G, Vsevolodovna R. I. M, Acosta L, et al.  
PHYSICAL REVIEW C, cilt.105, sa.4, 2022 (SCI-Expanded)
- 4. Multichannel experimental and theoretical constraints for the Cd-116(Ne-20, F-20)In-116 charge exchange reaction at 306 MeV**  
Burrello S, Calabrese S, Cappuzzello F, Carbone D, Cavallaro M, Colonna M, Lay J. A, Lenske H, Agodi C, Ferreira J. L., et al.  
PHYSICAL REVIEW C, cilt.105, sa.2, 2022 (SCI-Expanded)
- 5. O-18-induced single-nucleon transfer reactions on Ca-40 at 15.3A MeV within a multichannel analysis**  
Calabrese S, Cavallaro M, Carbone D, Cappuzzello F, Agodi C, Burrello S, De Gregorio G, Ferreira J. L., Gargano A, Sgouros O, et al.  
PHYSICAL REVIEW C, cilt.104, sa.6, 2021 (SCI-Expanded)
- 6. O-18 + Se-76 elastic and inelastic scattering at 275 MeV**  
La Fauci L, Spatafora A, Cappuzzello F, Agodi C, Carbone D, Cavallaro M, Lubian J, Acosta L, Amador-Valenzuela P, Borello-Lewin T, et al.  
PHYSICAL REVIEW C, cilt.104, sa.5, 2021 (SCI-Expanded)
- 7. The NUMEN Technical Design Report**  
Cappuzzello F, Agodi C, Calabretta L, Calvo D, Carbone D, Cavallaro M, Colonna M, Finocchiaro P, Iazzi F, Linares R, et al.  
International Journal of Modern Physics A, cilt.36, sa.30, 2021 (SCI-Expanded)
- 8. Measurement of the double charge exchange reaction for the Ne-20**  
Soukeras V, Cappuzzello F, Carbone D, Cavallaro M, Agodi C, Acosta L, Boztosun I, Brischetto G. A, Calabrese S, Calvo D., et al.  
RESULTS IN PHYSICS, cilt.28, 2021 (SCI-Expanded)
- 9. Gamma spectrometry measurements of natural and artificial radioactivity of Saklkent-Antalya and its correlation to quarries**  
YILDIRIM A., SOLAKCI S. O., EKE C., BOZTOSUN İ.  
ARABIAN JOURNAL OF GEOSCIENCES, cilt.14, sa.16, 2021 (SCI-Expanded)
- 10. A Constrained Analysis of the  $^{40}\text{Ca}(\text{O},\text{F})^{40}\text{K}$  Direct Charge Exchange Reaction Mechanism at 275 MeV**  
Cavallaro M, Bellone J. I, Calabrese S, Agodi C, Burrello S, Cappuzzello F, Carbone D, Colonna M, Deshmukh N, Lenske H, et al.  
FRONTIERS IN ASTRONOMY AND SPACE SCIENCES, 2021 (SCI-Expanded)
- 11. Initial State Interaction for the Ne-20**  
Carbone D, Linares R, Amador-Valenzuela P, Calabrese S, Cappuzzello F, Cavallaro M, Firat S, Fisichella M, Spatafora A, Acosta L, et al.

- UNIVERSE, cilt.7, sa.3, 2021 (SCI-Expanded)
12. **The NUMEN Heavy Ion Multidetector for a Complementary Approach to the Neutrinoless Double Beta Decay**  
Finocchiaro P., Acosta L., Agodi C., Altana C., Amador-Valenzuela P., Bortosun I., Brasolin S., Brischetto G. A., Brunasso O., Calabrese S., et al.  
UNIVERSE, cilt.6, sa.9, 2020 (SCI-Expanded)
  13. **First comparison of GEANT4 hadrontherapy physics model with experimental data for a NUMEN project reaction case**  
Oliveira J. R. B., MORALLES M., Flechas D., CARBONE D., CAVALLARO M., TORRESI D., ACOSTA L., AGODI C., Amador-Valenzuela P., BONANNO D., et al.  
EUROPEAN PHYSICAL JOURNAL A, cilt.56, sa.5, 2020 (SCI-Expanded)
  14. **Charge-state distributions of Ne-20 ions emerging from thin foils**  
CAVALLARO M., SANTAGATI G., CAPPUZZELLO F., CARBONE D., LINARES R., TORRESI D., ACOSTA L., AGODI C., BONANNO D., BONGIOVANNI D., et al.  
RESULTS IN PHYSICS, cilt.13, 2019 (SCI-Expanded)

### Diğer Dergilerde Yayınlanan Makaleler

1. **Investigation of  $^{76}\text{Se}(180,170)^{75}\text{Se}$  and  $^{76}\text{Se}(180,19\text{F})^{75}\text{As}$  transfer reactions at 15 MeV/u in a multi-channel approach within the NUMEN project**  
Cirialdo I., Cappuzzello F., Cavallaro M., Carbone D., Gargano A., De Gregorio G., Garcia-Tecocoatzí H., Santopinto E., Magaña-Vsevolodovna R., Acosta L., et al.  
Nuovo Cimento della Societa Italiana di Fisica C, cilt.47, sa.2, 2024 (ESCI)
2. **The NUMEN Project: An Update of the Facility Toward the Future Experimental Campaigns**  
Cappuzzello F., Acosta L., Agodi C., BOZTOSUN İ., Brischetto G. A., Calabrese S., Calabretta L., Calvo D., Campajola L., Capirossi V., et al.  
FRONTIERS IN ASTRONOMY AND SPACE SCIENCES, cilt.8, 2021 (ESCI)

### Hakemli Bilimsel Toplantılarda Yayımlanmış Bildiriler

1.  **$^{20}\text{Ne} + ^{130}\text{Te}$  collision in a multi-channel approach: Recent results and experimental challenges towards the NUMEN next phase**  
Soukeras V., Cappuzzello F., Carbone D., Cavallaro M., Agodi C., Acosta L., BOZTOSUN İ., Brischetto G., Calvo D., Chávez Lomelí E., et al.  
1st Edition of the Multi-Aspect Young ORiented Advanced Neutrino Academy School and Workshop, MAYORANA 2023, Genoa, İtalya, 4 - 14 Temmuz 2023, cilt.47
2. **Multichannel approach for the analysis of  $^{180}\text{O} + ^{40}\text{Ca}$  network of nuclear reactions within the NUMEN project**  
Carbone D., Agodi C., Bellone J., Burrello S., Cappuzzello F., Cavallaro M., Colonna M., De Gregorio G., Ferreira J., Gargano A., et al.  
1st Edition of the Multi-Aspect Young ORiented Advanced Neutrino Academy School and Workshop, MAYORANA 2023, Genoa, İtalya, 4 - 14 Temmuz 2023, cilt.47
3. **Study of the one-neutron transfer reaction in  $^{18}\text{O} + ^{76}\text{Se}$  collision at 275 MeV in the context of the NUMEN project**  
Cirialdo I., Cappuzzello F., Cavallaro M., Carbone D., Burrello S., Spatafora A., Gargano A., De Gregorio G., Magaña Vsevolodovna R., Acosta L., et al.  
13th International Spring Seminar on Nuclear Physics Perspectives and Challenges in Nuclear Structure after 70 Years of Shell Model (ISS), SantAngelo d'Ischia, İtalya, 14 - 20 Mayıs 2022
4. **New high intensity Heavy - Ion beams @ INFN-LNS: NUMEN project status and perspective**

Agodi C., Cappuzzello F., Acosta L., Amador-Valenzuela P., Auerbach N., Avanzi L., Bellone J., Bijker R., BOZTOSUN İ., Brasolin S., et al.

28th International Nuclear Physics Conference (INPC), Cape-Town, Güney Afrika, 11 - 16 Eylül 2022

5. **Multi-channel experimental and theoretical approach to study the**

$^{12}\text{C}(\text{O},\text{F})^{12}\text{B}$  single charge exchange reaction

Spatafora A., Carbone D., Cappuzzello F., Cavallaro M., Acosta L., Agodi C., Amador-Valenzuela P., Borello-Lewin T., Brischetto G., Calabrese S., et al.

13th International Spring Seminar on Nuclear Physics Perspectives and Challenges in Nuclear Structure after 70 Years of Shell Model (ISS), SantAngelo dIschia, İtalya, 14 - 20 Mayıs 2022

6. **A multi-channel study of the  $^{20}\text{Ne} + ^{130}\text{Te}$  system within the NUMEN project**

Soukeras V., Acosta L., Agodi C., BOZTOSUN İ., Brischetto G., Calvo D., Cappuzzello F., Carbone D., Cavallaro M., Chávez Lomelí E., et al.

44th Symposium on Nuclear Physics, SNP 2023, Cocoyoc, Meksika, 9 - 12 Ocak 2023, cilt.2619

7. **Experimental and theoretical multi-channel study of direct nuclear reactions: a tool to provide data driven information on the  $^{76}\text{Ge}$  neutrino-less double-beta decay**

Spatafora A., Acosta L., Agodi C., Amador-Valenzuela P., Brischetto G., Calabrese S., Calvo D., Capirossi V., Chávez-Lomelí E., Cappuzzello F., et al.

28th International Nuclear Physics Conference (INPC), Cape-Town, Güney Afrika, 11 - 16 Eylül 2022

8. **The NUMEN project: probing nuclear response to weak interaction by nuclear reactions**

Carbone D., Agodi C., Bellone J., Burrello S., Calabrese S., Cappuzzello F., Cavallaro M., Colonna M., De Gregorio G., Ferreira J., et al.

28th International Nuclear Physics Conference (INPC), Cape-Town, Güney Afrika, 11 - 16 Eylül 2022

9. **Recent results on heavy-ion direct reactions of interest for  $0\nu\beta\beta$  decay at INFN - LNS**

Cavallaro M., Acosta L., Adsley P., Agodi C., Altana C., Amador-Valenzuela P., Auerbach N., Barea J., Bellone J., Bijker R., et al.

43rd Symposium on Nuclear Physics (SNP), Morelos, Meksika, 6 - 09 Ocak 2020, cilt.1610

10. **Recent results on heavy-ion induced reactions of interest for neutrinoless double beta decay at INFN-LNS**

Cavallaro M., Acosta L., Agodi C., Altana C., Amador-Valenzuela P., Auerbach N., Barea J., Bellone J. I., Bijker R., Bonanno D., et al.

4th International Conference on Nuclear Structure and Dynamics (NSD), Venice, İtalya, 13 - 17 Mayıs 2019, cilt.223

11. **Data reduction for experimental measurements within the NUMEN project**

Calabrese S., Cappuzzello F., Agodi C., Cavallaro M., Carbone D., Acosta L., Bonanno D., Bongiovanni D., BOZTOSUN İ., Calvo D., et al.

Conference on Neutrino and Nuclear Physics (CNNP), Catania, İtalya, 15 - 21 Ekim 2017, cilt.1056

12. **Measuring nuclear reaction cross sections to extract information on neutrinoless double beta decay**

CAVALLARO M., CAPPUZZELLO F., AGODI C., ACOSTA L., AUERBACH N., BELLONE J., BIJKER R., BONANNO D., BONGIOVANNI D., Borello-Lewin T., et al.

12th International Spring Seminar on Nuclear Physics - Current Problems and Prospects for Nuclear Structure, İtalya, 15 - 19 Mayıs 2017, cilt.966

13. **Experimental challenges in the measurement of double charge exchange reactions within the NUMEN project**

CARBONE D., CAPPUZZELLO F., AGODI C., CAVALLARO M., ACOSTA L., BONANNO D., BONGIOVANNI D., BOZTOSUN İ., CALABRESE S., CALVO D., et al.

41st Symposium on Nuclear Physics (Cocoyoc), Cocoyoc, Meksika, 8 - 11 Ocak 2018, cilt.1078

14. **The NUMEN Project @ LNS: Status and Perspectives**

CAPPUZZELLO F., AGODI C., ACOSTA L., AUERBACH N., BELLONE J., BIJKER R., BONANNO D., BONGIOVANNI D., Borello-Lewin T., BOZTOSUN İ., et al.

Workshop on Calculation of Double-Beta-Decay Matrix Elements (MEDEX), Prague, Çek Cumhuriyeti, 29 Mayıs - 02 Haziran 2017, cilt.1894

15. **High Resolution Abundance Analysis Of A High Proper Motion Radial Velocity Standard Star: HD 102870**  
Solakçı S. O., Şahin T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.186-193
16. **High Resolution Abundance Analysis of a High Proper Motion Radial Velocity Standard Stars: HD 102870**  
SOLAKCI S. O., ŞAHİN T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.186-193
17. **An Observational Study of F Spectral Type High Proper Motion Stars From The ELODIE Archive**  
Solakçı S. O., Şahin T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.131-138
18. **AN OBSERVATIONAL STUDY OF F SPECTRAL TYPE HIGH PROPER MOTION STARS FROM THE ELODIE ARCHIVE.**  
SOLAKCI S. O., ŞAHİN T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.1-15
19. **What Do Radial Velocity Measurements tell about RV Tauri Stars?**  
Şahin T., Lambert D. L., Solakçı S. O.  
Dig Sites of Stellar Archeology: Giant Stars in the Milky Way, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.113-120
20. **High Resolution Spectroscopic Analysis of Metal Poor High Proper Motion Star: BD +20 3603**  
Solakçı S. O., Şahin T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.151-157
21. **High Resolution Spectroscopic Analysis of Metal Poor High Proper Motion Star: BD +20 3603**  
SOLAKCI S. O., ŞAHİN T.  
Dig Sites of Stellar Archeology: Giant Stars in the Milkyway, İzmir, Türkiye, 4 - 06 Eylül 2013, ss.1

## Verdiği Dersler

### Ön Lisans

Temel Matematik, Ön Lisans, 2023 - 2024, 2022 - 2023  
Tıbbi Terminoloji, Ön Lisans, 2023 - 2024, 2022 - 2023  
Göz Hastalıkları, Ön Lisans, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Görme Fizyolojisi, Ön Lisans, 2023 - 2024  
Optisyonluk II, Ön Lisans, 2023 - 2024, 2022 - 2023  
Göz Anatomisi ve Fizyolojisi, Ön Lisans, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Optisyonluk III, Ön Lisans, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Fizik, Ön Lisans, 2021 - 2022  
İş Sağlığı ve Güvenliği, Ön Lisans, 2018 - 2019  
İş Güvenliği, Ön Lisans, 2018 - 2019  
Kontakt Lensler, Ön Lisans, 2018 - 2019  
Geometrik Optik II, Ön Lisans, 2018 - 2019  
Geometrik Optik, Ön Lisans, 2018 - 2019  
Genel Kimya, Ön Lisans, 2018 - 2019  
Temel Matematik, Ön Lisans, 2017 - 2018

## Metrikler

Yayın: 37  
Atıf (WoS): 100  
Atıf (Scopus): 333

H-İndeks (WoS): 6

H-İndeks (Scopus): 12

### Kongre ve Sempozyum Katılımı Faaliyetleri

$^{116}\text{Sn}(^{18}\text{O}, ^{18}\text{Ne})^{116}\text{Cd}$  Double Charge Exchange experiment at 270 MeV, Katılımcı, Catania, İtalya, 2016

NUBA-2016: 3rd International Nuclear Physics Summer School, Katılımcı, Türkiye, 2016

$4\text{He} + 4\text{He}$  inelastic scattering at 55 MeV, Katılımcı, Catania, İtalya, 2015

9th International Conference on Luminescence and ESR Dosimetry, Katılımcı, Antalya, Türkiye, 2015

Dig Sites of Stellar Archeology: Giant Stars in the Milky, Katılımcı, İzmir, Türkiye, 2013

17th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, Katılımcı, Barcelona, İspanya, 2012

### Araştırma Alanları

Fizik, Astronomi ve Astrofizik, Yıldızlar, Nükleer Fizik, Radyoaktif bozunum ve in-beam spektroskopi, Temel Bilimler