

SELÇUK OKTAY SOLAKCI

LECT. PHD

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International Researcher IDs

ScholarID: 4JM_sq8AAAAJ

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

Yoksis Researcher ID: 221016

Learning Knowledge

Doctorate

2014 - 2023

Akdeniz University, Institute of Science, Fizik, Turkey

Postgraduate

2011 - 2014

Akdeniz University, Institute of Science, Fizik, Turkey

Undergraduate

2006 - 2010

Akdeniz University, Faculty Of Science, Fizik, Turkey

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Education Management and Planning, Akdeniz Üniversitesi Pedagojik Formasyon, Eğitim Fakültesi, 2010

Dissertations

Doctorate, LABR3:CE KRİSTALİ KULLANILARAK İNORGANİK SİNTİLASYON DEDEKTÖRÜ GELİŞTİRİLMESİ, Akdeniz University, Institute of Science, Çevre Bilimleri, 2022

Postgraduate, F tayf türünden yüksek öz hareketli yıldızların gözlemsel bir çalışması, Akdeniz University, Institute of Science, Fizik, 2014

Supported Projects

- BOZTOSUN İ., YILDIRIM A., SOLAKCI S. O., ÇOBAN A., Project Supported by Higher Education Institutions, LaBr3(Ce) Sintilatör Dedektörü Geliştirilmesi ve Yapımı, 2017 - 2021
- TUBITAK Project, RV Tauri türünden IRAS yıldızlarının radyal hız ölçümleri (PI: T. SAHİN), 2011 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- 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, vol.109, no.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, vol.107, no.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, vol.105, no.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, vol.105, no.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, vol.104, no.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, vol.104, no.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, vol.36, no.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, vol.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, vol.14, no.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, vol.7, no.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, vol.6, no.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, vol.56, no.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, vol.13, 2019 (SCI-Expanded)

Articles Published in Other Journals

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**
Cirraldo 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, vol.47, no.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, vol.8, 2021 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

1. **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, South Africa, 11 - 16 September 2022
2. **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**
Cirraldo 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 dIschia, Italy, 14 - 20 May 2022
3. **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, South Africa, 11 - 16 September 2022
4. **Multi-channel experimental and theoretical approach to study the $^{12}\text{C}(^{18}\text{O},^{18}\text{F})^{12}\text{B}$ 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, Italy, 14 - 20 May 2022

5. **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, Mexico, 9 - 12 January 2023, vol.2619
6. **Experimental and theoretical multi-channel study of direct nuclear reactions: a tool to provide data driven information on the ^{76}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, South Africa, 11 - 16 September 2022
7. **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, Mexico, 6 - 09 January 2020, vol.1610
8. **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, Italy, 13 - 17 May 2019, vol.223
9. **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, Italy, 15 - 19 May 2017, vol.966
10. **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, Mexico, 8 - 11 January 2018, vol.1078
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, Italy, 15 - 21 October 2017, vol.1056
12. **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, Czech Republic, 29 May - 02 June 2017, vol.1894
13. **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, Turkey, 4 - 06 September 2013, pp.186-193
14. **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, Turkey, 4 - 06 September 2013, pp.186-193
15. **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, Turkey, 4 - 06 September 2013, pp.131-138
16. **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, Turkey, 4 - 06 September 2013, pp.1-15

17. 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, Turkey, 4 - 06 September 2013, pp.113-120

18. 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, Turkey, 4 - 06 September 2013, pp.151-157

19. 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, Turkey, 4 - 06 September 2013, pp.1

Courses

Temel Matematik, Associate Degree, 2023 - 2024, 2022 - 2023

Tıbbi Terminoloji, Associate Degree, 2023 - 2024, 2022 - 2023

Göz Hastalıkları, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021

Görme Fiziyojisi, Associate Degree, 2023 - 2024

Optisyenlik II, Associate Degree, 2023 - 2024, 2022 - 2023

Göz Anatomisi ve Fiziyojisi, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021

Optisyenlik III, Associate Degree, 2022 - 2023, 2021 - 2022, 2020 - 2021

Fizik, Associate Degree, 2021 - 2022

İş Sağlığı ve Güvenliği, Associate Degree, 2018 - 2019

İş Güvenliği, Associate Degree, 2018 - 2019

Kontakt Lensler, Associate Degree, 2018 - 2019

Geometrik Optik II, Associate Degree, 2018 - 2019

Geometrik Optik, Associate Degree, 2018 - 2019

Genel Kimya, Associate Degree, 2018 - 2019

Temel Matematik, Associate Degree, 2017 - 2018

Metrics

Publication: 35

Citation (WoS): 100

Citation (Scopus): 221

H-Index (WoS): 6

H-Index (Scopus): 10

Congress and Symposium Activities

^{116}Sn (180 , ^{18}Ne) ^{116}Cd Double Charge Exchange experiment at 270 MeV, Attendee, Catania, Italy, 2016

NUBA-2016: 3rd International Nuclear Physics Summer School, Attendee, Turkey, 2016

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

9th International Conference on Luminescence and ESR Dosimetry, Attendee, Antalya, Turkey, 2015

Dig Sites of Stellar Archeology: Giant Stars in the Milky, Attendee, İzmir, Turkey, 2013

17th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, Attendee, Barcelona, Spain, 2012

Research Areas

Physics, Astronomy and Astrophysics, Stars, Nuclear physics, Radioactive decay and in-beam spectroscopy, Natural Sciences