

## Res. Asst. PhD SİNAN GENÇ

### Personal Information

**Office Phone:** [+90 352 224 8800](tel:+903522248800)

**Other Email:** [s.genc@ieee.org](mailto:s.genc@ieee.org)

**Web:** <https://avesis.agu.edu.tr/sinan.genc>

**Address:** Abdullah Gül Üniversitesi Sümer Kampüsü Oda:A100 Kocasinan/KAYSERİ

### International Researcher IDs

ScholarID: r\_5RhycAAAAJ

ORCID: 0000-0002-6909-723X

Publons / Web Of Science ResearcherID: M-9738-2017

ScopusID: 57195311068

Yoksis Researcher ID: 56170

### Education Information

Post Doctorate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 2023 - Continues

Doctorate, Abdullah Gul University, Fen Bilimleri Enstitüsü, Elektrik ve Bilgisayar Mühendisliği ABD (İngilizce), Turkey 2017 - 2023

Postgraduate, Abdullah Gul University, Fen Bilimleri Enstitüsü, Elektrik ve Bilgisayar Mühendisliği ABD (İngilizce), Turkey 2015 - 2016

Undergraduate, Sakarya University, Faculty of Engineering, Elektrik Elektronik Mühendisliği, Turkey 2007 - 2012

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Other, Ulusal Optik, Elektrooptik ve Fotonik Çalıştayı 2023, Koç University, 2023

Environment and Sustainability, 2022 Global Solutions Summit, Global Solutions Initiative, 2022

Environment and Sustainability, Green Hydrogen Policies in the MENA Region: Taking into Account the Hydrogen-Water-Climate Nexus , Konrad Adenauer Foundation, 2021

Environment and Sustainability, 2021 Global Solutions Summit, Global Solutions Initiative, 2021

Environment and Sustainability, Strategy and Planning Workshop III - Circular Economy Network MENA (CEMENA-Net), Konrad Adenauer Foundation, 2020

Environment and Sustainability, Water Journalism Academy , Konrad Adenauer Foundation & cewas, 2020

Environment and Sustainability, Strategy and Planning Workshop II - Circular Economy Network MENA (CEMENA-Net), Konrad Adenauer Foundation, 2020

Environment and Sustainability, 2020 Global Solutions Summit - Online, Global Solutions Initiative (GSI), 2020

Environment and Sustainability, 2021 Young Global Changers Summer School, Global Solutions Initiative, 2020

Environment and Sustainability, 2020 Young Global Changers Summer School , Global Solutions Initiative, 2020

Environment and Sustainability, Strategy and Planning Workshop I - Circular Economy Network MENA (CEMENA-Net),

Konrad Adenauer Foundation (KAS) REMENA, 2019

Sustainable Energy Resources, EU-MENA Young Leaders Academy on Sustainability and Resource Security, Konrad Adenauer Foundation (KAS) REMENA, 2019

Vocational Training, 10th International Summer School: New Frontiers in Optical Technologies, University of Tampere, 2019

Vocational Training, Optical Microscopy and Basic Optical Devices (Traning), Tampere University of Technology, 2019

Sustainable Energy Resources, Autumn Academy on Sustainability and Resource Security in EU and MENA Region, Konrad Adenauer Foundation (KAS) REMENA, 2018

Vocational Training, New Frontiers in Photonics 2018 Summer School, Gdańsk University of Technology, 2018

Renewable Energy Sources, Youth Winter Academy on Renewable Energies and Energy Security, Konrad Adenauer Foundation (KAS) REMENA, 2017

Education Management and Planning, Indoor Tools for Citizenship, Educator, 2015

Foreign Language, YÖK-ÖYP İngilizce Eğitimi, Marmara Üniversitesi, 2013

## **Dissertations**

Doctorate, Optical Scattering Based Random Forest Assisted Particle Detection and Classification, Abdullah Gul University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2023

Postgraduate, Photometric Modelling for Efficient Lighting and Display Technologies, Abdullah Gul University, Fen Bilimleri Enstitüsü, Elektrik Ve Bilgisayar Mühendisliği Abd, 2016

## **Research Areas**

Electrical and Electronics Engineering, Electronic, Nanotechnology, Optics and Photonics, Engineering and Technology

## **Academic Titles / Tasks**

Research Assistant PhD, Abdullah Gul University, Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği, 2023 - Continues

Research Assistant, Abdullah Gul University, Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği, 2013 - 2023

Research Assistant, Agri Ibrahim Cecen University, Doğa Bilimleri Ve Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği, 2013 - 2013

## **Taught Courses And Trainings**

Genç S., Ayık S., SDG 7 Atelier with Basic Light Applications, 2024 - 2024

Genç S., Beginner Level MATLAB Training, 2024 - 2024

Genç S., Beginner Level MATLAB Training, 2023 - 2023

Genç S., Introduction to MATLAB and Basic Plotting, 2022 - 2022

Genç S., Çelik Ayık S., Akyüz S., Polat G., Sustainable Development Goal 7 Atelier for Children with Basic Light Applications, 2022 - 2022

Genç S., Indoor Tools for Science, 2015 - 2015

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

### **I. Size, Material Type, and Concentration Estimation for Micro-Particles in Liquid Samples**

Genç S., Erdem T., Icoz K.

- Sensors and Actuators A: Physical, vol.370, pp.115265, 2024 (SCI-Expanded)
- II. **Numerical analysis and experimental verification of optical scattering from microplastics**  
Genç S., Icoz K., Erdem T.  
ROYAL SOCIETY OPEN SCIENCE, vol.10, no.8, pp.1-11, 2023 (SCI-Expanded)
  - III. **FRET enabled light harvesting within quantum dot loaded nanofibers**  
ALTINTAS Y., KİREMİTLER N. B., GENÇ S., ÖNSES M. S., MUTLUGÜN E.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.51, no.6, 2018 (SCI-Expanded)
  - IV. **Rec. 2100 color gamut revelation using spectrally ultranarrow emitters**  
Genç S., UĞUZ M., YILMAZ O., Mutlugun E.  
OPTICAL ENGINEERING, vol.56, no.11, 2017 (SCI-Expanded)
  - V. **Excitonic interaction amongst InP/ZnS salt pellets**  
ALTINTAS Y., YAZICI A. F., ÜNLÜ M., DADI Ş., GENÇ S., MUTLUGÜN E.  
JOURNAL OF MATERIALS CHEMISTRY C, vol.5, no.29, pp.7328-7336, 2017 (SCI-Expanded)
  - VI. **CdSe/ZnS quantum dot films for high performance flexible lighting and display applications**  
ALTINTAS Y., GENÇ S., Talpur M. Y., MUTLUGÜN E.  
NANOTECHNOLOGY, vol.27, no.29, 2016 (SCI-Expanded)
  - VII. **Trans-cis isomerization assisted synthesis of solution-processable yellow fluorescent maleic anhydrides for white-light generation**  
Özdemir M., GENÇ S., ÖZDEMİR R., ALTINTAS Y., Citir M., Sen U., MUTLUGÜN E., USTA H.  
SYNTHETIC METALS, vol.210, pp.192-200, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The effect of medium refractive index on microparticle characterization by optical scattering**  
GENÇ S.  
Photonics Letters of Poland, vol.16, no.2, pp.19-21, 2024 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Inverted Pyramids as a Low-cost, Large-scale SERS Substrate**  
Altınsoy B., Genç S., Nasser H., Bek A.  
Fotonik Çalıştayı 2024, Ankara, Turkey, 13 September 2024, pp.1
- II. **Mie-Scattering Based Detection of Microplastics in Beverages**  
Tan İ. H., Genç S., Bek A.  
Fotonik Çalıştayı 2024, Ankara, Turkey, 13 September 2024, pp.1
- III. **Facile Fabrication of Efficient Plasmonic Nanoantennas for Defect Center Quantum Emitters**  
Genç S., Yılmaz A., Fernández C. R., Çağlayan H., Bek A.  
Fotonik Çalıştayı 2024, Ankara, Turkey, 13 September 2024, pp.1
- IV. **Chemically synthesized inverted pyramids on silicon surfaces for use as substrates in Raman spectroscopy**  
Genç S., Altınsoy B., Nasser H., Bek A.  
18th Nanoscience and Nanotechnology Conference (NANOTR), İstanbul, Turkey, 26 - 28 August 2024, pp.370
- V. **Categorizing Microbeads in Water by Optical Interference and Machine Learning**  
Genç S., İçöz K., Erdem T.  
International Conference on Light and Light-Based Technologies (ICLLT), Ankara, Turkey, 16 - 18 May 2024, pp.1
- VI. **Machine Learning Based Classification of Microparticles Using Optical Scattering Simulations**  
Genç S., İçöz K., Erdem T.  
16th Nanoscience and Nanotechnology Conference (NANOTR), Ankara, Turkey, 5 - 08 September 2022, pp.51
- VII. **Machine Learning Assisted Particle Size and Type Classification Using Wavelength-Dependent**

### **Scattering Patterns**

Genç S., İçöz K., Erdem T.

International Conference on Optics and Photonics (OPTO) 2021, Wroclaw, Poland, 12 - 15 July 2021, pp.15

### **VIII. Color Simulation and Demonstration of Perovskite Nanocrystal Filters for Wide Color Gamut Displays**

GENÇ S., YAZICI A. F., Beskacak E., Uran C., MUTLUGÜN E.

31st Annual Conference of the IEEE Photonics Society, IPC 2018, Virginia, United States Of America, 30 September - 04 October 2018

### **IX. Redesign of commercial color filters for color enriched LCDs**

Genç S., Uran C., Mutlugün E.

International Conference on Optics and Photonics (OPTO) 2018, Gdansk, Poland, 4 - 07 July 2018

### **X. The effect of fourth color component on enhancement of color gamut**

GENÇ S., Uguz M., MUTLUGÜN E.

30th Annual Conference of the IEEE-Photonics-Society (IPC), Florida, United States Of America, 1 - 05 October 2017, pp.227-228

### **XI. Quantum Dot Integrated Nanofibers for White LEDs**

MUTLUGÜN E., ALTINTAS Y., KİREMİTLER N. B., GENÇ S., ÖNSES M. S.

Materials Research Society, MRS 2017 Spring Meeting, Arizona, United States Of America, 17 - 21 April 2017

### **XII. Polymeric Nanocrystal Sheets for Efficient Lighting and Display Applications**

MUTLUGÜN E., ALTINTAS Y., GENÇ S., TALPUR M. Y.

Materials Research Society, MRS 2016 Fall Meeting, Boston, United States Of America, 27 November - 02 December 2016

### **XIII. Computational study on NTSC color gamut enhancement using nano emitters**

GENÇ S., UĞUZ M., MUTLUGÜN E.

IEEE Photonics Conference 2016, Hawaii, United States Of America, 2 - 06 October 2016

## **Memberships / Tasks in Scientific Organizations**

Global Solutions Initiative - Young Global Changer Ambassador (Middle East), Country Representative, 2024 - Continues, Germany

IEEE Photonics Society - Young Professionals Advisory Committee, Chairman, 2024 - Continues, United States Of America

IEEE Photonics Society - Young Professionals, Vice President, 2024 - Continues, United States Of America

IEEE, Member, 2016 - Continues, United States Of America

IEEE Photonics Society, Member, 2016 - Continues, United States Of America

IEEE Photonics Society - Young Professionals, Member of Advisory Board, 2021 - 2023, United States Of America

IEEE Photonics Society Globalization Committee, Member, 2021 - 2023, United States Of America

## **Scientific Refereeing**

PHOTONICS LETTERS OF POLAND, Journal Indexed in ESCI, September 2022

## **Scientific Research / Working Group Memberships**

Smart Nanophotonics, Abdullah Gul University, Turkey, <http://people.agu.edu.tr/talhaerdem/Research>, 2019 - Continues

## **Metrics**

Publication: 21

Citation (WoS): 58

Citation (Scopus): 37

H-Index (WoS): 3

H-Index (Scopus): 3

## **Scholarships**

IPC 2024 Student & Young Professionals Travel Grant (SUM24 - Bridgetown, Barbados), Other International Organizations, 2024 - 2024

IPC 2023 Student & Young Professionals Travel Grant (IPC23 - Florida, USA), Other International Organizations, 2023 - 2023

IPC 2019 Student & Young Professionals Travel Grant (IPC19 - Texas, USA), Other International Organizations, 2019 - 2019

RAPID 2019 Student & Young Professionals Travel Grant (RAPID19 - Florida, USA), Other International Organizations, 2019 - 2019

IPC 2018 Student & Young Professionals Travel Grant (IPC18 - Virginia, USA), Other International Organizations, 2018 - 2018

## **Awards**

Genç S., Young Professional Member of the Month, Ieee Photonics Society, June 2020

Genç S., 3rd Best Oral Presentation, Gdańsk University Of Technology, Opto2018 Conference, July 2018