

## Asst. Prof. AHMAD SALMANOGHLI KHIAVI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ADM-2365-2022

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### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği A.B.D., Turkey 2017 - 2021

Postgraduate, Tabriz University, Iran 2005 - 2007

Undergraduate, Sahand University of Technology, Iran 2001 - 2005

### Research Areas

Sensing Devices and Transducers, Electronic Circuits, Microwave Circuits

### Academic Titles / Tasks

Assistant Professor, Ankara Yıldırım Beyazıt University, Mühendislik ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2024 - Continues

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

- I. **Engineering qubit coupling to reservoir mode: Optimizing circuitry to extend coherence time**  
Salmanoglu A., Sirat V. S.  
Chinese Journal of Physics, vol.90, pp.1005-1014, 2024 (SCI-Expanded)
- II. **Design of ultra-low noise amplifier for quantum applications (QLNA)**  
Salmanoglu A., Sirat V. S.  
Quantum Information Processing, vol.23, no.3, 2024 (SCI-Expanded)
- III. **Quantum correlation of microwave two-mode squeezed state generated by nonlinearity of InP HEMT**  
Salmanoglu A.  
Scientific Reports, vol.13, no.1, 2023 (SCI-Expanded)
- IV. **Quantum dot transition rate modifying by coupling to lattice plasmon**  
Hatem S., Salmanoglu A., Gecim H. S.  
Optical and Quantum Electronics, vol.55, no.9, 2023 (SCI-Expanded)
- V. **Enhancing quantum correlation at zero-IF band by confining the thermally excited photons: InP hemt circuitry effect**  
Salmanoglu A.  
Optical and Quantum Electronics, vol.55, no.8, 2023 (SCI-Expanded)

- VI. **Entanglement of optical and microcavity modes by means of an optoelectronic system**  
Salmanoglu A., GÖKCEN D., Gecim H. S.  
Physical Review Applied, vol.11, no.2, 2019 (SCI-Expanded)
- VII. **Array of nanoparticles coupling with quantum-dot: Lattice plasmon quantum features**  
Salmanoglu A., Gecim H. S.  
PHYSICA E: LOW-DIMENSIONAL SYSTEMS AND NANOSTRUCTURES, vol.100, pp.54-62, 2018 (SCI-Expanded)
- VIII. **Highly field enhancement by plasmonic field engineering in random distribution of Au-Au nanoparticles as SERS structure**  
SalmanOgli A., Nasserı B., Pişkin E.  
Journal of Luminescence, vol.190, pp.386-391, 2017 (SCI-Expanded)
- IX. **Sensitive plasmonic-photonic nanosensor as a morphologic mask**  
SalmanOgli A., Salimi K., Farhadnia F., Usta D. D.  
Optical Materials, vol.70, pp.73-82, 2017 (SCI-Expanded)
- X. **Plasmon-plasmon interaction effect on reproducible surface-enhanced Raman scattering for dye molecule detection**  
Salmanoglu A., Nasserı B., Pişkin E.  
Sensors and Actuators, A: Physical, vol.262, pp.87-98, 2017 (SCI-Expanded)
- XI. **Lattice plasmon effect on imaging resolution: Point-spread function enhancing**  
Salmanoglu A., Salimi K.  
SENSORS AND ACTUATORS, A: PHYSICAL, vol.267, pp.21-29, 2017 (SCI-Expanded)
- XII. **Plasmon – plasmon interaction effect on effective medium electrical conductivity (an effective agent for photothermal therapy)**  
SalmanOgli A., Nasserı B., Kohneh shahri M. Y., Piskin E.  
Current Applied Physics, vol.16, no.11, pp.1498-1505, 2016 (SCI-Expanded)
- XIII. **Quantum analysis of plasmonic coupling between quantum dots and nanoparticles**  
Ahmad S.  
Physical Review A, vol.94, no.4, 2016 (SCI-Expanded)
- XIV. **Analysis and modeling of localized heat generation by tumor-targeted nanoparticles (Monte Carlo methods)**  
Sanattalab E., SalmanOgli A., Piskin E.  
Journal of Nanophotonics, vol.10, no.2, 2016 (SCI-Expanded)
- XV. **Low noise patch-clamp current amplification by nanoparticles plasmonic--photonic coupling (analysis and modelling)**  
Haberal E., Salmanoglu A., Nasserı B.  
IET NANOBIO TECHNOLOGY, vol.10, pp.315-320, 2016 (SCI-Expanded)
- XVI. **Noble metal nanoparticle surface plasmon resonance in absorbing medium**  
Aghlara H., Rostami R., Maghoul A., Salmanoglu A.  
Optik, vol.126, no.4, pp.417-420, 2015 (SCI-Expanded)
- XVII. **Design of a portable nanosensor for easy breast tomography**  
Rostami A., Salmanoglu A., Farhadnia F., Dolatyari M., Rostami G., Pişkin E.  
RSC Advances, vol.5, no.25, pp.19002-19013, 2015 (SCI-Expanded)
- XVIII. **Simulation of optical signaling among nano-bio-sensors: Enhancing of bioimaging contrast**  
Salmanoglu A., Behzadi S., Rostami A.  
IEEE Transactions on Nanobioscience, vol.13, no.3, pp.327-335, 2014 (SCI-Expanded)
- XIX. **Investigation of potential profile effects in quantum dot and onion-like quantum dot-quantum well on optical properties**  
Elyasi P., Salmanoglu A.  
Optics Communications, vol.318, pp.26-30, 2014 (SCI-Expanded)
- XX. **Enhancement of tumor smart-targeting efficiency based on optical communication between signaling and receiving nanoparticles (modeling and analysis)**  
Salmanoglu A., Rostami A., Faranoush M., Dolatyari M., Rostami G.

- RSC Advances, vol.4, no.59, pp.30984-30992, 2014 (SCI-Expanded)
- XXI. **Design and simulation of perturbed onion-like quantum-dot-quantum-well (CdSe/ZnS/CdSe/ZnS) and its influence on fluorescence resonance energy transfer mechanism**  
SalmanOgli A., Rostami A.  
IET Nanobiotechnology, vol.7, no.4, pp.140-150, 2013 (SCI-Expanded)
- XXII. **Investigation of surface plasmon resonance in multilayered onion-like heteronanocrystal structures**  
Salmanogli A., Rostami A.  
IEEE Transactions on Nanotechnology, vol.12, no.5, pp.831-838, 2013 (SCI-Expanded)
- XXIII. **Plasmon modes hybridization influence on Nano-bio-sensors specification**  
Salmanogli A., Rostami A.  
IEEE Transactions on Nanotechnology, vol.12, no.5, pp.858-866, 2013 (SCI-Expanded)
- XXIV. **Simulation of a broadband nano-biosensor based on an onion-like quantum dot - Quantum well structure**  
Absalan H., SalmanOgli A., Rostami R.  
Quantum Electronics, vol.43, no.7, pp.674-678, 2013 (SCI-Expanded)
- XXV. **Engineering of perturbation effects in onion-like heteronanocrystal quantum dot-quantum well**  
Salmanogli A., Rostami R.  
Optics Communications, vol.306, pp.106-112, 2013 (SCI-Expanded)
- XXVI. **Simulation of tumor targeting enhancement by amplifying of targeted nano-biosensors radiation intensity**  
Salmanogli A., Rostami A.  
IEEE Transactions on Biomedical Engineering, vol.60, no.5, pp.1328-1335, 2013 (SCI-Expanded)
- XXVII. **Design and simulation of nano-bio sensors for dye molecules targeting to enhance targeting efficiency (smart targeting)**  
Salmanogli A., Rostami A., Abasi M.  
IEEE Transactions on Nanobioscience, vol.12, no.1, pp.21-28, 2013 (SCI-Expanded)
- XXVIII. **Modeling and improvement of breast cancer site temperature profile by implantation of onion-like quantum-dot quantum-well heteronanocrystal in tumor site**  
Salmanogli A., Rostami A.  
IEEE Transactions on Nanotechnology, vol.11, no.6, pp.1183-1191, 2012 (SCI-Expanded)
- XXIX. **Simulation and investigation of quantum dot effects as internal heat-generator source in breast tumor site**  
Absalan H., SalmanOgli A., Rostami R., Maghoul A.  
Journal of Thermal Biology, vol.37, no.7, pp.490-495, 2012 (SCI-Expanded)
- XXX. **Effects of inhomogeneous distribution of Si-Nc and Er ions on optical amplification in Si-Nc Er doped fiber**  
Meidanchi A., Salmanogli A.  
Optik, vol.123, no.13, pp.1140-1145, 2012 (SCI-Expanded)
- XXXI. **Investigation of electronic and optical properties of (CdSe/ZnS/CdSe/ZnS) quantum dot-quantum well heteronanocrystal**  
SalmanOgli A., Rostami A.  
Journal of Nanoparticle Research, vol.13, no.3, pp.1197-1205, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Squeezed state generation using cryogenic InP HEMT nonlinearity**  
Salmanogli A.  
Journal of Semiconductors, vol.44, no.5, 2023 (ESCI)
- II. **Silicon-based core-shell nanoparticle's nanobiomedical characterisation**  
Sana F. A., Farhadnia F., Salmanogli A.

International Journal of Nanoparticles, vol.11, no.4, pp.283-293, 2019 (Scopus)

III. **Engineering of core/shell nanoparticles surface plasmon for increasing of light penetration depth in tissue (modeling and analysis)**

Faalnouri S., Salmanoglu A.

Nanomedicine Research Journal, vol.2, pp.189-198, 2017 (Scopus)

IV. **Nanobio applications of quantum dots in cancer: Imaging, sensing, and targeting**

SalmanOglu A.

Cancer Nanotechnology, vol.2, no.1-6, pp.1-19, 2011 (Scopus)

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

I. **Design of Operational Quantum Radar**

SALMANOGHLI KHIAMI A.

QSBIZTECH 2024 &lt;Q|Turkey&gt;, Turkey, 7 - 08 March 2024

II. **Photodetector Engineering with Plasmonic Properties**

SALMANOGHLI KHIAMI A., GEÇİM H. S., ATABEY T. N., Kurt H. F., Dereli O. C.

World Academy of Science, Engineering and Technology International Journal of Electronics and Communication Engineering, 24 June 2021

III. **Quantum Radar**

SALMANOGHLI KHIAMI A.

Kobit 5, Turkey, 8 - 09 June 2021

IV. **Design and Modeling Interdigitated Capacitor - Spiral Inductor Resonator for Optical Pressure Sensor**

Demirel M., Duyguluer G., Öztürk M., Salmanoglu A., Gecim H.

13th International Conference on Electrical and Electronics Engineering, ELECO 2021, Virtual, Bursa, Turkey, 25 - 27 November 2021, pp.195-200

V. **Design and Modeling of Very Narrow Band-pass Radio Frequency Filter for Optical Pressure Sensor**

Ispak T., Basarancr G., Ceylan S., Salmanoglu A., Gecim H.

13th International Conference on Electrical and Electronics Engineering, ELECO 2021, Virtual, Bursa, Turkey, 25 - 27 November 2021, pp.201-205

VI. **Biomedical Device for Early Breast Cancer Detection: Device Performance Improving by Plasmonic-Photonic Mask**

SALMANOGHLI KHIAMI A., Meral S., Yalcinkaya E., Eroglu M., GEÇİM H. S.

BIOIMAGING 2019 - 6th International Conference on Bioimaging, 18 July 2019

VII. **Effects of optical losses on characteristics of silicon nanocrystal-Er-doped fiber amplifier**

SALMANOGHLI KHIAMI A., Rostami A.

2008 Second International Conference on Communications and Electronics, 04 June 2008

VIII. **Investigation of optical amplification in Si-Nanocrystal-Er doped optical fibers**

SALMANOGHLI KHIAMI A., Rostami A., Janabi Sharif F.

PROCEEDINGS-SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 06 June 2007

## **Metrics**

Publication: 59

Citation (Scopus): 78

H-Index (WoS): 9

H-Index (Scopus): 6