

Prof. ATILLA AYDINLI

Personal Information

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Education Information

Doctorate, University of Virginia, Engineering Physics, United States Of America 1977 - 1981

Postgraduate, University of Virginia, Engineering Physics, United States Of America 1976 - 1977

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1971 - 1975

Dissertations

Doctorate, Au/Pt/GaAs Interface:The Schottky Barrier, University of Virginia, Engineering Physics, 1981

Postgraduate, Point Contact Josephson Junctions, University of Virginia, Engineering Physics, 1977

Academic Titles / Tasks

Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2016 - Continues

Academic and Administrative Experience

Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, Elektrik-Elektronik Mühendisliği Bölümü, 2017 - Continues

Advising Theses

AYDINLI A., Sensor design base on slow light in photonic crystals, Postgraduate, E.Yağmur(Student), 2021

AYDINLI A., Aydınli A., Effects of atomik layer deposition passivation on leakage current in (In) GaN multi- quantum well light emitting diodes, Postgraduate, H.Mert(Student), 2021

AYDINLI A., Parity time symmetry applications in integrated optics, Postgraduate, S.Keskinden(Student), 2020

AYDINLI A., Optical and thermal dynamics of long wave quantum cascade lasers, Doctorate, S.GÜNDOĞDU(Student), 2018

AYDINLI A., Novel concepts in high power semiconductor lasers, Doctorate, S.ARSLAN(Student), 2018

AYDINLI A., GaN/InGaN tabanlı LED çip fabrikasyonu ve karakterizasyonu, Postgraduate, M.SIDDIYK(Student), 2018

AYDINLI A., Nd:YVO4 lazer kristali ve MgO:PPLN SHG kristali ile yeşil lazer tasarımı, karakterizasyonu ve uygulama alanları, Postgraduate, M.BURÇİN(Student), 2017

AYDINLI A., Size controlled germanium nanocrystals in dielectrics: Structural and optical analysis and stress evolution, Doctorate, R.BAHARIQUSHCHI(Student), 2017

AYDINLI A., Light matter interaction in plexcitonic crystals and moiré cavities, Doctorate, E.KARADEMİR(Student), 2015

AYDINLI A., Impurity-free quantum well intermixing for high-power laser diodes, Postgraduate, A.KAHRAMAN(Student), 2015

AYDINLI A., Formation of Ge nanocrystals with cw laser irradiation of SiO_x:Ge thin films, Postgraduate, M.GÜMÜŞ(Student), 2015

AYDINLI A., Dark current control in InAs/GaSb superlattice photodetectors, Postgraduate, A.MUTİ(Student), 2013

AYDINLI A., Plasmonic nanoparticles by laser dewetting of thin metallic films, Postgraduate, S.SARITAŞ(Student), 2013

AYDINLI A., Tuning the exciton-plasmon coupling, Postgraduate, S.ATEŞ(Student), 2012

AYDINLI A., Formation of silicon nanocrystals by laser processing of silicon rich oxides, Postgraduate, S.GÜNDOĞDU(Student), 2012

AYDINLI A., Fabrication, characterization and simulation of plasmonic cavities, Postgraduate, M.KARABIYIK(Student), 2010

AYDINLI A., Grating loaded integrated optical cantilevers, Postgraduate, E.KARADEMİR(Student), 2010

AYDINLI A., Passivation of InSb infrared photodetectors, Postgraduate, S.YUMRUKÇU(Student), 2010

AYDINLI A., Grating based plasmonic cavities, Postgraduate, S.SEÇKİN(Student), 2009

AYDINLI A., Plasmonic band gap cavities, Doctorate, A.KOCABAŞ(Student), 2008

AYDINLI A., Low dimensional structures for electrical and optical applications, Postgraduate, İ.AKÇA(Student), 2008

AYDINLI A., Germanium alloys for optoelectronic devices, Postgraduate, A.ERBİL(Student), 2008

AYDINLI A., Silicon based dielectrics: Growth, characterization, and applications in integrated optics, Doctorate, F.AY(Student), 2005

AYDINLI A., Monolithic and hybrid silicon-on-insulator integrated optical devices, Doctorate, İ.KİYAT(Student), 2005

AYDINLI A., Polarization independent thermo-optic modulators for integrated optics, Postgraduate, A.KOCABAŞ(Student), 2003

AYDINLI A., Integrated optical displacement sensors for scanning force microscopies, Postgraduate, C.KOCABAŞ(Student), 2003

AYDINLI A., Silicon-on-insulator optical waveguides and waveguide devices, Postgraduate, İ.KİYAT(Student), 2000

AYDINLI A., Silicon oxynitride layers for applications in optical waveguides, Postgraduate, F.AY(Student), 2000

AYDINLI A., Low loss optical waveguides and polarization splitters with oxidized Al_xGa_{1-x}As layers, Postgraduate, A.BEK(Student), 1998

AYDINLI A., GaAs/AlGaAs polarization splitting directional couplers, Postgraduate, N.YURT(Student), 1997

AYDINLI A., Gain measurements via spontaneous emission in quantum well semiconductor lasers, Postgraduate, T.AZFAR(Student), 1996

AYDINLI A., Ridge waveguide GaAs / Al_xGa_{1-x}As multiple quantum well laser diodes, Postgraduate, A.KAMURAN(Student), 1994

AYDINLI A., Al_xGa_{1-x}As / GaAs Graded index separate confinement heterostructure single quantum well lasers, Postgraduate, M.KORAY(Student), 1994

AYDINLI A., Çok katlı yarı iletken yapıların darbeli lazerle ışınlanmasının nümerik modellenmesi, Postgraduate, C.TOPAÇLI(Student), 1988

AYDINLI A., Sürekli CO₂ laser, Postgraduate, E.TAN(Student), 1986

AYDINLI A., İyon ekimi ile amorflaştırılmış silikonun pulslu lazerle tavlansında elektriksel aktivasyon, Postgraduate, S.DEDA(Student), 1986

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **PT-symmetric transverse mode splitting in coupled quantum cascade lasers**
Keskinden S., AYDINLI A.
JOURNAL OF MODERN OPTICS, vol.66, no.20, pp.1984-1989, 2019 (SCI-Expanded)
- II. **Facet Cooling in High-Power InGaAs/AlGaAs Lasers**
Arslan S., Gundogdu S., Demir A., AYDINLI A.
IEEE PHOTONICS TECHNOLOGY LETTERS, vol.31, no.1, pp.94-97, 2019 (SCI-Expanded)
- III. **Low-Loss Regrowth-Free Long Wavelength Quantum Cascade Lasers**
Gundogdu S., Demir A., Pisheh H. S., AYDINLI A.
IEEE PHOTONICS TECHNOLOGY LETTERS, vol.30, no.23, pp.1997-2000, 2018 (SCI-Expanded)

IV. Conservation of quantum efficiency in quantum well intermixing by stress engineering with dielectric bilayers

Arslan S., Demir A., Sahin S., AYDINLI A.

SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.33, no.2, 2018 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. Photonic crystal based sensor design Fotonik Kristal Temelli Sensör Tasarımı**
ZEYDAN E. Y., Keskinden S., AYDINLI A.
12th International Conference on Electrical and Electronics Engineering, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.131-135
- II. Reduced facet temperature in semiconductor lasers using electrically pumped windows**
Demir A., Arslan S., Gundogdu S., AYDINLI A.
Conference on High-Power Diode Laser Technology XVII, San-Francisco, Costa Rica, 3 - 05 February 2019, vol.10900
- III. Thermal characterisation of quantum cascade lasers with Fabry Perot modes**
Gundogdu S., Pisheh H. S., Demir A., Guenoven M., AYDINLI A., Sirtori C.
Conference on Semiconductor Lasers and Laser Dynamics VIII, Strasbourg, France, 23 - 26 April 2018, vol.10682
- IV. Facet temperature reduction by separate pumped window in high power laser diodes**
Arslan S., Gundogdu S., Demir A., AYDINLI A.
Conference on Semiconductor Lasers and Laser Dynamics VIII, Strasbourg, France, 23 - 26 April 2018, vol.10682
- V. IFVD-based large intermixing selectivity window process for high power laser diodes**
Arslan S., Sahin S., Demir A., AYDINLI A.
Conference on Semiconductor Lasers and Laser Dynamics VIII, Strasbourg, France, 23 - 26 April 2018, vol.10682

Metrics

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