Antti-Pekka Jauho - DTU Orbit (14/05/2019)

Jauho, Antti-Pekka

Antti-Pekka.Jauho@dtu.dk

Department of Physics - Professor

Center for Nanostructured Graphene

Research outputs:

Symmetry of superconducting correlations in displaced bilayers of graphene
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Control of superconducting pairing symmetries in monolayer black phosphorus
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Gate electrostatics and quantum capacitance in ballistic graphene device
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

In Memoriam Leonid V. Keldysh
Research output: Contribution to journal › Comment/debate – Annual report year: 2019 › Communication

Lithographic band structure engineering of graphene
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Probing the nanoscale origin of strain and doping in graphene-hBN heterostructures
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Fraunhofer response and supercurrent spin switching in black phosphorus with strain and disorder
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Ballistic tracks in graphene nanoribbons
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Conductance quantization suppression in the quantum Hall regime
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Electron Waiting Times of a Cooper Pair Splitter
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review
Probing nonlocal effects in metals with graphene plasmons

Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Strain-engineered Majorana zero energy modes and φ0 Josephson state in black phosphorus

Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Classification of DNA nucleotides with transverse tunneling currents

Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Disorder-induced localised gating in graphene

Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

Electron trajectories and magnetotransport in nanopatterned graphene under commensurability conditions

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Nanostructured graphene for spintronics

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Plasmons in Dimensionally Mismatched Coulomb Coupled Graphene Systems

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Quantum Corrections in Nanoplasmonics: Shape, Scale, and Material

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Spin-Caloritronic Batteries

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Strong Plasmon-Phonon Splitting and Hybridization in 2D Materials Revealed through a Self-Energy Approach

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Symmetry-forbidden intervalley scattering by atomic defects in monolayer transition-metal dichalcogenides

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Thermoelectrics in Coulomb-coupled quantum dots: Cotunneling and energy-dependent lead couplings

Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review
Graphene nanoribbons with sublattice-asymmetric doping
Research output: Contribution to conference › Poster – Annual report year: 2015 › Research

Graphene on graphene antidot lattices: Electronic and transport properties
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Kerr nonlinearity and plasmonic bistability in graphene nanoribbons
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Localized plasmons in graphene-coated nanospheres
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Patched Green's function techniques for two-dimensional systems: Electronic behavior of bubbles and perforations in graphene
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Plasmonic eigenmodes in individual and bow-tie graphene nanotriangles
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Thermally Driven Pure Spin and Valley Currents via the Anomalous Nernst Effect in Monolayer Group-VI Dichalcogenides
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Classical and quantum plasmonics in graphene nanodisks: Role of edge states
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Dual-probe spectroscopic fingerprints of defects in graphene
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Electronic transport in disordered graphene antidot lattice devices
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Nonlocal Response of Metallic Nanospheres Probed by Light, Electrons, and Atoms
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Optical bistability of graphene in the terahertz range
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review
Dynamical polarizability of graphene irradiated by circularly polarized ac electric fields
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Electronic transport in graphene-based structures: An effective cross-section approach
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Fundamental Limitations to Gain Enhancement in Periodic Media and Waveguides
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Fundamental limitations to gain enhancement in slow-light photonic structures
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Microscopic theory of phonon-induced effects on semiconductor quantum dot decay dynamics in cavity QED
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Modified field enhancement and extinction by plasmonic nanowire dimers due to nonlocal response
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Nanoplasmonics beyond Ohm's law
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2012 › Research › peer-review

Nanoplasmonics beyond Ohm's law
Research output: Contribution to journal › Conference article – Annual report year: 2012 › Research › peer-review

Nanoplasmonics beyond the refractive index
Research output: Contribution to conference › Poster – Annual report year: 2012 › Research › peer-review

Single-photon indistinguishability: influence of phonons
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2012 › Research › peer-review

Surface-enhanced Raman spectroscopy: nonlocal limitations
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review
Thermoelectric properties of disordered graphene antidot devices
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Clar Sextet Analysis of Triangular, Rectangular, and Honeycomb Graphene Antidot Lattices
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Clar sextets in square graphene antidot lattices
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Electron transport in edge-disordered graphene nanoribbons
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Field enhancement at metallic interfaces due to quantum confinement
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Role of the lightmatter coupling strength on nonMarkovian phonon effects in semiconductor cavity QED
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Thermoelectric properties of finite graphene antidot lattices
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Unusual resonances in nanoplasmonic structures due to nonlocal response
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Ab initio vibrations in nonequilibrium nanowires
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research

Analysis of optical properties of strained semiconductor quantum dots for electromagnetically induced transparency
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Atomic carbon chains as spin-transmitters: An ab initio transport study
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review
Counting statistics of transport through Coulomb blockade nanostructures: High-order cumulants and non-Markovian effects
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Influence of confining potentials on the exchange coupling in double quantum dots
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Localized Edge Vibrations and Edge Reconstruction by Joule Heating in Graphene Nanostructures
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Non-markovian effects in semiconductor cavity QED: Role of phonon-mediated processes
Research output: Contribution to conference › Poster – Annual report year: 2010 › Research › peer-review

Non-markovian model of photon-assisted dephasing by electron-phonon interactions in a coupled quantum-dot-cavity system
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Plasmonic nanostructures: local versus nonlocal response
Research output: Contribution to journal › Conference article – Annual report year: 2010 › Research › peer-review

Scattering cross section of metal catalyst atoms in silicon nanowires
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Slow-light enhanced absorption in a hollow-core fiber
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Atomistic theory for the damping of vibrational modes in monoatomic gold chains
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

Comparison of electromagnetically induced transparency schemes in semiconductor quantum dot structures: Impact of many-body interactions
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

 Corrections to the density-functional theory electronic spectrum: Copper phthalocyanine
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

Density functional study of graphene antidot lattices: Roles of geometrical relaxation and spin
Electron and phonon transport in silicon nanowires: Atomistic approach to thermoelectric properties

Electronic properties of graphene antidot lattices

Electronic transport properties of fullerene functionalized carbon nanotubes: Ab initio and tight-binding calculations

Optical properties and optimization of electromagnetically induced transparency in strained InAs/GaAs quantum dot structures

Optical response and excitons in gapped graphene

Prospects and limits of nanostructures for surface-enhanced raman spectroscopy

Surface-Decorated Silicon Nanowires: A Route to High-ZT Thermoelectrics

Thermal rectification in nonlinear quantum circuits

Ab initio study of spin-dependent transport in carbon nanotubes with iron and vanadium adatoms

Analysis of quantum dot EIT based on 8-band k\(\pmb{p}\) theory

Comparison of EIT schemes in semiconductor quantum dots

Counting statistics of non-markovian quantum stochastic processes
Designed defects in 2D antidot lattices for quantum information processing
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Graphene antidot lattices: Designed defects and spin qubits
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Heat Conductance is Strongly Anisotropic for Pristine Silicon Nanowires
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Influence of many-particle interactions on slow light phenomena in quantum dots
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Influence of many-particle interactions on slow-light phenomena in quantum dots
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

Mesoscopic photon heat transistor
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Modeling Transport in Ultrathin Si Nanowires: Charged versus Neutral Impurities
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Nanostructure design for surface-enhanced Raman spectroscopy - prospects and limits
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Optical properties of graphene antidot lattices
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Spin-polarized current and shot noise in the presence of spin flip in a quantum dot via nonequilibrium Green's functions
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Spin qubits in antidot lattices
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

Transport in Silicon Nanowires: Role of Radial Dopant Profile
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review
Failure of standard approximations of the exchange coupling in nanostructures
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Inelastic transport theory from first principles: Methodology and application to nanoscale devices
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Influence of Coulomb interactions on quantum coherence in quantum dots
Research output: Contribution to conference › Poster – Annual report year: 2007 › Research › peer-review

Quantum dot as a spin-current diode: A master-equation approach
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Quantum information processing using designed defect states in 2D anti-dot lattices
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Scaling theory put into practice: First-principles modeling of transport in doped silicon nanowires
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Transient charging and discharging of spin-polarized electrons in a quantum dot
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Comment on "Dephasing times in quantum dots due to elastic LO phonon-carrier collisions" - Uskov et al. reply
Research output: Contribution to journal › Editorial – Annual report year: 2006 › Research › peer-review

Electronic transport through Si nanowires: Role of bulk and surface disorder
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Modeling of inelastic effects in molecular electronics
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2006 › Research › peer-review

Quantum information processing using designed defects in 2D antidot lattices
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2006 › Research

Current and Current Fluctuations in Quantum Shuttles
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review
Open Problems in Noise in NEMS
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Quantum Computing using Defects in 2D antidot Lattices
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

Quantum Computing via Defect States in Two-dimensional anti-dot Lattices
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Quantum Transport Calculations Using Wave Function Propagation and the Kubo Formula
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

Quantum Transport Calculations Using Wave Function Propagation and the Kubo Formula
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

Quantum Transport Theories
Research output: Contribution to conference › Paper – Annual report year: 2005 › Research

Simple Models Suffice for the Single Dot Quantum Shuttle
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Unsolved Problems of Noise and Fluctuations in Physics
Research output: Contribution to conference › Paper – Annual report year: 2005 › Research

Coulomb drag in multiwall armchair carbon nanotubes
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Current noise in a vibrating quantum dot array
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Inelastic scattering and local heating in atomic gold wires
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Modeling of inelastic transport in one-dimensional metallic atomic wires
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Modeling of quantum nanomechanics
Quantum theory of shuttling instability in a movable quantum dot array
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Shot noise of a quantum shuttle
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Shuttle Instabilities: Semiclassical Phase Analysis
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

TMR Effect in a FM-QD-FM system
Research output: Contribution to journal › Journal article – Annual report year: 2004 › Research › peer-review

Quantum Shuttle in Phase Space
Research output: Contribution to journal › Journal article – Annual report year: 2003 › Research › peer-review

Virtual Photon Contribution to Frictional Drag in Double-layer Devices
Research output: Contribution to journal › Journal article – Annual report year: 2003 › Research › peer-review

Coulomb drag in the mesoscopic regime
Research output: Contribution to journal › Journal article – Annual report year: 2002 › Research › peer-review

Mesoscopic fluctuations of Coulomb drag between quasiballistic one-dimensional wires
Research output: Contribution to journal › Journal article – Annual report year: 2002 › Research › peer-review

Photon-mediated drag in double-layer electron gas
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2002 › Research › peer-review

Proceedings of the 19th Semiconductor Meeting
Research output: Book/Report › Book – Annual report year: 2002 › Research › peer-review

Sign reversal of drag in bilayer systems with in-plane periodic potential modulation
Research output: Contribution to journal › Journal article – Annual report year: 2002 › Research › peer-review

Spin-dependent quantum shot noise
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2002 › Research › peer-review
Coulomb drag in coherent mesoscopic systems
Research output: Contribution to journal › Journal article – Annual report year: 2001 › Research › peer-review

Coulomb drag in phase-coherent mesoscopic structures
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2001 › Research › peer-review

Dephasing in semiconductor-superconductor structures by coupling to a voltage probe
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Dephasing times in quantum dots due to elastic LO phonon-carrier collisions
Research output: Contribution to journal › Journal article – Annual report year: 2000 › Research › peer-review

Elastic LO-phonon scattering as an efficient mechanism of dephasing and homogeneous broadening in quantum dots
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research › peer-review

Transport in semiconductor superlattices: from quantum kinetics to THz-photon detectors
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2000 › Research › peer-review

Andreev scattering and conductance enhancement in mesoscopic semiconductor-superconductor junction.
Mortensen, N. A., Jauho, A-P. & Flensberg, K., 1999, Andreev scattering and conductance enhancement in mesoscopic semiconductor-superconductor junction.. p. 120-121
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research › peer-review

Angle dependence of Andreev scattering at semiconductor-superconductor interfaces
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Conductance enhancement in quantum-point-contact semiconductor-superconductor devices
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Contact resistance of quantum tubes.
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review
Current responsivity of semiconductor superlattice THz-photon detectors
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Hot electrons in superlattices: quantum transport versus Boltzmann equation.
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Inelastic Quantum Transport in Superlattices: Success and Failure of the Boltzmann Equation
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Quasienergy Spectroscopy of Excitons
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Resonant tunneling in a pulsed phonon field
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Simulations of interference effects in gated two-dimensional ballistic electron systems
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Two color electro-optics in a semiconductor quantum well.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research › peer-review

Unification of the three standard approaches to superlattice transport by nonequilibrium quantum theory.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research › peer-review

Excitonic dynamical Franz-Keldysh effect.
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Impact of interface roughness on perpendicular transport and domain formation in superlattices.
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Linear optical absorption spectra of mesoscopic structures in intense THz fields: Free-particle properties
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Microscopic theory of transconductivity.
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review
On the applicability of miniband transport in semiconductor superlattices.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research

Photon side-bands in mesoscopics.
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Quantum Transport: The Link between Standard Approaches in Superlattices
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Quantum transport theory.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Strong impact of impurity bands on domain formation in superlattices.
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Theory of phase-sensitive measurement of photon-assisted tunneling through a quantum dot
Research output: Contribution to journal › Journal article – Annual report year: 1998 › Research › peer-review

Frictional Coulomb drag in strong magnetic fields
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Linear optical absorption in THz irradiated undoped semiconductor superlattices
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Magnetic Fields and Phonons in Drag
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Microscopic modelling of perpendicular electronic transport in doped multiple quantum wells
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Nonequilibrium absorption in semiconductors and the dynamical Franz-Keldysh effect
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Observation of Dynamical Franz-Keldysh Effect
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Optics of Excitons in THz irradiated Quantum Wells
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review
Possible THz gain in superlattices at a stable operation point
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Sequential tunneling in doped superlattices: Fingerprints of impurity bands and photon-assisted tunneling
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Transport in weakly-coupled superlattices: A quantitative approach for photon-assisted tunneling
Research output: Contribution to journal › Journal article – Annual report year: 1997 › Research › peer-review

Coulomb drag: a probe of electron interactions in coupled quantum wells
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1996 › Research › peer-review

Dynamical Franz-Keldysh Effect
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Frontiers in Nanoscale Science of Micron/Submicron Devices
Research output: Book/Report › Book – Annual report year: 1996 › Research › peer-review

Magneto-Coulomb Drag: Interplay of Electron-Electron Interactions and Landau Quantization
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Nanostructuring of silicon by laser direct writing
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 1996 › Research › peer-review

Quantum kinetics and optics of Semiconductors
Research output: Book/Report › Book – Annual report year: 1996 › Research › peer-review

Theory of coherent time-dependent transport in one-dimensional multiband semiconductor super-lattices
Research output: Contribution to journal › Journal article – Annual report year: 1996 › Research › peer-review

Bloch Oscillations, Zener Tunneling, and Wannier-Stark Ladders in the Time Domain
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

Linear-response theory of Coulomb drag in coupled electron systems
Research output: Contribution to journal › Journal article – Annual report year: 1995 › Research › peer-review

Plasma instabilities in high electric fields
Time-dependent transport in interacting and noninteracting resonant-tunneling systems

Projects:

Spin-valley physics and quantum transport in 2D materials
Handberg Juul Martiny, J., Jauho, A., Kaasbjerg, K. & Thygesen, K. S.
Samfinansieret - Andet
01/02/2017 → 31/01/2020
Project: PhD

Opto-elektroniske komponenter baseret på kvante-strukturer
Berg, T. W., Mørk, J., Birkedal, D., Tromborg, B., Jauho, A. & Willatzen, M.
DTU-lønnet stipendie
15/10/2000 → 06/09/2004
Project: PhD

Quantum transport and thermoelectric effects in nanostructures and two-dimensional materials
Walldorf, N., Jauho, A. & Kaasbjerg, K.
Samfinansieret - Andet
01/09/2016 → 31/08/2020
Project: PhD

Novel Two-dimensional Plasmonic Materials in Curved and Engineered Geometries
Dias Gonçalves, P. A., Mortensen, N. A., Jauho, A. & Peres, N. M. R.
Grundforskningsfonden
01/06/2016 → 31/07/2019
Project: PhD

Theoretical Investigators of transport properties of ballistic graphene devices
Calogero, G., Brandbyge, M., Bøggild, P., Jauho, A., Cuniberti, G., Santos, E. J. G. & Papior, N. R.
Forskningsrådetsfinansiering
15/12/2015 → 13/03/2019
Project: PhD

Bridging first principles modelling with nanodevice TCAD simulations
Palsgaard, M. L. N., Brandbyge, M., Gunst, T., Markussen, T., Jauho, A. & Rideau, D.
Industrial PhD
01/09/2015 → 07/11/2018
Project: PhD

Nanostructuring of two-dimensional materials using disorder
Aktor, T., Jauho, A., Schiøtz, J., Fehske, H. & Wacker, A.
Samfinansieret - Andet
01/05/2015 → 07/11/2018
Project: PhD

Single-photon quantum information technology
Taherkhani, M., Gregerssen, N., Mørk, J., Jauho, A., McCutcheon, D., Marquardt, O. & Zinner, N. T.
Forskningsrådetsfinansiering
15/05/2015 → 05/09/2018
Project: PhD
Quantum Hall effects in nanostructured graphene
Samfinansieret - Andet
01/04/2014 → 14/06/2017
Project: PhD

Slow light enhancement and limitations in periodic media
Grgic, J., Mortensen, N. A., Jauho, A., Mørk, J., Laurynenka, A., De Rossi, A. & Willatzen, M.
Eksternt finansieret virksomhed
01/01/2009 → 19/04/2012
Project: PhD

Teori for Quantum Devices
Johnsen, K., Jauho, A., Jacobsen, K. W. & Smith, H.
MCFinansieret-SU
01/09/1995 → 10/08/1999
Project: PhD

Optical switching in poled glass
Jacobsen, R. S., Svalgaard, M., Fage-Pedersen, J., Kristensen, M., Jauho, A., Bozhevolnyi, S. I. & Kashyap, R.
DTU, Samfinansiering
15/03/2002 → 04/11/2005
Project: PhD

Spin-polariseret transport i halvledere
DTU-lønnet stipendie
01/02/2000 → 02/12/2003
Project: PhD

Spatio-temporal dynamics of localized excitons in semiconductor nanostructures
Leosson, K., Hvam, J. M., Østergaard, J. E., Jauho, A., Klingshirn, C. F. & Larsen, A. N.
DTU-lønnet stipendie
01/09/1998 → 14/03/2002
Project: PhD

Density-matrix Renormalization Group Study of Nanoscale Transport Phenomena
Bohr, D., Jauho, A., Bruus, H., Jeckelmann, E. & Østlund, S.
DTU-lønnet stipendie
01/08/2004 → 29/10/2007
Project: PhD

Quantum-limited measurement in mesoscopic
Flindt, C., Jauho, A., Flensberg, K., Mørk, J., Brandes, T. & Loss, D.
DTU-lønnet stipendie
15/08/2004 → 29/10/2007
Project: PhD

Inelastisk Elektrontransport i nanosystemer
Frederiksen, T., Brandbyge, M., Jauho, A., Schiøtz, J., Persson, M. & Todorov, T. N.
DTU-lønnet stipendie
01/03/2004 → 29/05/2007
Project: PhD

Dynamical effects in molecular electronics
Engelund, M., Jauho, A., Brandbyge, M., Vegge, T., Cuniberti, G. & Fernández, A. A.
DTU-lønnet stipendie
01/03/2007 → 01/09/2010
Transport in nanostructures
DTU-lønnet stipendie
01/09/2001 → 27/10/2004
Project: PhD

Vekselvirkningseffekter i lavdimensionale elektronsystemer
DTU-lønnet stipendie
01/01/1999 → 25/09/2001
Project: PhD

Modellering af transportegenskaber i Nanowires
Markussen, T., Brandbyge, M., Jauho, A., Mortensen, N. A., Blase, X. & Wacker, A.
DTU-lønnet stipendie
01/03/2006 → 21/10/2009
Project: PhD

Fundamentale egenskaber af komponenter til kvanteinformationsteknologi
Nielsen, P. K., Mørk, J., Jauho, A., Lodahl, P., Knorr, A. & Mølmer, K.
Technical University of Denmark
01/02/2009 → 20/09/2012
Project: PhD

Suspended Nanopatterned Graphene Devices
EU-finansieret
15/08/2013 → 07/12/2016
Project: PhD

Graphene Plasmonics
Christensen, T., Mortensen, N. A., Jauho, A., Wubs, M., Andersen, U. L., Koppens, F. & Engheta, N.
Technical University of Denmark
01/10/2012 → 17/02/2016
Project: PhD

Theory of nanoscale four-probe point (N4PP) spectroscopy of nanostructured graphene
Settnes, M., Jauho, A., Petersen, D. H., Power, S., Mortensen, N. A., Peeters, F. M. & Pereira, V. M.
Technical University of Denmark
15/04/2012 → 29/09/2015
Project: PhD

Atomar skala kvante transport i kommende halvleder komponenter
DTU, Samfinansiering
01/09/2006 → 21/12/2009
Project: PhD

Quantum Kinetics of charge carriers in quantum dots: applications to slow light and light amplification
Houmark-Nielsen, J., Jauho, A., Mørk, J., Nielsen, T. R., Mortensen, N. A., Kuhn, T., Pedersen, T. G. & Willatzen, M.
Forskningsrådsfinansiering
15/05/2006 → 20/01/2010
Project: PhD
Properties of single quantum dot lasers
Lund, A. M., Mørk, J., Nielsen, P. K., Jauho, A., Björk, G. & Kapon, E.
Technical University of Denmark
01/09/2010 → 19/03/2014
Project: PhD

Quantum theory of plasmonic excitations in metallic nanostructures
Toscano, G., Mortensen, N. A., Jauho, A., Wubs, M., Thygesen, K. S., García de Abajo, F. J. & Nordlander, P. J. A.
Technical University of Denmark
01/09/2009 → 04/04/2013
Project: PhD

NATEC: Nanophotonics for terabit communications: VKR centre of excellence - NATEC
Mørk, J., Hvam, J. M., Yvind, K., Mortensen, N. A., Jeppesen, P., Oxenløwe, L. K., Peucheret, C., Chung, I., Sigmund, O.,
Jensen, J. S., Jauho, A., Burrows, A. & Hübner, J.
Ukendt
01/09/2008 → 31/08/2014
Project: Research

QUEST: Quantum dot structures enabling light slow-down and amplification
Houmark-Nielsen, J.
Forskningsrådene - STVF
01/01/2006 → 30/06/2012
Project: Research

Non-equilibrium response in strongly driven systems
Jauho, A., Hu, B. Y. & Johnsen, K.
01/01/1997 → …
Project: Research

Microscopic modeling of ballistic transport in gated structures
Jauho, A.
01/01/1997 → …
Project: Research

Theory of charge transport in superlattices
Jauho, A. & Wacker, A.
01/01/1997 → 31/12/2000
Project: Research

Time-dependent effects in mesoscopic transport
Jauho, A.
01/01/1997 → 31/12/1997
Project: Research

Frictional drag in coupled mesoscopic systems
Jauho, A. & Hu, B. Y.
01/01/1997 → 31/12/2000
Project: Research

Electric field effects in scanning tunneling microscopy
Jauho, A., Stokbro, K., Grey, F. & Quaade, U.
01/01/1996 → …
Project: Research
Optical absorption in mesoscopic structures in intense THz-fields
Jauho, A. & Johnsen, K.
01/01/1996 → …
Project: Research

Quantum Kinetics in Transport and Optics of Semiconductors
Jauho, A.
01/01/1996 → 31/12/2000
Project: Research

Transmission phases in time-dependent transport
Jauho, A.
01/01/1996 → 31/12/2000
Project: Research

Modulation response of semiconductor quantum dot nanolasers and nanoLEDs
Nielsen, T. R., Lorke, M., Mark, J. & Jauho, A.
Forskningsrådene - Andre
01/01/2010 → 31/12/2012
Project: Research

Activities:

Talk about "Radiative heat transport in quantum circuits" presented at Unifyring Themes in Condensed Matter
Antti-Pekka Jauho (Speaker)
11 Jan 2009 → 17 Jan 2009
Activity: Talks and presentations › Conference presentations

Talk about "Atomistic Modeling of Electronic and Thermal Transport Properties of Si-nanowires" Presented at Advanced Heterostructures and Nanostructures Workshop
Antti-Pekka Jauho (Speaker)
7 Dec 2008 → 12 Dec 2008
Activity: Talks and presentations › Conference presentations

Talk about "Atomistic Modeling of Electronic and Thermal Transport Properties of Si-nanowires" Presented at International Workshop on Nonequilibrium Nanostructures
Antti-Pekka Jauho (Speaker)
1 Dec 2008 → 6 Dec 2008
Activity: Talks and presentations › Conference presentations