

Publications

Prof. Dr. Christoph Stampfer

JARA-FIT

2nd Institute of Physics A, RWTH Aachen University, 52074 Aachen, Germany

& Peter Grünberg Institute (PGI-9), Forschungszentrum Jülich, 52425 Jülich Germany

e-mail: stampfer@physik.rwth-aachen.de

Phone: +49 241 80 27094

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Highlights:

Coherent Charge Oscillations in a Bilayer Graphene Double Quantum Dot, **Nature Communications** 14, 7911 (2023)
Probing enhanced el-ph coupling in graphene by infrared resonance Raman, **Phys. Rev. Lett.** 130, 256901 (2023)
Particle-hole symmetry protects spin-valley blockade in graphene quantum dots, **Nature** 618, 51 (2023)
Phonon-mediated room-temperature quantum Hall transport in graphene, **Nature Communications** 14, 318 (2023)
Putting high-index Cu on the map for high-yield, dry-transferred CVD graphene, **ACS Nano** 17, 1229 (2023)
Experimental observation of ABCB stacked tetralayer graphene, **ACS Nano** 16, 16617 (2022)
Spin relaxation in a single-electron graphene quantum dot, **Nature Communications** 13, 3637 (2022)
CVD bilayer graphene spin valves with 26 μm spin diffusion length at room temperature, **Nano Letters** 22, 4949 (2022)
2D Materials for Future Heterogeneous Electronics, **Nature Communications** 13, 1392 (2022)
Graphene whisperitronics: transducing whispering gallery modes into electronic transport, **Nano Letters** 22, 128 (2022)
Probing two-electron multiplets in bilayer graphene quantum dots, **Phys. Rev. Lett.** 127, 256802 (2021)
Spin-valley coupling in single-electron bilayer graphene quantum dots, **Nature Communications** 12, 5250 (2021)
Metavalent bonding in crystalline solids: how does it collapse? **Advanced Materials** 33, 2102356 (2021)
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Hot-Carrier Cooling in High-Quality Graphene is Intrinsically Limited by Optical Phonons, **ACS Nano** 15, 11285 (2021)
Electrical Control over Phonon Polarization in Strained Graphene, **Nano Letters** 21, 2898 (2021)
Electron-hole crossover in gate-controlled bilayer graphene quantum dots, **Nano Letters** 20, 7709 (2020)
Observation of the Spin-Orbit Gap in BLG by One-Dimensional Ballistic Transport **Phys. Rev. Lett.** 124, 177701 (2020)
Unveiling valley lifetimes of free charge carriers in monolayer WSe_2 , **Nano Letters** 20, 3147 (2020)
Single-electron double quantum dots in bilayer graphene, **Nano Letters** 20, 2005 (2020)
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Spin States Protected from Intrinsic El-Ph-Coupling Reaching 100 ns Lifetime in MoSe_2 , **Nano Letters** 19, 4083 (2019)
A corner reflector of graphene Dirac fermions as a phonon-scattering sensor, **Nature Communications** 10, 2428 (2019)
Detecting Ultrasound Vibrations by Graphene Resonators, **Nano Letters** 18, 5132 (2018)
Gate-defined electron-hole double dots in bilayer graphene, **Nano Letters** 18, 4785 (2018)
Impact of Many-Body Effects on Landau Levels in Graphene, **Phys. Rev. Lett.** 120, 187701 (2018)
Tailoring mechanically-tunable strain fields in graphene, **Nano Letters** 18, 1707 (2018)
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High quality factor graphene-based 2D heterostructure mechanical resonator, **Nano Letters** 17, 5950 (2017)
A two-dimensional Dirac fermion microscope, **Nature Communications** 8, 15783 (2017)
Spin lifetimes exceeding 12 nanoseconds in graphene non-local spin valve devices, **Nano Letters** 16, 3533 (2016)
Size quantization of Dirac fermions in graphene constrictions, **Nature Communications** 7, 11528 (2016)
Ballistic transport exceeding 28 μm in CVD grown graphene, **Nano Letters** 16, 1387 (2016)
Raman spectroscopy as probe of nanometer-scale strain variations in graphene, **Nature Communications** 6, 8429 (2015)
Ultrahigh-mobility graphene devices from chemical vapor deposition on reusable copper, **Science Adv.** 1, e1500222 (2015)
Switchable Coupling of Vibrations to Two-Electron Carbon-Nanotube Quantum Dot States, **Nano Letters** 15, 4417 (2015)
Low B Field Magneto-Phonon Resonances in Single-Layer and Bilayer Graphene, **Nano Letters** 15, 1547 (2015)
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Probing relaxation times in graphene quantum dots, **Nature Communications** 4, 1753 (2013)
Electronic excited states in bilayer graphene double quantum dots, **Nano Letters** 11, 3571 (2011)
Spin States in Graphene Quantum Dots, **Phys. Rev. Lett.** 105, 116801 (2010)
Graphene single-electron transistors, **Materials Today** 13, 44 (2010)
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Energy gaps in etched graphene nanoribbons, **Phys. Rev. Lett.** 102, 056403 (2009)
Franck-Condon blockade in suspended carbon nanotube quantum dots, **Nature Physics** 5, 327 (2009)
Spatially resolved Raman spectroscopy of single- and few-layer graphene, **Nano Letters** 7, 238 (2007)

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