Phase-breaking mechanisms

Nyquist phase relaxation in one-dimensional metal films

Weak anti-localization

Weak anti-localization in graphene

Anderson localisation of light

Anderson-Mott transitions

Effect of disorder on the quantum coherence in mesoscopic wires

Modeling of 1D metal-insulator transition

Electron-electron interactions in thin metal films

The Anderson transition and the scaling hypothesis

Peierls distortions in 1D wires: Si(553)-Au

Variable-range hopping conductivity

Variable-range hopping conductivity in Quantum Hall Regime

Hopping conductivity in 2D arrays of Ge/Si quantum dots

Metal-Insulator transition in SrTi_{1 x}Ru_xO₃

Metal-Insulator transition in VO₂

Metal-Insulator transition of strained SmNiO₃ thin films

Electrical transport in wide-band-gap oxide ferromagnetic semiconductors

Kondo effect in carbon nanotubes

STM Study of Kondo effect through ferromagnetic nanoclusters

One- and two-channel Kondo effect in quantum dots

Electronic transport in cuprates