

Supporting information

Stable-radicals increase the conductance and Seebeck coefficient of graphene nanoconstrictions

Mohammed Noori^{1,2}, Hatef Sadeghi^{1,*} and Colin J. Lambert¹

¹The Theory of Molecular-scale Transport, Department of Physics, Lancaster University, Lancaster, UK

²Department of Physics, College of Science, University of Thi-Qar, IRAQ

**h.sadeghi@lancaster.ac.uk*; *c.lambert@lancaster.ac.uk*

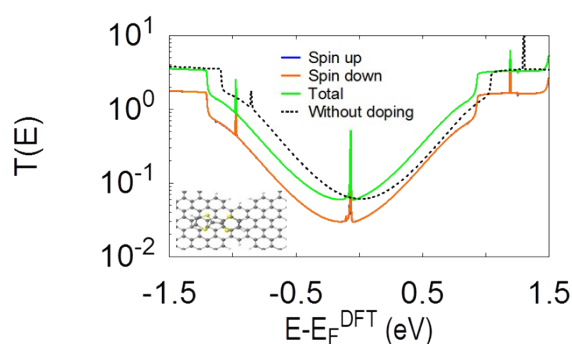


Figure S1. The spin-dependent and total transmission coefficient as a function of energy for TTF nanoconstriction junction

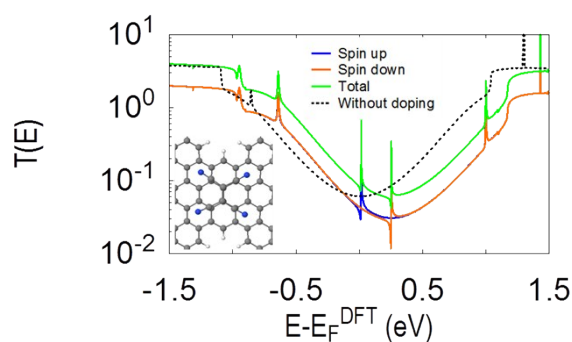


Figure S2. The spin-dependent and total transmission coefficient as a function of energy for TCNE nanoconstriction junction

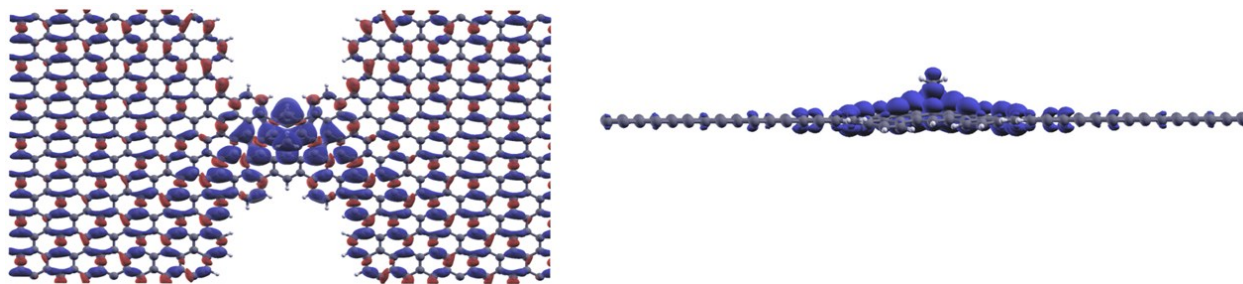


Figure S3. Local density of states (LDOS) of the graphene nanoconstrictions in the presence of 4-picoline radical. The LDOS is calculated by integrating the imaginary of the Green's function $G(r,E)$ with respect to energy E over a small energy window centered of a given atom.