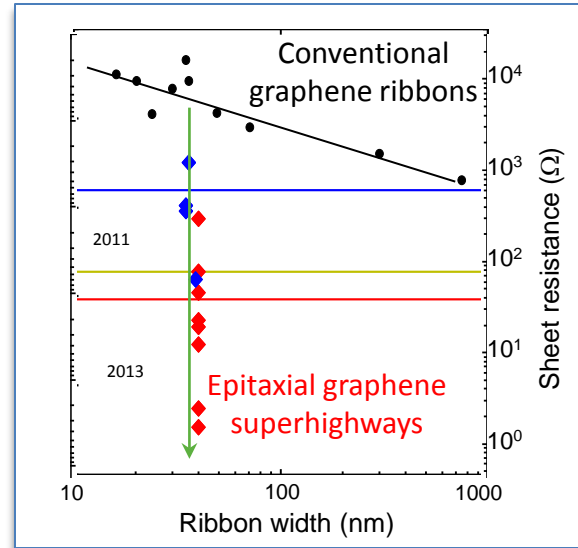
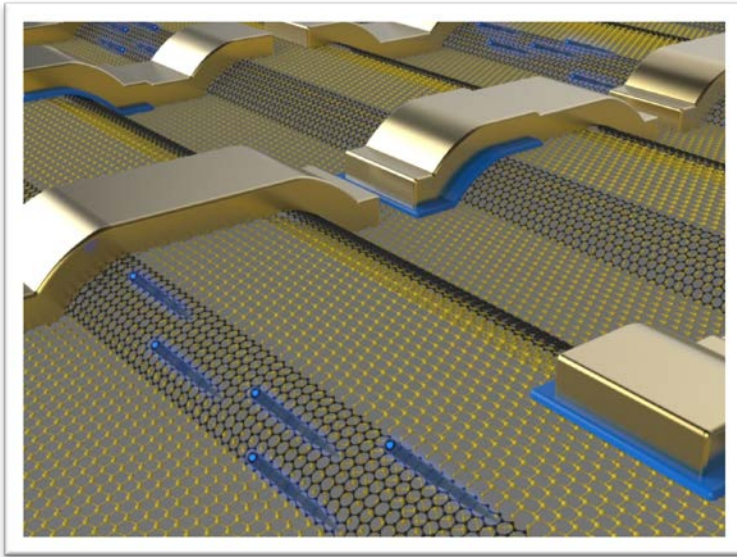


Graphene Electronic Superhighways

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The resistance of epitaxial graphene ribbons are up to 10,000 times smaller than those of conventionally produced graphene ribbons. They are even significantly smaller than theoretically predicted minimal values (red line), indicating that new physical processes may be involved.

Schematic drawing of graphene ribbons, grown on the sidewalls of steps etched in silicon carbide. The blue arrows indicate electrons as they travel along the “highways” from one contact to the next.

Electrons in epitaxial graphene nanoribbons travel unimpeded at high speed for large distances, so that they are ideally suited for graphene electronics

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