Review of: "The structure of an Oligophenylene vanillin nanowire"

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Potential competing interests: No potential competing interests to declare.

The structure of an Oligophenylene vanillin nanowire is so simple that there is no room for defects and electrons pass without hindrance.

This is a big problem with conventional crystalline semiconductors, such as those made from silicon wafers: these defects are always present in those structures, and those defects interfere with the passage of electrons. In addition, materials that normally do not mix easily can be assembled into nanowires. For example, layers of silicon and germanium, two widely used semiconductors, "are very difficult to grow side by side in thin films." “But in Oligophenylene vanillin nanowires, they can be grown without any problems.” In addition, the equipment required for this type of vapor deposition is widely used in the semiconductor industry and can easily be adapted for the production of nanowires.

Conclusion:

Oligophenylene vanillin (silicon/germanium) structure nanowires and cylinders are used for possible applications in energy, electronics, optics and other fields.

References


