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# Electrical interrogation of DNA nanowires

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We will discuss one-dimensional nanowires that integrate the unique structural and recognition features of DNA with the favorable electronic properties of conductive π-conjugated organic systems. We have incorporated such nanowires into electrical devices and investigated their charge transport properties as a function of DNA length and sequence context. Our studies are significant for the development of next generation nanoscale biosensors and organic electronics.

## Biography

Alon A. Gorodetsky is an Assistant Professor in the Department of Chemical Engineering and Materials Science at the University of California - Irvine. He received his B. S. degrees in Engineering Physics and Materials Science from Cornell University and his PhD in Chemistry from the California Institute of Technology. Subsequently, Dr. Gorodetsky was an NSF American Competitiveness in Chemistry Postdoctoral Fellow at Columbia University. Dr. Gorodetsky's current research is focused on the development of biologically inspired materials and biomolecular electronics for addressing issues in human health and renewable energy.

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