

Figure S1. Gel electrophoresis analysis of the inter-input interactions and the formation of supramolecular structures of the inputs.

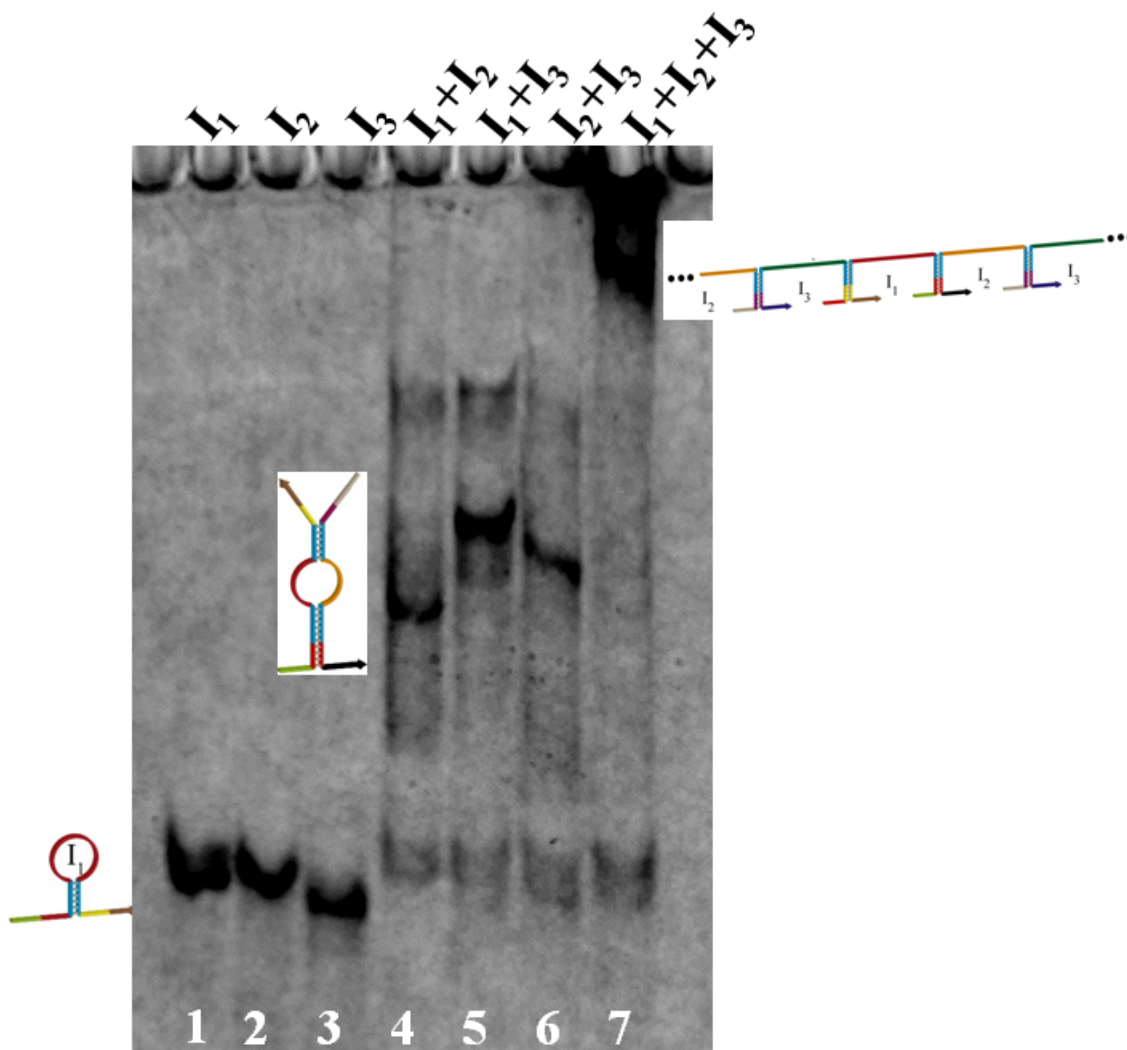


Figure S1 examines the inter-input interactions and the formation of the respective supramolecular structures. In lanes 1-3 the electrophoretic migration of the individual inputs, I_1 , I_2 and I_3 are presented. In lanes 4-6 the bands corresponding to the electrophoretic migration of mixtures of the I_1+I_2 ; I_1+I_3 ; I_2+I_3 are presented. Besides residues of the free input strands, bands corresponding to slower migrating DNA structures are observed, consistent with the formation of bi-loop structures of the inputs. In lane 7, the electrophoretic migration of the mixture consisting of $I_1+I_2+I_3$ is displayed. A broad very slow migrating band corresponding to a high-molecular-weight product is observed, consistent with the formation of polymeric wires consisting of the three inputs.