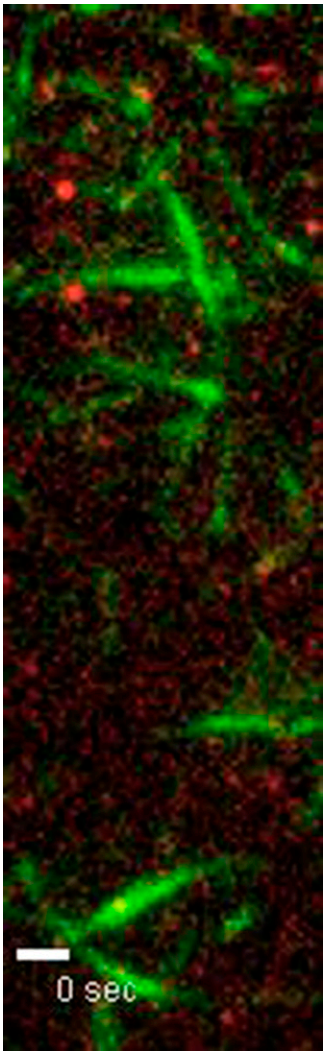
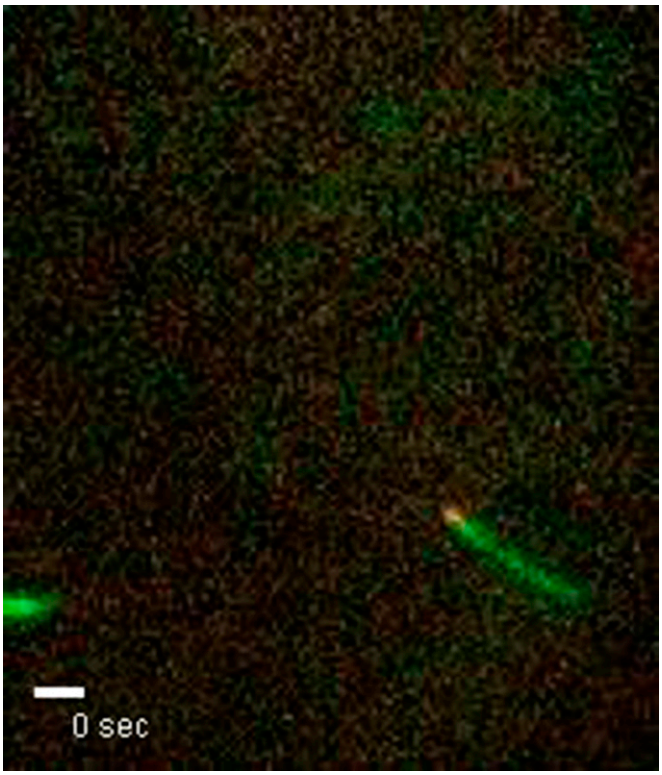
# Supporting Information

## Polka et al. 10.1073/pnas.1304127111



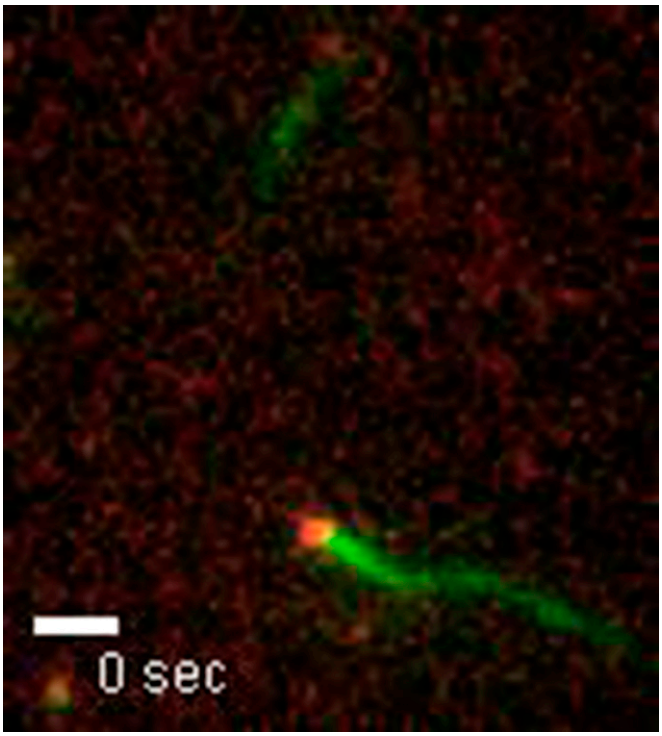

**Movie S1.** DNA-bound AlfA filaments are more dynamic than unbound filaments: 6 nM *parN*, 3 μM AlfA, 1.5 μM AlfB. (Scale bar, 1 μm.) Acquisition interval, 5 s.

Movie S1



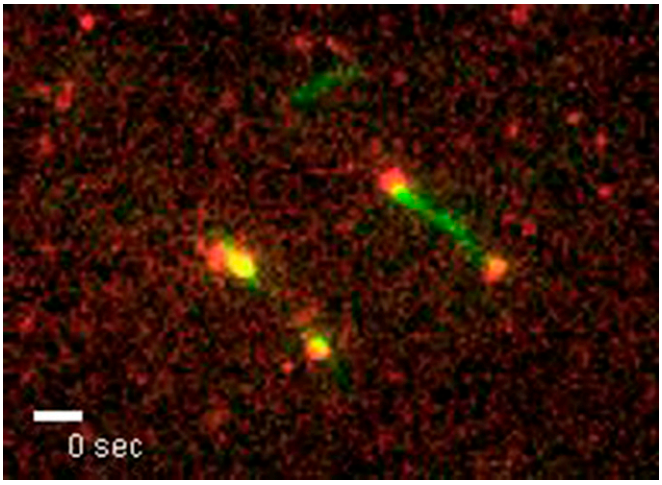

**Movie S2.** Multivalent *parN* particles can be propelled processively. Source for Fig. 4*C*: 20 nM *parN*, 3 μM AlfA, 1.5 μM AlfB. (Scale bar, 1 μm.) Acquisition interval, 5 s.

Movie S2



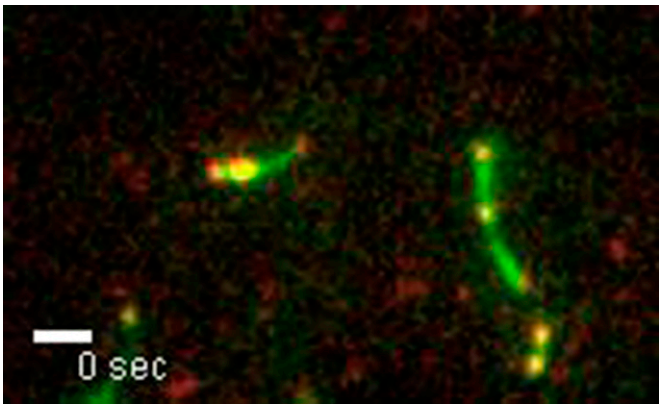

**Movie S3.** A *parN* particle breaks apart, with the daughters pushed in opposite directions. Source for Fig. 4*D*: 60 nM *parN*, 3.2 μM AlfA, 1.6 μM AlfB. (Scale bar, 1 μm.) Acquisition interval, 3 s.

Movie S3




**Movie S4.** Multiple successive filament/DNA rearrangements and segregation events. Source for Fig. 4*E*: 60 nM *parN*, 3.2 μM AlfA, 1.6 μM AlfB. (Scale bar, 1 μm.) Acquisition interval, 3 s.

Movie S4




**Movie S5.** Multiple successive filament/DNA rearrangements and segregation events: 60 nM *parN*, 3.2 μM AlfA, 1.6 μM AlfB. (Scale bar, 1 μm.) Acquisition interval, 3 s.

Movie S5

## Other Supporting Information Files

*SI Appendix* (PDF)