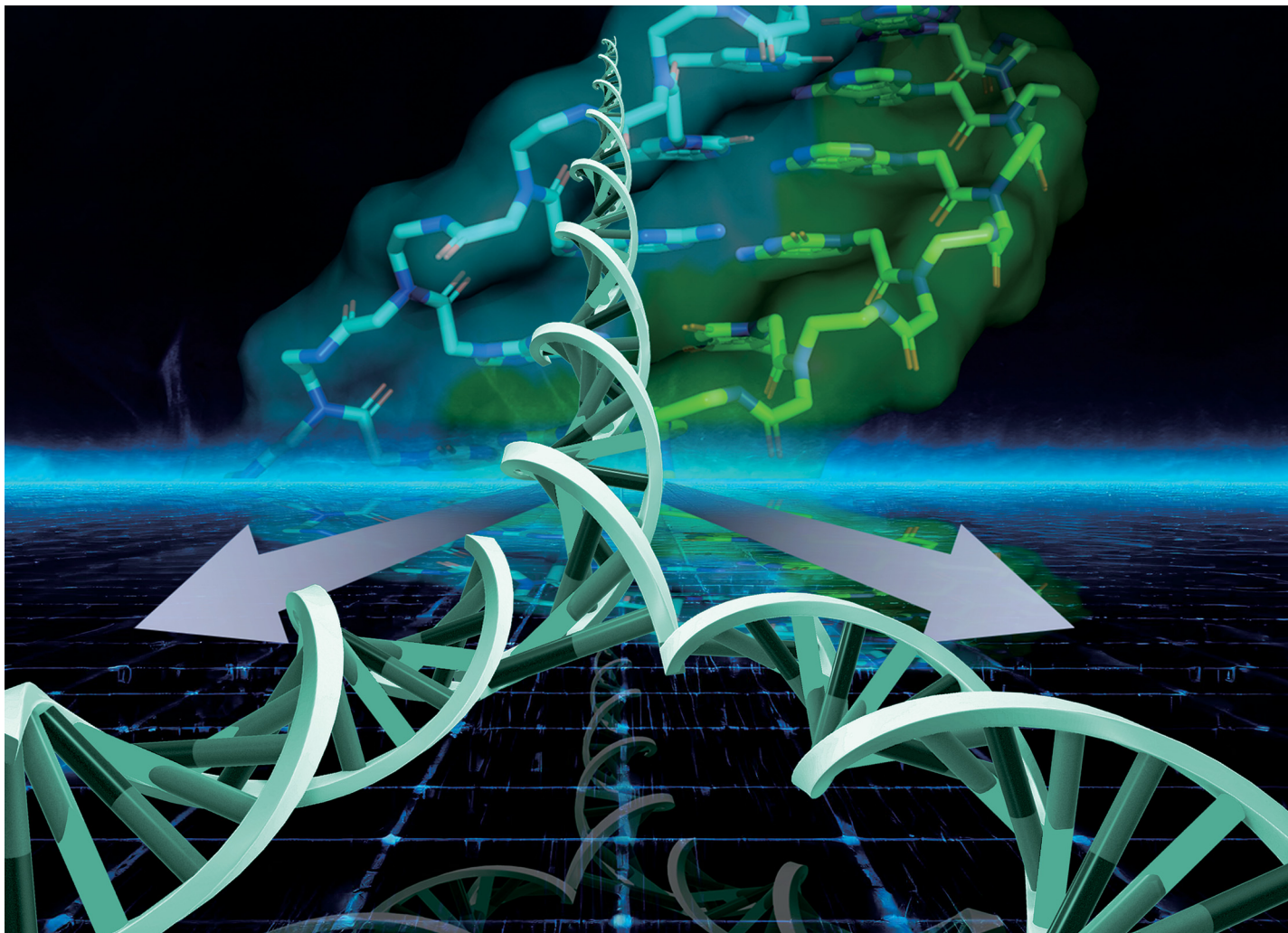




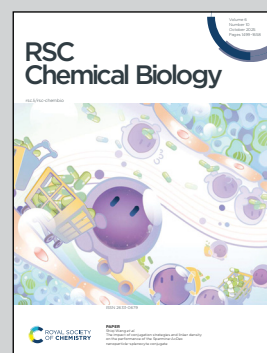
Showcasing research from Professor Shoji Osami's laboratory, Department of Chemistry, Graduate School of Science, Nagoya University, Nagoya, Japan.

Peptide nucleic acids in parallel orientation form invasion complexes with double-stranded DNA

This study explores the underutilized property of peptide nucleic acids (PNAs) to form parallel duplexes and introduces a novel double-duplex invasion strategy that takes advantage of parallel orientations, enabling recognition of specific target sequences in double-stranded DNA without requiring nucleobase modifications. The background illustrates the crystal structure of the parallel PNA/PNA duplex obtained in this work, and the arrows indicate the orientations of the parallel and antiparallel duplexes.

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As featured in:



See Osami Shoji, Yuichiro Aiba *et al.*, *RSC Chem. Biol.*, 2025, **6**, 1566.