

Article

Self-Association of Antimicrobial Peptides: A Molecular Dynamics Simulation Study on Bombinin

Peicho Petkov ¹, Elena Lilkova ², Nevena Ilieva ^{2,3}* and Leandar Litov ¹

¹ Sofia University "St. Kliment Ohridski", Faculty of Physics, Atomic Physics Department, 5 J. Bouchier Blvd, 1164 Sofia, Bulgaria

² Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, Acad. G. Bonchev Str., Block 25A, 1113 Sofia, Bulgaria

³ Institute of Informatics and Mathematics at the Bulgarian Academy of Sciences, Acad. G. Bonchev Str., Block 8, 1113 Sofia, Bulgaria

* Correspondence: nevena.ilieva@parallel.bas.bg

Version October 26, 2019 submitted to Int. J. Mol. Sci.

Supplementary Material

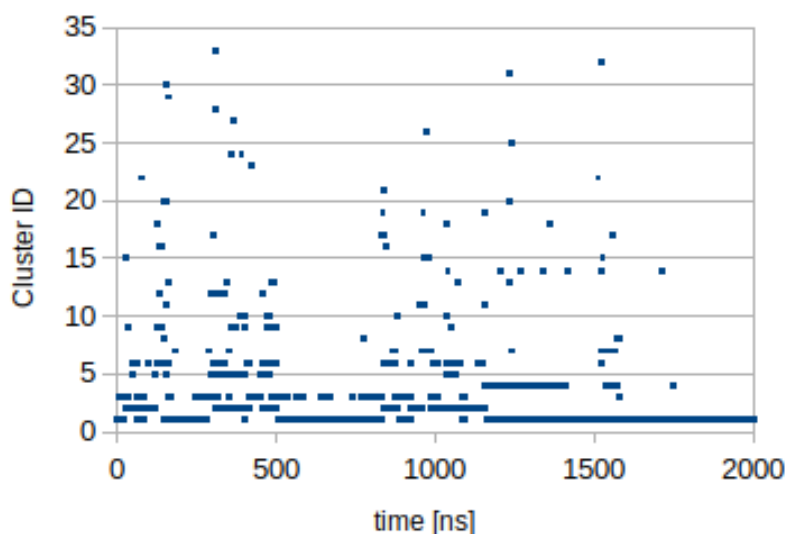


Figure S 1. Cluster population along the 2 μ s trajectory of the single bombinin H2 monomer in water.

© 2019 by the authors. Submitted to *Int. J. Mol. Sci.* for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

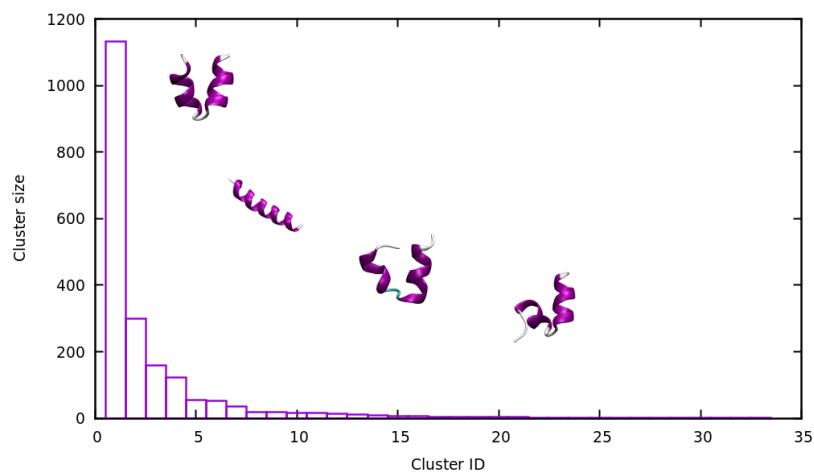


Figure S 2. Clusters' size and centroids of the four biggest clusters.

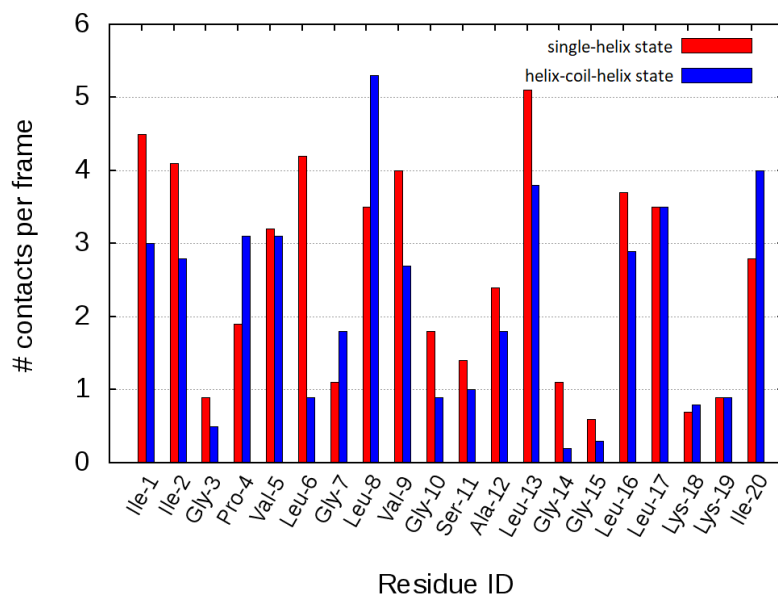


Figure S 3. Intermolecular contacts per frame for each of the residues in the bombinin H2 molecule in the single-helix and the helix-coil-helix states for the solution of 27 bombinin H2 monomers.

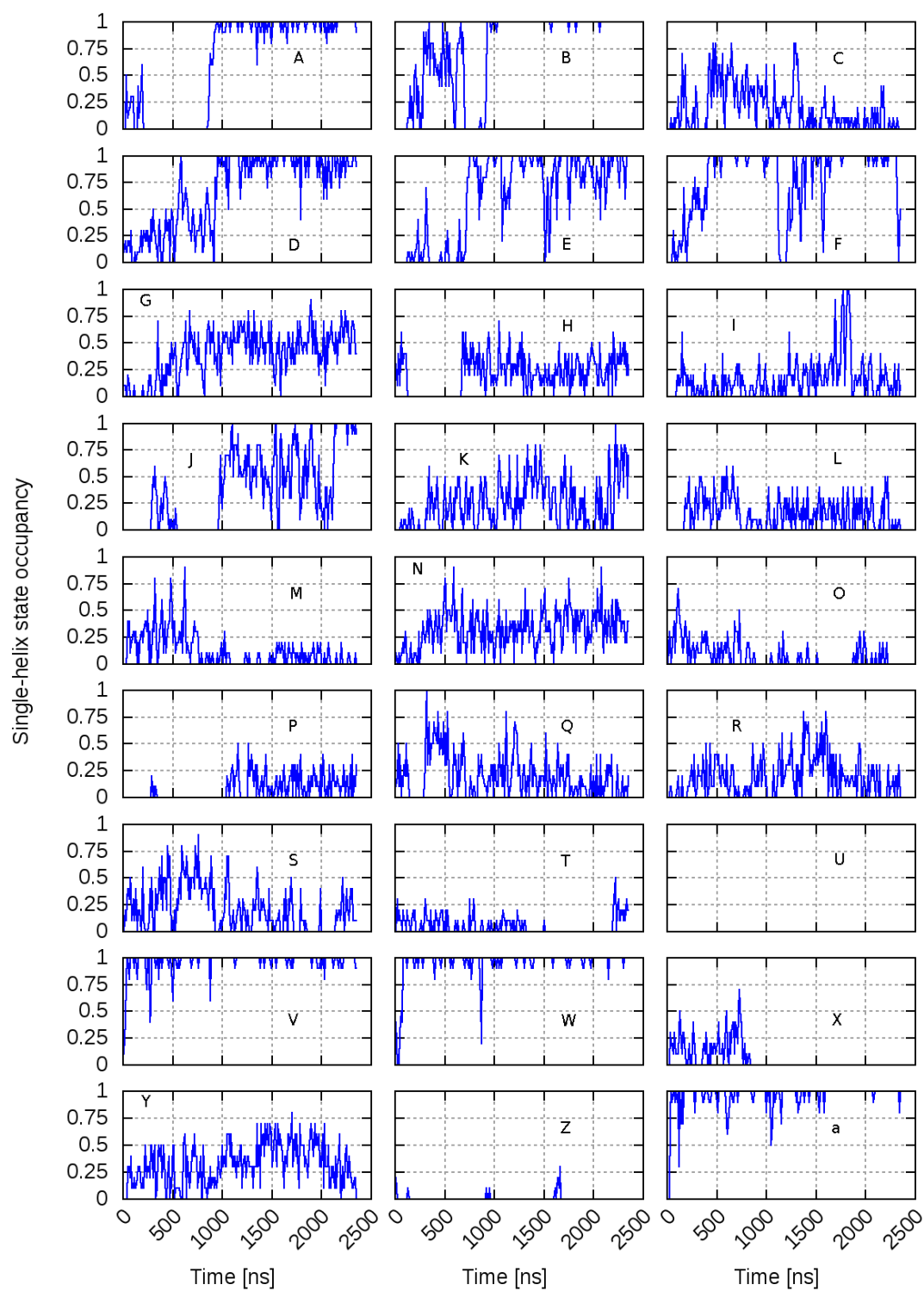


Figure S 4. Single-helix state occupancy for each of the 27 peptide chains.

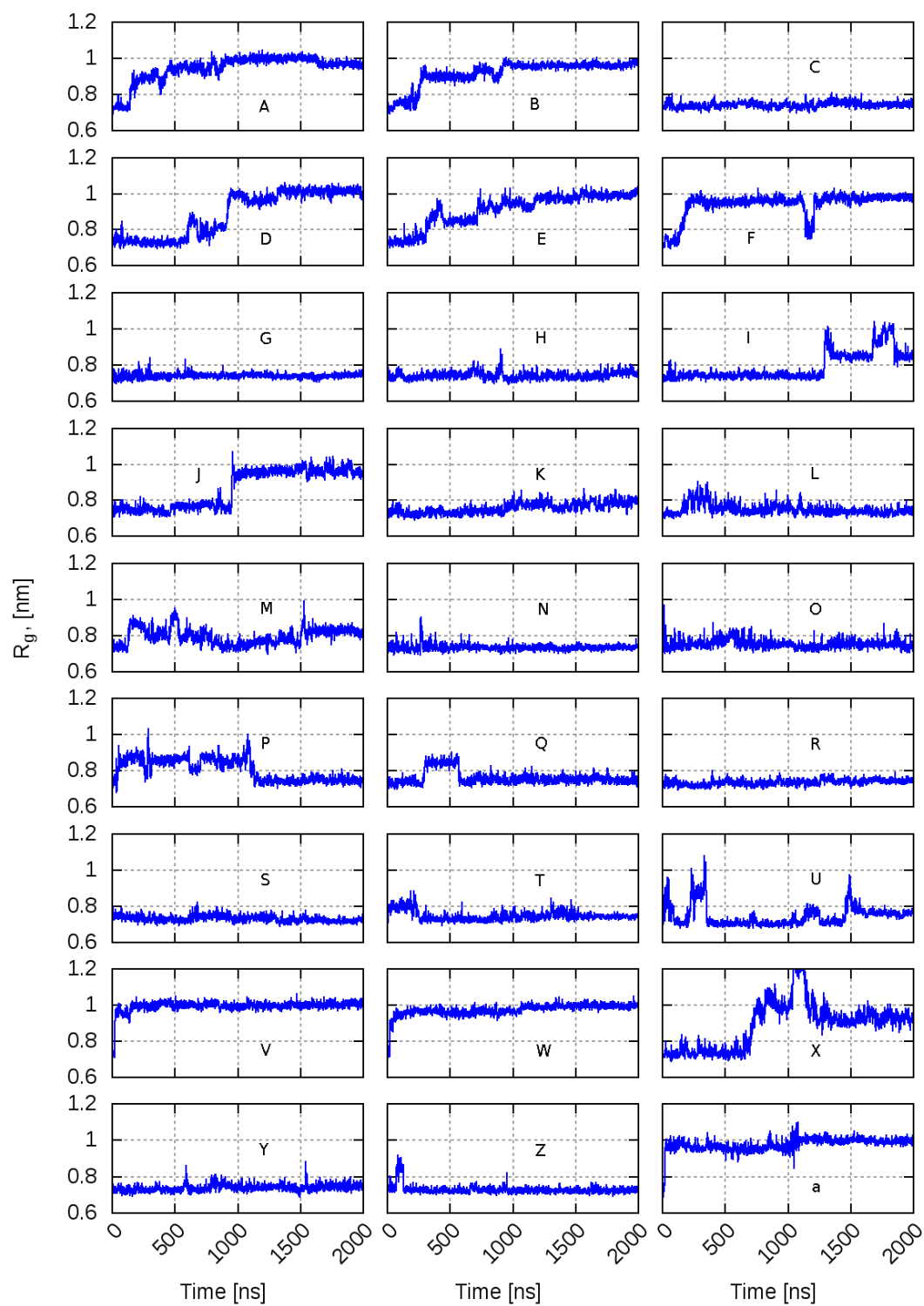


Figure S 5. Gyration radius for each of the 27 peptide chains.