

MODEL OF TOPOLOGICAL CODING OF CHAIN POLYMERS FOR  
BIONICAL NANO-ELECTRONICS. I. A TOPOLOGICAL CODE AND  
ASSIGNMENT OF THE PHYSICAL OPERATORS TO TRIPLETS OF A CODE

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The model of topological coding of chain polymers offered by the authors for bionical nanoelectronics, consists of a topological code and system of the physical operators. The topological code is constructed on a basis of four arc chain graph - analogue of 4-link fragment of chain polymer. It is shown, that all 64 conformations of the chain graph are described by matrixes from 6 boolean variables and form a block supermatrix, which will be transformed in a triplet code, isomorphic to Boolean hypercube  $B^6$ . The system of the physical operators reconstructing conformations of polymer, coded by triplets, consists of the operators of connectivity and anti-connectivity. The model describes properties of a real genetic code.