

Symmetry and elastic deformation of corpuscle rings: pictures

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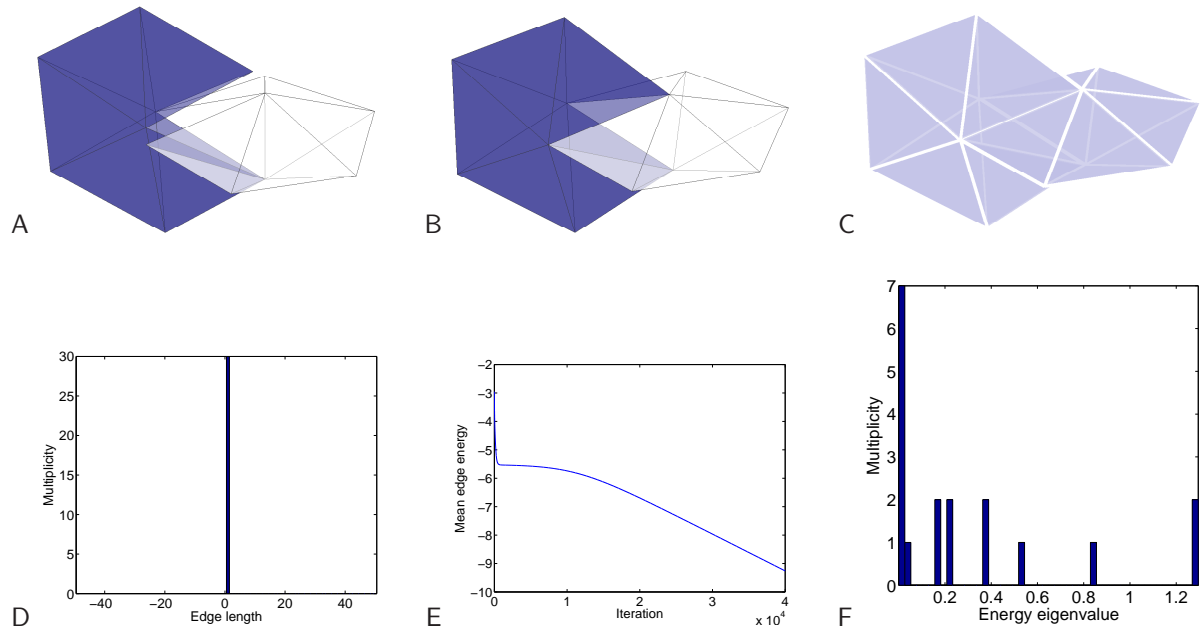


Figure 1: Construction of the Goldberg icosahedron. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red: compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

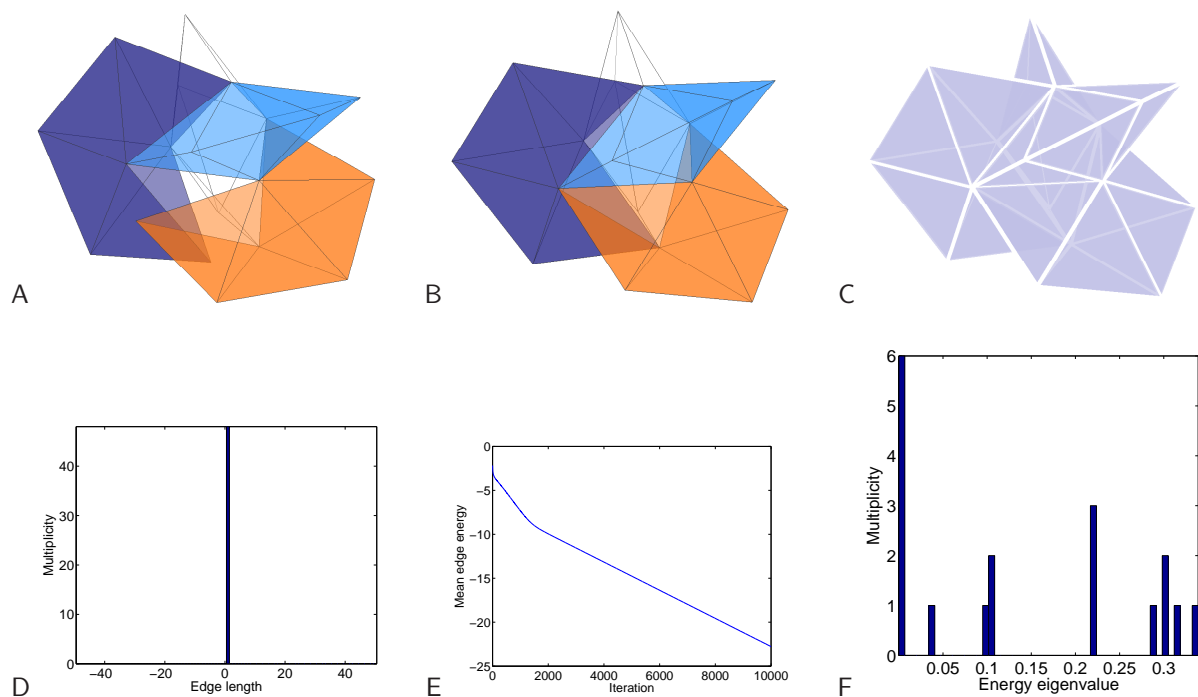


Figure 2: Construction of the corpuscle 4-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

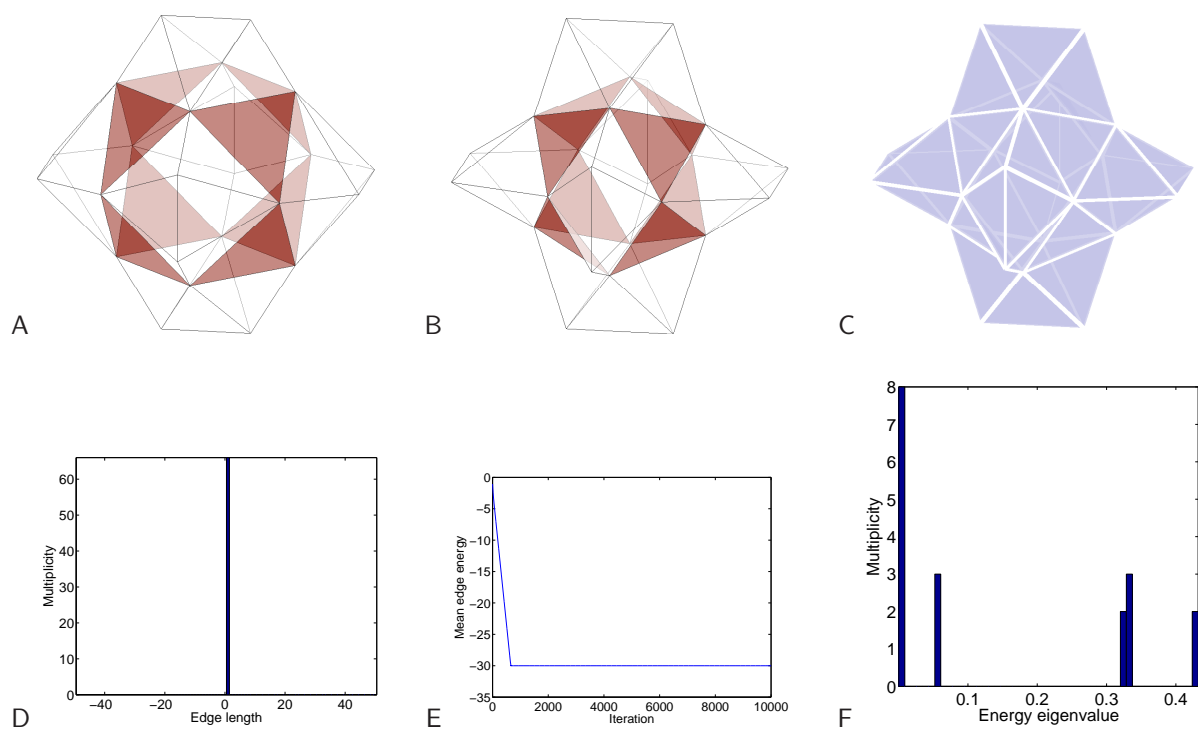


Figure 3: Construction of the 44-face corpuscle ball. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

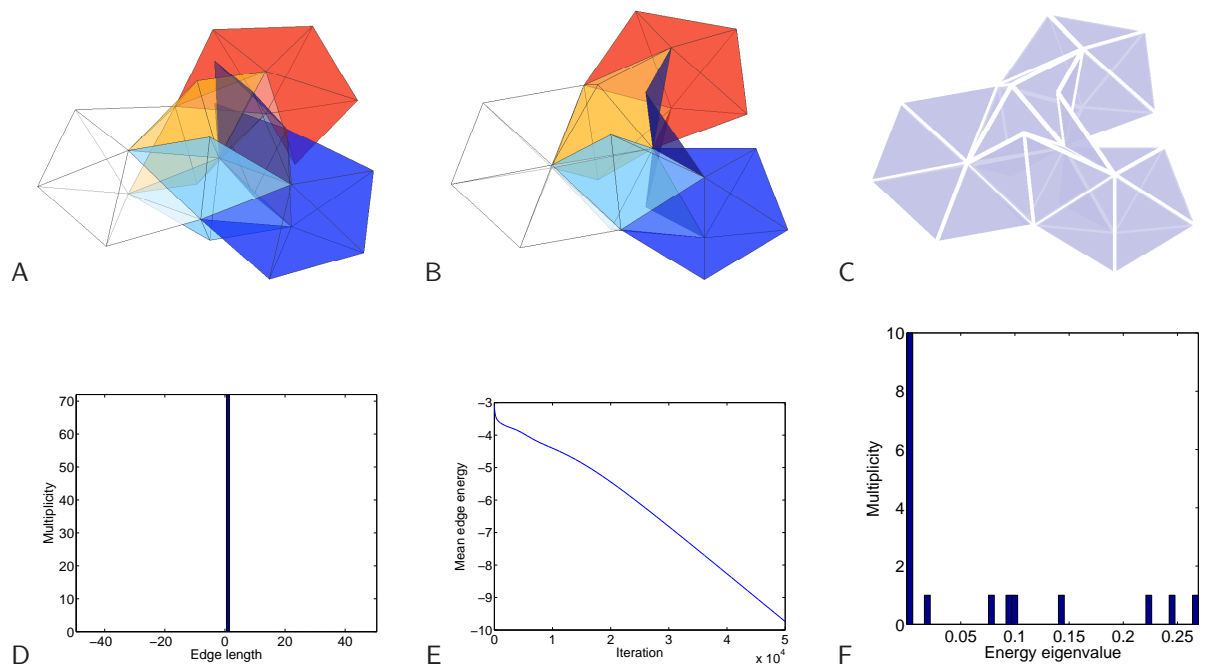


Figure 4: Construction of the corpuscle 6-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

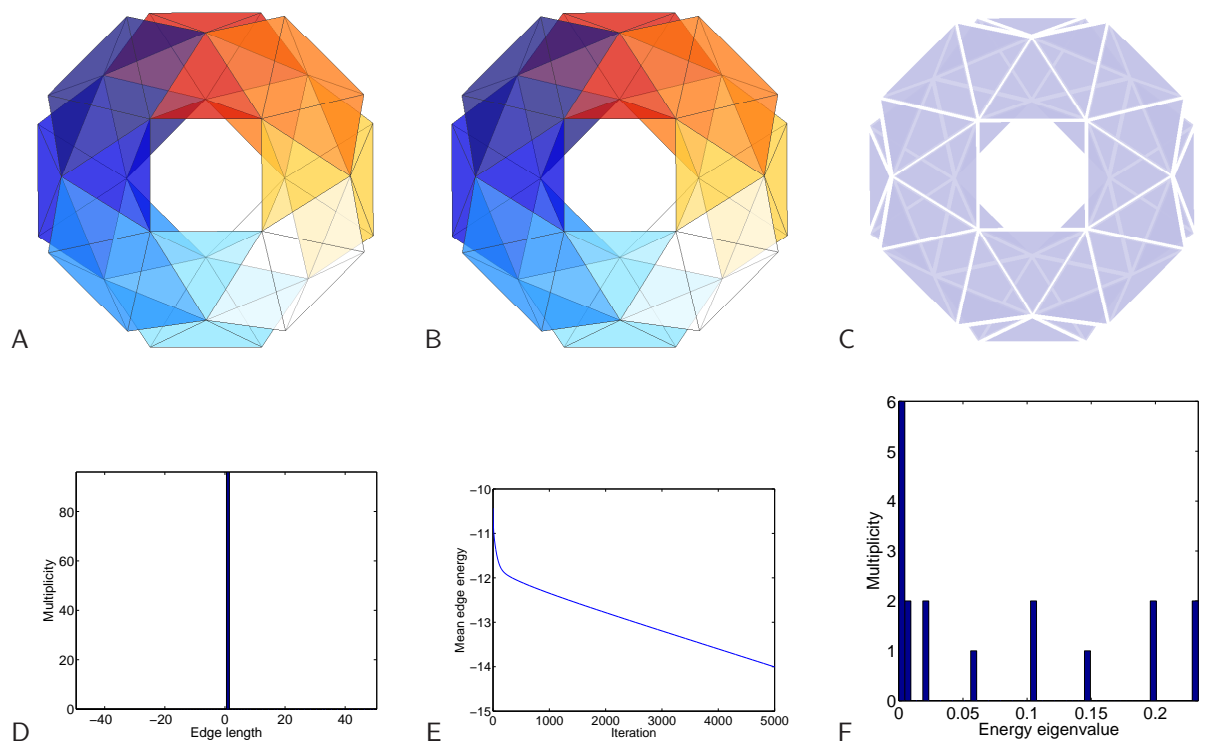


Figure 5: Construction of the corpuscle 8-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

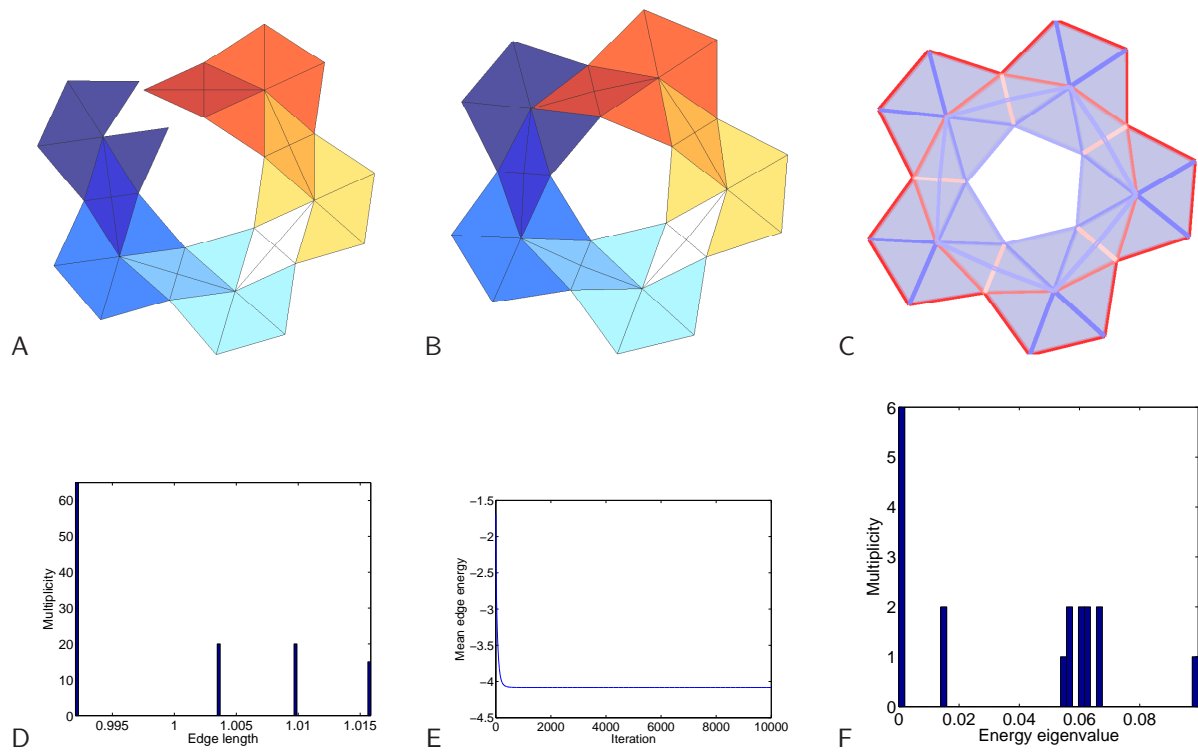


Figure 6: Construction of the corpuscle 10-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

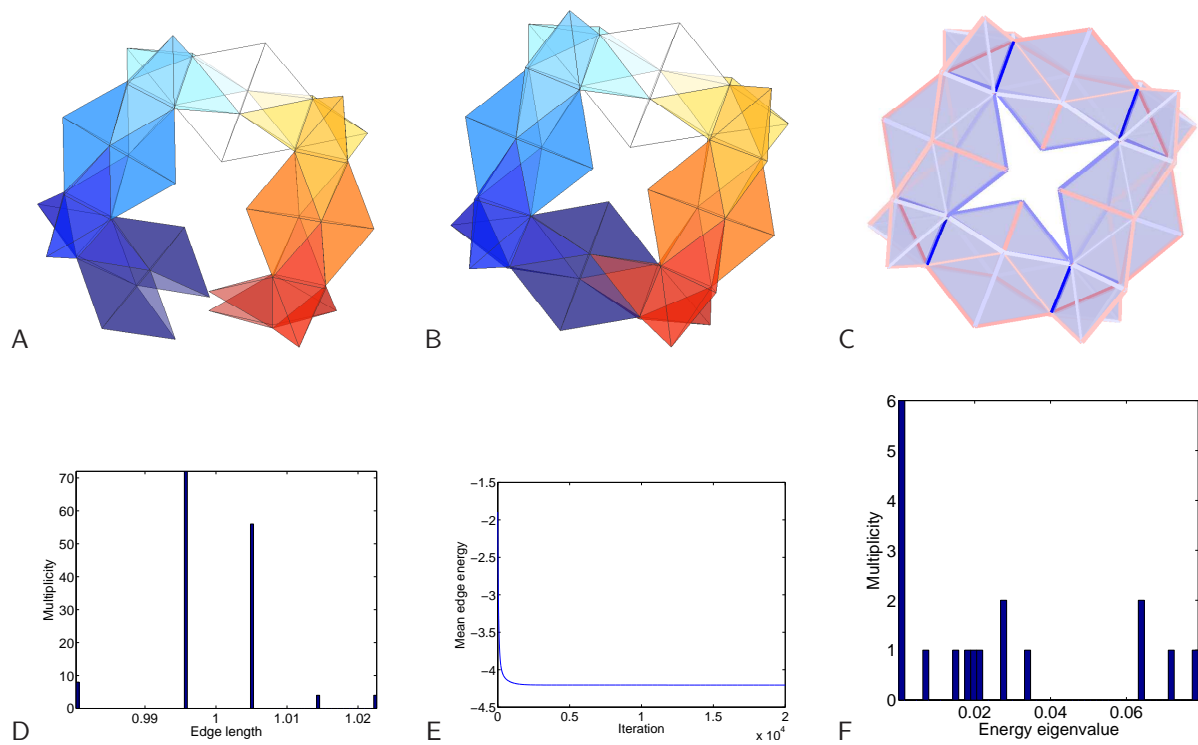


Figure 7: Construction of the corpuscle 12-ring (2-fold). (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

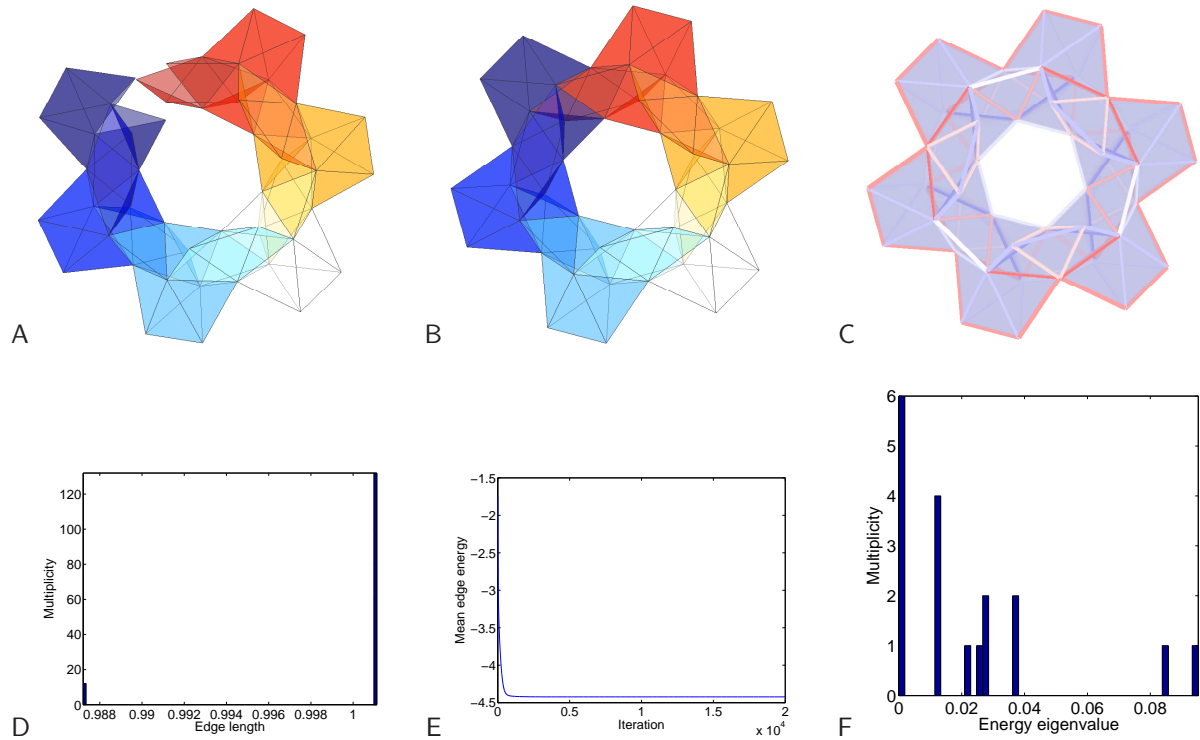


Figure 8: Construction of the corpuscle 12-ring (3-fold). (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

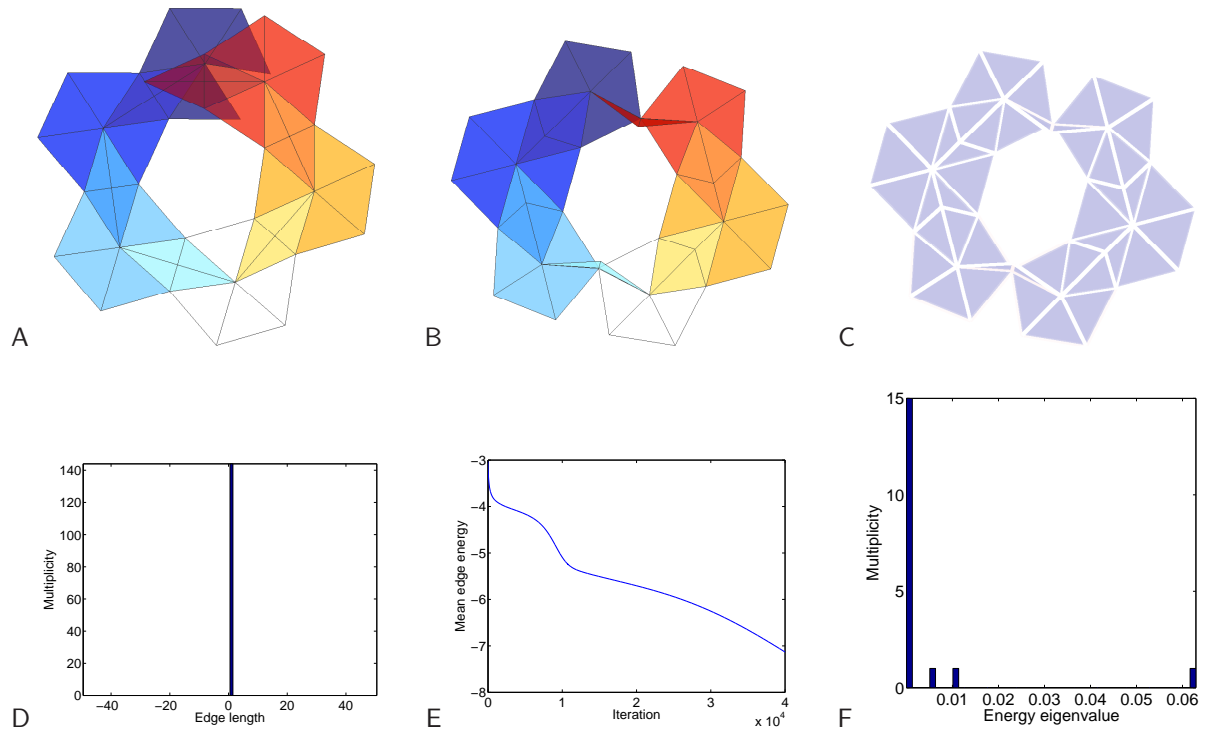


Figure 9: Construction of the corpuscle 12-ring (6-fold). (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

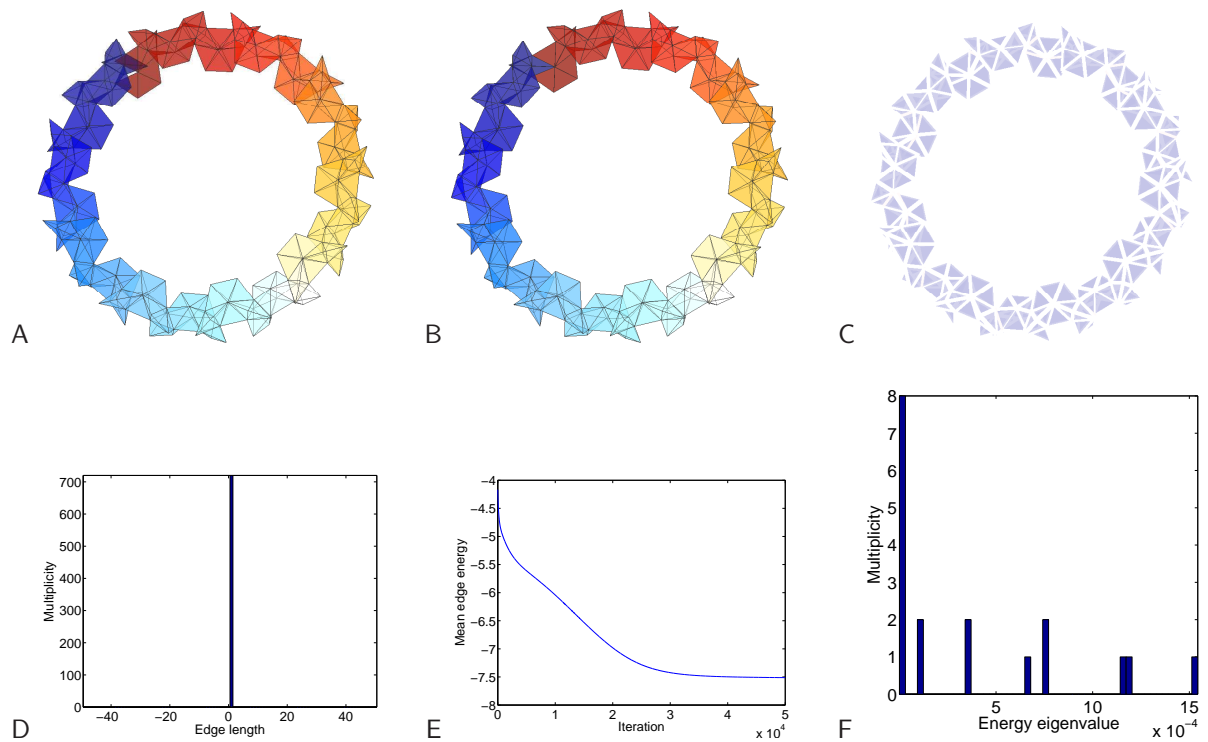


Figure 10: Construction of the alternative corpuscle 60-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

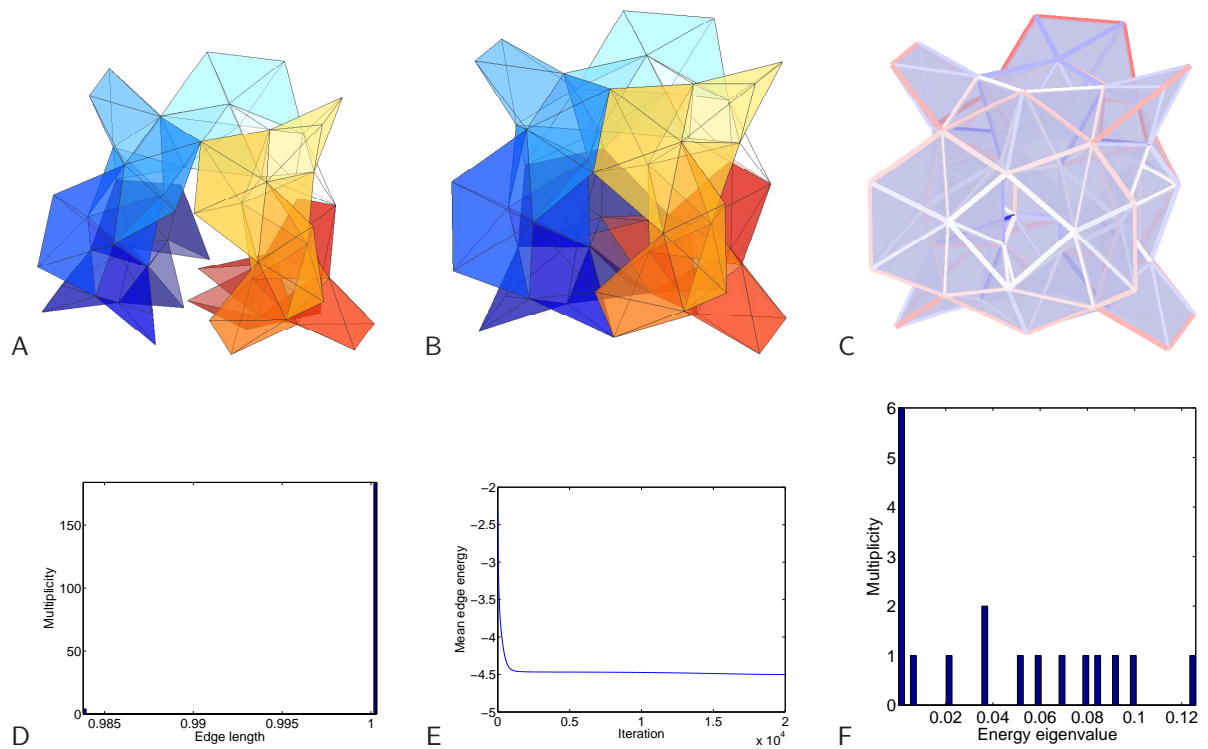


Figure 11: Construction of the corpuscle 16-ring. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red:compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.

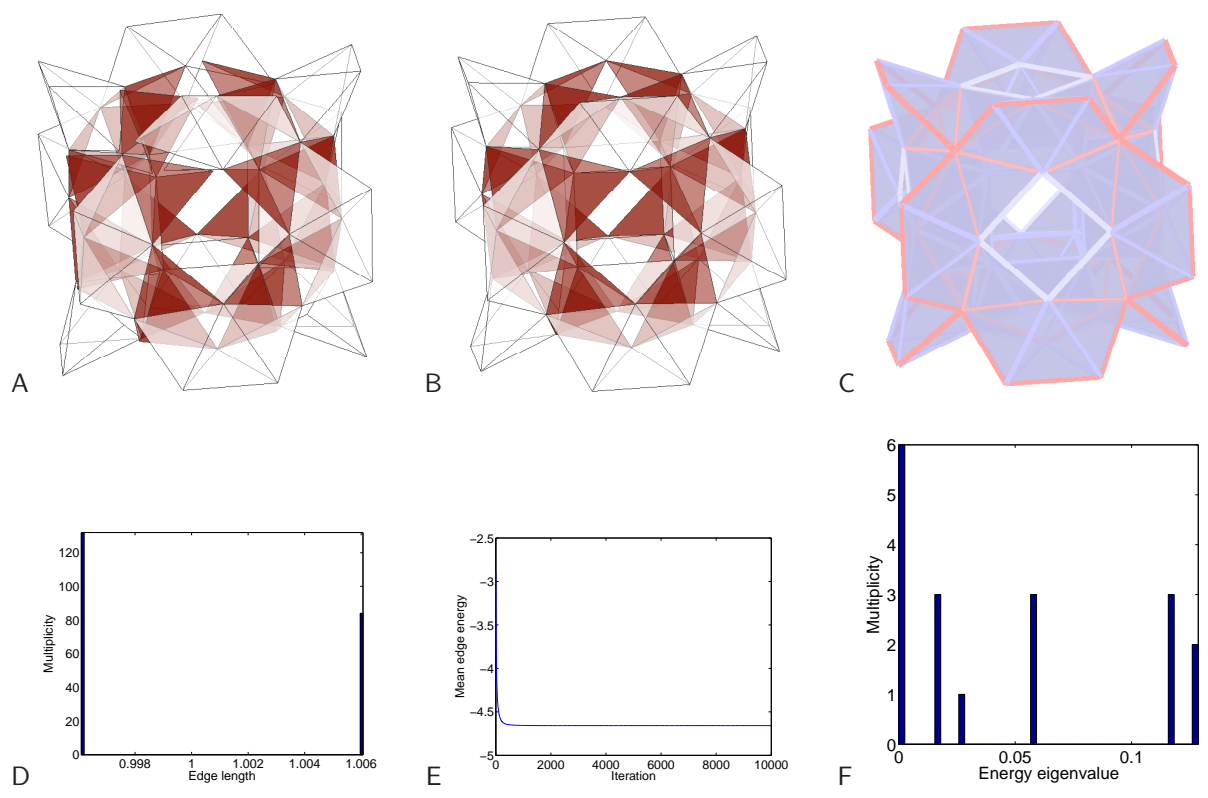


Figure 12: Construction of the corpuscle ball. (A) Construction by non-deformed subunits. (B) Closed body in its relaxed conformation. (C) Tension of edges (red: compressed, blue: stretched). (D) Histogram of edge lengths. (E) Energy during relaxation. (F) Eigenvalues of the deformation energy matrix.