Supporting Information for A Series of Two-dimensional Carbon Allotropes with Dirac Cone

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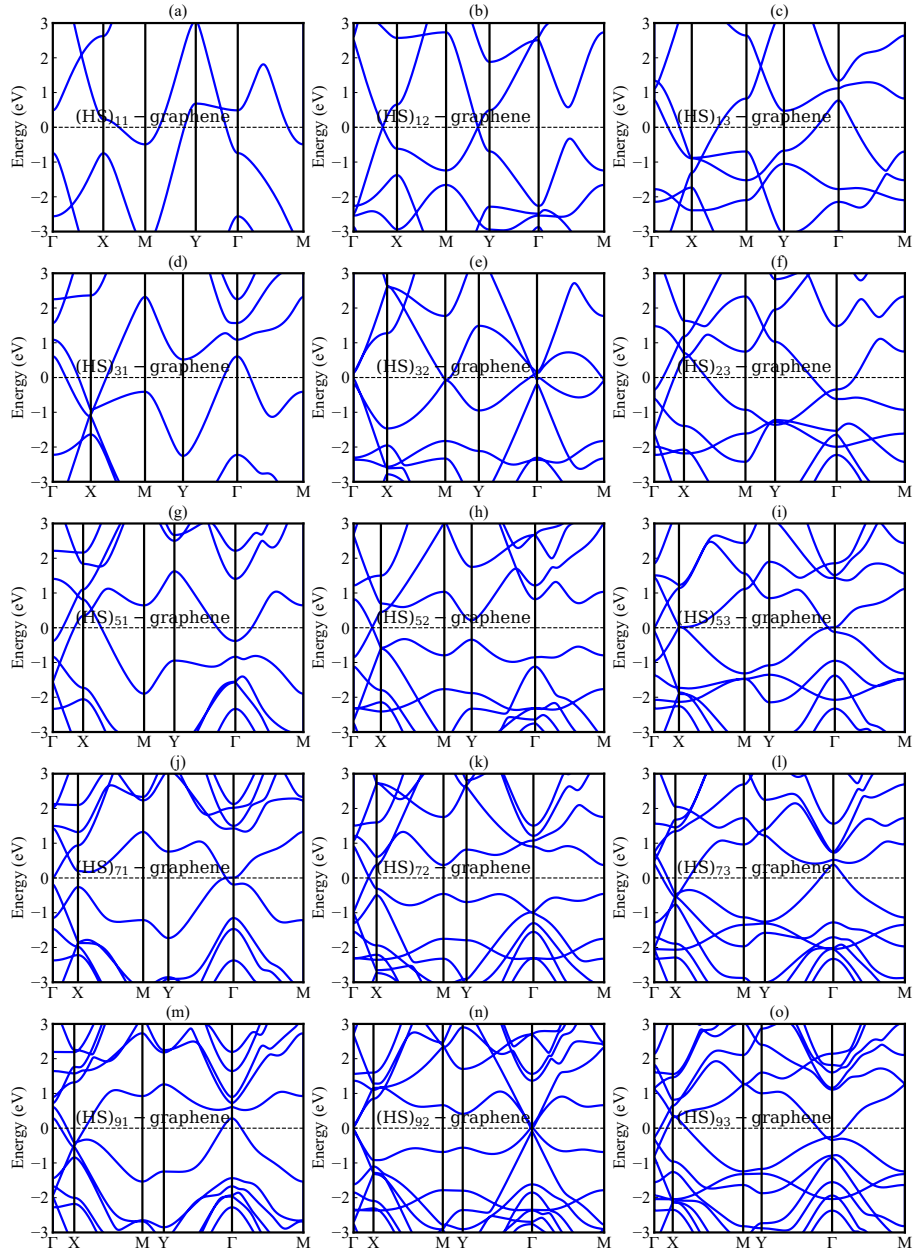
May 6, 2023

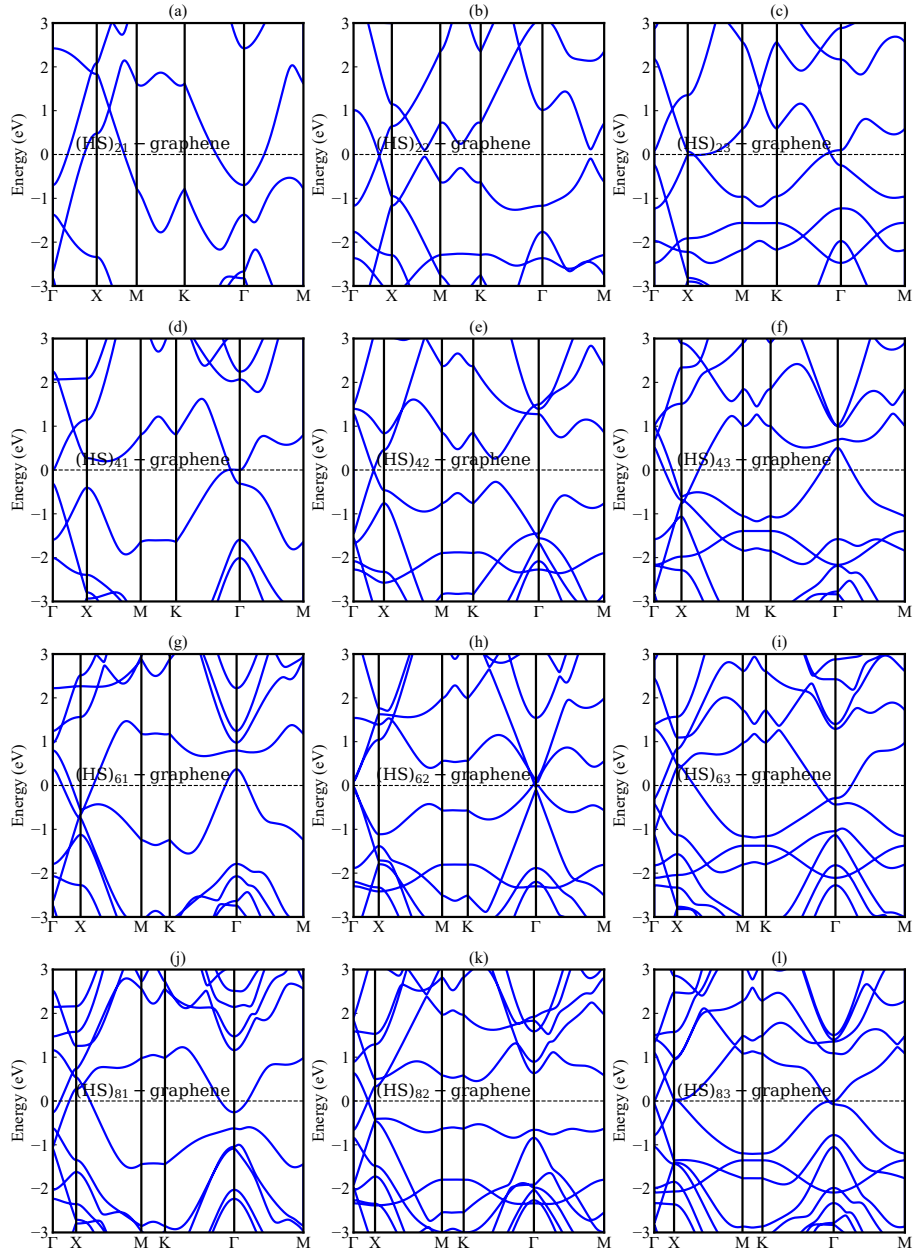Fig.S1 The band structures of $(HS)_{nm}$-graphene with odd number n.

Fig.S2 The band structures of $(HS)_{nm}$-graphene with even number n.

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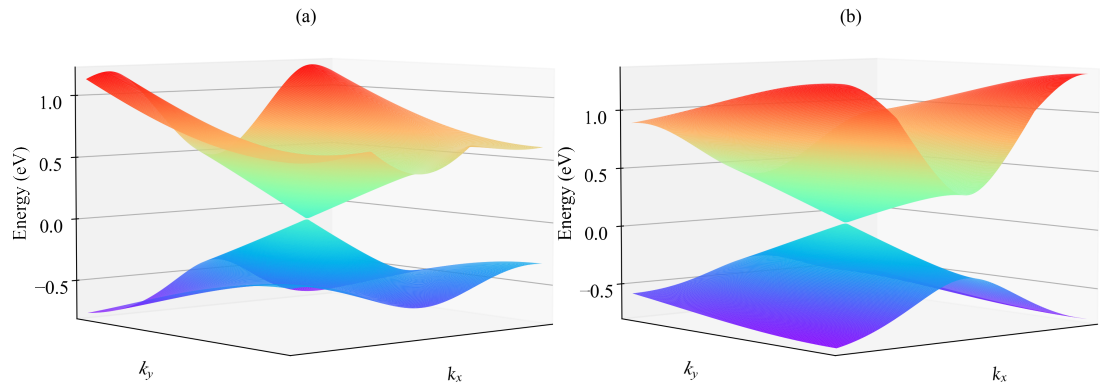(a)   (b)

Fig.S3 The three-dimensional band structures of (a) $(HS)_{52}$-graphene and (b) $(HS)_{nm}$-graphene around the Dirac point D_1.

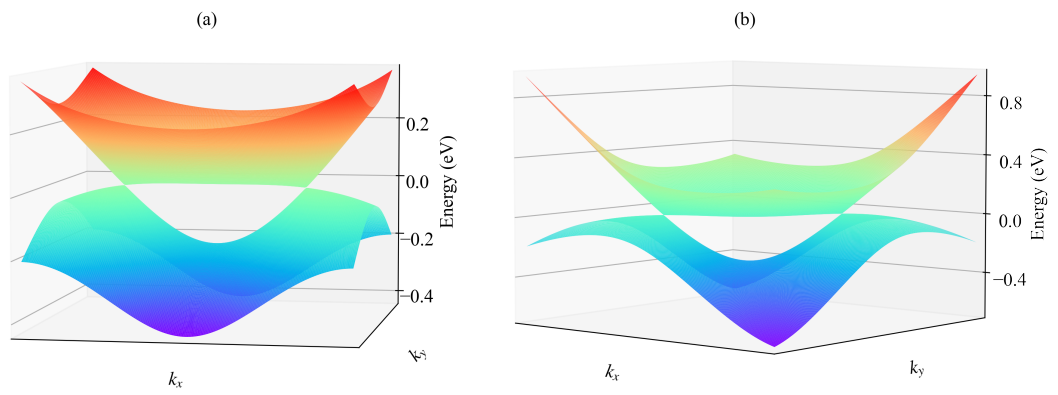(a)   (b)

Fig.S4 The three-dimensional band structures of (a) $(HS)_{71}$-graphene and (b) $(HS)_{41}$-graphene around the Dirac points D_1 and D_2.
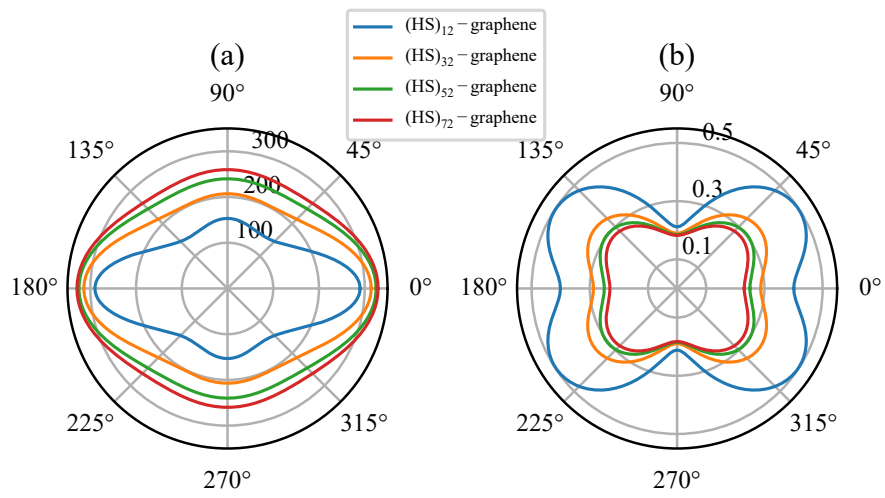
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Fig.S5 The orientation-dependence of (a) Young's modulus and (b) Poisson's ratio of $(HS)_{12}$-graphene, $(HS)_{32}$-graphene, $(HS)_{52}$-graphene and $(HS)_{72}$-graphene.