## Electronic Supplementary Information (ESI) for

## Diffusive nature of thermal transport in stanene

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Figure S1. Phonon dispersions along high-symmetry directions for (a) graphene, (b) blue phosphorene, (c) silicene and, (d) stanene.

Table S1. Optimized lattice constant a, buckling height h and, nearest-neighbor distance d for graphene, blue phosphorene, silicene and stanene.

Material	a (Å)	h (Å)	d (Å)
graphene	2.42	-	1.43
blue phosphorene	3.33	1.23	2.26
silicene	3.87	0.44	2.28
stanene	4.67	0.85	2.83



Figure S2. Electron localization function (ELF) for (a) graphene, (b) blue phosphorene, (c) silicene, and (d) stanene (Top view). ELF = 0 indicates no localization and 1, complete localization.