

Supporting information for:
Dynamics of effusive and diffusive gas separation
on pillared graphene.

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Files available free of charge:

- [movie_1.avi](#) - Influence of parameter λ value on separation of O_2 from N_2 .
- [movie_2.avi](#) Separation of H_2 , CH_4 and CO_2 with use of hybrid (6,6)-(5,5) 2-D pillared graphene.

Nitrogen, TRIPOS FF, 5 ns

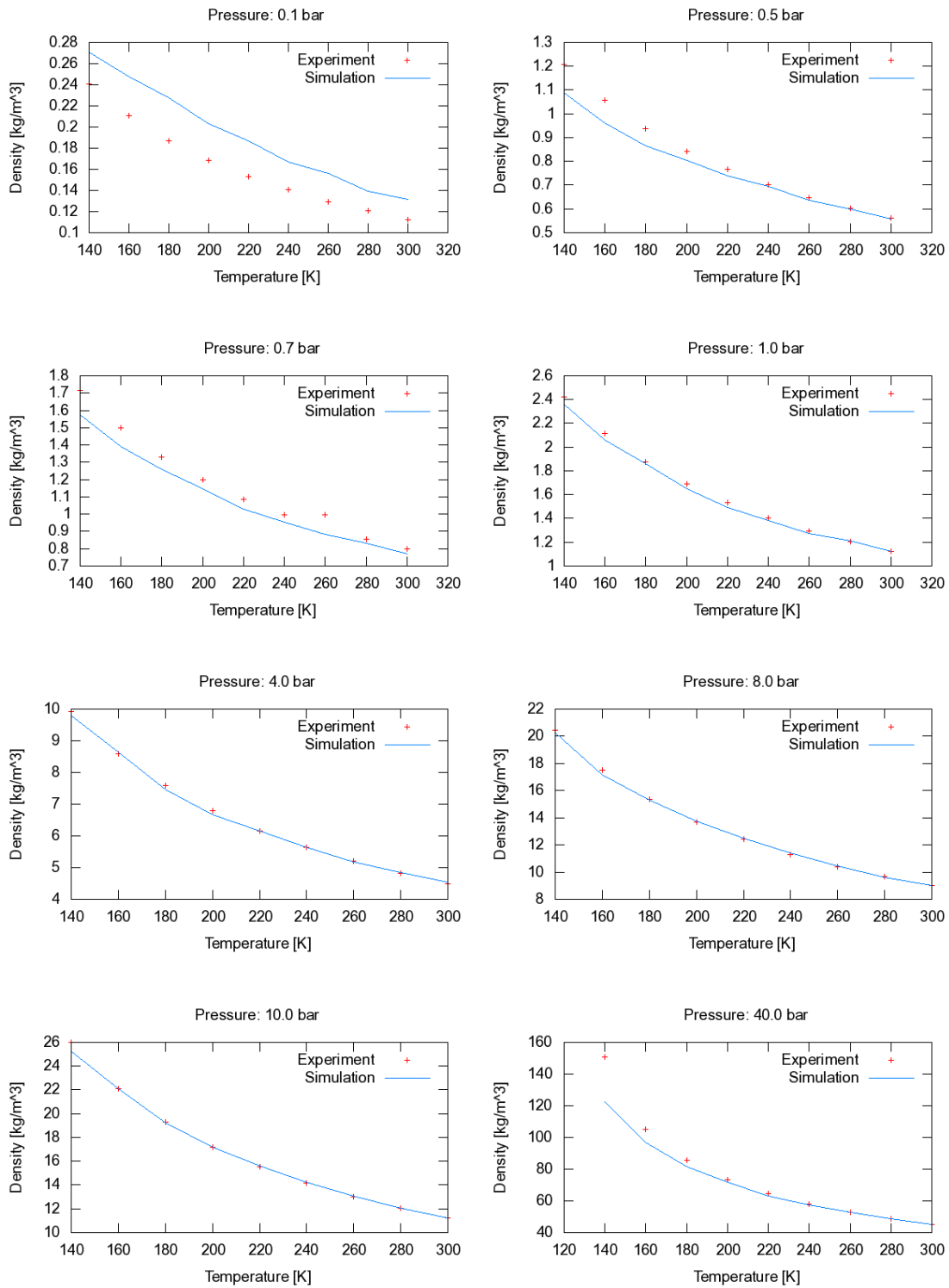


Figure S1: Verification of force field parameters against experimental data - nitrogen.

Oxygen, TRIPOS FF, 5 ns

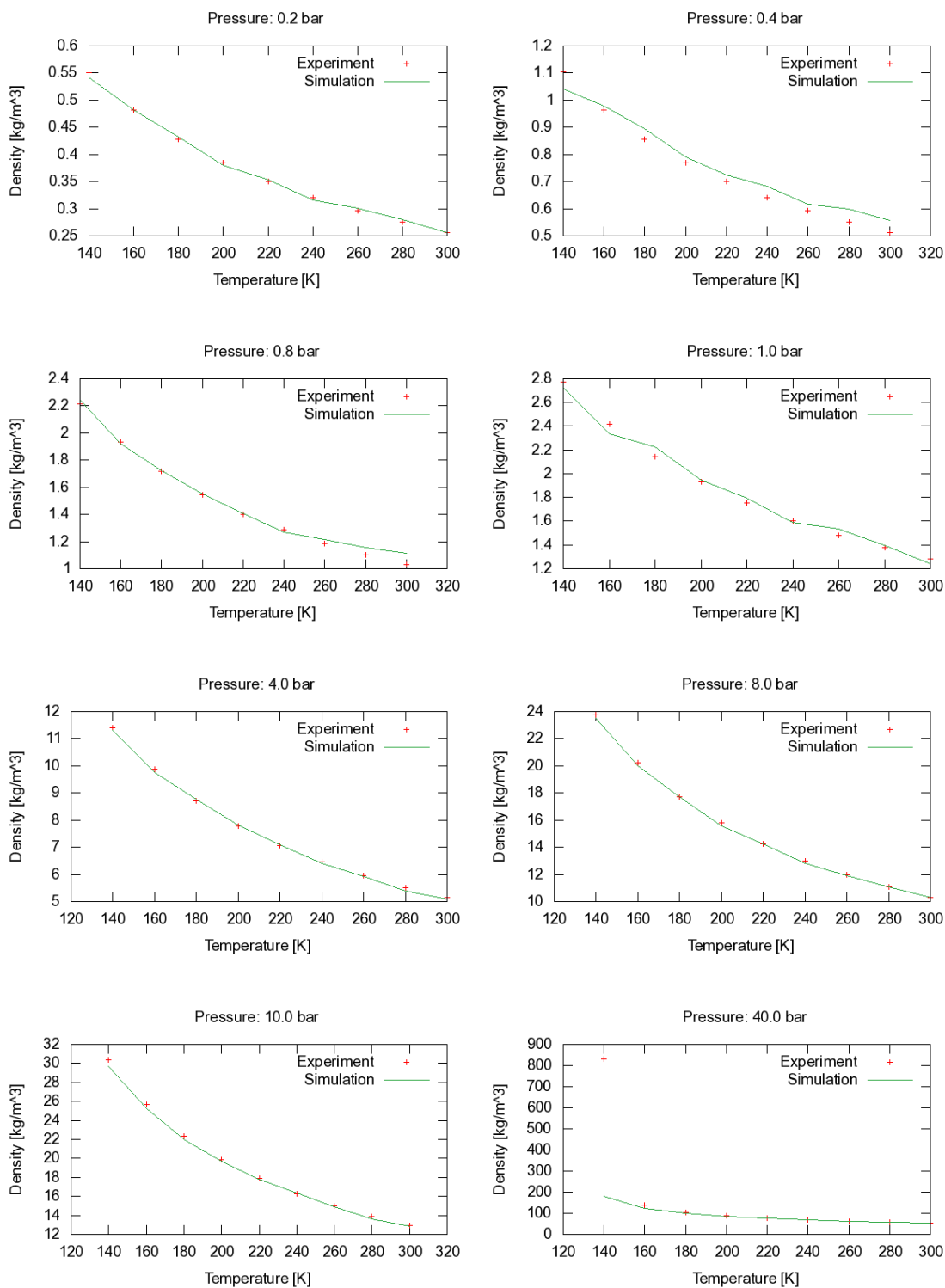


Figure S2: Verification of force field parameters against experimental data - oxygen.

Air (79/21), TRIPOS FF, 5 ns

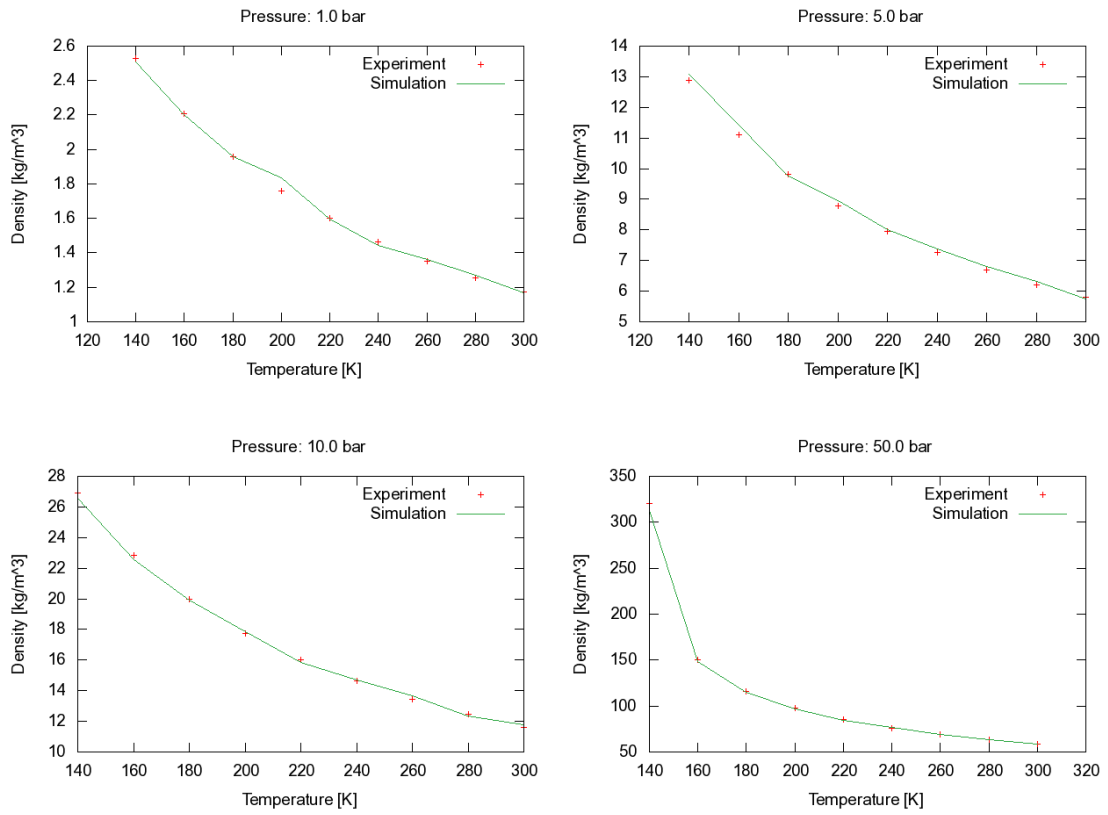


Figure S3: Verification of force field parameters against experimental data - air.

Methane, TRIPOS FF, 5 ns

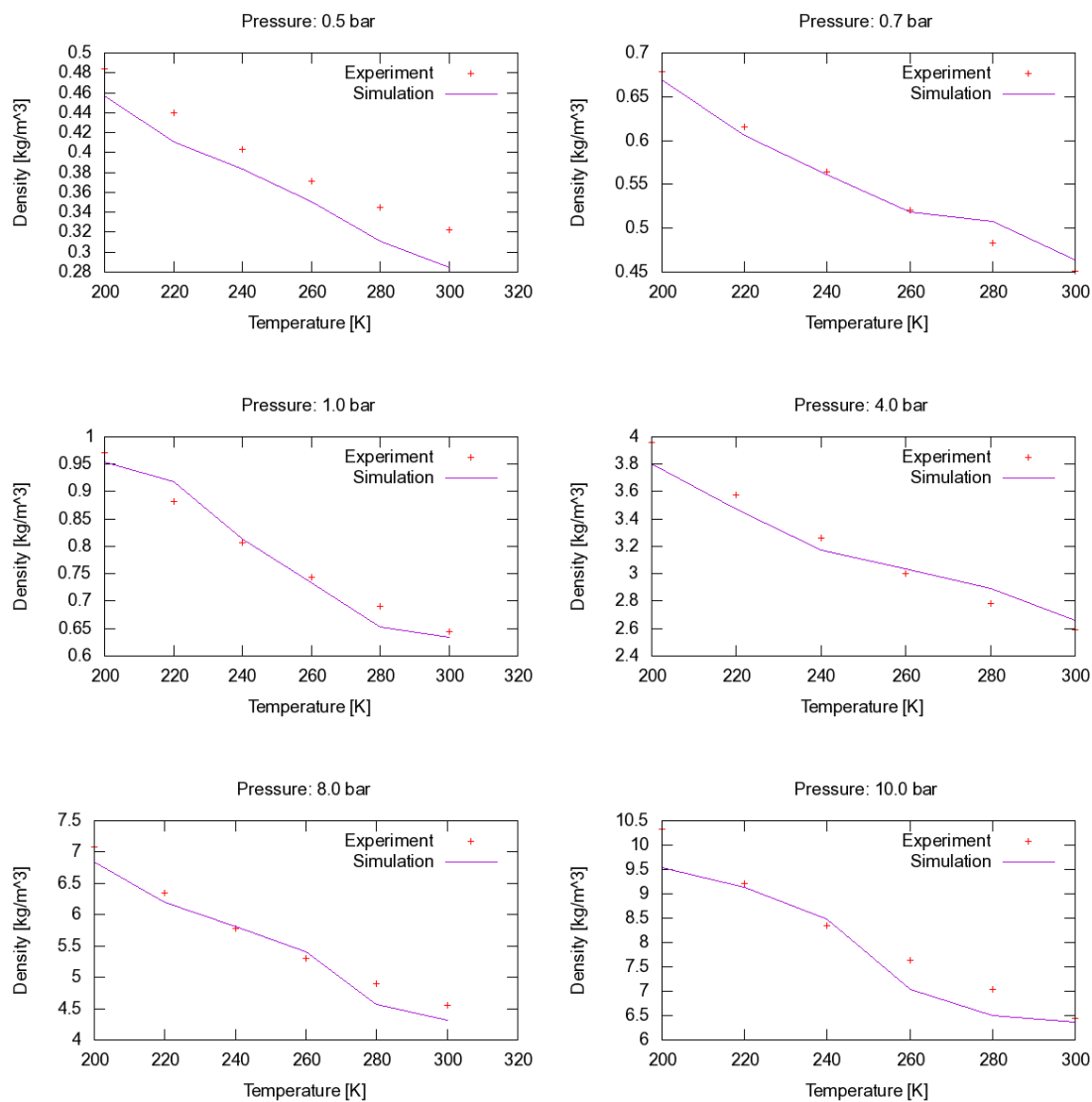


Figure S4: Verification of force field parameters against experimental data - methane.

Carbon dioxide, TRIPOS FF, 5 ns

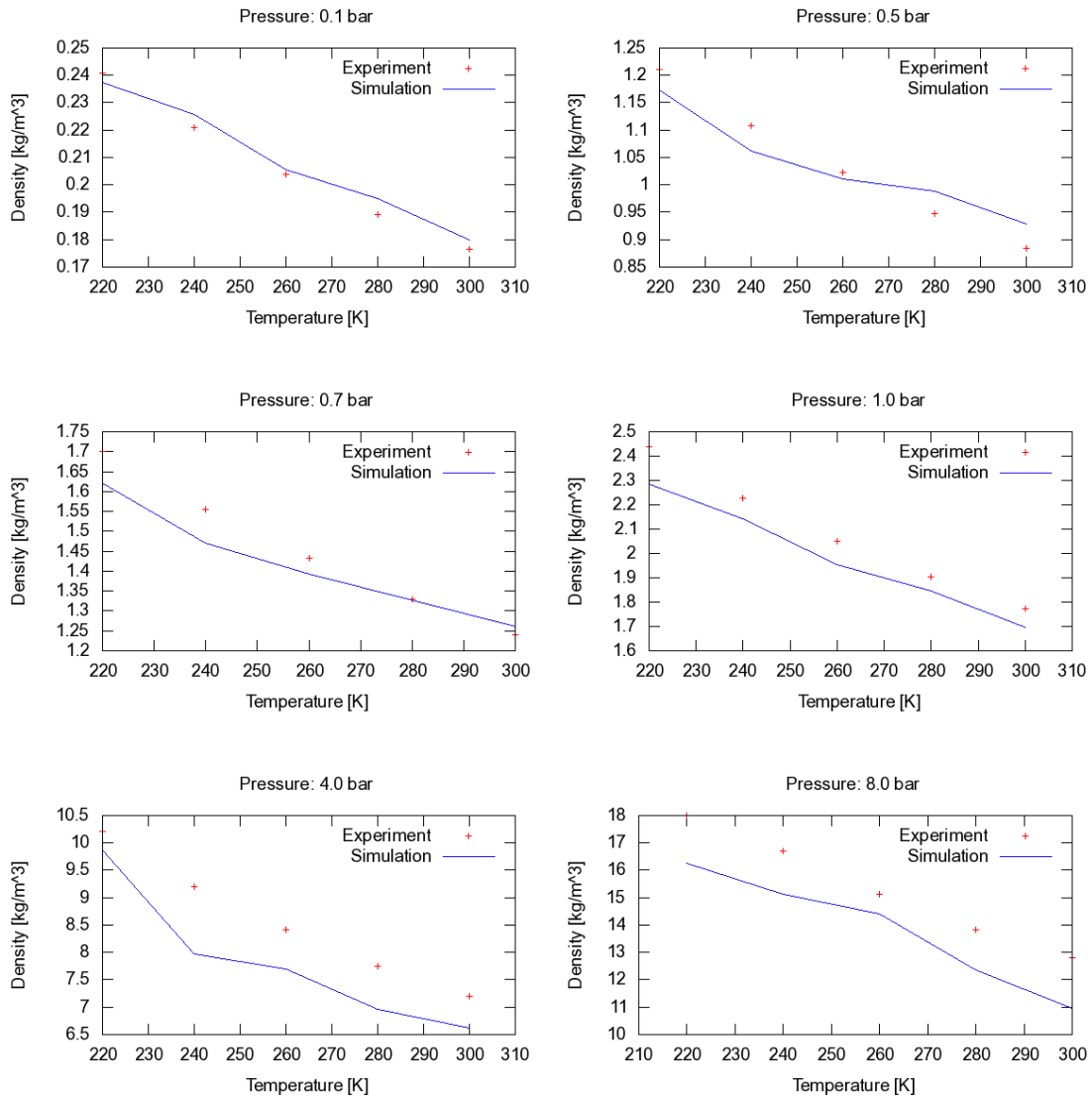


Figure S5: Verification of force field parameters against experimental data - carbon dioxide.

Hydrogen, TRIPOS FF, 5 ns

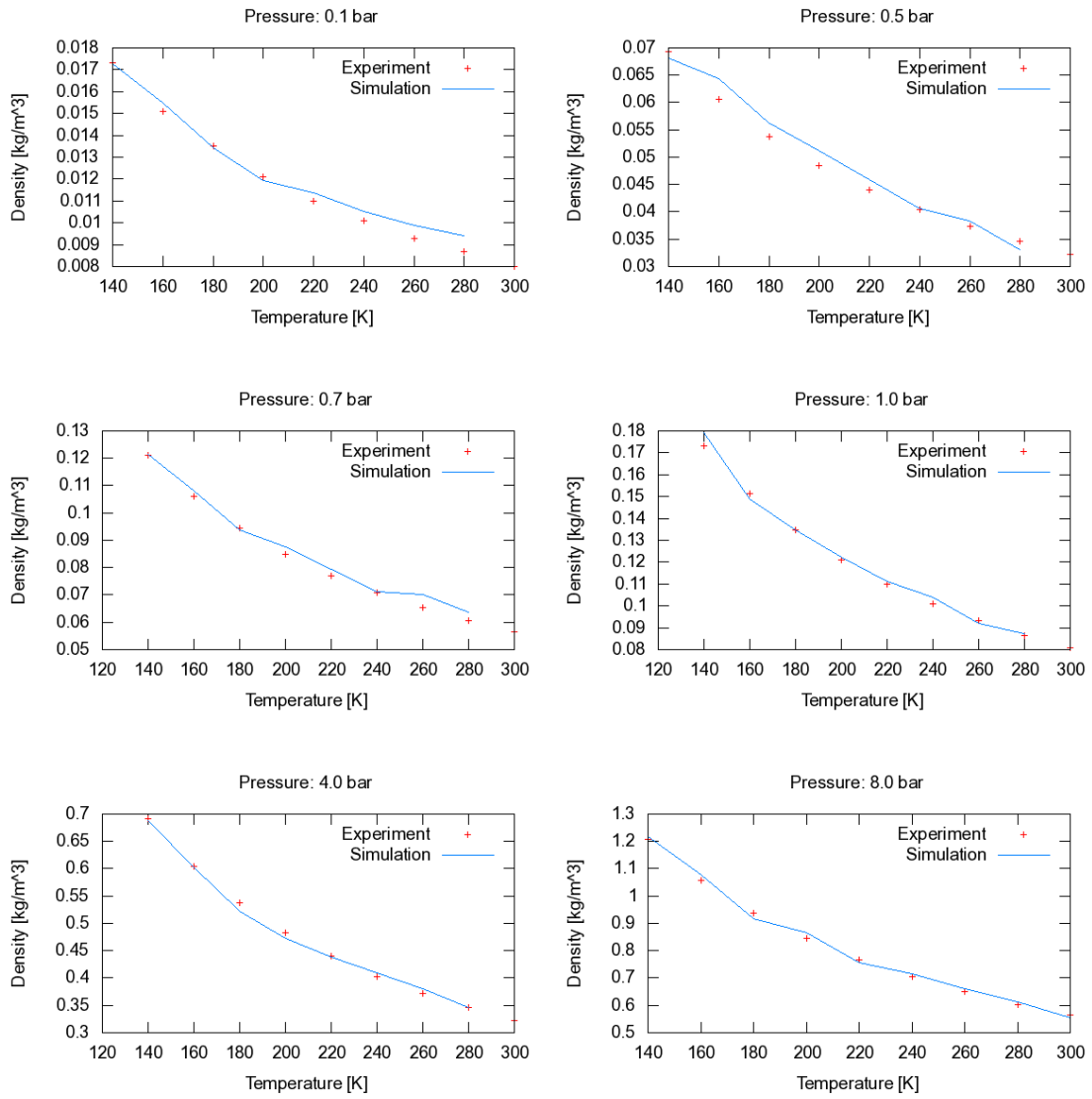


Figure S6: Verification of force field parameters against experimental data - hydrogen.