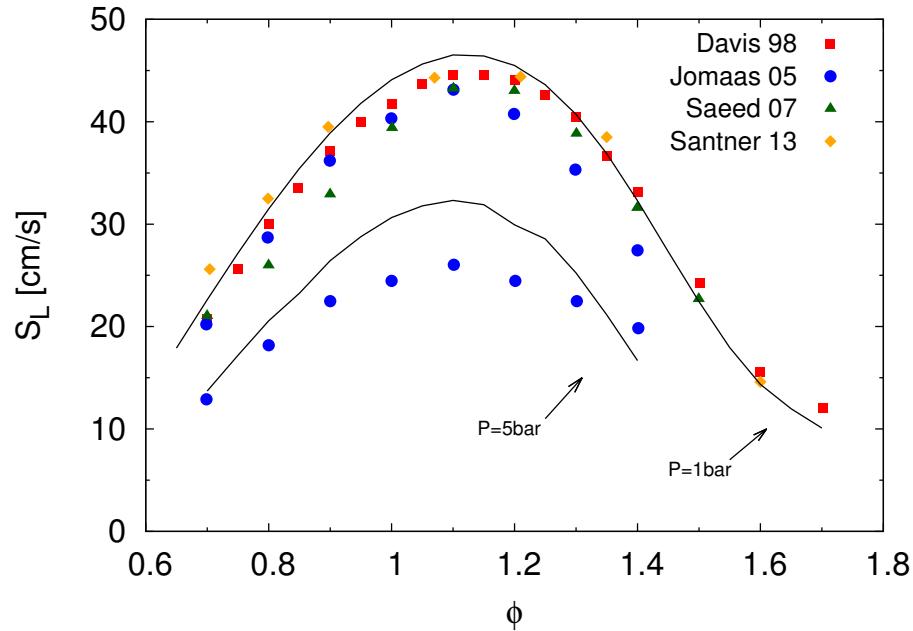


Laminar burning velocities



Flame speeds (Davis et al.) obtained with nonlinear extrapolation to zero stretch (2cm/s lower than with a linear extrapolation).

Outwardly propagating spherical flames (Jomaas et al. and Saeed & Stone). Some evidence of cellular burning at high pressures and for rich mixtures (Saeed & Stone).

References

- [1] S. G. Davis, C. K. Law, Determination of and fuel structure effects on laminar flame speeds of C₁ to C₈ hydrocarbons, Comb. Sci. Tech. 140 (1998) 427–449.
- [2] G. Jomaas, X. L. Zheng, D. L. Zhu, C. K. Law, Experimental determination of counterflow ignition temperatures and laminar flame speeds of C₂ C₃ hydrocarbons at atmospheric and elevated pressures, Proc. Comb. Inst. 30 (2005) 193–200.
- [3] K. Saeed, R. Stone, Laminar burning velocities of propene-air mixtures at elevated temperatures and pressures, J. Energy Inst. 80 (2007) 73–82.
- [4] J. Santner, F. M. Haas, X. Shen, Y. Ju, F. L. Dryer, High pressure studies of propene combustion, 8th US Nat. Comb. Meet. (2013) paper 070RK-0172.