BIBLIOGRAPHY FOR THE KINETIC THEORY OF REACTING GASES

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The goal of this document is to bring together, in a single refence, a list of as many of the various works on the kinetic theory of reacting gases that the present author could locate. Within these documents and the documents listed in the respective bibliographies, it is hoped that most papers and books on this topic may be located. To limit the scope, the focus of this search has been confined primarily to neutral dilute gases. All references are in english except where noted. I would be interested to be informed of those documents that I have missed. Hopefully, a more unified approach may occur in the quest to derive the governing equations for chemically reacting, polyatomic gases at both low and high temperatures by virtue of researchers being more aware of each others efforts.

To the fluid dynamicist, explicit expressions are needed for all transport coefficients as well as the nonequilibrium chemical reaction rate. It is hoped that complete and usable expressions for the governing equations may be arrived at in cases where the traditional Navier-Stokes equations are used as well as more involved governing equation sets like those arising from Grad's moment method. Some rough ideas as to the domain of validity of the various equation sets would be quite helpful.

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