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## A Review on the Gas Phase Thermal Decomposition of Dimethylnitramine (DMNA)

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**Abstract:** The experimental and theoretical researches on the gas phase thermal decomposition of DMNA were systematically reviewed, compared and analyzed. The author of this paper has made some comments on the correctness and creditability of the data and conclusions which have been published in the literatures. Based on the initial step of dissociation of N—NO<sub>2</sub>, the probable mechanism of gas phase thermal decomposition of DMNA has been proposed in detail.

**Key words:** dimethylnitramine (DMNA); thermal decomposition; mechanism

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\* 本刊声明 \*  
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### Объявление

Российские профессора по приглашению Пекинского технологического института читали целый ряд лекций по энергонасыщенным материалам. Эти лекции были переведены и переработаны профессором Сун Чуанцай и его сотрудниками и опубликованы в данном журнале. Как например:

1. Tenixiuk A, et al. "Effect of active-additive upon the combustion catalysis of double-based propellants". *Energetic Materials*, Vol. 10, No. 2, P. 91 - 94 (2002).
2. Ilyushin M A, et al. "Cobaltic tetrazol coordination compounds available for laser initiation". *Energetic Materials*, Vol. 11, No. 1, P. 55 - 56 (2003).
3. Demianenko D, et al. "New developments of pyrotechnic automatic controlling". *Energetic Materials*, Vol. 11, No. 2, P. 110 - 112 (2003).

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