

**Erratum: Atom-molecule reaction  $D + H_2 \rightarrow HD + H$  studied by molecular beams**

J. Geddes, H. F. Krause, and W. L. Fite

Citation: *The Journal of Chemical Physics* **59**, 566 (1973); doi: 10.1063/1.1679856

View online: <http://dx.doi.org/10.1063/1.1679856>

View Table of Contents: <http://scitation.aip.org/content/aip/journal/jcp/59/1?ver=pdfcov>

Published by the **AIP Publishing**

---

**Articles you may be interested in**

[Atom-Molecule Reaction  \$D + H\_2 \rightarrow HD + H\$  Studied by Molecular Beams](#)

J. Chem. Phys. **56**, 3298 (1972); 10.1063/1.1677694

[Trajectory Studies of Halogen Atom—Molecule Exchange Reactions](#)

J. Chem. Phys. **55**, 4861 (1971); 10.1063/1.1675591

[Mass Spectrometric Studies of Atom—Molecule Reactions Using High-Intensity Crossed Molecular Beams](#)

J. Chem. Phys. **53**, 4377 (1970); 10.1063/1.1673950

[Molecular-Beam Kinetics: Evidence for Short-Range Attraction in Halogen Atom—Molecule Exchange Reactions](#)

J. Chem. Phys. **49**, 2447 (1968); 10.1063/1.1670423

[Atom—Molecule Reaction of Hydrogen Studied by Molecular Beams](#)

J. Chem. Phys. **39**, 1896 (1963); 10.1063/1.1734550

---



**NEW Special Topic Sections**

**NOW ONLINE**  
Lithium Niobate Properties and Applications:  
Reviews of Emerging Trends

**AIP** | Applied Physics  
Reviews

# Errata

THE JOURNAL OF CHEMICAL PHYSICS

VOLUME 59, NUMBER 1

1 JULY 1973

## Erratum: Enhanced resolution for solid state NMR

[J. Chem. Phys. **58**, 1772 (1973).]

W-K. Rhim, D. D. Elleman, and R. W. Vaughan

*Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, California 91109*

*Physics Section, Jet Propulsion Laboratory, Pasadena, California 91103*

## Erratum: High-resolution NMR in solids by intermolecular double resonance

[J. Chem. Phys. **58**, 1773 (1973).]

C. S. Yannoni

*IBM Research Laboratory, San Jose, California 95114*

Please note the following unfortunate printer's error: Figure 1 of the Communication by Rhim *et al.* (p. 1773) was interchanged with that of Fig. 1 of the following Note by Yannoni (p. 1774). The figure captions are correct as they stand.

THE JOURNAL OF CHEMICAL PHYSICS

VOLUME 59, NUMBER 1

1 JULY 1973

## Erratum: Use of translational energy measurements in the evaluation of the energetics for dissociative attachment processes

[J. Chem. Phys. **58**, 1430 (1973).]

P. W. Harland, J. L. Franklin, and D. E. Carter

*Department of Chemistry, Rice University, Houston, Texas 77001*

The following graphical errors should be rectified: (i) The arrow representing the excess energy *EE* involved in the dissociative capture process at the threshold in Fig. 1 should extend to the dis-

sociation asymptote of  $AB^{**}$ . (ii) The corrected electron energy scale in Fig. 5(b) should read one electron volt (1 eV) higher, i.e., 2 should be 3, etc.

THE JOURNAL OF CHEMICAL PHYSICS

VOLUME 59, NUMBER 1

1 JULY 1973

## Erratum: Atom-molecule reaction $D + H_2 \rightarrow HD + H$ studied by molecular beams

[J. Chem. Phys. **56**, 3298 (1972).]

J. Geddes\*, H. F. Krause†, and W. L. Fite

*Department of Physics, University of Pittsburgh, Pittsburgh, Pennsylvania 15260*

The reactive differential cross section integrated over solid angle in the center-of-mass system (Eq. 14) should read

$$\sigma_r(v) = (9.0 \pm 4.5) \times 10^{-17} [1 - (v_0^2/v^2)] \text{ cm}^2 \quad v \geq v_0$$

$$= 0 \quad v < v_0.$$

The bulk rate constant that is calculated from this cross section should read  $(3.2 \pm 1.6) \times 10^{-12} \text{ cm}^3/\text{sec}$ . Extrapolation of the lower temperature rate measurements of LeRoy, Ridley, and Quickert<sup>1</sup> to

the effective temperature of our experiment gives a value of  $5.6 \times 10^{-12}$  cm<sup>3</sup>/sec. The discrepancy between the two rate constant values is remarkably small considering the simplified functional form assumed for  $\sigma(\nu)$  and the uncertainties of extrapolating the bulk rate measurements to the effective temperature of the crossed-beam experiment.

We thank Dr. Rolf Gengenbach for bringing misprinted Eq. (14) to our attention.

\*Present address: The Queen's University of Belfast, Belfast, North Ireland.

†Present address: Oak Ridge National Laboratory, Oak Ridge, TN 37830.

<sup>1</sup>D. J. LeRoy, B. A. Ridley, and K. A. Quickert, Discuss. Faraday Soc. **44**, 92 (1967).

---

THE JOURNAL OF CHEMICAL PHYSICS

VOLUME 59, NUMBER 1

1 JULY 1973

**Erratum: Infrared spectra and vibrational assignments of *trans*-CH<sub>3</sub>N=NH, CH<sub>3</sub>N=ND, CD<sub>3</sub>N=NH, and CD<sub>3</sub>N=ND**

[J. Chem. Phys. **58**, 203 (1973)]

Martin N. Ackermann, Jeremy J. Burdge, and Norman C. Craig

*Department of Chemistry, Oberlin College, Oberlin, Ohio 44074*

The following corrections should be made in the published paper:

(1) The nitrogen–nitrogen bonds in the formulas of the methyldiazenes should be written as double bonds, not single bonds, in the title, the abstract, and in Refs. 9 and 11.

(2) The journal for both entries in Ref. 24 is *Spectrochim. Acta*, not *J. Chem. Phys.*

(3) In Table I, Footnote f also applies to the 1457 cm<sup>-1</sup> band for gaseous CH<sub>3</sub>N=NH.

(4) In Table II, Footnotes g and h should be interchanged.