

III. PRODUCTION SCIENTIFIQUE

Publications

107 publications parues ou acceptées dont 92 dans des revues internationales à comité de lecture, 2 chapitres de livres, 6 articles de revue, 7 comptes-rendus de conférences internationales (autres que résumés).

Édition d'un livre.

Publications dans des revues internationales à comité de lecture

1 - Time-resolved study of intramolecular vibrational redistribution in p-difluorobenzene,

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2 - Photodissociation of Van der Waals molecules: adiabatic treatment,

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3 - Vibrational predissociation decay channels for glyoxal complexes,

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4 - Isotope effect in the vibrational predissociation of Van der Waals molecules: complexes of glyoxal with H₂ and D₂,

J.A. Beswick, N. Halberstadt, C. Jouvét et B. Soep, *Laser Chem.* **1**, 77 (1982).

5 - From selective to non-selective vibrational predissociation in glyoxal Van der Waals complexes,

N. Halberstadt et B. Soep, *Laser Chem.* **2**, 115 (1983).

6 - Vibrational predissociation in Van der Waals complexes of glyoxal with Ar and Kr,

N. Halberstadt et B. Soep, *J. Chem. Phys.* **80**, 2340 (1984).

7 - Infrared absorption and predissociation of NO dimer,

Ph. Bréchnac, S. De Benedictis, N. Halberstadt, B. J. Whitaker et S. Avrillié, *J. Chem. Phys.* **83**, 2064 (1985).

8 - Theory of mode specific vibrational predissociation: the HF dimer,

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9 - Performances of a pulsed tunable infrared Raman laser for spectroscopy,

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10 - Three-dimensional quantum mechanical study of Ne...Cl₂ vibrational predissociation

N. Halberstadt, J.A. Beswick et K.C. Janda, *J. Chem. Phys.* **87**, 3966 (1987).

11 - Infrared predissociation of (NO)₂: Rotational distribution of the fragments,

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B. P. Reid, K.C. Janda et N. Halberstadt, *J. Phys. Chem.* **92**, 587 (1988).

13 - State-to-State Vibrational Predissociation Dynamics and Spectroscopy of He...Cl₂: Experiment and Theory,

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14 - Decay of Vibrationally Excited States of the Ne...Cl₂ Complex,

N. Halberstadt, O. Roncero et J.A. Beswick, *Chem. Phys.* **129**, 83 (1989).

15 - A theoretical study of the Ar₂HCl Van der Waals cluster,

J.M. Hutson, N. Halberstadt et J.A. Beswick, *J. Chem. Phys.* **90**, 1337 (1989).

16 - Product State Distributions for the Vibrational Predissociation of Ne-Cl₂

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17 - Photofragmentation of the Ne...ICl complex: A three-dimensional quantum mechanical study

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18 - Quantum dynamical calculations for the vibrational predissociation of the He...ICl complex: Product rotational distribution

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22 - Vibrational predissociation of Ar...Cl₂ complex: the small molecule limit for intramolecular vibrational relaxation

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23 - A theoretical study of the HgAr₂ (³P₁ ← ¹S₀) vibronic spectrum

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25 - Coherence effects between intramolecular vibrational relaxation and dissociation in triatomic van der Waals systems

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28 - Calculation of the rovibrational $B \leftarrow X$ excitation spectrum of the He_2Cl_2 cluster

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34 - Fragmentation dynamics of the vibrationally excited ammonia-argon Van der Waals complex

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35 - The He-Cl_2 potential: Atom-atom and *ab initio* compared to experiment

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O. Roncero, N. Halberstadt et J.A. Beswick, *J. Chem. Phys.* **104**, 7554 (1996).

38 - Modeling the production and fragmentation of Ar_3^+ after threshold photon impact ionization of Ar_3

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39 - High resolution spectroscopy of the $\text{He } ^{79}\text{Br}_2$ Van der Waals molecule: An experimental and theoretical study

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98 - Ar...I₂: A model system for complex dynamics

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102 - Rotational distributions in the vibrational predissociation of weakly bound complexes: Quasi-classical Golden Rule treatment

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