BIBLIOGRAPHY OF PHOTOABSORPTION CROSS SECTION DATA

by

R. D. Hudson
L. J. Kieffer

JILA Information Center Report No. 11

University of Colorado
Boulder, Colorado
September 30, 1970
The Joint Institute for Laboratory Astrophysics was created in 1962 through the collaboration of the University of Colorado and the National Bureau of Standards, U. S. Dept. of Commerce, for the purpose of furthering research and graduate education in laboratory astrophysics—laboratory and theoretical investigations of physical processes of astrophysical importance. The major fields of activity are low energy atomic physics, theoretical astrophysics, and aerodynamics.

The institute is located on the campus of the University of Colorado. The academic staff are members of the Department of Physics and Astrophysics, of the College of Arts and Sciences, or the Department of Aerospace Engineering Sciences, of the College of Engineering. In addition to certain members of these faculties, the scientific staff of JILA includes Visiting Fellows and Members from other institutes, graduate students and postdoctoral appointees.

The JILA is operated as a partnership between CU and NBS by the Fellows of JILA, responsible through their Chairman to the Director, the NBS, and the President, the University of Colorado. NBS appointed staff members of JILA constitute the NBS Laboratory Astrophysics Division (274.00).
BIBLIOGRAPHY OF PHOTOABSORPTION CROSS SECTION DATA

by

Robert D. Hudson
Space Physics Division
NASA Manned Spacecraft Center
Houston, Texas 77058

and

Lee J. Kieffer†
Joint Institute for Laboratory Astrophysics
University of Colorado
Boulder, Colorado 80302

September 30, 1970

†Staff Member, Laboratory Astrophysics Division, National Bureau of Standards.
CONTENTS

I. INTRODUCTION--------------------------------------------------------------- vii

II. BIBLIOGRAPHY

Total Absorption-------------------experimental 3
Detachment-------------------experimental 5
-------------------theoretical 5
Ionization-------------------experimental 5
-------------------theoretical 6
Dissociation-------------------experimental 8
-------------------theoretical 8
Scattering-------------------experimental 8
-------------------theoretical 8
Dissociative Ionization-------------------experimental 9

III. BIBLIOGRAPHIC REFERENCES---------------------------------------------- 11

IV. AUTHOR INDEX---------------------------------------------------------- 39
ABSTRACT

A bibliography of photoabsorption cross section data is presented. Only references which report a measured or calculated photoabsorption cross section (relative or normalized) in regions of continuous absorption are included. The bibliography is current as of January 1, 1970.
I. INTRODUCTION

In the past several years the Joint Institute for Laboratory Astrophysics Information Center, University of Colorado, Boulder, Colorado, has been engaged in a program to collect reports that contain data on low energy atomic collisions, to critically evaluate and produce comprehensive compilations of these data, and to compile up-to-date bibliographies. The first bibliography on photoabsorption cross section data to be produced by the Information Center was published as JILA Information Center Report #5 in April, 1968. This present report, the result of a collaborative effort between the Information Center and NASA-Manned Spacecraft Center, is the first updating of the original report.

Although the title of this report uses the term cross section we have, of course, included all papers that give absorption and ionization coefficients. The criterion that we have attempted to apply in our selection of the papers is that the data in the papers should be for wavelength regions of continuous absorption. For atoms, this clearly means those wavelength regions above the first ionization limit, indeed, until elastic scattering becomes important, the absorption and ionization continuum cross sections are identical. In the case of molecules this clear cut distinction cannot be made since we now have ionization and dissociation continua overlaid in many cases by discrete structure with variable efficiencies for preionization, predissociation and photoexcitation. We have therefore not restricted the wavelength range that was searched for data, but obviously the majority of the data are for the ultraviolet (10 to 3000 Å).

Several (about a dozen) standard works on photoabsorption and photoionization were used as primary sources for references. In addition, Physics Abstracts was searched back to 1940. The more current material was obtained from abstracting journals. The cutoff time for inclusion of references from these abstracting journals in this bibliography was March 1, 1970, but because of the time lag involved in the abstracting journals, some references to publications in the late part of 1969 may not be included. In addition to references from the formal scientific literature we have included theses, reports given at meetings, and company or agency reports which have been printed and circulated. However, reference is not made to material that is unavailable either through library facilities or government document centers. No classified material is included.

There is a tendency for authors to publish material which is identical to that which they have reported on at a meeting (the proceedings of which are printed and circulated) and also issued as a company or agency report. In some cases it is possible to verify that this is so and in those cases only one reference (the formal publication, if there is one) is kept in the bibliography. In most cases it is not possible to make such a precise distinction among such documents, since only some of the material may have been made available before. Because of this, there may be cases of duplication in the sense that there may be more than one
reference to the same original data. We have tried to keep this to a minimum consistent with our aim of collecting references to all published data.

Inclusion of a reference in this bibliography does not imply a value judgment about the accuracy of the information. We only assert that the reference reports a measured or calculated photoabsorption cross-section (or the equivalent). The question of the accuracy of the data is to be covered in separate published critical reviews (the first, on molecular photoabsorption cross section data, will be published soon by one of us, R.D.H.).

Description of the Bibliography Format

The Photoabsorption Cross Section Bibliography is divided into three main sections. The first section describes the data which are in the references included in the bibliography. The data are categorized by a hierarchy of descriptors in the following order:

1. Process (e.g., absorption, ionization, etc.)
2. Experimental or Theoretical
3. Normalized or Relative (The data are considered normalized if given in absolute units.)
4. Atomic or Molecular Species including the degree of ionization of the species. (A negative ion is indicated by a minus sign; neutral unexcited species by a blank; neutral excited species by a star; and a positive ion by a number indicating the degree of positive ionization. All of these symbols follow the atomic species, which are listed in ascending order of nuclear charge, Z. Molecular species are listed in arbitrary order.)
5. The references. These are identified by an arbitrary file number, the first author, and the year of publication (e.g., 63 implies 1963).

The Process categories that we have chosen are based more on experimental techniques than the, perhaps, more logical theoretical categories. Thus, for example, the category "Absorption" has no theoretical subsection, as the theoretical papers will deal specifically with ionization or dissociation. However, in the laboratory, the quantities measured are usually the total absorption cross section and the photoionization or photodissociation yield. In these cases the cross section is listed under "Absorption" while the yields are listed under "Ionization" and "Dissociation." This listing procedure has been followed even for papers which claim to measure "Ionization" cross sections for atoms using absorption techniques. Those papers listed under the category "Ionization, Experimental," have all measured the cross section by detecting the number of positive ions created.

A large amount of data is now becoming available using mass spectrometry and photoelectron techniques. These techniques measure a quantity which should yield the relative partial photoionization cross section
for the production of ion fragments, or of the parent ion in a particular energy state. We have listed the papers using these techniques under "Ionization, Relative."

The second section lists the title, authors and complete reference for the papers cited. These are ordered by their "file" number. The abbreviations for journal titles are taken from Chemical Abstracts.

The third section consists of an alphabetical author index. After each name is a list of the "file" numbers of articles, authored or co-authored, which can be found in the bibliographic section.

Acknowledgments

We would like to gratefully acknowledge the assistance of the staff of the JILA Information Center in the preparation of this bibliography. The computer programs used were written by Patricia Ruttenberg, while the editorial and associated technical library work were performed by Elizabeth Reynolds and Victoria Tempey.

1 The JILA Information Center is supported in part by the National Bureau of Standards through the National Standard Reference Data Program.

II. BIBLIOGRAPHY
<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>TOTAL ABSORPTION</th>
<th>EXPERIMENTAL</th>
<th>TOTAL ABSORPTION</th>
<th>EXPERIMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N₂O</td>
<td>2718 THOMPSON,63</td>
<td>2770 WATANABE,53</td>
<td>C &amp; S</td>
<td>2654 MATSUMOTO,67</td>
</tr>
<tr>
<td></td>
<td>2892 METZGER,63</td>
<td>2866 COOK,60</td>
<td>C &amp; S</td>
<td>2654 MATSUMOTO,67</td>
</tr>
<tr>
<td>C Cl</td>
<td>1042 MAKATA,65</td>
<td>1245 SUNA,55</td>
<td>C &amp; D</td>
<td>1821 LAUER,65</td>
</tr>
<tr>
<td></td>
<td>1790 CAIRNS,65</td>
<td>1702 CAIRNS,66</td>
<td>LI &amp; CL</td>
<td>2629 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2252 INN,53</td>
<td>2431 PRESTON,43</td>
<td>K &amp; CL</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2556 MESSNER,33</td>
<td>2716 THOMPSON,63</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2770 WATANABE,53</td>
<td>3533 HAYARDO,68</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>3695 GERSHER,51</td>
<td></td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>Cl</td>
<td>1249 SUNA,55</td>
<td>1271 HUFFMAN,64</td>
<td>CS &amp; CL</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>1790 CAIRNS,65</td>
<td>1626 COOK,69</td>
<td>LI &amp; BR</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>1702 CAIRNS,66</td>
<td>2599 MESSNER,33</td>
<td>NA &amp; BR</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2716 THOMPSON,63</td>
<td>2770 WATANABE,53</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>Br₂</td>
<td>3612 SULZBACH,67</td>
<td>3645 SEERY,64</td>
<td>K &amp; BR</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>H Cl</td>
<td>1393 ROMANO,68</td>
<td>2739 ROMAN,49</td>
<td>RB &amp; BR</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>C H₄</td>
<td>0870 RUSTGI,64</td>
<td>1172 METZGER,64</td>
<td>CS &amp; BR</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>1790 DITCHBURN,95</td>
<td>1759 WILKINSON,56</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2361 LAUER,65</td>
<td>2301 LUKIESKI,64</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2376 MOE,52</td>
<td>2599 MESSNER,33</td>
<td>LI &amp; I</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2604 SUN,55</td>
<td>2770 WATANABE,53</td>
<td>NA &amp; I</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2871 DITCHBURN,84</td>
<td>3914 LUTF,69</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>Na Cl</td>
<td>2625 DAVIDOVITS,67</td>
<td></td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>H₂S</td>
<td>1147 WATANABE,64</td>
<td>1655 LAVILLA,66</td>
<td>RB &amp; I</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>3805 HENKE,67</td>
<td>3253 HENKE,67</td>
<td>CS &amp; I</td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>C S₂</td>
<td>2658 METZGER,63</td>
<td>3916 COOK,69</td>
<td>H₂O₂</td>
<td>2241 MALL,52</td>
</tr>
<tr>
<td>C Cl₄</td>
<td>2892 WERNER,30</td>
<td>3095 HENKE,67</td>
<td>C &amp; Cl₂</td>
<td>2622 ROEBBER,67</td>
</tr>
<tr>
<td>O₂</td>
<td>1849 COOK,64</td>
<td></td>
<td>C &amp; O₂</td>
<td>3005 HENKE,67</td>
</tr>
<tr>
<td>C₂H₄</td>
<td>1172 METZGER,64</td>
<td>1224 ZELIKOFF,53</td>
<td>N &amp; D Cl</td>
<td>3295 LEMPI,68</td>
</tr>
<tr>
<td></td>
<td>1759 WILKINSON,56</td>
<td>2121 WILKINSON,55</td>
<td></td>
<td>3565 WAKAMURA,68</td>
</tr>
<tr>
<td></td>
<td>2742 SCHENK,62</td>
<td>2599 MESSNER,33</td>
<td>BR &amp; Cl</td>
<td>3645 SEARY,64</td>
</tr>
<tr>
<td></td>
<td>2604 WALKER,95</td>
<td>3544 PERSON,68</td>
<td>N &amp; M</td>
<td>3755 SCHURGER,68</td>
</tr>
<tr>
<td>H Br₂</td>
<td>3246 SHARDANAND,68</td>
<td>3577 SHARDANAND,68</td>
<td>N &amp; C N</td>
<td>3919 OKABE,69</td>
</tr>
<tr>
<td>I Cl</td>
<td>3645 SEERY,64</td>
<td></td>
<td>N &amp; H N</td>
<td>3509 OKABE,68</td>
</tr>
<tr>
<td>I Br₂</td>
<td>3645 SEERY,64</td>
<td></td>
<td>N &amp; H N</td>
<td>3509 OKABE,68</td>
</tr>
<tr>
<td>H₂O₂</td>
<td>2707 HOLT,48</td>
<td>3795 SCHURGERS,68</td>
<td>M &amp; O₂</td>
<td>2645 COMES,67</td>
</tr>
<tr>
<td>Si O</td>
<td>3386 MAIN,68</td>
<td></td>
<td>N &amp; H N</td>
<td>3509 OKABE,68</td>
</tr>
<tr>
<td>C F₄</td>
<td>1395 COOK,65</td>
<td>2376 MOE,52</td>
<td>C &amp; O₂</td>
<td>0991 HUFFMAN,63</td>
</tr>
<tr>
<td>O₃</td>
<td>0862 VASSEY,48</td>
<td>1366 VIGROUX,52</td>
<td>C &amp; H₄</td>
<td>3532 CHUN,68</td>
</tr>
<tr>
<td></td>
<td>1369 NY,33</td>
<td>1486 VIGROUX,52</td>
<td>NA &amp; Cl₂</td>
<td>3247 HANSEN,68</td>
</tr>
<tr>
<td></td>
<td>2623 OGAHA,58</td>
<td>2633 INN,53</td>
<td>AR &amp; 2</td>
<td>2970 WILKINSON,68</td>
</tr>
<tr>
<td></td>
<td>2668 TAKANO,61</td>
<td>2641 HEARM,61</td>
<td>O &amp; 3</td>
<td>1370 VIGROUX,52</td>
</tr>
<tr>
<td></td>
<td>2700 VIGROUX,52</td>
<td>2710 VIGROUX,52</td>
<td></td>
<td>2511 BARBIER,42</td>
</tr>
<tr>
<td></td>
<td>2702 VIGROUX,52</td>
<td>2770 WATANABE,53</td>
<td></td>
<td>2511 BARBIER,42</td>
</tr>
<tr>
<td></td>
<td>2734 VIGROUX,52</td>
<td></td>
<td></td>
<td>2511 BARBIER,42</td>
</tr>
<tr>
<td></td>
<td>2669 VIGROUX,50</td>
<td>2890 NY,32</td>
<td></td>
<td>2164 HARRISON,25</td>
</tr>
<tr>
<td></td>
<td>2708 GREGG,66</td>
<td></td>
<td></td>
<td>2164 HARRISON,25</td>
</tr>
<tr>
<td>F N₃</td>
<td>2601 LA PAGLIA,61</td>
<td></td>
<td>NA &amp; Br</td>
<td>3247 HANSEN,68</td>
</tr>
<tr>
<td>Na₂</td>
<td>1394 HUDSON,65</td>
<td>2613 HUDSON,64</td>
<td>NA &amp; I</td>
<td>3247 HANSEN,68</td>
</tr>
<tr>
<td>Cs₂</td>
<td>1707 LAP,66</td>
<td>3399 CREEK,68</td>
<td>BE &amp; O</td>
<td>3247 HANSEN,68</td>
</tr>
<tr>
<td>Cs₂O₄</td>
<td>2121 WILKINSON,56</td>
<td>3544 PERSON,68</td>
<td>GE &amp; F₂</td>
<td>3918 HANG,68</td>
</tr>
<tr>
<td>D₂O</td>
<td>1606 ASTOIN,97</td>
<td>1212 LAUER,65</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>2732 JOHANNIN-GILLES,55</td>
<td>2738 JOHANNIN-GILLES,55</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>K₂O</td>
<td>1228 DITCHBURN,43</td>
<td>1485 HUDSON,65</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td></td>
<td>1707 LAP,66</td>
<td>3399 CREEK,68</td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>R₂O</td>
<td>3399 CREEK,68</td>
<td></td>
<td></td>
<td>2625 DAVIDOVITS,67</td>
</tr>
<tr>
<td>DETACHMENT</td>
<td>EXPERIMENTAL</td>
<td>IONIZATION</td>
<td>EXPERIMENTAL</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>H - 1222 SMITH, 59</td>
<td>1223 SMITH, 59</td>
<td>H - 2855 BEYNON, 66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1291 BOHM, 65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C - 0599 SEMAN, 62</td>
<td>1008 BRANSCOMB, 61</td>
<td>NE - 1188 SAMSON, 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O - 0038 BRANSCOMB, 59</td>
<td>1628 BRANSCOMB, 65</td>
<td>N - 2942 COMES, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1632 BRANSCOMB, 65</td>
<td>2667 SMITH, 68</td>
<td>O - 2943 COMES, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F - 0949 BERRY, 63</td>
<td>2644 POPP, 67</td>
<td>NE - 0926 COMES, 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL - 3780 ROTH, 69</td>
<td></td>
<td>1582 SAMSON, 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR - 3780 ROTH, 69</td>
<td>AR - 0575 SAMSON, 63</td>
<td>1226 LEE, 53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I - 0817 STEINER, 63</td>
<td>3416 STEINER, 68</td>
<td>0993 SAMSON, 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3780 ROTH, 69</td>
<td></td>
<td>1234 WAINFAN, 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OZ - 0468 BURCH, 58</td>
<td>1628 BRANSCOMB, 65</td>
<td>AR - 1035 ASINOVSKI, 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O N - 1628 BRANSCOMB, 65</td>
<td>1669 BRANSCOMB, 66</td>
<td>KR - 0975 SAMSON, 63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N OZ - 1628 BRANSCOMB, 65</td>
<td>3887 WARNECK, 69</td>
<td>KE - 1179 EDERER, 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O D - 1628 BRANSCOMB, 65</td>
<td>1669 BRANSCOMB, 66</td>
<td>KE - 1355 METZGER, 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S M - 3564 GOLUB, 69</td>
<td></td>
<td>1189 SAMSON, 64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1360 MATSUNAGA, 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELATIVE</td>
<td></td>
<td>1395 METZGER, 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - 0970 SMITH, 55</td>
<td>1386 BRANSCOMB, 59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 0970 SMITH, 55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I - 0839 STEINER, 63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O - 1386 BRANSCOMB, 59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3O2 - 3564 GOLUB, 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEORETICAL</td>
<td>N H3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DETACHMENT</td>
<td>EXPERIMENTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N - 0371 GELTMAN, 62</td>
<td>0561 OHMURA, 66</td>
<td>N O - 2062 METZGER, 67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0954 CHANDRASEKHAR, 58</td>
<td>1166 JEN, 53</td>
<td>2675 WATANABE, 52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1277 HENRICK, 44</td>
<td></td>
<td>2656 WATANABE, 53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1386 CHANDRASEKHAR, 44</td>
<td>1385 CHANDRASEKHAR, 45</td>
<td>2658 METZGER, 63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1392 JOHN, 62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1794 DOUTHY, 66</td>
<td>2244 GELTMAN, 58</td>
<td>C2H4 - 1172 WATANABE, 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2309 JOHN, 66</td>
<td></td>
<td>1223 WATANABE, 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2374 MITCHELL, 59</td>
<td>2382 BELL, 67</td>
<td>2868 WATANABE, 56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2650 WILLIAMSON, 42</td>
<td>2653 RUDKJØBING, 43</td>
<td>2869 WATANABE, 57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2747 JER, 56</td>
<td>2747 KROGDAL, 67</td>
<td>2870 WATANABE, 58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2794 NACEK, 67</td>
<td>2863 WATANABE, 67</td>
<td>2871 WATANABE, 59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT - 1207 TIETZ, 64</td>
<td>1092 MOSKVIN, 65</td>
<td>2672 WATANABE, 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2241 GELTMAN, 56</td>
<td>2681 ZINTROV, 62</td>
<td>2673 WATANABE, 61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2807 TIETZ, 62</td>
<td></td>
<td>2674 WATANABE, 62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C - 0666 MYERSCOUGH, 63</td>
<td>1657 COOPER, 62</td>
<td>N O - 2662 WALKER, 55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1105 MOSKVIN, 64</td>
<td>1166 MYERSCOUGH, 64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1295 MOSKVIN, 64</td>
<td>1833 HENRY, 65</td>
<td>3044 PERSON, 66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2066 ROBINSON, 67</td>
<td>2787 BREENE, 59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3269 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N - 1111 MOSKVIN, 64</td>
<td>3269 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 2447 YAMANOUCHI, 44</td>
<td>2709 KLEIN, 48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0988 HENRY, 67</td>
<td>0884 GILLESPIE, 64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1057 COOPER, 62</td>
<td>1081 MOSKVIN, 64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1635 BREEN, 65</td>
<td>2666 MOSKVIN, 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2072 GARRETT, 67</td>
<td>2842 BATES, 46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3888 SCHNEIDER, 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F - 1057 COOPER, 62</td>
<td>1101 MOSKVIN, 64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1229 MOSKVIN, 65</td>
<td>2086 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA - 1929 MOSKVIN, 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S T - 2063 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S - 2063 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL - 1057 COOPER, 62</td>
<td>1929 MOSKVIN, 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2063 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K - 192 MOSKVIN, 69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BR - 2063 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I - 2066 ROBINSON, 67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELATIVE</td>
<td>EXPERIMENTAL</td>
<td>RELATIVE</td>
<td>EXPERIMENTAL</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>AR 2622 CARLSDEN,67 2676 WEISSLER,99 2840 LAWRENCE,87 3883 KRAUSE,68</td>
<td>2639 CONES,61 3413 SAMSON,68 2316 LAWRENCE,29 2591 VROOM,67</td>
<td>C2H4 2396 NICHOLSON,65 2802 CHUPKA,67</td>
<td>S F6 1897 DIBELER,66 2676 WEISSLER,99 3591 VROOM,67</td>
<td></td>
</tr>
<tr>
<td>K 2315 LAWRENCE,25 2840 WILLIAMS,87</td>
<td>2317 LAWRENCE,29 2184 FROST,62 2873 DIBELER,67 3591 VROOM,67</td>
<td>N O2 3591 VROOM,67</td>
<td>C2H2</td>
<td></td>
</tr>
<tr>
<td>ZN 3188 HARRISON,69</td>
<td>H I 2377 MORRISON,65 3591 VROOM,67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KR 1883 VILLAREJO,67 3413 SAMSON,68 3883 KRAUSE,68</td>
<td>2624 DIBELER,67 3591 VROOM,67 2316 LAWRENCE,29</td>
<td>S O2 3591 DIBELER,67</td>
<td>H Br 3591 VROOM,67</td>
<td></td>
</tr>
<tr>
<td>RB 2316 LAWRENCE,29</td>
<td>C2H4 2396 NICHOLSON,65 3591 VROOM,67</td>
<td></td>
<td>Improve 3591 KRAUS,68</td>
<td></td>
</tr>
<tr>
<td>CD 3256 DIBELER,68</td>
<td>C H3CL 2219 DIBELER,65</td>
<td>3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>XE 1699 BREHM,66 2366 NICHOLSON,63 3496 BRUNOLO,68</td>
<td>1883 VILLAREJO,67 3413 SAMSON,68 3591 VROOM,67</td>
<td>M C N 3701 BAKER,68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 0496 BOEKNER,30</td>
<td>1238 MOHLER,26 2316 LAWRENCE,29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YB 3510 PARR,68</td>
<td>2222 POPESCU,66</td>
<td>C NF3 3640 KRAUS,68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MG 1699 BREHM,66</td>
<td>2846 FROST,67</td>
<td>F2 3591 VROOM,67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N2 0230 COMES,64 2465 COMES,67 2739 SPOH,67 3463 TURNER,66 3915 DIBELER,69</td>
<td>1208 DIBELER,66 2624 DIBELER,67 3591 VROOM,67</td>
<td>C O2 2727 DIBELER,67 3571 COLLIN,68</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>O2 1177 SCHNO,64 2366 NICHOLSON,63 2678 WEISSLER,59</td>
<td>1699 BREHM,66 2624 DIBELER,67 2739 SPOH,67 3591 VROOM,67</td>
<td>C N 2727 DIBELER,67 3571 COLLIN,68</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>N2 0891 COMES,61 1177 SCHNO,64 2676 WEISSLER,59</td>
<td>0931 COMES,64 2624 DIBELER,67 3591 VROOM,67</td>
<td>MG I2 1979 DIBELER,66 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>H2O 1699 BREHM,66 2739 SPOH,67</td>
<td>2624 DIBELER,67 3454 BRUNOLO,68</td>
<td>1238 MOHLER,26 2873 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>HO 0237 FROST,60 3591 VROOM,67</td>
<td>2624 DIBELER,67 3454 BRUNOLO,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>O2 0237 FROST,60 2251 HURZELER,58 2676 WEISSLER,59</td>
<td>1666 REESE,66 2366 NICHOLSON,63 2739 SPOH,67 3591 VROOM,67</td>
<td>C MCL 2396 NICHOLSON,65 2739 SPOH,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>C2H2 1604 DIBELER,66 2228 NICHOLSON,65 2739 SPOH,67</td>
<td>1699 BREHM,66 2624 DIBELER,67 3591 VROOM,67</td>
<td>C F3 2727 LIFSHITZ,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>CL2 3591 VROOM,67</td>
<td>2624 DIBELER,67 3454 BRUNOLO,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>N2O 2678 WEISSLER,59 2873 DIBELER,67 2739 SPOH,67</td>
<td>2624 DIBELER,67 3454 BRUNOLO,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>C0 2678 WEISSLER,59 2739 SPOH,67</td>
<td>2727 DIBELER,67 3591 VROOM,67</td>
<td>D C N 3591 BAKER,68</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>BR2 2377 MORRISON,60</td>
<td>2624 DIBELER,67 3454 BRUNOLO,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>H CL 2396 NICHOLSON,65 3642 KRAUS,68</td>
<td>2396 NICHOLSON,65 3454 BRUNOLO,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>C HA 1357 DIBELER,65 2396 NICHOLSON,65</td>
<td>1699 BREHM,66 3026 CHUPKA,68</td>
<td>2624 DIBELER,67 3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>I2 2377 MORRISON,60</td>
<td>3591 VROOM,67</td>
<td>H * 2745 YAKOWITJ,66</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>H2S 1325 DIBELER,65</td>
<td>3591 VROOM,67</td>
<td>3815 LIN,68</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>C S2 2727 DIBELER,67</td>
<td>3591 VROOM,67</td>
<td>H * 2745 YAKOWITJ,66</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>O2 1325 DIBELER,65 3254 VILLAREJO,60</td>
<td>3791 VROOM,67</td>
<td>3591 VROOM,67</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>C2H4 1699 BREHM,66 2025 BOTTER,66 2396 NICHOLSON,65</td>
<td>2025 BOTTER,66 3797 CHUPKA,69</td>
<td>2396 NICHOLSON,65</td>
<td>2396 NICHOLSON,65</td>
<td></td>
</tr>
<tr>
<td>NF 3591 VROOM,67</td>
<td></td>
<td>HE * 2249 HUANG,68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IONIZATION</td>
<td>THEORETICAL</td>
<td>IONIZATION</td>
<td>THEORETICAL</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>LI</td>
<td></td>
<td>MA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9017 TAIT, 64</td>
<td>1280 MCGUIRE, 67</td>
<td>1.236 BATES, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9066 BURGESS, 60</td>
<td>2218 CHIU, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1791 HOSKIN, 68</td>
<td>2470 HURD, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2698 STEWART, 67</td>
<td>2649 PEACH, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1776 EVELL, 67</td>
<td>2744 VAKORI, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2440 MCGUIRE, 69</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9372 CHANG, 68</td>
<td>3890 GEZALO, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LI 1</td>
<td></td>
<td>AL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2527 BELL, 67</td>
<td>2687 STEWART, 63</td>
<td>2443 MANSON, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2499 PEACH, 67</td>
<td>2681 ZHANG, 62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3910 GEZALO, 68</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td></td>
<td>SI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1236 BATES, 46</td>
<td>2056 ALICK, 66</td>
<td>1.2056 BURGESS, 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2999 ALICK, 66</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 1</td>
<td>1321 BATES, 69</td>
<td>3712 VAINSHTEIN, 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029 VAINSHTEIN, 68</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 1</td>
<td>1321 BATES, 49</td>
<td>1624 BATES, 49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2399 PRADERE, 64</td>
<td>2029 PRADERE, 64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2742 VAINSHTEIN, 54</td>
<td>2029 VAINSHTEIN, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C 2</td>
<td></td>
<td>AR</td>
<td>0741 WOO, 47</td>
<td></td>
</tr>
<tr>
<td>0578 NORMAN, 63</td>
<td>1330 BATES, 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1236 BATES, 46</td>
<td>2986 MCGUIRE, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3390 HIDALGO, 68</td>
<td>3298 PHILLIPS, 32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3390 HIDALGO, 68</td>
<td>2440 MCGUIRE, 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3390 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N 1</td>
<td>1121 JOHNSTON, 64</td>
<td>1236 BATES, 46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3879 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N 2</td>
<td></td>
<td>CR</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
</tr>
<tr>
<td>3390 HIDALGO, 68</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N 3</td>
<td>3390 HIDALGO, 68</td>
<td>MN</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
</tr>
<tr>
<td>N 4</td>
<td>1627 IVANOVA, 64</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 1</td>
<td>1236 BATES, 46</td>
<td>3213 HENRY, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2399 YAMATOH, 60</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3379 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 2</td>
<td>2399 YAMATOH, 60</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3379 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 3</td>
<td>3390 HIDALGO, 68</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 4</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O 5</td>
<td>1627 IVANOVA, 64</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F 1</td>
<td>1236 BATES, 46</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F 2</td>
<td>1236 BATES, 46</td>
<td>KR</td>
<td>0741 WOO, 47</td>
<td></td>
</tr>
<tr>
<td>NE 1</td>
<td>1236 BATES, 46</td>
<td>1284 MCGUIRE, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1236 BATES, 46</td>
<td>2284 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3390 HIDALGO, 68</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3390 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE 2</td>
<td>3390 HIDALGO, 68</td>
<td>3390 HIDALGO, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3379 HENRY, 68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE 3</td>
<td>3390 HIDALGO, 68</td>
<td>3390 HENRY, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NE 4</td>
<td>3390 HIDALGO, 68</td>
<td>3390 HENRY, 68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>9225 COOPER, 62</td>
<td>1288 MCGUIRE, 67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1670 KURJOFING, 60</td>
<td>2056 BURGESS, 60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2218 CHIU, 67</td>
<td>2370 HOSKIN, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2502 SEATON, 91</td>
<td>2649 PEACH, 67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2565 BATO, 66</td>
<td>2742 VAINSHTEIN, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2440 MCGUIRE, 68</td>
<td>3520 MCGUIRE, 68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ionization</td>
<td>Theoretical</td>
<td>Relative</td>
<td>Dissociation</td>
<td>Experimental</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>----------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>AG</td>
<td>0245 MATESE,65</td>
<td>3520 MCGUIRE,68</td>
<td>H2O 0772 BEYER,64</td>
<td></td>
</tr>
<tr>
<td>AG</td>
<td>018925 COOPER,62</td>
<td>3520 MCGUIRE,68</td>
<td>N H3 2693 OIKE,67</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>0252 MCGUIRE,68</td>
<td>3520 MCGUIRE,68</td>
<td>N O 0772 BEYER,64</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>1288 MCGUIRE,67</td>
<td>1893 MCGUIRE,65</td>
<td>C O2 0772 BEYER,64</td>
<td>2727 DIBELER,67</td>
</tr>
<tr>
<td>IN</td>
<td>2846 MCGUIRE,65</td>
<td>3520 MCGUIRE,68</td>
<td>H2S 3392 DIBELER,68</td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>1288 MCGUIRE,67</td>
<td>1893 MCGUIRE,65</td>
<td>C S2 2727 DIBELER,67</td>
<td></td>
</tr>
<tr>
<td>SB</td>
<td>1288 MCGUIRE,67</td>
<td>1893 MCGUIRE,65</td>
<td>S O2 3392 DIBELER,68</td>
<td></td>
</tr>
<tr>
<td>TE</td>
<td>1288 MCGUIRE,67</td>
<td>1893 MCGUIRE,65</td>
<td>C O5 2727 DIBELER,67</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>1288 MCGUIRE,67</td>
<td>2848 MCGUIRE,65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XE</td>
<td>0744 W00,67</td>
<td>1288 MCGUIRE,67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1893 MCGUIRE,65</td>
<td>2079 COMES,66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2616 COOPER,64</td>
<td>2616 BRANDT,67</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2845 MASON,66</td>
<td>2648 MCGUIRE,66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2944 COMES,68</td>
<td>3510 MCGUIRE,68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>1288 MCGUIRE,67</td>
<td>2378 MOSKVIN,63</td>
<td>H2 1 2800 OKEYUK,67</td>
<td>2876 DUNN,68</td>
</tr>
<tr>
<td>CS</td>
<td>2845 MASON,68</td>
<td>2848 MCGUIRE,65</td>
<td>3259 DUNN,68</td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>2843 MASON,68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA</td>
<td>1983 FARNOUX,67</td>
<td>3917 FARNOUX,69</td>
<td>D2 1 2876 DUNN,68</td>
<td>3259 DUNN,68</td>
</tr>
<tr>
<td>PT</td>
<td>3917 FARNOUX,69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU</td>
<td>2686 FARNOUX,67</td>
<td>2845 MASON,68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3917 FARNOUX,68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HG</td>
<td>2845 MATESE,65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PB</td>
<td>2845 MATESE,65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>2686 FARNOUX,67</td>
<td>3917 FARNOUX,69</td>
<td>HE 2689 SHAREANAND,67</td>
<td>2875 WOLLAN,31</td>
</tr>
<tr>
<td>U</td>
<td>2845 MATESE,65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FM</td>
<td>2843 MASON,68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2</td>
<td>1959 FLAMENKY,65</td>
<td>2097 SHIMIZU,63</td>
<td>NE 2689 SHAREANAND,67</td>
<td>2875 WOLLAN,31</td>
</tr>
<tr>
<td>H2</td>
<td>2686 KSHARE,67</td>
<td>3412 KSHARE,68</td>
<td>AR 2689 SHAREANAND,67</td>
<td>2875 WOLLAN,31</td>
</tr>
<tr>
<td>H2</td>
<td>3891 KAPLAN,69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>1 2204 BATES,63</td>
<td>3517 BATES,68</td>
<td>KR 2720 HEDDE,62</td>
<td></td>
</tr>
<tr>
<td>H2</td>
<td>3821 DIXON,69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N2</td>
<td>3689 SCHNEIDER,69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN2</td>
<td>3692 KAPLAN,68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C H2</td>
<td>1668 DALGARN0,52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HE</td>
<td>2631 BYRON,67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KR</td>
<td>2645 KRAUSE,67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2</td>
<td>2845 MATESE,65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O2</td>
<td>1280 NETZGER,64</td>
<td>1797 GOLDSHTEIN,66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2O</td>
<td>0772 BEYER,64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2O</td>
<td>2846 MATESE,65</td>
<td>1797 GOLDSHTEIN,66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2O</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O2</td>
<td>0772 BEYER,64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O2</td>
<td>2727 DIBELER,67</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### DISSOCIATIVE IONIZATION

#### EXPERIMENTAL

<table>
<thead>
<tr>
<th>Compound</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂</td>
<td>2678 Weissler, 59</td>
</tr>
<tr>
<td>N₂</td>
<td>0931 Comes, 64</td>
</tr>
<tr>
<td>H₂O</td>
<td>2623 Dibeler, 66</td>
</tr>
<tr>
<td>N₂O</td>
<td>2678 Weissler, 59</td>
</tr>
<tr>
<td>C₂H₂</td>
<td>1624 Botter, 66</td>
</tr>
<tr>
<td>N₂O₂</td>
<td>2678 Weissler, 59</td>
</tr>
<tr>
<td>C₂O</td>
<td>2678 Weissler, 59</td>
</tr>
<tr>
<td>Br₂</td>
<td>2377 Morrison, 60</td>
</tr>
<tr>
<td>HCL</td>
<td>3640 Krauss, 68</td>
</tr>
<tr>
<td>C₂H₄</td>
<td>1357 Dibeler, 65</td>
</tr>
<tr>
<td>I₂</td>
<td>2377 Morrison, 60</td>
</tr>
<tr>
<td>C₂H₄</td>
<td>1609 Brehm, 66</td>
</tr>
<tr>
<td></td>
<td>3757 Chupka, 69</td>
</tr>
<tr>
<td>N₂O</td>
<td>2678 Weissler, 59</td>
</tr>
<tr>
<td>C₃H₃Cl</td>
<td>2219 Dibeler, 65</td>
</tr>
<tr>
<td>C₂H₅N</td>
<td>3011 Dibeler, 67</td>
</tr>
<tr>
<td>C₂H₅N</td>
<td>3251 Dibeler, 68</td>
</tr>
<tr>
<td>C₂H₅F</td>
<td>3640 Krauss, 68</td>
</tr>
<tr>
<td>C₂H₅F</td>
<td>1357 Dibeler, 65</td>
</tr>
<tr>
<td>TE₂</td>
<td>3026 Chupka, 68</td>
</tr>
<tr>
<td>SE₂</td>
<td>3866 Berkowitz, 69</td>
</tr>
<tr>
<td>SE₂</td>
<td>3866 Berkowitz, 69</td>
</tr>
<tr>
<td>NaI</td>
<td>1979 Berkowitz, 66</td>
</tr>
<tr>
<td>TiI</td>
<td>1979 Berkowitz, 66</td>
</tr>
<tr>
<td>Na₂I</td>
<td>1979 Berkowitz, 66</td>
</tr>
<tr>
<td>MgI₂</td>
<td>1979 Berkowitz, 66</td>
</tr>
<tr>
<td>MgI₂</td>
<td>1979 Berkowitz, 66</td>
</tr>
<tr>
<td>Cl₂CH₃</td>
<td>2025 Botter, 66</td>
</tr>
<tr>
<td>C₂O₂</td>
<td>1684 Botter, 66</td>
</tr>
<tr>
<td>ClC₂N</td>
<td>3011 Dibeler, 67</td>
</tr>
<tr>
<td>BrC₂N</td>
<td>3011 Dibeler, 67</td>
</tr>
<tr>
<td>ICl₂N</td>
<td>3011 Dibeler, 67</td>
</tr>
<tr>
<td>FCl₂N</td>
<td>3011 Dibeler, 67</td>
</tr>
</tbody>
</table>

---

**Note:** The above table lists various compounds and their references. It seems to be related to the study of dissociative ionization, possibly in the context of spectroscopy or similar scientific fields.
III. BIBLIOGRAPHIC REFERENCES
Page Intentionally Left Blank
BIBLIOGRAPHIC REFERENCES

36. BRANSCOMB L, BURCH D S, SMITH S J, GELTMAN S
   PHOTODETACHMENT CROSS SECTION AND THE ELECTRON AFFINITY OF ATOMIC OXYGEN
   PHYS REV, VOL 111, 564, (1958)

237. FROST D G, MCCONWELL C A
   THE DETERMINATION OF IONIZATION AND DISSOCIATION POTENTIALS OF MOLECULES BY RADIATION WITH ELECTRONS
   FINAL REPORT, UNIVERSITY OF BRITISH COLUMBIA, DEPT. OF CHEMISTRY, AFOSR-TR-60-423, AD-247 415, 1966, 34 PAGES

247. YANAMOUCHI T
   RADIATIVE DETACHMENT AND ATTACHMENT OF NEGATIVE OXYGEN ION
   PROG PHYS MATH SOC JAPAN, VOL 22, 969, (1940)

308. KUYATT C E, SIMPSON J A
   INELASTIC ELECTRON SCATTERING FROM RARE GASES. DETERMINATION OF OSCILLATOR STRENGTHS IN THE CONTINUUM AND IN ATOMIC COLLISION PROCESSES, M C MCCONWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 191, 1984, PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 27-28 JULY 1963)

371. GELTMAN S
   THE BOUND-FREE ABSORPTION COEFFICIENT OF THE HYDROGEN NEGATIVE ION
   ASTROPHYS J, VOL 136, 935, (1962)

399. KLEIN M M, BRUECKNER K A
   INTERACTION OF SLOW ELECTRONS WITH ATOMIC OXYGEN AND ATOMIC NITROGEN
   PHYS REV, VOL 111, 1115, (1958)

466. BURCH D S, SMITH S J, BRANSCOMB L
   PHOTODETACHMENT OF (O2)-
   PHYS REV, VOL 112, 171, (1958)

496. BOECKNER C, MOHLER F L
   PHOTO-IONIZATION OF CAESIUM VAPOR BY ABSORPTION BETWEEN THE SERIES LINES
   J RES NATL BUR STD, VOL 5, 331, (1930)

500. WEISSLER G L, LEE P, RHIM E I
   ABSOLUTE ABSORPTION COEFFICIENTS OF NITROGEN IN THE VACUUM ULTRAVIOLET
   J OPT SOC AM, VOL 42, 84, (1952)

518. WEISSLER G L, LEE P
   ABSORPTION COEFFICIENTS OF OXYGEN IN THE VACUUM ULTRAVIOLET
   J OPT SOC AM, VOL 42, 266, (1952)

520. AXELROD N H, GIVENS M P
   ABSORPTION BY GASEOUS HELIUM IN THE EXTREME ULTRAVIOLET
   PHYS REV, VOL 115, 97, (1959)

520. COMES F J, ELZER A
   PHOTONIONIZATION OF ATOMIC NITROGEN
   PHYS LETTERS, VOL 260A, 334-335, (1967)

561. OHMURA T, OHMURA H
   ELECTRON-HYDROGEN SCATTERING AT LOW ENERGIES
   PHYS REV, VOL 118, 194, (1960)

575. SIMSON J A R
   OBSERVED AND PREDICTED NEW AUTOIONIZED ENERGY LEVELS IN KRYPTON, ARGON, AND XENON
   PHYS REV, VOL 132, 2122, (1963)

577. SCHNAPPER H W
   MULTIPLE EXCITATION AND IONIZATION OF INNER ATOMIC SHELLS BY X RAYS
   PHYS REV, VOL 131, 2595, (1963)

578. NORMAN G E
   PHOTONIONIZATION CROSS SECTIONS OF THE LOWER EXCITED STATES AND OSCILLATOR STRENGTHS OF CERTAIN LINES OF CARBON AND NITROGEN ATOMS
   OPT SPECFRY USSR ENGLISH TRANSL, VOL 14, 315, (1963)

582. BLAKE A J, CARVER J H
   DETERMINATION OF PARTIAL PHOTONIONIZATION CROSS SECTIONS BY PHOTOELECTRON SPECTROSCOPY
   J CHEM PHYS, VOL 47, 1036-1044, (1967)

598. HENRY R J W
   ELASTIC SCATTERING FROM ATOMIC OXYGEN AND PHOTODETACHMENT FROM O-
   PHYS REV, VOL 162, 56-63, (1967)

699. SEMAN M L, BRANSCOMB L
   STRUCTURE AND PHOTODETACHMENT SPECTRUM OF THE ATOMIC CARBON NEGATIVE ION
   PHYS REV, VOL 125, 1602, (1962)

605. THOMPSON R J, DUNCAN A B F
   INTENSITIES OF ELECTRONIC TRANSITIONS IN AMMONIA
   J CHEM PHYS, VOL 14, 573-577, (1946)

617. TANNENBAUM E, COFFIN E M, HARRISON A J
   THE FAR ULTRAVIOLET ABSORPTION SPECTRA OF SIMPLE ALKYL AMINES
   J CHEM PHYS, VOL 21, 311-318, (1953)

622. NATAKABE K, SAKAI H, MOTL J R, NAKAYAMA T
   ABSORPTION CROSS SECTION OF O2, N2, AND N2O WITH AN IMPROVED PHOTODETACHMENT METHOD
   CONTRIBUTION NO. 11, HAWAII INSTITUTE OF GEOPHYSICS, HONOLULU, HAWAII, 1958, 39 PAGES

13
636 Itamoto F K, McAllister H C
ABSORPTION COEFFICIENTS OF NITROGEN IN THE REGION 850 TO 1000 A
CONTRIBUTION NO. 29, HAWAII INSTITUTE OF GEOPHYSICS, HONOLULU, HAWAII, 1961, 65 PAGES

640 Matsunaga F H, Watanabe K
ABSORPTION COEFFICIENTS OF O2 IN THE VACUUM ULTRAVIOLET
CONTRIBUTION NO. 33, HAWAII INSTITUTE OF GEOPHYSICS, HONOLULU, HAWAII, 1961, 20 PAGES

647 Baker D J, Bedo D E, Tompoulian D H
CONTINUOUS PHOTOELECTRIC ABSORPTION CROSS SECTION OF HELIUM
PHYS. REV. VOL 124, 1471, (1961)

666 Myerscough V P, Mc Dowell H R C
PHOTO detachment FROM C-
(In) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION
PHENOMENON IN GASES (PARIS, 8-13 JULY 1963) P. Hubert AND E Chemiu-ALcAM, EDITORS, SERMA, PARIS, VOL 1, 139, 1963

672 Himnell L C, Fontana P R
RESONANCE SCATTERING OF LIGHT FROM ATOMIC HYDROGEN
PHYS. REV. VOL 162, 23-28, (1967)

688 Cook G R, Metzger P H
IMPROVED PHOTOIONIZATION AND ABSORPTION SPECTRA OF SEVERAL GASES IN
THE 650 TO 1000 ANGSTROM REGION
(In) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION
PHENOMENON IN GASES (PARIS, 8-13 JULY 1963) P. Hubert AND E Chemiu-ALcAM, EDITORS, SERMA, PARIS, VOL 1, 149, 1963

698 Dalgaro A, Henry R J H, Stewart A L
THE PHOTOIONIZATION OF ATOMIC OXYGEN
PLANETARY SPACE SCI, VOL 12, 235, (1964)

699 Huffman R E, Tanaka Y, Larrabee J C
HELIUM AND ARGON EMISSION CONTINUUM AND THEIR USE IN ABSORPTION
CROSS SECTION MEASUREMENTS IN THE VACUUM ULTRAVIOLET
(In) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION
PHENOMENON IN GASES (PARIS, 8-13 JULY 1963) P. Hubert AND E Chemiu-ALcAM, EDITORS, SERMA, PARIS, VOL 1, 149, 1963

700 Moo Y H, Sun C P
ON THE ABSORPTION OF X-RAYS
SCI. REP. NAfal TSING HUA UNIV. SER. A, VOL 4, 399-418, (1947)

702 Beyer K O, Welge K H
PHOTODISSIOZIATIONEN VON H2, H2, H2, O, C O, H20, G O2, UND H N3
IM EXTREMEN VAKUUM-JV
Z NATURFORSCH, VOL 19A, 19, (1964)

704 Huffman R E, Larrabee J C, Tanaka Y
ABSORPTION COEFFICIENTS OF OXYGEN IN THE 1060-580-A WAVELENGTH
REGION
J CHEM. PHYS, VOL 40, 356, (1964)

817 Steiner B, Branchcomb L, Seman M L
ELECTRON AFFINITY OF ATOMIC IODINE
J CHEM. PHYS, VOL 37, 1280, (1962)

829 Steiner B, Branchcomb L, Seman M L
ENERGY DEPENDENCE FOR THE PHOTODETACHMENT OF I- NEAR THRESHOLD
(In) ATOMIC COLLISION PROCESSES, M C Mc Dowell, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 537, 1964.
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)

842 Taft J H
THE CALCULATION OF THE PHOTO-IONIZATION CROSS SECTION OF LITHIUM
(In) ATOMIC COLLISION PROCESSES, M C Mc Dowell, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 598, 1964.
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)

862 Vassy A, Vassy E
EFFECT OF TEMPERATURE ON THE ABSORPTION SPECTRUM OF OZONE.
CHAPPUSIS BANDS
J CHEM. PHYS, VOL 16, 1163-1164, (1948)

870 Rustgi O P
ABSORPTION CROSS SECTIONS OF ARGON AND METHANE BETWEEN 600 AND 170
ANGSTROM UNITS
J. OPT. SOC. AM, VOL 94, 464, (1964)

885 Gillespie J
FINAL-STATE EFFECTS IN ATOMIC PROCESSES, PHOTODETACHMENT
PHYS. REV, VOL 135, A7F5, (1964)

901 Comes F J, Lessmann W
MESSUNG VON ANHEITGZUSTANDE DES STICKSTOFFMOLEKULS MIT HILFE DER
PHOTOIONISATION
Z. NATURFORSCH, VOL 16A, 1038, (1961)

904 Chandra Sekhar S
ON THE CONTINUOUS ABSORPTION COEFFICIENT OF THE NEGATIVE HYDROGEN
ION, IV.
ASTROPHYS. J, VOL 128, 114, (1958)

915 Cook G R, Metzger P H
PHOTOIONIZATION AND ABSORPTION CROSS SECTIONS OF O2 AND N2 IN THE
600- TO 1000- ANGSTROM REGION
J. CHEM. PHYS, VOL 41, 371, (1964)
<table>
<thead>
<tr>
<th>ID</th>
<th>Author(s)</th>
<th>Title</th>
<th>Volume</th>
<th>Pages</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1255</td>
<td>RUSTGI O P, FISHER E I, FULLER C H</td>
<td>ABSORPTION CROSS SECTIONS AND F VALUES OF KRYPTON AND XENON IN THEIR IONIZATION CONTINUUM</td>
<td>J Opt Soc Am, Vol 54, 745</td>
<td>1964</td>
<td></td>
</tr>
<tr>
<td>1321</td>
<td>BATES D R</td>
<td>THE QUANTAL THEORY OF CONTINUOUS ABSORPTION OF RADIATION BY VARIOUS ATOMS IN THEIR GROUND STATES. I.THE ATOMS FROM BORON TO NEON</td>
<td>Monthly Notices Roy Astron Soc, Vol 100, 29</td>
<td>1939</td>
<td></td>
</tr>
<tr>
<td>1351</td>
<td>MADSEN R P, COOLING K</td>
<td>TWO-ELECTRON EXCITATION STATES IN HELIUM</td>
<td>Astrophys J, Vol 141, 364</td>
<td>1965</td>
<td></td>
</tr>
</tbody>
</table>
1355 Metzger P H, Cook G R
Flux Distribution of the Hopfield Helium Continuum from the Photoionization of Ar, Kr, and Xe

1357 Dibeler V H, Krauss H, Reese R M, Harlee F N
Mass-Spectrometric Study of Photoionization. III. Methane and Methane-D

1359 Cairns R B, Samson J A R
Absorption and Photoionization Cross Sections of C O2, C O, Ar, and Ne at Intense Solar Emission Lines
J Geophys Res, Vol 70, 59, (1965)

1360 Matsumaga F M, Watanabe K, Jackson R S
Photoionization Yield and Absorption Coefficient of Xenon in the Region of 860-1023 Angstroms

1368 Vigroux E
Absorption de l'ozone dans le spectre visible
Compt Rend, Vol 235, 144-148, (1952)

1369 Ny T, Choong S
L'absorption de la lumiere par l'ozone entre 3050 et 2150 angstroms
Compt Rend, Vol 196, 916-918, (1933)

1370 Vigroux E
Absorption de l'ozone dans le domaine spectral situé au-dessous de 3130 angstroms
Compt Rend, Vol 234, 2592-2594, (1952)

1371 Romano J, Granier-Mayence J
Effet de température sur le spectre d'absorption de l'oxyde azoteux gazeux entre 2100 et 1000 angstroms
Compt Rend, Vol 234, 824-826, (1952)

1377 Bott J
Über das Grenzkontinuum der Matriumhauptserie
Ann Physik, Vol 35, 214, (1939)

1382 Cooke F W
Ionization of Caesium Vapor by Light
Phys Rev, Vol 38, 1351, (1931)

1384 Chandrasekhar S, Elbept O O
On the continuous absorption coefficient of the negative hydrogen ion. V.

1385 Chandrasekhar S
On the continuous absorption coefficient of the negative hydrogen ion

1386 Branscomb L, Smith S J
Experimental cross section for photodetachment of electrons from H- and D-

1392 John T L
Exchange effects on the photodetachment cross-section of H-

1393 Romano J, Vodar B
Spectre d'absorption de l'acide chlorhydrique gazeux dans la région de Schumann
Compt Rend, Vol 226, 238-240, (1948)

1394 Hudson R D
Measurements of the molecular absorption cross section and the photoionization of sodium vapor between 1680 and 3700 angstroms

1395 Cook G R, Ching B K
Photoionization and Absorption Cross Sections and Fluorescence of C F4

1404 Cairns R B, Samson J A R
Total Absorption Cross Section of Atomic Oxygen Below 910 Angstroms
Phys Rev, Vol 139, 1403, (1965)

1405 Hudson R D, Carter V L
Absorption of Light by Potassium Vapor between 2856 and 1150 Angstroms
Phys Rev, Vol 139, 1426, (1965)

1408 Vigroux E
Absorption de l'ozone dans le spectre visible
Compt Rend, Vol 227, 277-279, (1948)

1454 Burke P G, Movicar D D
Resonances in E- /He+ scattering and the photoionization of He

1561 Samson J A R, Cairns R B
Total Absorption Cross Sections of H2, N2, and O2 in the Region 950-200 Angstroms

18
1563 Samson J A R
photoionization cross sections of neon from threshold to 230 angstroms

1599 Flannery M R, OPik U
the photoionization of the hydrogen molecule from the ground electronic and vibrational state

1617 Aboud A A, Curtis J P, Merecure R, Rense W A
oxygen gas continuous absorption in the extreme ultraviolet

1619 Astoin H, Johannin-Gilles A, Vodar B
absorption de la vapeur d'eau dans l'ultraviolet extreme
Compt Rend, Vol 237, 558, (1953)

1624 Bates D R, Seaton M J
the quantal theory of continuous absorption of radiation by various atoms in their ground states. II. further calculations on oxygen, nitrogen and carbon

1626 Cook G R, Metzger P M, Ogana M
photoionization and absorption coefficients of C I in the 600 to 1000 angstrom region

1627 Ivanova A V
photoionization of optical electrons in the ions NV and O VI
Opt Spectry USSR English Transl, Vol 16, 502, (1964)

1628 Branscomb L, Smith S J, Tisone G
photodetachment spectra for O-, (O H)-, and (O O)-

1629 Weimberg M, Berry R S
forbidden continuum in photodetachment

1632 Branscomb L, Smith S J, Tisone G
oxygen metastable atom production through photodetachment

1635 Breen R G
bound-free continuum of 0-
j quant spectra radiative transfer, Vol 5, 449, (1965)

1641 Clark K C
ionospheric absorption by N2 and O2 of certain extreme ultraviolet solar wavelengths
Phys Rev, Vol 87, 271, (1952)

1659 Dalgarno A
the photo- ionization cross section of methane

1661 Dalgarno A, Parkinson D
photoionization of atomic oxygen and atomic nitrogen
J Atmospheric Terrest Phys, Vol 18, 335, (1960)

1664 Reese R M, Rosenstock H M
photoionization mass spectrometry of N O

1667 Dalgarno A
photoionization of atomic oxygen and nitrogen
GCA Tech Report 60-5-54, Geophysics Corp of America, Bedford, Mass, ASTIA-AD 257 860, 1960, 8 pages

1669 Ditchburn R W
photodetachment cross section, electron affinity, and structure of the negative hydroxyl ion

1678 Rudjoeving H
dermination of continuous absorption coefficients in the spectrum of Na I
Kgl Danske Videnskab Selskab Fys Medd, Vol 18, 3, (1949)

1679 Ditchburn R W
the absorption spectrum of neon

experimental and theoretical studies of photodionization efficiency curves for CIIH and CIIQ

1699 Breth B
massenspektrometrische untersuchung der photodionisation von molekülen
1701 DITCHBURN R W

Absorption cross-sections in the vacuum ultra-violet. III. Methane

1702 CAIRNS R B, SAMSON J A R

Total absorption cross sections of C O and C O2 in the
region 550-200 Angstroms

1707 LAPP W, HARRIS L P

Absorption cross sections of alkali-vapor molecules - I. Cs2
in the visible. II. K2 in the red
J Quant Spectry Radiative Transfer, Vol 6, 169, (1964)

1711 COOK G R, METZGER P H, OGAWA M

Absorption, photoionization and fluorescence of C O2

1715 DITCHBURN R W, HEDDE D W O

Continuous absorption of oxygen (1850 - 1300 Angstroms)

1717 DITCHBURN R W, HUDSON R O

The absorption of light by calcium vapor (2100 to 1080 Angstroms)

1719 DITCHBURN R W, JUTSUM P J

Continuous absorption of light in sodium vapor

1731 BLAKE A J, CARVER J H

Partial photoionization cross sections for molecular oxygen
Phys Letters, Vol 1, 467, (1965)

1732 BEYNON J D E, CAIRNS R B

An experimental determination of the photoabsorption cross
section of atomic hydrogen

1733 BREENE R G

Photoionization calculations for atoms and ions with 1S, 2S
and 2P electrons

1739 DITCHBURN R W, JUTSUM P J, HARR G V

The continuous absorption of light in alkali-metal vapours

1749 DITCHBURN R W, HARR G V

The continuous absorption of light in magnesium vapour

1749 DITCHBURN R W, YOUNG P A

The absorption of molecular oxygen between 1850 and 2500
Angstroms

1754 PATCH R W

Absolute intensity measurements for the 2.7 mu band of water
vapor in a shock tube

1755 EDERER D L, TOMBOULIAN O H

Photoionization cross section of neon in the 80 to 600 Angstrom
region
Phys Rev, Vol 133, 41525, (1964)

1756 EHLER A W, WEISSLER G L

Absorption cross sections of H2 between 550 and 833 Angstroms
QB 129356, Technical Report No. 2, University of Southern
California, 1957

1759 WILKINSON P G, JOHNSTON H L

The absorption spectra of methane, carbon dioxide, water
vapor, and ethylene in the vacuum ultraviolet

1759 EHLER A W, WEISSLER G L

Ultraviolet absorption of atomic nitrogen in its ionization
continuum

1777 LUKIRSKII A P, BRYTOV I A, GRIBOVSKII S A

Photoionization absorption of Ar, Xe, alcohol, and methylal
in the 7-44 Angstrom wavelength range

1794 OUGHTRY N A, FRASER P A, MCCEACHRAN R P

The bound-free absorption coefficient of the negative
hydrogen ion

1797 GOLSTEIN R, MASTRUP F N

Absorption coefficients of the 02 Schumann-Runge continuum
from 1270 to 1745 Angstroms using a new continuum source

1798 SAMSON J A R, CAIRNS R B

Ionization potential of O2

1799 HUDSON R O, CARTER V L, STEIN J A

An investigation of the effect of temperature on the
Schumann-Runge absorption continuum of oxygen, 1980-1950 A
1821 LAUFER A H, HCNEBY J R
DEUTERIUM ISOTOPE EFFECT IN VACUUM-ULTRAVIOLET ABSORPTION
COEFFICIENTS OF WATER AND METHANE
CAN J CHEM, VOL 43, 3487, (1965)

1825 MUILLERMIN F
ANALYSE CONTINUE DU SPECTRE D'ABSORPTION DE L'ARGON ET DU
HELIUM ENTRE 2 ET 8 ANGSTROMS
J PHYS, VOL 26, 776, (1965)

1830 HENRY R J W
PHOTOIONIZATION CROSS SECTIONS FOR C-, N, AND O
J CHEM PHYS, VOL 44, 4057, (1966)

1835 ATSEMOVSKII E I, BATENIN V N
EXPERIMENTAL INVESTIGATION OF THE CONTINUOUS SPECTRUM OF
ARGON PLASMA
HIGH TEMP USSR ENGLISH TRANSL, VOL 3, 489, (1965)

1840 FROST D C, MAK D, MCDOWELL C A
THE PHOTOLYSIS OF NITROGEN DIOXIDE
CAN J CHEM, VOL 40, 1964, (1962)

1845 NEWSOM G H
THE ABSORPTION SPECTRUM OF CALCIUM VAPOUR, 1660-2283 ANGSTROMS
PROC PHYS SOC LONDON, VOL 87, 975, (1966)

1849 CODLING K
STRUCTURE IN THE PHOTOLYSIS CONTINUUM OF S F6 BELOW
630 ANGSTROMS
J CHEM PHYS, VOL 44, 4401, (1966)

1855 LAVILLA R E, DESLATTES R D
K-ABSORPTION FINE STRUCTURES OF SULFUR IN GASEOUS S F6
J CHEM PHYS, VOL 44, 4405, (1966)

1857 DUBELEK V H, WALKER J A
PHOTOIONIZATION EFFICIENCY CURVE FOR S F6 IN THE WAVELENGTH
REGION 1050 TO 1800 ANGSTROMS
J CHEM PHYS, VOL 44, 4495-4496, (1966)

1863 VILLAREJO D, HERM R R, INGHAM M G
MEASUREMENT OF THRESHOLD ELECTRONS IN THE PHOTOLYSIS
OF AR, Kr, AND XE
J CHEM PHYS, VOL 46, 4995-4996, (1967)

1869 MCGUIRE E J
A MODEL FOR ATOMIC EXCITED STATES AND ITS APPLICATION TO
PHOTOABSORPTION CALCULATIONS
THESIS, CORNELL UNIVERSITY, 1965, 106 PAGES, UNIVERSITY
MICROFILMS INC. ANN ARBOR, MICHIGAN, NO. 65-14,732

1873 FARMUX F C
ETUDE THEORIQUE DE LA VARIATION DES SECTIONS EFFICACES DE
PHOTOLYSIS DES ATOMES DANS UN MODELE A POTENTIEL CENTRAL
COMPT REND, VOL 264, 1728-1731, (1967)

1892 MOSKVIK Yu V
PHOTOIONIZATION CROSS SECTIONS OF NEGATIVE ALKALI-METAL AND
HALOGEN IONS
HIGH TEMP USSR ENGLISH TRANSL, VOL 3, 765, (1965)

1907 DUBELEK V H, WALKER J A, KODDAD G H
PHOTOABSORPTION CROSS SECTIONS OF MOLECULAR OXYGEN BETWEEN
1250 AND 2350 ANGSTROMS
J QUANT SPECTRY RADIATIVE TRANSFER, VOL 6, 451, (1966)

1916 BURGESS A, SEATON M J
A GENERAL FORMULA FOR THE CALCULATION OF PHOTO-IONIZATION
CROSS SECTIONS
MONTHLY Notices ROY ASTRON SOC, VOL 120, 121, (1960)

1926 SCHMIDT M
TWO CENTRE COULOMB POTENTIAL APPROXIMATION
J PHYS SOC JAPAN, VOL 18, 811, (1963)

1929 HENRY R J W, LIPSKY L
MULTICHANNEL PHOTO-IONIZATION OF ATOMIC SYSTEMS
PHYS REV, VOL 193, 94, (1967)

1937 ROBINSON E J, GELTMAN S
SINGLE- AND DOUBLE-QUANTUM PHOTODETACHMENT OF NEGATIVE IONS
PHYS REV, VOL 157, 4, (1967)

1956 NETZER P R, COOK G R, USBAN M
PHOTOLYSIS AND ABSORPTION COEFFICIENTS OF N O IN THE
650 TO 960 ANGSTROM REGION
CAN J CHEM, VOL 45, 203, (1967)
<table>
<thead>
<tr>
<th>Page</th>
<th>Author(s)</th>
<th>Title and Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2301</td>
<td>Lukirskii A P, Brytov I A, Zimkina T M</td>
<td>Photoionization Absorption of He, Kr, Xe, C H4, and Methyl in the 23.6-250 Angstrom Region. Opt Spectry USSR English Transl, Vol 17, 234, (1964)</td>
</tr>
</tbody>
</table>
2309 JOHN T L
THE PHOTO-DETACHMENT OF H-
MONTHLY NOTICES ROY ASTRON SOC, VOL 121, 41, (1960)

2310 JUTSUM P J
THE CONTINUOUS ABSORPTION OF LIGHT IN CALCIUM VAPOUR
PROC PHYS SOC LONDON A, VOL 67, 199, (1954)

2312 KUNZ J
THE IONIZATION OF CAESIUM VAPOUR BY ULTRA-VIOLET LIGHT
PHIL MAG, VOL 17, 443, (1954)

2313 LADENBURG R, VAN VOORHIS C C
CONTINUOUS ABSORPTION OF OXYGEN BETWEEN 1750 AND 1380A AND
ITS BEARING UPON THE DISPERSION
PHYS REV, VOL 46, 1018A, (1932)

2314 LADENBURG R, VAN VOORHIS C C, BOYCE J C
ABSORPTION OF OXYGEN IN THE REGION OF SHORT WAVE-LENGTHS
PHYS REV, VOL 46, 1018A, (1932)

2315 LAWRENCE E O
THE PHOTOELECTRIC EFFECT IN POTASSIUM VAPOUR AS A FUNCTION OF
THE FREQUENCY OF THE LIGHT
PHIL MAG, VOL 50, 345, (1929)

2316 LAWRENCE E O, EDLEFSSEN N E
THE PHOTO-IONIZATION OF THE VAPORS OF CAESIUM AND RUBIDIUM
PHYS REV, VOL 34, 233, (1929)

2317 LAWRENCE E O, EDLEFSSEN N E
THE PHOTO-IONIZATION OF POTASSIUM VAPOUR
PHYS REV, VOL 34, 233, (1929)

2318 LEE P
PHOTODISSOCIATION AND PHOTOIONIZATION OF OXYGEN (O2) AS INFERRED
FROM MEASURED ABSORPTION COEFFICIENTS
J OPT SOC AR, VOL 45, 783, (1955)

2319 LEE P, WEISSLER G L
ABSOLUTE ABSORPTION OF THE H2 CONTINUUM
ASTROPHYS J, VOL 119, 978, (1957)

2320 LITTLE E M
IONIZATION EFFICIENCY OF ULTRAVIOLET LIGHT IN CAESIUM VAPOUR
PHYS REV, VOL 35, 109, (1927)

2321 SCHIEN R I
ABSORPTION, IONIZATION, AND ION-FRAGMENTATION CROSS SECTIONS
OF HYDROCARBON VAPORES UNDER VACUUM-ULTRAVIOLET RADIATION
J CHEM PHYS, VOL 37, 2032, (1962)

2322 PRADERIE F
CALCUL DE QUELQUES SECTIONS DE PHOTOIONISATION DU CARBONE
NEUTRE
ANN ASTROPHYS, VOL 27, 129, (1964)

2323 MASSEY H S W, BATES D R
THE CONTINUOUS ABSORPTION OF LIGHT BY NEGATIVE HYDROGEN IONS
ASTROPHYS J, VOL 93, 292, (1940)

2324 MITCHELL E W
THE ABSORPTION COEFFICIENT OF THE NEGATIVE HYDROGEN ION
ASTROPHYS J, VOL 138, 872, (1959)

2325 MOE G, DUNCAN A B F
INTENSITIES OF ELECTRONIC TRANSITIONS OF ACETYLENE IN THE
VACUUM ULTRAVIOLET
J AM CHEM SOC, VOL 74, 3186, (1952)

2326 MOE G, DUNCAN A B F
INTENSITY OF ELECTRONIC TRANSITIONS OF METHANE AND CARBON
TETRAFLUORIDE IN THE VACUUM ULTRAVIOLET
J AM CHEM SOC, VOL 74, 3114, (1952)

2327 MORRISON J D, KURZELER H, INGHAM M G, STANTON H E
THRESHOLD LAW FOR THE PROBABILITY OF EXCITATION OF MOLECULES
BY PHOTON IMPACT. A STUDY OF THE PHOTOIONIZATION EFFICIENCIES
OF Br2, I2, H I, AND C H I
J CHEM PHYS, VOL 33, 821, (1960)

2328 MOSKVIN YU V
PHOTOIONIZATION OF ATOMS AND RECOMBINATION OF IONS IN THE
VAPORES OF ALKALI METALS
OPT SPECTRY USSR ENGLISH TRANSL, VOL 15, 316, (1963)

2329 BUNCH S M, COOK G R, OGANA M, EHLER A W
ABSORPTION COEFFICIENTS OF CaH6 AND Hz IN THE VACUUM
ULTRAVIOLET
J CHEM PHYS, VOL 28, 740-741, (1958)

2330 RICH J C
CONTINUOUS ULTRAVIOLET ABSORPTION BY NEUTRAL SILICON
ASTROPHYS J, VOL 148, 275, (1967)

2331 COOLING K, MADDOX R P, EDERER D L
RESONANCES IN THE PHOTO-IONIZATION CONTINUUM OF NE I
PHYS REV, VOL 155, 26, (1967)

2332 BELL K L, KINGSTON A E
THE BOUND-FREE ABSORPTION COEFFICIENT OF THE NEGATIVE
HYDROGEN ION
PROC PHYS SOC LONDON, VOL 90, 895, (1967)
2597 JOHANNIN-GILLES A  
ABSORPTION DE LA VAPEUR D'EAU DANS L'ULTRAVIOLET DE SCHUMANN  
COMPT REND, Vol 226, 676, (1948)

2598 MAYENCE J  
SPECTRES D'ABSORPTION A BASSE TEMPERATURE ETUDE DE N2O GAZEUX  
ET DE N O GAZEUX ET LIQUIDE  
ANN PHYS PARIS, Vol 7, 453, (1952)

2599 MESSNER R H  
DER EINFLUS DER CHEMISCHEN BINDUNG AUF DEN  
ABSORPTIONS KOEFFIZIENTEN LECHTER ELEMENTE IM GEBIETE  
ULTRAVIOLETTER RONTGENSTRahlen  
Z PHYSIK, Vol 85, 727, (1933)

2600 SCHONHEIT E  
MASSENSPEKTROMETRISCHE UNTERSUCHUNG DER PHOTOIONISATION VON  
ARGON  

2601 SEATON M J  
THE PHOTO-IONIZATION CROSS SECTION OF NEUTRAL ATOMIC CALCIUM  
ANN ASTRON, Vol 18, 264, (1960)

2602 SEATON M J  
A COMPARISON OF THEORY AND EXPERIMENT FOR PHOTO-IONIZATION  
CROSS SECTIONS. II. SODIUM AND THE ALKALI METALS  
PROC ROY SOC LONDON, SER A, Vol 286, 418, (1953)

2603 SEATON M J  
THE PHOTO-IONIZATION OF NEON  

2604 SUN H, KEISSLER G L  
ABSORPTION CROSS SECTIONS OF METHANE AND AMMONIA IN THE VACUUM  
ULTRAVIOLET  
J CHEM PHYS, Vol 23, 1106, (1955)

2605 SUN H, KEISSLER G L  
ABSORPTION COEFFICIENTS OF NITRIC OXIDE IN THE VACUUM  
ULTRAVIOLET  
J CHEM PHYS, Vol 23, 1372, (1955)

2606 STUECKELBERG E C G  
THE THEORY OF CONTINUOUS ABSORPTION OF OXYGEN AT 1450 ANGSTROMS  
PHYS REV, Vol 42, 618, (1932)

2607 STEWART A L, WEBB T G  
PHOTO-IONIZATION OF HELIUM AND IONIZED LITHIUM  
PROC PHYS SOC LONDON, Vol 82, 932, (1960)

2608 STEWART A L  
THE PHOTO-IONIZATION CROSS SECTION OF LITHIUM  

2610 ROMAND J, MAYENCE J  
SPECTRE D'ABSORPTION DE L'OXYDE AZOTEUX GAZEUX DANS LA REGION  
DE SCHUMANN  
COMPT REND, Vol 228, 998, (1949)

2612 DIBELER V H, REESE R M  
MASS SPECTROMETRIC STUDY OF PHOTOIONIZATION. I. APPARATUS  
AND INITIAL OBSERVATIONS ON ACETYLENE, ACETYLENE-02,  
BENZENE, AND BENZENE-06  
J RES NATL BUR STD, Vol 69A, 409, (1964)

2613 HUDSON R D  
ATOMIC ABSORPTION CROSS SECTION OF SODIUM VAPOR BETWEEN  
2600 AND 1000 ANGSTROMS  
PHYS REV, Vol 125, 42212, (1964)

2616 GRANOT W, LUNDOVIST S  
COLLECTIVE EFFECTS IN THE PHOTODISOCIATION CROSS SECTIONS OF  
ATOMS AND MOLECULES  
J QUANT SPECTRY RADIATIVE TRANSFER, Vol 7, 611, (1967)

2619 HUDSON R D, CARTER V L  
ATOMIC ABSORPTION CROSS SECTIONS OF LITHIUM AND SODIUM  
BETWEEN 600 AND 1000 ANGSTROMS  
J OPT SOC AR, Vol 57, 551, (1967)

2622 KOZLOV M G, NIKONOVA E I,  
STARTSEV G P  
VACUUM ABSORPTION SPECTRA OF THE VAPORS OF METALS OF THE  
ALUMINUM GROUP. I. THALLIUM AND ALUMINUM  
OPT SPECTRY USSR ENGLISH TRANSL, Vol 21, 298, (1966)

2623 DIBELER V H, WALKER J A,  
ROSENSTOCK H M  
MASS SPECTROMETRIC STUDY OF PHOTOIONIZATION. III. WATER AND  
AMMONIA  
J RES NATL BUR STD, Vol 704, 469, (1967)

2624 BERGOWITZ J, EHRHARDT H,  
TEKARD T  
SPEKTREN UND WINKELVERTEILUNGEN DER PHOTOELEKTRONEN VON  
ATOMEN UND MOLEKULEN  
Z PHYSIK, Vol 206, 69, (1967)
ULTRAVIOLET ABSORPTION CROSS SECTIONS FOR THE AlKALI HALIDE VAPORS
J CHEM PHYS, VOL 46, 2968, (1967)

MULTIPLE IONIZATION PROCESSES IN HELIUM
PHYS LETTERS, VOL 24A, 616, (1967)

ABSORPTION COEFFICIENT OF OZONE IN THE ULTRAVIOLET AND VISIBLE REGIONS
J OPT SOC AM, VOL 43, 870, (1953)

MESSUNG ZWEIER SERIENGRENZKONTINUA DES CALCIUMS
Z ASTROPHYS, VOL 96, 78, (1962)

ABSORPTION COEFFICIENTS OF SULFUR DIOXIDE IN THE VACUUM ULTRAVIOLET
J CHEM PHYS, VOL 36, 958, (1962)

ULTRAVIOLET ABSORPTION OF S 02. DISSOCIATION ENERGIES OF S 02 AND S O
J CHEM PHYS, VOL 40, 1132, (1964)

ABSORPTION COEFFICIENTS OF GASES IN THE VACUUM ULTRAVIOLET
J CHEM PHYS, VOL 29, 1969, (1962)

NEUE ANREGUNGSZUSTANDE DES ARGONS OBERHALB DER
IONISATIONSGRENZE DOPPELT P 3/2

ABSORPTION COEFFICIENT AND PHOTOIONIZATION YIELD OF N O IN THE REGION 540-1390 ANGSTROMS
APPL OPT, VOL 6, 391, (1966)

QUANTITATIVE AUSMESSUNG DES FLUOR-AFFINITATSKONTINUUMS
Z NATURFORSCH, VOL 22A, 294, (1967)

VACANCY CASCADE IN THE REORGANIZATION OF KRYPTON IONIZED IN AN INNER SHELL
PHYS REV, VOL 158, 10, (1967)

A REVISIED GENERAL FORMULA FOR THE CALCULATION OF ATOMIC PHOTOIONIZATION CROSS SECTIONS
MEN ROY ASTRON SOC, VOL 71, 13, (1967)

CONTINUOUS ABSORPTION COEFFICIENTS FOR NON-HYDROGENIC ATOMS
MONTHLY NOTICES ROY ASTRON SOC, VOL 124, 371, (1962)

IONIZATION POTENTIAL AND ABSORPTION COEFFICIENT OF CO S
J CHEM PHYS, VOL 46, 4457, (1967)

THE ABSORPTION SPECTRUM OF SULFUR HEXAFLUORIDE IN THE VERY SOFT X-RAY REGION
SOVIET PHYS DOXILADY ENGLISH TRANSL, VOL 17, 726, (1967)

THE PHOTOIONIZATION OF SODIUM
PLANETARY SPACE SCI, VOL 15, 729, (1966)

THE ABSORPTION OF LIGHT IN CAESIUM VAPOUR IN THE PRESENCE OF HELIUM
PROG ROY SOC LONDON SER A, VOL 150, 478, (1935)

PHOTODETACHMENT CROSS SECTION FOR THE NEGATIVE ION OF ATOMIC OXYGEN
IN PROCEEDINGS OF THE FOURTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENON IN GASES (UPPSALA, SWEDEN, 17-21 AUG 1959)
H ROBERT NILSSON, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 219, 1960

ABSORPTION COEFFICIENTS OF GASES IN THE VACUUM ULTRAVIOLET.
PART IV. OZONE
J CHEM PHYS, VOL 21, 1651, (1953)

PHOTOELECTRIC ABSORPTION IN LITHIUM VAPOUR
PROG PHYS SOC LONDON A, VOL 66, 364, (1953)

CALCULATION OF PHOTOIONIZATION CROSS SECTIONS OF ALUMINUM AND GALLIUM ATOMS
OPT SPECTRY USSR ENGLISH TRANSL, VOL 8, 79, (1960)

PHOTOIONIZATION EFFICIENCIES AND CROSS SECTIONS IN N H3
J CHEM PHYS, VOL 23, 1940, (1959)
PHOTOIONIZATION AND TOTAL ABSORPTION CROSS SECTION OF GASES.

I. IONIZATION POTENTIALS OF SEVERAL MOLECULES. CROSS SECTIONS OF N₂ AND N O
J CHEM PHYS, VOL 22, 1964, (1954)

ABSORPTION COEFFICIENTS OF OXYGEN IN THE VACUUM ULTRAVIOLET
J CHEM PHYS, VOL 21, 1926, (1933)

PHOTOIONIZATION AND TOTAL ABSORPTION CROSS SECTION OF GASES. II. O₂ AND N₂ IN THE REGION 450-1500 ANGSTROMS
J CHEM PHYS, VOL 25, 969, (1956)

PHOTOIONIZATION CROSS SECTION OF NITRIC OXIDE
PHYS REV, VOL 91, 1195, (1953)

IONIZATION POTENTIALS OF AMMONIA AND SOME AMINES
J CHEM PHYS, VOL 26, 1773, (1957)

ABSORPTION COEFFICIENTS OF WATER VAPOR IN THE VACUUM ULTRAVIOLET
J OPT SOC AM, VOL 43, 753, (1953)

PHOTOIONIZATION CROSS SECTIONS OF N₂ AND N O
J CHEM PHYS, VOL 25, 965, (1956)

PHOTOIONIZATION CROSS SECTIONS IN C₂H₄ AND C₂H₂
J CHEM PHYS, VOL 23, 1962, (1955)

PHOTOIONIZATION EFFICIENCIES AND CROSS SECTIONS IN N₂O AND N O
J CHEM PHYS, VOL 23, 1962, (1955)

PHOTOIONIZATION ANALYSIS BY MASS SPECTROSCOPY
J OPT SOC AM, VOL 49, 338, (1959)

THEORY OF THE DISPERSION AND ABSORPTION OF HELIUM
PHYS REV, VOL 43, 258, (1933)

THE NEGATIVE HYDROGEN ION AND ITS ABSORPTION COEFFICIENT
ASTROPHYS J, VOL 96, 438, (1942)

EFFECTIVE CROSS SECTION FOR PHOTOIONIZATION OF LITHIUM IONS
SOVIET PHYS JETP ENGLISH TRANSL, VOL 15, 750, (1962)

PRELIMINARY DATA ON PHOTOIONIZATION EFFICIENCIES AND CROSS SECTIONS IN C₂H₄ AND C₂H₂
J CHEM PHYS, VOL 23, 1954, (1955)

PHOTOIONIZATION EFFICIENCIES AND CROSS SECTIONS IN N₂O AND N O
J CHEM PHYS, VOL 23, 1962, (1955)

THE ABSORPTION OF OZONE IN THE ULTRA-VIOLET AND VISIBLE REGIONS OF THE SPECTRUM
PROC PHYS SOC LONDON, VOL 78, 932, (1961)

CALCUL DES SECTIONS EFFICACES DE PHOTOIONISATION DES ATOMES O₂ ET DE BISMUTH DANS LE DOMAINE DES RAYONS X TRES MOUS
COMPT REND, VOL 264, 138, (1967)

MEASUREMENT OF THE X-RAY ABSORPTION COEFFICIENT OF XENON
PHYS REV, VOL 46, 866, (1934)

PHOTOIONIZATION CROSS SECTION OF OXYGEN IN THE VACUUM REGION OF THE SPECTRUM
OPT SPEKTRY USSR ENGLISH TRANSL, VOL 18, 416, (1965)

PHOTON SCATTERING CROSS SECTIONS AT LYMAN-ALPHA (1215.7 Å)
FOR HE AND HE
J QUANT SPECTRY RADIATIVE TRANSFER, VOL 7, 605, (1967)

VACUUM-ULTRAVIOLET ABSORPTION SPECTRUM OF CARBON SUBOXIDE
J CHEM PHYS, VOL 46, 4094, (1967)

ON THE CONTINUOUS ABSORPTION OF THE NEGATIVE HYDROGEN ION IN THE ULTRAVIOLET
KGL DANKE VIDENSKAB SELSKAB NAT FYS MEDD, VOL 26, 3, (1943)

PHOTO-IONIZATION CROSS-SECTIONS OF CALCUL VAPOR
ASTROPHYS J, VOL 11, 228, (1967)

ABSORPTION COEFFICIENTS OF NITROGEN IN THE 1000-580 ANGSTROM WAVELENGTH REGION
J CHEM PHYS, VOL 39, 916, (1963)

MESURES ABSOLUES DES COEFFICIENTS D'ABSORPTION DE L'OXIGNE DANS LA REGION DES BANDES DE HUGGINS, A 18 DEGRES
COMPT REND, VOL 234, 2391, (1952)

ABSORPTION OF L'OXIGNE DANS LA REGION DES BANDES DE HUGGINS, INFLUENCE DE LA TEMPERATURE.
COMPT REND, VOL 234, 2429, (1952)
2702 VIGROUX E  
ABSORPTION DE L'OZONE A 18 DEGREES AU-DESSOUS DE 3130 ANGSTROMS  
COMPT REND, VOL 234, 2529, (1952)  

2703 LUKIRSKII A P, ZIMKINA T M  
ABSORPTION COEFFICIENTS OF ARGON AND ETHYL ALCOHOL  
IN THE ULTRASOFT X-RAY REGION  
BULL ACADEM SCI USSR PHYS SER ENGL TRANSL, VOL 27, 803, (1953)  

2704 BAKER D J, TOMBOULIAN D H  
PHOTOELECTRIC K-ABSORPTION CROSS SECTION OF LITHIUM  
PHYS REV, VOL 128, 677, (1962)  

2705 PETERSON T J, MCGUIRE E J,  
TOMBOULIAN D H  
PHOTOELECTRIC K-ABSORPTION CROSS SECTION OF BERYLLIUM  
PHYS REV, VOL 129, 674, (1963)  

2706 MOLT R B, MCLANE C K,  
OLDENBERG D  
ULTRAVIOLET ABSORPTION SPECTRUM OF HYDROGEN PEROXIDE  
J CHEM PHYS, VOL 46, 6431-6436, (1967)  

2707 NAKANABE T  
MEASUREMENT OF THE L ABSORPTION SPECTRA OF XENON  
PHYS REV, VOL 137, 1380-1392, (1965)  

2708 THOMPSON B A, HARTECK P,  
REEVES R R  
ULTRAVIOLET ABSORPTION COEFFICIENTS OF C02, CO, O2, H2O,  
H2O, N H3, N O, S O2, AND C H3 BETWEEN 1850 AND 4000 A  
J GEOPHYS RES, VOL 66, 6131-6136, (1963)  

2709 CHAN Y H, DALGARNO A  
THE REFRACTIVE INDEX OF HELIUM  
PROC PHYS SOC LONDON, VOL 45, 227-233, (1969)  

2711 MIDDLE D W O  
PHOTON-SCATTERING PROCESSES  
J QUANT SPECTRY RADIATIVE TRANSFER, VOL 2, 349-357, (1968)  

2712 VIUDELMER F  
MEASURE DES COEFFICIENTS D'ABSORPTION DE L'ARGON ET DU NEON  
POUR DES NUAGES X MOUS  
COMPT REND, VOL 257, 855-858, (1963)  

2713 VIGROUX E  
ABSORPTION DE L'OZONE DANS LA REGION DES BANDES DE MUGGINS.  
INFLUENCE DE LA TEMPERATURE  
COMPT REND, VOL 236, 2170-2172, (1953)  

2714 JEN C K  
THE ABSORPTION COEFFICIENT OF H-  
CHINESE J PHYS, VOL 2, 38-42, (1936)  

2715 DIBELER V H, WALKER J A  
MASS-SPECTROMETRIC STUDY OF PHOTOIONIZATION. VI. O2, C O2,  
C O S, AND C S2  
J OPT SOC AM, VOL 57, 1007-1012, (1967)  

2716 SEWELL K G  
PHOTOIONIZATION OF THE L SHELL OF LITHIUM  
J OPT SOC AM, VOL 57, 1058-1059, (1967)  

2717 JOHANNIN-GILLES A  
ABSORPTION DE LA VAPEUR D'EAU LOURDE DANS L'ULTRAVIOLET DE  
SCHUMANN  
COMPT REND, VOL 240, 1923-1924, (1955)  

2718 VIGROUX E  
CONTRIBUTION A L'ETUDE EXPERIMENTALE DE L'ABSORPTION DE  
L'OZONE  
ANN PHYS, VOL 8, 709-762, (1953)  

2719 ROMAN D  
ABSORPTION ULTRAVIOLETTE DANS LA REGION DE SCHUMANN ETUDE  
DE O2, N2, O2, ET H  
ANN PHYS, VOL 9, 927-952, (1949)  

2720 JOHANNIN-GILLES A  
ABSORPTION DANS L'ULTRAVIOLET DE SCHUMANN ETUDE DE LA  
VAPEUR D'EAU ET D'EAU LOURDE  
J RECH CENTRE NATL RECH SCI, VOL 6, 205-204, (1955)  

2721 SOPHR R, VON PUTTKAMER E  
ENERGIEMESSUNG VON PHOTOELEKTRONEN UND FRANCK-CONDON  
FAKTOREN DER SCHWINGUNGSUBERGÄNGE EINIGER MOLEKULIONEN  
Z NATURFORSCH, VOL 22A, 739-745, (1967)  

2722 JOHANNIN-GILLES A, ASTOIN N,  
VODAR B  
DISCUSSION DES SPECTRES D'ABSORPTION DE H2O ET D2O DANS  
L'ULTRAVIOLET LOINTAIN  
CAHIERS PHYS, VOL 71-72, 49-53, (1956)  

2723 ASTOIN N, GRANIER J  
SUR LE SPECTRE D'ABSORPTION DE L'AZOTE DANS L'ULTRAVIOLET  
EXTREME  
COMPT REND, VOL 244, 1350-1353, (1957)  

2724 VAINSHEIN L A, YAVORSKY B  
ON THE APPROXIMATE CALCULATION OF OSCILLATOR STRENGTHS AND  
The EFFECTIVE CROSS-SECTION FOR PHOTO-IONIZATION  
ZH EKSPER TEOR FIZ, VOL 27, 712-718, (1954)  

28
2746 Huffman R E, Tanaka Y, Larrabee J C

2747 Kroghahl M A, Miller J E

2748 Yavork B

2770 Watanabe K, Zelikoff M, Inn E C Y

2771 Henry R J W

2775 Gavrila M

2776 Lifshitz E, Chupka W A

2778 De Reilhac L, Damany-AstoN N

2779 Hedlin D W O

2782 Sroka W

2787 Breene R G
The Bound Free Continuum for C-. Planet Phys Sci, Vol 2, 10-16, (1959)

2790 MacK J

2800 Oksyuk Yu O

2801 La Paglia S R, Duncan A B F

2802 Chupka W A, Berkonitz J

2803 Tietz T

2808 Sroka W

2829 Wainshstein L A, Yavinsky B

2836 Byron F W, Joachain C J

2840 Williams R A

2842 Kim Y K, Inokuti M

2843 Mawson S T, Cooper J W
2867 Startsev G P, Koizov M G

The absorption cross section above the ionization limit
and the oscillator strengths for Ga and In between 220 and
150 m mu.

In Abstracts of the Fifth International Conference on the
Physics of Electronic and Atomic Collisions (Leningrad,
USSR, 17-23 July 1967) Publishing House Nauka, Leningrad,
Page 616, 1967

2868 Connelly M, Lipsky L, Smith K

Photoionization of atoms with configurations 1s2 2s2 2p6 3s2 3p6

In Abstracts of the Fifth International Conference on the
Physics of Electronic and Atomic Collisions (Leningrad,
USSR, 17-23 July 1967) Publishing House Nauka, Leningrad,
Page 619, 1967

2869 Khare S P

Photoionization of hydrogen molecule

In Abstracts of the Fifth International Conference on the
Physics of Electronic and Atomic Collisions (Leningrad,
USSR, 17-23 July 1967) Publishing House Nauka, Leningrad,
Page 626, 1967

2871 Ditchburn R W, Bradley J E S, Cannon C G, Munday G

Absorption cross-sections for Lyman alpha and neighbouring
lines

In Rocket Exploration of Upper Atmosphere, R L S Boyd,
Editor, Interscience Publ, New York, Pages 327-334, 1954

2872 Deslattes R D

Photoionization of the M shell of xenon


2873 Diebler V H, Walker J A, Liston S K

Mass spectrometric study of photoionization. VII. Nitrogen
dioxide and nitrous oxide


2874 Wolf H

Die absorptionskoefizienten fur rontgenstrahlen in der
umgebung der L-Kanten bei den Elementen Au, Pt und Ag

Ann Physik, Vol 16, 973-986, (1933)

2875 Wollan E O

Scattering of X-rays from gases

Phys Rev, Vol 37, 862-872, (1931)

2876 Dunn G H

Photo dissociation of H2+ and D2+ Theory and tables

JILA Report No. 92, University of Colorado, 1968, 55 Pages

2877 Vigroux E

Absorption de l'ozone dans l'ultraviolet

Compt Rend, Vol 236, 2277-2278, (1953)

2878 Ny T, Choong S

L'absorption de la lumiere par l'ozone entre 3550 et 3400
angstroms (region des bandes de Huggins)

Compt Rend, Vol 195, 309-311, (1932)

2879 Yamanduchi T

Photo-ionization and recombination of O++ ion


2880 Bates D R

The continuous radiative absorption cross-section of O-

2881 Stewart J G, Rotenberg M

Wave functions and transition probabilities in scaled
Thomas-Fermi ion potentials


2882 Yamanduchi T

Photo-ionization and recombination of O+ ion


2883 Yamanduchi T, Kotani M

Photo-ionization and recombination of oxygen atom


2884 Goerke B

Die absorption langwelliger rontgenstrahlen von 2-10
angstrom electron in leichten elementen

Ann Physik, Vol 5, 475-506, (1930)

2885 Comes F J, Salzer M G, Schimpf G

Autoionisation in atompektrum


2886 Comes F J, Elzer A

Photoionisationsuntersuchungen am atomstrahlen. III. Der
ionisierungsquerschnitt des atomaren stickstoffs


2887 Comes F J, Speier F, Elzer A

Photoionisationsuntersuchungen am atomstrahlen. II. Der
ionisierungsquerschnitt des atomaren sauerstoffs


2888 Dalgaro A, Degges T, Williams D A

Dipole properties of molecular nitrogen

2961 HARR G V, HEPPINSTALL R
SOME AUTOIONIZATION MEASUREMENTS ON INDIUM VAPOUR
PROC PHYS SOC LONDON, VOL 87, 547-549, (1966)

2963 KONINGSTEIN J A, MORTENSEN O S
ELECTRONIC RAMAN SPECTRA. III. ABSOLUTE CROSS SECTIONS FOR
ELECTRONIC RAMAN AND RAYLEIGH SCATTERING
PHYS REV, VOL 166, 75-79, (1968)

2970 WILKINSON P G
ABSORPTION SPECTRUM OF ARGON IN THE 1070-1135 ANGSTROM REGION
CAN J PHYS, VOL 46, 315-319, (1968)

2973 HUDSON R D, CARTER V L
BANDWIDTH DEPENDENCE OF MEASURED UV ABSORPTION CROSS
SECTIONS OF ARGON
J OPT SOC AM, VOL 58, 227-232, (1968)

2994 ALTICK P L
PHOTO-IONIZATION CROSS SECTION OF BERYLLIUM NEAR THRESHOLD
PHYS REV, VOL 169, 21-24, (1968)

3004 HUDSON R D, CARTER V L
ATOMIC-ABSORPTION CROSS SECTIONS OF NA, 500 TO 600 ANGSTROMS
J OPT SOC AM, VOL 58, 426-431, (1968)

3005 HENKE B L, ELGIN R L, LENT R E, LEDINGHAM R B
X-RAY ABSORPTION IN THE 2-TO-260 ANGSTROM REGION
NORELCO REPRT, VOL 14, 112-117, (1967)

3011 DIBELER V H, LISTON S K
MASS-SPECTROMETRIC STUDY OF PHOTOIONIZATION. VIII. DICYANOGEN
AND THE CYANOGEN HALIDES
J CHEM PHYS, VOL 47, 4546-4555, (1967)

3013 GAVORILA M
ANALYTIC EVALUATION OF THE KRAMERS-HEISENBERG MATRIX
ELEMENT FOR COHERENT SCATTERING OF PHOTONS BY ATOMIC
HYDROGEN
REV RouM PHYS, VOL 12, 745-759, (1967)

3019 HENRY R J W
PHOTOIONIZATION CROSS SECTIONS FOR N AND O-
J CHEM PHYS, VOL 48, 3635-3638, (1968)

3024 HENKE B L, ELGIN R L, LENT R E, LEDINGHAM R B
X-RAY ABSORPTION IN THE 2-TO-260 ANGSTROM REGION
NORELCO REPRT, VOL 14, 112-117, (1967)

3026 FROST D C, MCDOELL C A, VROOM D A
PHOTO-ION KINETIC ENERGY ANALYSIS WITH A PHOTOELECTRON
SPECTROMETER
NATURE, VOL 218, 943-944, (1968)

3027 MARSTON J, LISTON S K
MASS-SPECTROMETRIC STUDY OF PHOTOIONIZATION. IX. HYDROGEN
CYANIDE AND ACETONITRILE
J CHEM PHYS, VOL 48, 4765-4768, (1968)

3032 EADES J L, ELGIN R L, LENT R E, LEDINGHAM R B
X-RAY ABSORPTION IN THE 2-TO-260 ANGSTROM REGION
REPT OF AFOSR 67-1254, POMONA COLLEGE, CLAREMONT, CALIFORNIA,
AD 694315, 1967, 39 PAGES

3036 BERKOMITZ J, LIFSHITZ C
THE PHOTOIONIZATION OF CADMIUM AND MERCURY VAPOURS
J PHYS B PROC PHYS SOC 2, VOL 1, 435-448, (1968)
3257 Cones, F. J., Weller, H. O.
Die spektroskopie des Wasserstoffmoleküls in der Nähe seiner Ionisierungsgrenze.

3259 Dunn, G. M.
Photoionization of (H2+) and (O2+).--Theory.

3260 Henry, R. J. W.
Polarization in low-energy electron scattering--Carbon and Nitrogen.

3261 Biegoszewsky, G. V., Zapskov, A. L., Israilev, I. M., Saprykin, V. N.
Cross sections for the absorption of X rays by Uranium and Thorium.

3262 Lenz, W., Okabe, H.
Photoionization of N O O and N O 2 in the vacuum ultraviolet.

3263 Kozlov, M. G., Startsev, G. P.
Vacuum-ultraviolet absorption spectra of the vapors of metals of the aluminum group. II. Gallium and Indium.

3264 Sharananono.
Attenuation cross sections of Xe and Xe2 near resonance lines 1469.6 angstroms.

3265 Delgarino, A., Parkinson, E. M.
An expansion method for calculating atomic properties. X: 15 doublet (singlet S) - 15SP (singlet P) transitions of the helium sequence.

3266 Chupka, W. A., Berkowitz, J.
Photoionization of the N2 molecule near threshold.

3267 Greiner, H.
Untersuchungen über die Gültigkeit des Beerischen Gesetzes bei der Absonption von extrem ultraviolettisicht in Oz und N2.

3268 Fonichev, V. A., Zhukova, I. I.
Absorption coefficients of Carbon in the region of ultraviolet X radiation.

3269 Judge, D. L., Weissler, G. L.
Fluorescence spectra of the excited ion (N2)+ resulting from vacuum-ultraviolet photon impact on N2.

3270 Main, R. P., Morsell, A. L., Hooker, W. J.
Measurement of the oscillator strength of the Si O (A singlet P1 - X singlet Sigma +) band system.

3271 Hidalgo, H. A.
Photo-ionization cross-sections for ions of Carbon, Nitrogen, Oxygen, and Neon.

3272 Chupka, W. A., Berkowitz, J.
Photoionization of the N2 molecule near threshold.

3273 Swanson, M., Cooling, K.
Excitation of K-shell electrons in Be by soft X rays and 25-kev electrons.

3274 Creek, D. M., Harr, G. V.
Some ultraviolet cross-section measurements on molecular alkali-metal vapours.

3275 Wheaton, J. E.
Improvements in design and performance of the large aperture Lyman flash tube.

3276 Blackwell, H. E., Bajwa, G. S., Shipp, G. S., Weissler, G. L.
Vacuum ultraviolet radiation as a probe of rare gas plasmas.

3277 Khare, S. P.
Photo-ionization of the hydrogen molecule.

3278 Samson, J. A. R., Cairns, R. B.
Photoelectron spectroscopy of the rare gases.
KRAUSS H, WALKER J A, BIBLER V H

Mass spectrometric study of photoionization, X-hydrogen chloride and methyl halides

SEERY D J, BRITTON D

The continuous absorption spectra of chlorine, bromine, bromine chloride, iodine chloride, and iodine bromide

SAMSON J A R

Mass spectrophotometric determination of different ions produced by the process of photoionization
Thesis, University of Southern California, Los Angeles, 1969, 84 pages, University Microfilms Inc, Ann Arbor, Michigan, No. 69-1662

DERSHEN E, SCHEIN M

The absorption of the K-alpha line of carbon in various gases and its dependence upon atomic number
Phys Rev, Vol 37, 1238-1249, (1931)

HAENSEL R, KEITEL G, SCHREIBER P, KUNZ C

Experimental comparison of photoabsorption of solid and gaseous xenon near the N IV, V edge

BERKOWITZ J, CHUPKA W A, WALTER T A

Photoionization of HCN - the electron affinity and heat of formation of CN

KAPLAN I G, MARKIN A P

Calculation of the photoionization cross sections of molecular systems. II. Ethylene, butadiene, and benzene

SAMSON J A R

Simultaneous photoexcitation and photoionization of helium

HENRY R J W

The influence of autoionizing states on absorption cross sections for atomic oxygen

COOPER J W, HANSON S T

Photo-ionization in the soft X-ray range - angular distributions of photoelectrons and interpretation in terms of subshell structure

SCHURGERS M, WELGE K H

Absorptionskoeffizient von H2O2 und N2H4 zwischen 1200 und 2000 Å
Z Naturforsch, Vol 23A, 1508-1510, (1968)

CHUPKA W A, BERKOWITZ J, REFAEY K M A

Photoionization of ethylene with mass analysis

GAILY T D

Optical absorption coefficient of molecular oxygen near 1215 Å

MARR G V, AUSTIN J M

Absorption cross-section measurements on the vacuum ultra-violet spectrum of zinc vapour

HEPPINSTALL R, MARR G V

Vacuum ultraviolet absorption cross-section measurements in lead vapour

MARR G V, AUSTIN J M

Absorption cross-section measurements on the vacuum ultraviolet spectrum of cadmium vapour

ANUSTA M YA, CHEREPOKOV N A, CHERNYSHCHEVA L V, SHEFTEL S I

On atomic photoionization cross section calculation

MADDEN R P, EDERER D L, COOLING K

Resonances in the photo-ionization continuum of Ar I (20-150 eV)

ROTHE D E

Radiative capture of electrons by chlorine, bromine, and iodine atoms

BAKER C, TURNER D M

High resolution molecular photoelectron spectroscopy. III. Acetylenes and azo-acytylenes

HUDSON R D, CARTER V L

Predissociation in N2 and O2
3815 LIN S H  
CALCULATION OF ANISOTROPIC PHOTOIONIZATION CROSS SECTIONS.  
I. HYDROGEN ATOM  
CAN J PHYS, VOL 46, 2715-2731, (1968)

3816 HUDSON R G, CARTER V L, YOUNG P A  
ABSORPTION SPECTRUM OF SR I IN THE REGION OF AUTOIONIZATION  
FROM 1646 TO 2020 ANGSTROMS  
PHYS REV, VOL 180, 77-82, (1969)

3818 HARRISON W, SCHENK R I, CAIRNS R B, SCHUBERT K E  
PHOTOIONIZATION WITH ATOMIC BEAMS. I. ZINC_ATOMS BETWEEN 247 AND 1242 ANGSTROMS  
J CHEM PHYS, VOL 50, 3920-3936, (1969)

3820 NATALIS P, COLLIN J E  
EXPERIMENTAL EVIDENCE FOR HIGH VIBRATIONAL EXCITATION IN 402+ GROUND STATE BY PHOTOELECTRON SPECTROSCOPY  
CHEM PHYS LETTERS, VOL 2, 414-416, (1968)

3821 DIXON R M, HULL S E  
THE PHOTO-IONIZATION OF PI-ELECTRONS FROM O2  

3833 SROKA M  
LICHTEMISSION IM VAKUUMULTRAVIOLETT DURCH  
ELEKTRONENSTOSSANREGUNG IN GASEN. TEIL B - UNTERSUCHUNGEN  
IN STICKSTOFF  

3879 HENRY R J M, WILLIAMS R E  
COLLISION STRENGTHS AND PHOTOIONIZATION CROSS SECTIONS FOR NITROGEN, OXYGEN, AND NEON  
PUBL ASTRON SOC PACIFIC, VOL 80, 669-679, (1968)

3883 KRAUSE M O  
PHOTO-IONIZATION OF KRYPTON BETWEEN 300 AND 1500 EV. RELATIVE  
SUBSHELL CROSS SECTIONS AND ANGULAR DISTRIBUTIONS OF PHOTOELECTRONS  
PHYS REV, VOL 177, 151-157, (1969)

3884 MENDIZ A J  
A THEORETICAL ANALYSIS OF THE RARE GAS AUTOIONIZATION BETWEEN  
THE DOUBLET P 3/2 AND DOUBLET P 1/2 SERIES LIMITS. WITH  
APPLICATIONS TO AN  
THESIS, UNIVERSITY OF SOUTHERN CALIFORNIA, 1968, 126 PAGES,  
UNIVERSITY MICROFILMS INC, ANN ARBOR, MICHIGAN, NO. 68-12249

3886 BERKOMITZ J, CHUPKA W A  
PHOTOIONIZATION OF HIGH-TEMPERATURE VAPORS. VI. SE2  
CHEM PHYS, VOL 90, 4265-4270, (1969)

3887 WARNER P  
PHOTODETACHMENT OF N 02-  
CHEM PHYS LETTERS, VOL 3, 532-533, (1969)

3888 SCHNEIDER B, WEINBERG M, TULLY J, BERRY R S  
PSEUDOPOTENTIAL METHOD FOR INELASTIC PROCESSES IN ATOMS AND  
MOLECULES. I.GENERAL METHOD AND PHOTODETACHMENT OF O-  
PHYS REV, VOL 182, 137-141, (1969)

3889 SCHNEIDER B, BERRY R S  
PSEUDOPOTENTIAL METHOD FOR INELASTIC PROCESSES IN ATOMS AND  
MOLECULES. II.PHOTOIONIZATION OF N2  
PHYS REV, VOL 182, 141-151, (1969)

3890 GEZALOV KH B, IVANOVA A V  
PHOTOIONIZATION CROSS SECTION OF LITHIUM  
HIGH TEMP USSR ENGLISH TRANSL, VOL 6, 403-404, (1968)

3891 KAPLAN I G, MARKIN A P  
INTERFERENCE PHENOMENA IN PHOTOIONIZATION OF MOLECULES  
SOVIET PHYS DOKLADY ENGLISH TRANSL, VOL 14, 36-39, (1969)

3892 HUEBERT B J, MARTIN R M  
GAS-PHASE FAR-ULTRAVIOLET ABSORPTION SPECTRUM OF HYDROGEN  
BROMIDE AND HYDROGEN IODIDE  
J PHYS CHEM, VOL 72, 3046-3049, (1968)

3893 COOK G R, OGAMA M  
PHOTOIONIZATION AND ABSORPTION COEFFICIENTS OF OCS  
J CHEM PHYS, VOL 51, 647-652, (1969)

3894 LUTZ B L  
PRESSURE-INDUCED A DOUBLE PRIME SINGLET SIGMA GERADE + FROM  
K SINGLET SIGMA GERADE + ABSORPTION IN THE VACUUM ULTRAVIOLET  
SPECTRUM OF MOLECULAR NITROGEN  
J CHEM PHYS, VOL 51, 706-716, (1969)

3895 BERKOMITZ J, CHUPKA W A  
PHOTOELECTRON SPECTROSCOPY OF AUTOIONIZATION PEAKS  
J CHEM PHYS, VOL 51, 2341-2354, (1969)

3896 COOK G R, OGAMA M  
PHOTOIONIZATION, ABSORPTION, AND FLUORESCENCE OF C 52  
J CHEM PHYS, VOL 51, 2419-2425, (1969)

3897 FARNOUX F C  
PHOTOIONISATION DES ATOMES LOURDS - ETUDE THEORIQUE DANS UN  
MODELE NON RELATIVISTE A POTENTIEL CENTRAL  
J PHYS, VOL 30, 521-533, (1969)
3918 Hauge R, Channa V M, Margrave J L
ULTRAVIOLET ABSORPTION SPECTRUM OF CE F2
J. Mol. Spectrosc., Vol 27, 143-147, (1968)

3919 Okabe H, Mele A
PHOTODISSOCIATION OF N2 C3 IN THE VACUUM-ULTRAVIOLET
PRODUCTION OF C N (B DOUBLET SIGMA) AND N C N (A TRIPLET PI)

3988 Dalgarno A, Allison A C
PHOTODISSOCIATION OF MOLECULAR HYDROGEN ON VENUS
IV. AUTHOR INDEX
Page Intentionally Left Blank
AUTHOR INDEX

ABOUD A A 1612
AKOPYAN M E 2865
ALLISON A C 3088
ALTICK P L 2856 2999
AMUSIA M YA 3766
APPLETON J P 2216
ASINOVSKII E I 1635
ASTOIN N 1866 1142 1143 1619 2596 2740 2741
AUSTIN J W 3761 3765
AKELROD N N 509
BAJWA G S 3402
BAKER C 3781
BAKER D J 647 2704
BAILION D 2511
BAUMEN V M 1835
BATES DR 1193 1236 1231 1330 1624 2284 2373 2492 3517
BECKER R A 1252
BEDO D E 647
BELL K L 2213 2217 2382
BERKOWITS J 1979 2624 2382 2886 3256 3272 3396 3691 3757 3886 3915
BERRY R S 949 1629 3888 3889
BEYER K D 772 2677
BEYNON J D E 1732 2026 2555
BIZTENEMZHNYKH G V 1293
BIEN F 3012
BLACET F E 2244
BLACKWELL H E 3402
BLAKE A J 582 1731 1967
BOECKER C 496 1241
BOHR A 1291
BOTSCHER R 1684 2025
BOTT J 1377
BOYCE J C 2314
BOYD A H 2685
BRADDICK H J J 1742 2666
BRADLEY J E S 2671
BRANDT W 2610
BRANKCOMB L 38 468 599 817 839 979 1008 1386 1628 1632 1660
BRENNER G 1635 1733 2787
BREM B 1699
BRITTON D 3645
BRODAHL D C 2625
BRUECKNER K A 399
BRUNOLO C R 3494
BRYUOV I A 1777 2201
BUNCH S M 2379
BURCH D S 38 468 1222 1223
BURGESS A 1258 2056
BURKE P G 1546
BYRON F W 2631 2635
CAIROS R B 1147 1359 1454 1561 1707
CANNON C G 2871
CARRON D A 2622 2645
CARTER V L 1353 1405 1799 2619 2697 2862 2973 3004 3542 3784 3816
CARVER J H 982 1731 1967
CHALONGE D 2511
CHANDRASEKHAR S 394 1243 1384 1385
CHANG E S 3923
CHAN Y M 2719
CHENAUTL M 1238
CHEREPKOV N A 3766
CHERNYSHEVA L V 3765
CHING B K 1292 1395
CHIU L Y C 2213
CHOONG S 1369 2890
CHUN H U 3932
CHUPKA W A 1979 2776 2802 2866 3026 3571 3390 3691 3757 3886 3915
CLARK K C 1641
COBLENTZ W W 1241
COOLING K 1391 1654 2381 3398 3779
COFFIN E M 617
COLLINS J E 3571 3820
COMES F J 920 891 926 930 931 2079 2485 2639 2941 2942 2943 3257
CONNEELY M 2868
COOKE F W 1382
COOK G R 688 915 1149 1172 1252 1253 1283 1359 1756 1626 1711 2082 2379 2423 2678 2653 2864 3913 3916
COOPER J W 925 1057 2506 2643 3708
CREEK D M 3567 3399
CURTIS J P 1232 1612
DAGLANO A 690 1668 1661 1667 2719 2852 2956 3347 3088
DAVIS-DABSONIN N 2778
DAVIDOVITS P 2629
DEWES E 2639
DERSHEM E 3695
DE REILHAC L 2778
DESALLES R D 1655 2872
DNEZ P 3023
DOBELLER Y M 1320 1357 1684 1957 2025 2019 2612 2623 2757 2873 3011 3251 3392 3640
DITCHEBACH R W 1226 1242 1678 1699 1701 1710 1717 1718 1739 1740 1749 2666 2871
DIXON R M 3821
DOLLITTLE P M 3949
<table>
<thead>
<tr>
<th>Name</th>
<th>Page 1</th>
<th>Page 2</th>
<th>Page 3</th>
<th>Page 4</th>
<th>Page 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doughty N A</td>
<td>1794</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duncan A B F</td>
<td>605</td>
<td>2375</td>
<td>2376</td>
<td>2801</td>
<td></td>
</tr>
<tr>
<td>Dunn G H</td>
<td>2876</td>
<td>3259</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ederer O L</td>
<td>1179</td>
<td>1350</td>
<td>1755</td>
<td>2381</td>
<td>3779</td>
</tr>
<tr>
<td>Edelby M M</td>
<td>2316</td>
<td>2317</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ehler A W</td>
<td>1756</td>
<td>1769</td>
<td>2379</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhardt M</td>
<td>2624</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elbert D D</td>
<td>1384</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elser F A</td>
<td>3510</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elgin R L</td>
<td>3005</td>
<td>3253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elzer A</td>
<td>528</td>
<td>926</td>
<td>2942</td>
<td>2943</td>
<td></td>
</tr>
<tr>
<td>Farnoux F C</td>
<td>1903</td>
<td>2646</td>
<td>3917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher E I</td>
<td>1255</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flannery M R</td>
<td>1599</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fontanev V A</td>
<td>2663</td>
<td>3378</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fontana P R</td>
<td>672</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foote P D</td>
<td>1238</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraser P A</td>
<td>1794</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frost D C</td>
<td>237</td>
<td>1840</td>
<td>2846</td>
<td>3250</td>
<td></td>
</tr>
<tr>
<td>Fuller C H</td>
<td>1295</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaily T D</td>
<td>3758</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garrett W R</td>
<td>2071</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garrison R L</td>
<td>2214</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garton W R S</td>
<td>2426</td>
<td>2480</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gavarla M</td>
<td>2775</td>
<td>3162</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geltman S</td>
<td>36</td>
<td>371</td>
<td>2060</td>
<td>2241</td>
<td></td>
</tr>
<tr>
<td>Gezalov KH B</td>
<td>3990</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghta C</td>
<td>2222</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giedt R R</td>
<td>2844</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gillespie J</td>
<td>885</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Givens H P</td>
<td>509</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glassgold A E</td>
<td>2856</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goldstein R</td>
<td>1797</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golomb D</td>
<td>2636</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golub S</td>
<td>3564</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graner-Mayence J</td>
<td>1371</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granier J</td>
<td>1142</td>
<td>2996</td>
<td>2741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grassdale G L</td>
<td>2490</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grechukhin D P</td>
<td>2849</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green L C</td>
<td>2242</td>
<td>2243</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greiner H</td>
<td>3376</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gridtovskii S A</td>
<td>1777</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Griggs M</td>
<td>3598</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maddox G N</td>
<td>1967</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mansel R</td>
<td>3016</td>
<td>3247</td>
<td>3688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hall T C</td>
<td>2244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hargreaves J</td>
<td>2478</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marlee F N</td>
<td>1357</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morrison A J</td>
<td>617</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morrison G R</td>
<td>2245</td>
<td>2246</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrison M</td>
<td>3818</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris L P</td>
<td>1787</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hartek P</td>
<td>2718</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harwood C N</td>
<td>3533</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hauge R</td>
<td>3918</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearn A G</td>
<td>2684</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedde D W O</td>
<td>1715</td>
<td>2720</td>
<td>2779</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heilpern H</td>
<td>1131</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henke B L</td>
<td>3615</td>
<td>3293</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hend Y</td>
<td>2666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hennich L R</td>
<td>1227</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henry R W</td>
<td>988</td>
<td>690</td>
<td>1830</td>
<td>2058</td>
<td>2771</td>
</tr>
<tr>
<td>Hoppinstall R</td>
<td>2961</td>
<td>3764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herr R R</td>
<td>1883</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hidalgo M B</td>
<td>3390</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Himmel L C</td>
<td>672</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holt R B</td>
<td>2707</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hooker W J</td>
<td>3346</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huang S S</td>
<td>2249</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hudson R D</td>
<td>1353</td>
<td>1394</td>
<td>1655</td>
<td>1717</td>
<td>1799</td>
</tr>
<tr>
<td>Hudson R</td>
<td>2613</td>
<td>2619</td>
<td>2697</td>
<td>2802</td>
<td>2973</td>
</tr>
<tr>
<td>Husebert B J</td>
<td>3912</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huffman R E</td>
<td>691</td>
<td>774</td>
<td>1271</td>
<td>2507</td>
<td>2598</td>
</tr>
<tr>
<td>Huffman R</td>
<td>2692</td>
<td>2699</td>
<td>2746</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hull S E</td>
<td>3821</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hurziker H</td>
<td>2251</td>
<td>2377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingham M G</td>
<td>1883</td>
<td>2291</td>
<td>2377</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insa A G Y</td>
<td>1270</td>
<td>2252</td>
<td>2633</td>
<td>2638</td>
<td>2668</td>
</tr>
<tr>
<td>Insa A G</td>
<td>2673</td>
<td>2679</td>
<td>2778</td>
<td>2891</td>
<td></td>
</tr>
<tr>
<td>Inokuti M</td>
<td>2842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Israiley I M</td>
<td>3293</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ito M F K</td>
<td>635</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivanova A V</td>
<td>1627</td>
<td>3890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson H T</td>
<td>2071</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson R S</td>
<td>1360</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jacobs T A</td>
<td>2844</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jaegle M</td>
<td>3017</td>
<td>3020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jen C K</td>
<td>1166</td>
<td>2724</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joachin J C</td>
<td>2631</td>
<td>2835</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johannin-Gilles A</td>
<td>1619</td>
<td>2597</td>
<td>2732</td>
<td>2738</td>
<td>2748</td>
</tr>
<tr>
<td>Johnson J L</td>
<td>1392</td>
<td>2389</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnson W R</td>
<td>2845</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnston H L</td>
<td>1759</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnston R R</td>
<td>1211</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judge D L</td>
<td>3379</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jurma A S</td>
<td>1147</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jutsum P J</td>
<td>1719</td>
<td>1739</td>
<td>2318</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaplan I G</td>
<td>3592</td>
<td>3891</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karposhovina E N</td>
<td>2818</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keitel G</td>
<td>3688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kelm S</td>
<td>2635</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khanna V M</td>
<td>3918</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khare S P</td>
<td>2869</td>
<td>3412</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim Y K</td>
<td>2842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kingston A E</td>
<td>2213</td>
<td>2217</td>
<td>2382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author</td>
<td>Surname</td>
<td>Initials</td>
<td>Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>-----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OLOENBERG O</td>
<td>2707</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPIK U</td>
<td>1599</td>
<td>2204</td>
<td>3517</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARKINSON O</td>
<td>1661</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARKINSON E M</td>
<td>3347</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARKINSON M H</td>
<td>2490</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARRATT L G</td>
<td>2657</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARR A C</td>
<td>3510</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATTY R W</td>
<td>1974</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATTY R R</td>
<td>3533</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEACH G</td>
<td>2649</td>
<td>2652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PENNER S S</td>
<td>3012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSON J C</td>
<td>3544</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERY-ThORNE A</td>
<td>2426</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETERSON T J</td>
<td>2705</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHILLIPS M</td>
<td>2428</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POOTS G</td>
<td>2204</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPESCU A</td>
<td>2222</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPESCU I</td>
<td>2222</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POPP H P</td>
<td>2644</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRADIERE F</td>
<td>2359</td>
<td>2429</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRESTON W M</td>
<td>2431</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REESE R M</td>
<td>1320</td>
<td>1357</td>
<td>1664 2612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEVES E M</td>
<td>2490</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEVES R R</td>
<td>2718</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REFAET K M A</td>
<td>3757</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REHDER L</td>
<td>1291</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REIMANN C W</td>
<td>949</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RENSE W A</td>
<td>1612</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RICH J C</td>
<td>2380</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROBINSON E J</td>
<td>2060</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROEBBER J L</td>
<td>2622</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROMANO J</td>
<td>1371</td>
<td>1393</td>
<td>2610 2735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROSENSTOCK H M</td>
<td>1664</td>
<td>1684</td>
<td>2025 2623</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROSS K J</td>
<td>1293</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROTTENBERG M</td>
<td>2894</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUTHE D E</td>
<td>3780</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUOJKOBING M</td>
<td>1670</td>
<td>2693</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSTGI O P</td>
<td>870</td>
<td>1255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAKAI H</td>
<td>622</td>
<td>2641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALPETER E E</td>
<td>2863</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALZER H G</td>
<td>2079</td>
<td>2941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SANSON J A R</td>
<td>576</td>
<td>993</td>
<td>1167 1188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAPIRING V N</td>
<td>3293</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SASAKI T</td>
<td>3016</td>
<td>3247</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHEIN M</td>
<td>3605</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHNEIDER B</td>
<td>3888</td>
<td>3889</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHNAPPER H W</td>
<td>577</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHERER R I</td>
<td>1177</td>
<td>2342</td>
<td>3549 3818</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHONHEIT E</td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHREIBER P</td>
<td>3688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHULSTER D</td>
<td>2635</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHUMPE G</td>
<td>2941</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHURGERS M</td>
<td>3755</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEATON M J</td>
<td>1218</td>
<td>1219</td>
<td>1624 2056 2601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEERY D J</td>
<td>3645</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEGAL M L</td>
<td>599</td>
<td>817</td>
<td>839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEGELL K G</td>
<td>1337</td>
<td>2728</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHARDANI</td>
<td>2689</td>
<td>3346</td>
<td>3577</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHEFFER S I</td>
<td>3766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHINZU M</td>
<td>2057</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHIPP G S</td>
<td>3402</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIMPSON J A</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMITH K</td>
<td>2668</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMITH S J</td>
<td>38 466</td>
<td>979</td>
<td>1222 1223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SONNATE G</td>
<td>3016</td>
<td>3247</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SODD S P</td>
<td>2289</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPEIER F</td>
<td>2943</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPOHR R</td>
<td>2739</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SROKA W</td>
<td>2782</td>
<td>2828</td>
<td>3833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAIR R</td>
<td>1241</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STANLEY H E</td>
<td>2377</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STARTSEV G P</td>
<td>2621</td>
<td>2688</td>
<td>2667 3337</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEINBERG M</td>
<td>2216</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEINER B</td>
<td>817 839 3414 3540 3964</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEIN J A</td>
<td>1799</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEWART A L</td>
<td>690</td>
<td>1221</td>
<td>2607 2608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEWART J C</td>
<td>2894</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUECKELBERG E C</td>
<td>2606</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SULLIVAN J O</td>
<td>2637</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SULLMANN K G P</td>
<td>3012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUN C P</td>
<td>741</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUN H</td>
<td>1245</td>
<td>2604 2605</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWANSON N</td>
<td>3309</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAIT J H</td>
<td>842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TANAKA Y</td>
<td>691 774 1271 2507 2508</td>
<td>2633 2668 2699 2746</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TANNERHAUS E</td>
<td>617</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEKAAT T</td>
<td>2624</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THOMSON B A</td>
<td>2718</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THOMSON R J</td>
<td>605</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TIEZ T</td>
<td>1203</td>
<td>2603</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TISONI G</td>
<td>1628</td>
<td>1632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TONTOLAIA D H</td>
<td>467 1359 1755 2704 2705</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TULLY J</td>
<td>3888</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUNSTEAD J</td>
<td>1228</td>
<td>2669</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURNER O W</td>
<td>3453 3454 3781</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAINSHTEIN L A</td>
<td>2670</td>
<td>2742</td>
<td>2829</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAN VOORHIS C C</td>
<td>2313 2314</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VASSY A</td>
<td>862</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VASSY E</td>
<td>862</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIGROUX E</td>
<td>1360</td>
<td>1370</td>
<td>1430 2700 2701</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Years | 2702 2723 2733 2809 | |
|--------|---------------------|