

# List of literature of electron cross sections from different elements and materials

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- 1. Electron cross sections ordered by elements**
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# 1 Ordered by elements

Ag

[308]

1 - 256 KeV [310]

Al

[308]

1 - 256 KeV [310]

alkali-atoms

[9], [245]

Ar

[307]

0.7 - 10 eV	[273]
0.1 - 20 eV	[243], [289]
20 - 100 eV	[318]
20 - 110 eV	[100]
100 eV	[78]
4 - 300 eV	[312]
20 - 200 eV	[314]
300 - 1000 eV	[256]
100, 250, 500, 1000, 1500 eV	[306]
400-2400 eV	[3]
100 - 3000 eV	[270]
700 - 6000 eV	[300]
1 - 256 KeV	[310]

Ar<sup>+</sup>

3.5 - 6.5 eV [45]

Ar<sup>9+</sup>

0 - 3000 eV [41]

As

[308]

Au

[307]

30 - 200 eV	[201]	
100, 250, 500, 1000, 1500 eV		[306]
1 - 256 KeV	[310]	

Ba

0 - 200 eV	[16]	
100 - 1500 eV	[309]	

Be

[308]

1 - 256 KeV [310]

Be<sup>+</sup>

[198]

Bi

[253], [307]

100, 250, 500, 1000, 1500 eV [306]

Br

100 - 1500 eV [309]

Br<sub>2</sub>

[307]

C

100, 250, 500, 1000, 1500 eV	[306]
1 - 256 KeV	[310]

C<sub>2</sub>F<sub>6</sub>

[200]

C<sub>2</sub>H<sub>2</sub>

0.01 - 20 eV	[119]
0 - 10 eV	[95]
1 - 400 eV	[218]
5 - 100 eV	[120]
10 - 200 eV	[208]

C<sub>2</sub>H<sub>4</sub>

< 2 eV	[61]
1 - 400 eV	[303]

C<sub>2</sub>H<sub>6</sub> Ethan

< 2 eV	[61]
7.5 - 20 eV	[321]
1 - 400 eV	[303]
2 - 100 eV	[234]

C<sub>3</sub>F<sub>8</sub>

[200]

Ca

0-200 eV	[16]
100 - 1500 eV	[309]

CCl<sub>4</sub>

0.01 - 0.25 eV [114]

Cd

[307]

3.4 - 85 eV	[173]
60 - 150 eV	[284]
100 - 1500 eV	[309]

CF<sub>2</sub>Cl<sub>2</sub>

0.01 - 0.25 eV [114]

CF<sub>3</sub>Cl

0.01 - 0.25 eV [114]

CF<sub>4</sub>

0.02 - 4 eV	[247]
75 - 700 eV	[222]
100 - 700 eV	[187]

CFCl<sub>3</sub>

0.01 - 0.25 eV [114]

CH<sub>3</sub>F

0.3 - 250 eV [18]

CH<sub>3</sub>Cl

0.3 - 250 eV [18]

CH<sub>3</sub>SH

0.6 - 250 eV [54]

CH<sub>4</sub> (Methan)

[239], [307]

0.05 - 12 eV	[32]
< 1 eV	[240]
< 2 eV	[254], [61]
< 20 eV	[252]
0.2 - 5 eV	[299]
0.1 - 20 eV	[197], [290]
7.5 - 20 eV	[321]
10 - 50 eV	[75]
1.5 - 100 eV	[169]
1 - 400 eV	[303]
75 - 700 eV	[222]
1 - 4000 eV	[176]

Cl

[308]

Cl<sub>2</sub>

[307]

10 - 200 eV	[28]
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CO

[204], [185], [307], [308]

< 1.5 eV	[319]
10 - 200 eV	[28]
20 - 100 eV	[235]

CO<sub>2</sub>

[307]

< 1 eV	[327], cite535
0.12 - 2.0 eV	[272]
0.5 - 3000 eV	[276]
20 - 100 eV	[219]
45 - 150 eV	[196]

Cs

[307]

100, 250, 500, 1000, 1500 eV

[306]

CS<sub>2</sub>

0.4 - 80 eV

[280]

Cu

[308]

1 - 256 KeV

[310]

Cu<sup>+</sup>

[37]

D<sub>2</sub>

[307]

F

1 - 256 KeV

[310]

Fe

[269]

1 - 256 KeV

[310]

Ga

100 - 1500 eV

[309]

Ge

0 - 300 eV

[48]

GeH<sub>4</sub>

75 - 4000 eV [12]

H

[15], [211], [228], [250], [329], [174], [307]

10.2 - 12.0 eV	[193], cite195
17 - 54 eV eV	[168]
100 - 200 eV	[266]
40 - 250 eV	[34]
54.42 eV	[322]
54.4 - 400 eV	[317]
20 - 1000 eV	[38]
> 150 eV	[223]
100, 250, 500, 1000, 1500 eV	[306]

H<sub>2</sub>

[313], [307]

0.01 - 0.175 eV	[77]
0.2 - 10 eV	[224]
1 - 5 eV	[171]
0 - 100 eV	[50]
50 - 700 eV	[297]
50 - 1000 eV	[324]
150 - 2600 eV	[189]

H<sub>2</sub>O

[20], [307]

< 15 eV	[86]
1 - 20 eV	[182]
4 - 20 eV	[178]
4 - 50 eV	[5]
6 - 50 eV	[181]
25 - 300 eV	[194]
100 - 1000 eV	[291]
81 - 3000 eV	[281]
10 - 3000 eV	[233]

H<sub>2</sub>S

[184]

1 - 30 eV	[112]
< 15 eV	[86]

HBr

0 - 4 eV	[116]
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HCl

[188], [307]

10 - 200 eV	[28]
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He

[23], [8], [9], [207], [164], [307]

0.1 - 20 eV	[243], [289]
0.7 - 10 eV	[260]
10 - 30 eV	[47]
12 - 30 eV	[20]
0 - 80 eV	[53]
100 eV	[49], [213]
4 - 300 eV	[312]
100 - 300 eV	[40]
100, 250, 500, 1000, 1500 eV	[306]
0 - 1000 eV	[39]
50 - 1000 eV	[324]
400 - 2400 eV	[3]
500 - 2000 eV	[190]
600 eV	[298]
1024.6 eV	[277]
1 - 256 KeV	[310]

HF

[236]

Hg

[253], [307]

9 - 25 eV	[30]
8 - 50 eV	[257]
25 - 150 eV	[296]
15 - 100 eV	[104]
15 - 180 eV	[274]
25 - 300 eV	[265]
100, 250, 500, 1000, 1500 eV	[306]
1 - 256 KeV	[310]

I

[308]

I<sub>2</sub>

[307]

K

[307]

7-100 eV	[2]
54.42 eV	[322]
50 - 200 eV	[108]
150 - 500 eV	[255]
$\zeta$ 100 eV	[283]
100 - 1500 eV	[309]

Kr

[172]

0.01 - 16 eV	[248]
0.1 - 20 eV	[225]
0.175 - 20 eV	[275]
0.7 - 10 eV	[273]
5 - 200 eV	[244]
20 - 100 eV	[318]
20 - 200 eV	[314]

100, 250, 500, 1000, 1500 eV	[306]
80 - 4000 eV	[175]
700 - 6000 eV	[300]
1 - 256 KeV	[310]

Li

[261], [263], cite196, [**307**]

2 - 10 eV	[287]
250, 500, 1000 eV	[13]
100 - 1500 eV	[309]

Li<sup>2+</sup>

60 eV	[322]
122 - 1000 eV	[216]

Mg

[217]

100 - 1500 eV	[309]
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Mg<sup>+</sup>

[198]

Mn

100 - 1500 eV	[309]
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Mo

100 - 1500 eV	[309]
1 - 256 KeV	[310]

N

[**307**], [**308**]

1 - 256 KeV	[310]
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N<sub>2</sub>

[258], [123], [307]

0.01 - 0.175 eV	[77]
0.55, 1.5, 2.2 eV	[101]
< 1.5 eV	[249]
< 20 eV	[210]
0 - 30 eV	[267]
20 - 100 eV	[235]
10 - 200 eV	[28]
0.1 - 1.5 eV	[301]

N<sub>2</sub>O

[307]

5 - 80 eV	[102]
10 - 80 eV	[288]
40 - 100 eV	[215]

Na

[232], [307]

22.1, 54.4 eV	[294]
54.42 eV	[322]
0 - 1000 eV	[52]
150 - 500 eV	[255]
> 10 eV	[268]
100 - 1500 eV	[309]

Nb

[308]

Ne

[307]

0.1 - 7.0 eV	[80]
0 - 20 eV	[325]
0.1 - 200 eV	[243]

0.7 - 10 eV	[260]
4 - 300 eV	[312]
65 - 500 eV	[44]
100, 250, 500, 1000, 1500 eV	[306]
100 - 3000 eV	[270]
140 - 3000 eV	[26]
700 - 6000 eV	[300]
1 - 256 KeV	[310]

NH<sub>3</sub>

[184]

1 - 80 eV	[215]
10 - 3000 eV	[233]

Ni

1 - 256 KeV	[310]
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NO

[302], [307]

7.5 - 40 eV	[7]
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NO<sub>2</sub>

90 - 4000 eV	[6]
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O

[230], [307], [308]

0.5 - 8.7 eV	[241]
14.1 - 2000 eV	[14]
1 - 256 KeV	[310]

O<sup>6+</sup>

<u>O<sub>2</sub></u>	[316]
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[307]

0.01 - 0.175 eV	[77]
0.012 - 1 eV	[103]
0.15 - 10 eV	[192]
0 - 2 eV	[43]
0 - 18 eV	[36]
1 - 30 eV	[35]
5 - 20 eV	[31]
0.2 - 100 eV	[295]
45 - 150 eV	[196]
300 - 1000 eV	[256], [177]

OCS

40 - 100 eV	[215]
90 - 4000 eV	[6]

OS

100 - 1500 eV	[309]
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P

100 - 1500 eV	[309]
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Pb

[253]

100, 250, 500, 1000, 1500 eV	[306]
1 - 256 KeV	[310]

Ra

0-200 eV	[16]
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Rb

[307]

150 - 500 eV	[255]
100, 250, 500, 1000, 1500 eV	[306]

Rh

100 - 1500 eV [309]

Sc

100 - 1500 eV [309]

Se

[170]

SF<sub>6</sub>

5 - 75 eV	[165]
75 - 700 eV	[222]

Si

1 - 256 KeV [310]

SiH<sub>4</sub> (silane)

[199], [239]

0.1 - 10 eV	[259]
0.1 - 30 eV	[282]
0.05 - 20 eV	[226]
1 - 25 eV	[229]
1.8 - 100 eV	[191]

Sn

**[308]**

1 - 256 KeV [310]

SO<sub>2</sub>

1 - 30 eV	[67]
5 - 50 eV	[227]

90 - 4000 eV [6]

Sr

0-200 eV	[16]
100 - 1500 eV	[309]

Ta

[308]

1 - 256 KeV	[310]
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Ti

1 - 256 KeV	[310]
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Tl

[253], [307]

U

1 - 256 KeV	[310]
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V

[308]

W

100 - 1500 eV	[309]
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Xe

[271], [307]

0 - 10 eV	[262]
0.7 - 10 eV	[273]
0.1 - 20 eV	[225]
1 - 25 eV	[242]
1 - 100 eV	[286]
15 - 100 eV	[89]

20 - 100 eV	[318]
20 - 200 eV	[314]
4 - 300 eV	[312]
40 - 350 eV	[296]
100, 250, 500, 1000, 1500 eV	[306]
80 - 4000 eV	[175]
1 - 256 KeV	[310]

Yb

0 - 200 eV	[16]
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Zn

[307]
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Zn<sup>+</sup>

17 - 39 eV	[166]
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others

[1], [4], [9], [10], [11], [13], [17], [18], cite19, [21], [22], [24], [25], [27], [29], [33], [42], [46], [51], [55], [56], [57], [195], [202], [203], [205], [206], [209], [212], [214], [220], [221], [231], [246], [251], [264], [279], [279], [285], [292], [293], [115] , [304], [315], [320], [323], [326], [328], [167], [180], [183], [184], [186]

data

[305], [306], [307], [308], [309], [310], [311]

## 2 Excitation cross sections

Ba: [66]

C<sub>2</sub>F<sub>6</sub>: [93]

CO: [109]

Cu<sup>+</sup>: [37]

H<sub>2</sub>: [76], [209]

H<sub>2</sub>O: [20]

He: [22], [23], [39], [64], [117], [130], [190]

Hg: [105]

N<sub>2</sub>: [81], [151], [210], [301]

NO: [7]

O<sub>2</sub>: [36], [43], [88], [230]

propane: [68]

Si<sub>2</sub>H<sub>6</sub>: [59]

others: [91]

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