

# *Stopping for Ion : He , Target = N*

<b>Pub. Year</b>	<b>Authors, Title, Journal Citation and Comments</b>	<b>Citation Numb</b>
<b>1927</b>	Gibson, G. E. Eyring, H. <b>'The Ionization and Stopping Power of Various Gases for Alpha Particles from Polonium'</b> <i>Phys. Rev., 30, 553-561 (1927)</i> <i>Comment : S. He (2-7 MeV) -&gt; H, He, N, O, Ne, Ar, CH2. Early stopping paper- values based on differential of range/ionization measurements.</i>	<b>1927-Gibs</b> 1577
<b>1944</b>	Gray, L. H. <b>'The Ionization Method of Measuring Neutron Energy'</b> <i>Proc. Comb. Phil. Soc., 40, 72-102 (1944)</i> <i>Comment : S. H, He (.25 -8 MeV) -&gt; He, N, O, Ne, Ar, Air. Early paper on stopping and ionization effects of charged particles.</i>	<b>1944-Gray</b> 1578
<b>1949</b>	Hatfield, T. N. Lockenwitz, A. E. Colby, M. Y. <b>'The Relative Stopping Power of Gases for Alpha Particles from Polonium'</b> <i>J. Franklin Inst., 247, 133-36 (1949)</i> <i>Comment : S. 5.3 MeV He -&gt; H2, N2, O2, N2O, CO2, H2S, Hydrocarbons</i>	<b>1949-Hatf</b> 0065
<b>1962</b>	Martin, F. W. Northcliffe, L. C. <b>'Energy Loss and Effective Charge of He, C, and Ar Ions'</b> <i>Phys. Rev., 128, 1166-1174 (1962)</i> <i>Comment : S. He, C, Ar (4-400 MeV) -&gt; H, He, N, Ar</i>	<b>1962-Mart</b> 0148
<b>1965</b>	Boring, J. W. Strohl, G. E. Woods, F. R. <b>'Total Ionization in Nitrogen by Heavy Ions of Energies 25 to 50 keV'</b> <i>Phys. Rev. A, 140, 1065-69 (1965).</i> <i>Comment : S. 25-50 keV H, He, C, N, O, Ar -&gt; N2</i>	<b>1965-Bori</b> 0229
<b>1966</b>	Kerr, G. D. Hain, L. M. Underwood, N. Walther, A. W. <b>'Molecular Stopping Cross Sections of Air, N2, Kr, CO2 and CH4 for Alpha Particles'</b> <i>Health Phys., 12, 1475-80 (1966)</i> <i>Comment : S. 0.3-5 MeV He -&gt; N2, Air, Kr, CO2, CH4</i>	<b>1966-Kerr</b> 0793
<b>1966</b>	Rotondi, E. <b>'Bragg's Additivity Law of Stopping Power for 5 MeV Alpha Particles in O2, N2, CO2, Co, NH3 and Hydrocarbon Gases'</b> <i>NRC Canada Report No. NRC-9076 P. 1-6 (1966)</i> <i>Comment : S. 5 MeV He -&gt; N2, O2, CO, CO2, NH3, Hydrocarbons</i>	<b>1966-Roto</b> 0438
<b>1968</b>	Ormrod, J. H. <b>'Low-Energy Electronic Stopping Cross Sections in Nitrogen and Argon'</b> <i>Can. J. Phys., 46, 497-502 (1968)</i> <i>Comment : S. (5-200 keV) H, D, He, B, C, N, O, F, Ne -&gt; N, Ar</i>	<b>1968-Ormr</b> 0342

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<b>1968</b>	Rotondi, E. <b>'Energy Loss of Alpha Particles in Tissue'</b> <i>Rad. Res., 33, 1-9 (1968)</i> <i>Comment : S. 0.L-5.3 MeV He -&gt; N2, O2, CH4, CO2</i>	<b>1968-Roto</b> 0437
<b>1971</b>	Bourland, P. D. Chu, W. K. Powers, D. <b>'Stopping Cross Section of Gases for Alpha Particles from 0.3 - 2.0 MeV'</b> <i>Phys. Rev. B, 3, 3625-35 (1971)</i> <i>Comment : S. 0.3-2.0 MeV He -&gt; H2, O2, N2, NH3, N2O, CO, CO2, Hydrocarbons</i>	<b>1971-Bour</b> 0439
<b>1971</b>	Bourland, P. D. Powers, D. <b>'Bragg-Rule Applicability to Stopping Cross Sections of Gases for Alpha Particles of Energy 0.3 - 2.0 MeV'</b> <i>Phys. Rev. B, 3, 3635-41 (1971)</i> <i>Comment : S. 0.3-2.0 MeV He -&gt; H2, O2, N2, NH3, N2O, CO, CO2, Hydrocarbons</i>	<b>1971-Bour2</b> 0440
<b>1971</b>	Hoyer, U. Waffler, H. <b>'Der Atomare Bremsquerschnitt von H2, D2, He, N2 und a Fur Alpha-Teilchen in Umladungsgebiet (0.5 &lt; E &lt; 2 MeV).'</b> <i>Z. Naturforsch. 26A, 592-95 (1971)</i> <i>Comment : S. 0.5-2.0 MeV He -&gt; H2, D2, N2, Ar</i>	<b>1971-Hoye</b> 0431
<b>1975</b>	Langley, R. A. <b>'Stopping Cross Sections for Helium and Hydrogen in H2, N2, O2 and H2S (0.3 - 2.5 MeV)'</b> <i>Phys. Rev. B, 12, 3575-83 (1975)</i> <i>Comment : S. 0.3-2.5 MeV H, He -&gt; H2, N2, O2, H2S</i>	<b>1975-Lang</b> 0785
<b>1977</b>	Besenbacher, F. <b>'Stopping Power and Straggling for H and He Ions in Gas Targets'</b> <i>Specialeopgave. Aarhus University (1977)</i> <i>Comment : S. dS. 20-500 keV H, He -&gt; H, He N, O, Ne, Ar, Kr, Xe, CO2</i>	<b>1977-Bese</b> 0954
<b>1978</b>	Hanke, C. C. Laursen, J. <b>'Stopping Cross Sections for Alpha Particles from 1.0 to 8.5 MeV in H2, He, N2, O2, Ne, Kr, and Xe.'</b> <i>Nucl. Inst. Methods, 151, 253-260 (1978)</i> <i>Comment : S. 1.0 - 8.5 MeV He -&gt; H, He, N, O, Ne, Kr, Xe.</i>	<b>1978-Hank</b> 1082
<b>1979</b>	Besenbacher, F. Andersen, H. H. Hvelplund, P. Knudsen, H. <b>'Stopping Power of Swift Hydrogen and Helium Ions in Gases'</b> <i>Kgl. Danske Videnskab. Selskab Mat. Fys. Medd. 40, 1-39 (1979)</i> <i>Comment : S. 40 keV-1 MeV H And 100 keV-2.4 MeV He -&gt; H2, He, N2, O2, CO2, Ne, Ar, Kr, Xe</i>	<b>1979-Bese</b> 1160
<b>1979</b>	Dennis, J. A. Powers, D. <b>'The Dependence of Stopping Power on Physical and Chemical States'</b> <i>Preprint (1979) 8</i> <i>Comment : S. H, He -&gt; Gases (Review Of Current Data)</i>	<b>1979-Denn</b> 1193

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1979	Whillock, M. J. Edwards, A. A. <b>'Determination of the Stopping Cross Sections of N, H, CH4, C4H10 and C3H6 using Alpha Particles in the Range 1.3-4.2 MeV'</b> <i>Phys. Med. Biol.</i> , 24, 518-524 (1979) <i>Comment : S. He (1.3-4.2 MeV) -&gt; N, H, CH4, C4H10, C3H6</i>	1979-Whil 1540
1980	Nguyen, V. D. Chemtob, M. Chary, J. Posny, F. Parmentier, N. <b>'Recent Experimental Results on W-Values (Average Energy Loss per Ion Pair) for Heavy Particles'</b> <i>Phys. Med. Biol.</i> , 25 (3), 509-518 (1980) <i>Comment : S. H, He, C, N, O, Ar (25-375 keV) -&gt; CH4, CO2, N2 (ionization chamber)</i>	1980-Nguy 1487
1980	Thwaites, D. I. <b>'Stopping Cross Sections of Various Gases for Alpha Particles in the Energy Region 0.2-5.5 MeV'</b> <i>Phys. Med. Biol.</i> , 25 (5), 865-875 (1980) <i>Comment : S. He (0.2-5.5 MeV) -&gt; He, N, Ar, CH4, Air</i>	1980-Thwa 1489
1983	Baumgart, H. Berg, H. Huttel, E. Pfaff, E. Reiter, G. <b>'He4 Stopping Cross Sections in H2, He, N2, O2, Ne, Ar, Kr, Xe, CH4 and CO2'</b> <i>Nucl. Inst. Methods</i> , 215, 319-328 (1983) <i>Comment : S. He (0.1-1.2 MeV) -&gt; H2, He, N2, O2, Ne, Ar, Kr, Xe, CH4 and CO2</i>	1983-Baum3 1450
1987	Reiter, G. Baumgart, H. Kniest, N. Pfaff, E. Clausnitzer, G. <b>'Proton and Helium Stopping Cross-Sections in N2, O2, NO and N2O'</b> <i>Nucl. Inst. Methods</i> , B27, 287-292 (1987) <i>Comment : S. H, He (50-3000 keV) -&gt; N, O, N2O, NO</i>	1987-Reit 1439
1990	Reiter, G. Kniest, N. Pfaff, E. Clausnitzer, G. <b>'Proton and Helium Stopping Cross Sections in H, He, N, O, Ne, Ar, Kr, Xe, CH4'</b> <i>Nucl. Inst. Methods</i> , B44, 399-411 (1990) <i>Comment : S. H, He (0.7-3.0 MeV) -&gt; H, He, N, O, Ne, Ar, Kr, Xe, CH4</i>	1990-Reit 1933
2002	Geissel, H. Weick, H. Scheidenberger, C. Bimbot, R. Gardes, D. <b>'Experimental Studies of Heavy-Ion Slowing Down in Matter'</b> <i>Nucl. Inst. Methods</i> , B195, 3-54 (2002) <i>Comment : S. Summary of 18 Heavy Ion Stopping in 26 Targets</i>	2002-Geis 3141