

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

<b>Pub. Year</b>	<b>Authors, Title, Journal Citation and Comments</b>	<b>Citation Numb</b>
<b>1942</b>	Crenshaw, C. M. <b>'The Loss of Energy of Hydrogen Ions Traversing Various Gases'</b> <i>Phys. Rev., 62, 54-64 (1942)</i> <i>Comment : S. 60-340 keV H, D -&gt; H2, D2, He, H2O Rel. To Air</i>	<b>1942-Cren</b> 0040
<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>1953</b>	Phillips, J. A. <b>'The Energy Loss of Low Energy Protons in Some Gases'</b> <i>Phys. Rev., 90, 532-37 (1953)</i> <i>Comment : S. 10-80 keV H -&gt; H2, He, N2, O2, Ar, Kr, H2O, CO2, CCl4</i>	<b>1953-Phil</b> 0099
<b>1953</b>	Reynolds, H. K. Dunbar, D. N. F. Wenzel, W. A. Whaling, W. <b>'The Stopping Cross Section of Gases for Protons, 30-600 keV'</b> <i>Phys. Rev., 92, 742-48 (1953)</i> <i>Comment : S. 30-600 keV H -&gt; H2, He, O2, Air, N2, Ne, Ar, Kr, Xe, Hydrocarbons.</i>	<b>1953-Reyn</b> 0103
<b>1953</b>	Weyl, P. K. <b>'The Energy Loss of Hydrogen, Helium, Nitrogen and Neon Ions in Gases'</b> <i>Phys. Rev., 91, 289-96 (1953)</i> <i>Comment : S. 150-450 keV H, D, He, N, Ne -&gt; H2, He, Air, Ar</i>	<b>1953-Weyl</b> 0131
<b>1963</b>	Park, J. T. Zimmermann, E. J. <b>'Stopping Cross Section of Some Hydrocarbon Gases for 40-250 keV Protons and Helium Ions'</b> <i>Phys. Rev., 131, 1611-18 (1963)</i> <i>Comment : S. 40-250 keV H -&gt; Air, He, Various Hydrocarbons</i>	<b>1963-Park</b> 0175
<b>1966</b>	Mason, D. L. Prior, R. M. Quinton, A. R. <b>'The Energy Straggling of 1 MeV Protons in Gases'</b> <i>Nucl. Inst. Methods, 45, 41-44 (1966)</i> <i>Comment : dS. 1 MeV H -&gt; H, He, N, O, Ar, Xe</i>	<b>1966-Maso</b> 0282
<b>1968</b>	Hvelplund, P. <b>'Prisopgave'</b> <i>Aarhus University P. 1-105 (In Danish) (1968)</i> <i>Comment : S, dS. Many Ions (H-Hg) at 50-500 keV -&gt; H, He, Ne, Ar, Kr, Xe, Air</i>	<b>1968-Hvel</b> 0406
<b>1970</b>	Walsh, P. J. Underwood, N. <b>'Energy Loss of Heavy Charged Particles'</b> <i>Health Phys., 18, 561-565 (1970)</i> <i>Comment : S. H (0.3-8 MeV) -&gt; H, He, Li, C. Theory, compared to experiments.</i>	<b>1970-Wals</b> 1950

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<b>1971</b>	Bonderup, E. Hvelplund, P. <b>'Stopping Power and Energy Straggling of Swift Protons'</b> <i>Phys. Rev. A, 4, 562-69 (1971)</i> <i>Comment : S,dS. 100-500 keV H -&gt; H2, He, Air, Ne, Ar, Kr</i>	<b>1971-Bond</b> 0429
<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
<b>1983</b>	Baumgart, H. Arnold, W. Berg, H. Huttel, E. Clausnitzer, G. <b>'Proton Stopping Powers in Various Gases'</b> <i>Nucl. Inst. Methods, 204, 597 (1983)</i> <i>Comment : H (60-800 keV) -&gt; H, He, N, O, Ne, Ar, Kr, Xe</i>	<b>1983-Baum</b> 1614
<b>1984</b>	Xu, Y. J. Khandelwal, G. S. Wilson, J. W. <b>'Intermediate Energy Proton Stopping Power for Hydrogen Molecules and Monoatomic Helium Gas'</b> <i>Phys. Letters, 100A, 3, 137-140 (1984)</i> <i>Comment : S. H (0.1-1.0 MeV) -&gt; H2, He</i>	<b>1984-Xu 2</b> 1464
<b>1990</b>	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, B44, 399-411 (1990)</i> <i>Comment : S. H, He (0.7-3.0 MeV) -&gt; H, He, N, O, Ne, Ar, Kr, Xe, CH4</i>	<b>1990-Reit</b> 1933
<b>1991</b>	Golser, R. Semrad, D. <b>'Observation of a Striking Departure from Velocity Proportionality in Low Energy Electronic Stopping'</b> <i>Phys. Rev. Letters, 66, 1831 (1991)</i> <i>Comment : S. H (3 - 20 keV) He</i>	<b>1991-Gols</b> 1654
<b>1992</b>	Golser, R. Semrad, D. <b>'Energy Loss of Hydrogen and Helium Ions in Hydrogen and Helium Gas: Looking for Exceptions from Velocity Proportionality'</b> <i>Nucl. Inst. Methods, B69, 18-21 (1992)</i> <i>Comment : S. H, D, He (2-20 keV/amu) -&gt; H, He</i>	<b>1992-Gols3</b> 1893
<b>1993</b>	Schiefermuller, A. Galser, R. Stohl, R. Semrad, D. <b>'Energy Loss of Hydrogen Projectiles in Gases'</b> <i>Phys. Rev. A, 48, 4467-4475 (1993)</i> <i>Comment : S. H (3-20 keV/amu) -&gt; H2, D, He, Ne</i>	<b>1993-Schi</b> 2076

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<b>1994</b>	Auth, C. Winter, H. <b>'Impact Parameter Dependence of the Energy Loss of Fast Protons in Single Collisions with Noble Gas Atoms'</b> <i>Nucl. Inst. Methods, B93, 123-131 (1994)</i> <i>Comment : S. H (50-250 keV) -&gt; He, Ne Ar</i>	<b>1994-Auth</b> 1854
<b>1994</b>	OBELIX Collaboration <b>'Recent Results from OBELIX in Atomic Physics'</b> <i>Yaderna Fiz. (Russia), 57, 1816-1828 (1994)</i> <i>Comment : S. H (0.5keV-3.3 MeV) -&gt; H, He (gas) Pressure effects on stopping.</i>	<b>1994-OBEL</b> 2041
<b>1994</b>	Schiwietz, G. Grande, P. L. Auth, C. Winter, H. Salin, A. <b>'Angular Dependence of Energy Loss in Prton-Helium Collisions'</b> <i>Phys. Rev. Letters, 72, 2159-2162 (1994)</i> <i>Comment : S. H (50-250 keV) -&gt; He (single collision scattering)</i>	<b>1994-Schi</b> 1860
<b>1995</b>	Agnello, M. Belli, G. Bertin, A. Botta, E. Zoccoli, A. <b>'Anti-Proton Slowing Down in H-2 and He and Evidence of Nuclear Stopping Power'</b> <i>Phys. Rev. Letters, 74, 371-374 (1995)</i> <i>Comment : S, Sn. H- (0.5-1.1 MeV) -&gt; H, He</i>	<b>1995-Agne</b> 1744
<b>1996</b>	Golser, R. Semrad, D. Aumayr, F. <b>'Electronic Stopping in a He-H2 Mixture Substantially Exceeds Bragg's Rule Value'</b> <i>Phys. Rev. Lett., 76, 3104-3107 (1996)</i> <i>Comment : S. D (4 keV/amu) -&gt; He/H mixtures.</i>	<b>1996-Gols</b> 2160
<b>2000</b>	Formicola, A. Aliotta, M. Gyurky, G. Raiola, F. Bonetti, R. <b>'Energy Loss of Deuterons in He-3 Gas; A Threshold Effect'</b> <i>Eur. Phys. J., A8, 443-446 (2000)</i> <i>Comment : S. D (15 - 100 keV) -&gt; He3</i>	<b>2000-Form</b> 2370
<b>2001</b>	Raiola, F. Gyurky, G. Aliotta, M. Formicola, A. Bonetti, R. <b>'Stopping Power of Low Energy Deuterons in He-3 Gas'</b> <i>Eur. Phys. J., A10, 487-491 (2001)</i> <i>Comment : S. D (10 -100 keV) -&gt; He3 gas</i>	<b>2001-Raio</b> 2368