

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

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
<b>1900</b>	Sklodowska-Curie, Mme. 'Sur la Penetration des Rayons de Becquerel non Deviables par le Champ Magnetique' <i>Acad. Sci. Paris: Comptes Rendus, 130, 76-79 (1900)</i> <i>Comment : S. 5-7 MeV He -&gt; Air, Al. The earliest measurement of ion stopping in matter.</i>	<b>1900-Sklo</b> 1680
<b>1913</b>	Marsden, E. Taylor, T. S. 'The Decrease in Velocity of Alpha-Particles in Passing through Matter' <i>Proc. Roy. Soc., A88, 443-454 (1913)</i> <i>Comment : S. 5-8 MeV He -&gt; Al, Cu, Au, Air, Mica</i>	<b>1913-Mars2</b> 0088
<b>1924</b>	Rutherford, E. 'The Capture and Loss of Electrons by Alpha Particles' <i>Phil. Mag., 47, 277 (1924)</i> <i>Comment : S. He (5-7 MeV) -&gt; Air, H, He, Mica</i>	<b>1924-Ruth</b> 1994
<b>1925</b>	Jacobsen, T. " <i>Nature, June 19, 858 (1925)</i> <i>Comment : S, He (5-7 MeV) -&gt; Air</i>	<b>1925-Jaco</b> 1990
<b>1927</b>	Briggs, G. H. 'The Decrease of Velocity of Alpha Particles from Radium C' <i>Proc. Roy. Soc., A114, 341-354 (1927)</i> <i>Comment : S. 3 - 5.3 MeV He -&gt; Mica Rel. To Air</i>	<b>1927-Brig</b> 0025
<b>1934</b>	Mano, G. 'Recherches Sur L'Absorption Des Rayons Alpha' <i>Ann. de Physique, 1, 408-531 (1934)</i> <i>Comment : S. 4.2-7.7 MeV He -&gt; H2, He, Ne, Ar, Air</i>	<b>1934-Mano</b> 0085
<b>1944</b>	Gray, L. H. 'The Ionization Method of Measuring Neutron Energy' <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>	Appleyard, R. K. 'Stopping Power of Liquid Water for Alpha Particles' <i>Nature, 163, 526 (1949)</i> <i>Comment : S. He (4-5 MeV) -&gt; H2O, Air. Relative measurments.</i>	<b>1949-Appl</b> 1579
<b>1953</b>	Weyl, P. K. 'The Energy Loss of Hydrogen, Helium, Nitrogen and Neon Ions in Gases' <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

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

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
<b>1959</b>	Ramavataram, K. Porat, D. I. 'Measurement of Surface Density of Thin Foils' <i>Nucl. Inst. Methods, 4, 239-42 (1959)</i> <i>Comment : S. 3.72, 4.33 MeV He -&gt; Al, Ni, Ag, Au all rel. To Air</i>	<b>1959-Rama</b> 0550
<b>1966</b>	Kerr, G. D. Hain, L. M. Underwood, N. Walthers, A. W. 'Molecular Stopping Cross Sections of Air, N2, Kr, CO2 and CH4 for Alpha Particles' <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>1968</b>	Hvelplund, P. 'Prisopgave' <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>1969</b>	Ramirez, J. J. Prior, R. M. Swint, J. B. Quinton, A. R. Blue, R. A. 'Energy Straggling of Alpha Particles through Gases' <i>Phys. Rev., 179, 310-14 (1969)</i> <i>Comment : S, dS. 1-3.5 MeV He -&gt; He, Air, Ar, Kr, Xe</i>	<b>1969-Rami</b> 0388
<b>1971</b>	Hvelplund, P. 'Energy Loss and Straggling of 100-500 keV Atoms with $Z_1 \leq 12$ in Various Gases' <i>Kgl. Danske Videnskab. Selskab Mat. Fys. Medd., 38, No. 4, P. 1-25 (1971)</i> <i>Comment : S,dS. (100-500 keV) He, Li, Be, B, C, N, O, F, Ne, Na, Mg -&gt; Air, He, Ne, H2, O2</i>	<b>1971-Hvel</b> 0421
<b>1972</b>	Huebner, J. S. Skolil, L. L. 'The Residual Energy and Stopping Power of 210Po Alpha Particles in Air, CO2, and He' <i>Am. J. Phys., 40, 1177-78 (1972)</i> <i>Comment : S. 3-5.3 MeV He -&gt; Air, CO2, He</i>	<b>1972-Hueb</b> 0666
<b>1973</b>	Chu, W. K. Ziegler, J. F. Mitchell, I. V. Mackintosh, W. D. 'Energy-Loss Measurements of 4He Ions in Heavy Metals' <i>Appl. Phys. Letters, 22, 437-39 (1973)</i> <i>Comment : S. 2.0 MeV He -&gt; Al, Si, V, Fe, Co, Ni, Cu, In, Ge, Mo, Sb, Te, Gd, Hf, Ta, W, Ir, Pt, Au, Pb</i>	<b>1973-Chu 3</b> 0124
<b>1976</b>	Geary, M. J. Haque, A. K. M. M. 'The Stopping Power and Straggling for Alpha Particles in Tissue Equivalent Materials' <i>Nucl. Inst. Methods, 137, 151-5 (1976)</i> <i>Comment : S, dS. 0.5-5.5 MeV He -&gt; Air, Melinex, Mylar</i>	<b>1976-Gear</b> 0912
<b>1978</b>	Ouseph, P. J. Mostovych, A. 'An Experiment to Measure Range, Range Straggling, Stopping Power and Energy Straggling of Alpha Particles in Air' <i>Am. J. Phys., 46, 742-744 (1978)</i> <i>Comment : S,dS,R,dR. He (0.3-4.0 MeV) -&gt; Air</i>	<b>1978-Ouse</b> 1732

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

---

<i>Pub. Year</i>	<i>Authors, Title, Journal Citation and Comments</i>	<i>Citation Numb</i>
<b>1980</b>	Thwaites, D. I. 'Stopping Cross Sections of Various Gases for Alpha Partifcles in the Energy Region 0.2-5.5 MeV' <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

---