

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

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
<b>1924</b>	Rutherford, E. 'The Capture and Loss of Electrons by Alpha Particles' <i>Phil. Mag.</i> , 47, 277 (1924)	<b>1924-Ruth</b>
	<i>Comment</i> : S. He (5-7 MeV) -> Air, H, He, Mica	1994
<b>1925</b>	Gurney, R. W. 'The Stopping-Power of Gases for Alpha-Particles of Different Velocities' <i>Proc. Roy. Soc.</i> , A107, 340-349 (1925)	<b>1925-Gurn</b>
	<i>Comment</i> : S. 5.3, 6.1 MeV He -> H2, He, O2, Ne, Ar, Kr, Xe Rel. To Air	0061
<b>1927</b>	Gibson, G. E. Eyring, H. 'The Ionization and Stopping Power of Various Gases for Alpha Particles from Polonium' <i>Phys. Rev.</i> , 30, 553-561 (1927)	<b>1927-Gibs</b>
	<i>Comment</i> : S. He (2-7 MeV) -> H, He, N, O, Ne, Ar, CH2. Early stopping paper- values based on differential of range/ionization measurements.	1577
<b>1934</b>	Mano, G. 'Recherches Sur L'Absorption Des Rayons Alpha' <i>Ann. de Physique</i> , 1, 408-531 (1934)	<b>1934-Mano</b>
	<i>Comment</i> : S. 4.2-7.7 MeV He -> H2, He, Ne, Ar, Air	0085
<b>1934</b>	Naidu, R. 'Sur Les Courbes D'Ionisation Des Rayons Alpha Du Polonium Dans Les Gaz Rares' <i>J. Phys. Radium</i> , 5, 575-77 (1934)	<b>1934-Naid</b>
	<i>Comment</i> : S. 3-7 MeV He -> He, Ne, Ar, Kr, Xe. All Rel. To Air	0093
<b>1944</b>	Gray, L. H. 'The Ionization Method of Measuring Neutron Energy' <i>Proc. Comb. Phil. Soc.</i> , 40, 72-102 (1944)	<b>1944-Gray</b>
	<i>Comment</i> : S. H, He (.25 -8 MeV) -> He, N, O, Ne, Ar, Air. Early paper on stopping and ionization effects of charged particles.	1578
<b>1953</b>	Weyl, P. K. 'The Energy Loss of Hydrogen, Helium, Nitrogen and Neon Ions in Gases' <i>Phys. Rev.</i> , 91, 289-96 (1953)	<b>1953-Weyl</b>
	<i>Comment</i> : S. 150-450 keV H, D, He, N, Ne -> H2, He, Air, Ar	0131
<b>1962</b>	Martin, F. W. Northcliffe, L. C. 'Energy Loss and Effective Charge of He, C, and Ar Ions' <i>Phys. Rev.</i> , 128, 1166-1174 (1962)	<b>1962-Mart</b>
	<i>Comment</i> : S. He, C, Ar (4-400 MeV) -> H, He, N, Ar	0148
<b>1968</b>	Hvelplund, P. 'Prisopgave' <i>Aarhus University P. 1-105 (In Danish) (1968)</i>	<b>1968-Hvel</b>
	<i>Comment</i> : S, dS. Many Ions (H-Hg) at 50-500 keV -> H, He, Ne, Ar, Kr, Xe, Air	0406

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

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
<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.</i> , 179, 310-14 (1969) <i>Comment</i> : S, dS. 1-3.5 MeV He -> He, Air, Ar, Kr, Xe	<b>1969-Rami</b> 0388
<b>1971</b>	Chu, W. K. Powers, D. 'Energy Loss of Alpha Particles in Noble Gases from 0.3 - 2.0 MeV' <i>Phys. Rev. B</i> , 4, 10-15 (1971) <i>Comment</i> : S. 0.3-2.0 MeV He -> He, Ne, Ar, Kr, Xe	<b>1971-Chu</b> 0675
<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.</i> , 38, No. 4, P. 1-25 (1971) <i>Comment</i> : S,dS. (100-500 keV) He, Li, Be, B, C, N, O, F, Ne, Na, Mg -> Air, He, Ne, H <sub>2</sub> , O <sub>2</sub>	<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, CO <sub>2</sub> , and He' <i>Am. J. Phys.</i> , 40, 1177-78 (1972) <i>Comment</i> : S. 3-5.3 MeV He -> Air, CO <sub>2</sub> , He	<b>1972-Hueb</b> 0666
<b>1973</b>	Wenger, E. Gardner, R. P. Verghese, K. 'Molecular Stopping Cross Sections of Alpha Particles in Butane, Propane, Ethane, Neon, Helium, and Hydrogen' <i>Health Phys.</i> , 25, 67-71 (1973) <i>Comment</i> : S. (2.5-6 MeV) He -> H <sub>2</sub> , Ne, He, C <sub>2</sub> H <sub>6</sub> , C <sub>3</sub> H <sub>8</sub> , C <sub>4</sub> H <sub>10</sub>	<b>1973-Weng</b> 0828
<b>1977</b>	Cameron, J. M. Mccamis, R. H. Miller, G. A. Moss, G. A. Roy, G. 'Energy Loss and Straggling of Low Energy Alphas in Helium' <i>Nucl. Inst. Methods</i> , 145, 405-407 (1977) <i>Comment</i> : S, dS. 0.1-1.7 MeV He -> He	<b>1977-Came</b> 1042
<b>1978</b>	Hanke, C. C. Laursen, J. 'Stopping Cross Sections for Alpha Particles from 1.0 to 8.5 MeV in H <sub>2</sub> , He, N <sub>2</sub> , O <sub>2</sub> , Ne, Kr, and Xe.' <i>Nucl. Inst. Methods</i> , 151, 253-260 (1978) <i>Comment</i> : S. 1.0 - 8.5 MeV He -> H, He, N, O, Ne, Kr, Xe.	<b>1978-Hank</b> 1082
<b>1979</b>	Besenbacher, F. Andersen, H. H. Hvelplund, P. Knudsen, H. 'Stopping Power of Swift Hydrogen and Helium Ions in Gases' <i>Kgl. Danske Videnskab. Selskab Mat. Fys. Medd.</i> 40, 1-39 (1979) <i>Comment</i> : S. 40 keV-1 MeV H And 100 keV-2.4 MeV He -> H <sub>2</sub> , He, N <sub>2</sub> , O <sub>2</sub> , CO <sub>2</sub> , Ne, Ar, Kr, Xe	<b>1979-Bese</b> 1160
<b>1979</b>	Dennis, J. A. Powers, D. 'The Dependence of Stopping Power on Physical and Chemical States' <i>Preprint (1979) 8</i> <i>Comment</i> : S. H, He -> Gases (Review Of Current Data)	<b>1979-Denn</b> 1193

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

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Num
<b>1980</b>	Thwaites, D. I. 'Stopping Cross Sections of Various Gases for Alpha Particles in the Energy Region 0.2-5.5 MeV' <i>Phys. Med. Biol.</i> , 25 (5), 865-875 (1980) <i>Comment</i> : S. He (0.2-5.5 MeV) -> He, N, Ar, CH4, Air	1980-Thwa 1489
	Fukuda, A. 'Stopping Powers in Rare Gases for 40-200 keV Rare-Gas Ions' <i>J. Phys. B, Atom. and Molec. Phys.</i> , 14, 4533-4544 (1981) <i>Comment</i> : S. He, Ne, Ar, Kr (40-200 keV) -> He, Ne, Ar, Kr, Xe (Note: stopping for ions of zero deflection)	1981-Fuku 1411
<b>1983</b>	Baumgart, H. Berg, H. Huttel, E. Pfaff, E. Reiter, G. 'He4 Stopping Cross Sections in H2, He, N2, O2, Ne, Ar, Kr, Xe, CH4 and CO2' <i>Nucl. Inst. Methods</i> , 215, 319-328 (1983) <i>Comment</i> : S. He (0.1-1.2 MeV) -> H2, He, N2, O2, Ne, Ar, Kr, Xe, CH4 and CO2	1983-Baum3 1450
	Clouvas, A. Gaillard, M. J. De Pinho, A. G. Poizat, J. C. Rimillieux, J. 'Nonequilibrium Effects in the Energy Loss of He Beams in Very Thin Carbon Foils' <i>Phys. Letters</i> , 103A, 419 (1984) <i>Comment</i> : S. He (1.5-2.4 MeV) -> C (charge state effects)	1984-Clou 1636
<b>1990</b>	Reiter, G. Kniest, N. Pfaff, E. Clausnitzer, G. 'Proton and Helium Stopping Cross Sections in H, He, N, O, Ne, Ar, Kr, Xe, CH4' <i>Nucl. Inst. Methods</i> , B44, 399-411 (1990) <i>Comment</i> : S. H, He (0.7-3.0 MeV) -> H, He, N, O, Ne, Ar, Kr, Xe, CH4	1990-Reit 1933
	Golser, R. Semrad, D. 'Energy Loss of Hydrogen and Helium Ions in Hydrogen and Helium Gas: Looking for Exceptions from Velocity Proportionality' <i>Nucl. Inst. Methods</i> , B69, 18-21 (1992) <i>Comment</i> : S. H, D, He (2-20 keV/amu) -> H, He	1992-Gols3 1893
<b>1993</b>	Novkovic, D. Subotic, K. Milosevic, Z. Manic, S. Stojanovic, M. 'Alpha Particle Energy Straggling Measurements in Nobel Gases' <i>J. Moscow Phys. Soc. (UK)</i> , 3, 215-220 (1993) <i>Comment</i> : dS. He(8.8 MeV) -> He, Ne, Ar, Kr, Xe	1993-Novk 2077
	Fukuda, A. 'Stopping Powers of He and Ar Gases for 50-200 keV He-3 Ions' <i>Rad. Prot. Dosimetry</i> , 70, 47-48 (1997) <i>Comment</i> : S. He3 (50-2000 keV) -> He, Ar	1997-Fuku 2180