

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

| Pub. Year | Authors, Title, Journal Citation and Comments | Citation Numb |
|------------------|--|--------------------------|
| 1925 | Gurney, R. W. 'The Stopping-Power of Gases for Alpha-Particles of Different Velocities' <i>Proc. Roy. Soc., A107, 340-349 (1925)</i> <i>Comment : S. 5.3, 6.1 MeV He -> H2, He, O2, Ne, Ar, Kr, Xe Rel. To Air</i> | 1925-Gurn 0061 |
| 1927 | Gibson, G. E. Eyring, H. 'The Ionization and Stopping Power of Various Gases for Alpha Particles from Polonium' <i>Phys. Rev., 30, 553-561 (1927)</i> <i>Comment : S. He (2-7 MeV) -> H, He, N, O, Ne, Ar, CH2. Early stopping paper- values based on differential of range/ionization measurements.</i> | 1927-Gibs 1577 |
| 1944 | 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) -> He, N, O, Ne, Ar, Air. Early paper on stopping and ionization effects of charged particles.</i> | 1944-Gray 1578 |
| 1949 | Hatfield, T. N. Lockenwitz, A. E. Colby, M. Y. 'The Relative Stopping Power of Gases for Alpha Particles from Polonium' <i>J. Franklin Inst., 247, 133-36 (1949)</i> <i>Comment : S. 5.3 MeV He -> H2, N2, O2, N2O, CO2, H2S, Hydrocarbons</i> | 1949-Hatf 0065 |
| 1960 | Roll, P. G. Steigert, F. E. 'Energy Loss of Heavy Ions in Nickel, Oxygen and Nuclear Emulsion' <i>Nucl. Phys., 17, 54-66 (1960)</i> <i>Comment : S. He, B, C, N, O, F, Ne (2-10 MeV/amu) -> O, Ni, Emulsion</i> | 1960-Roll 0220 |
| 1966 | Rotondi, E. 'Bragg's Additivity Law of Stopping Power for 5 MeV Alpha Particles in O2, N2, CO2, Co, NH3 and Hydrocarbon Gases' <i>NRC Canada Report No. NRC-9076 P. 1-6 (1966)</i> <i>Comment : S. 5 MeV He -> N2, O2, CO, CO2, NH3, Hydrocarbons</i> | 1966-Roto 0438 |
| 1968 | Rotondi, E. 'Energy Loss of Alpha Particles in Tissue' <i>Rad. Res., 33, 1-9 (1968)</i> <i>Comment : S. 0.L-5.3 MeV He -> N2, O2, CH4, CO2</i> | 1968-Roto 0437 |
| 1971 | Bourland, P. D. Chu, W. K. Powers, D. 'Stopping Cross Section of Gases for Alpha Particles from 0.3 - 2.0 MeV' <i>Phys. Rev. B, 3, 3625-35 (1971)</i> <i>Comment : S. 0.3-2.0 MeV He -> H2, O2, N2, NH3, N2O, CO, CO2, Hydrocarbons</i> | 1971-Bour 0439 |

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| 1971 | Bourland, P. D. Powers, D. 'Bragg-Rule Applicability to Stopping Cross Sections of Gases for Alpha Particles of Energy 0.3 - 2.0 MeV' <i>Phys. Rev. B, 3, 3635-41 (1971)</i> <i>Comment : S. 0.3-2.0 MeV He -> H2, O2, N2, NH3, N2O, CO, CO2, Hydrocarbons</i> | 1971-Bour2 0440 |
| | Hvelplund, P. 'Energy Loss and Stragglng of 100-500 keV Atoms with $Z \leq 12$ 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 -> Air, He, Ne, H2, O2</i> | 1971-Hvel 0421 |
| 1975 | Langley, R. A. 'Stopping Cross Sections for Helium and Hydrogen in H2, N2, O2 and H2S (0.3 - 2.5 MeV)' <i>Phys. Rev. B, 12, 3575-83 (1975)</i> <i>Comment : S. 0.3-2.5 MeV H, He -> H2, N2, O2, H2S</i> | 1975-Lang 0785 |
| | Besenbacher, F. 'Stopping Power and Stragglng for H and He Ions in Gas Targets' <i>Specialeopgave. Aarhus University (1977)</i> <i>Comment : S. dS. 20-500 keV H, He -> H, He N, O, Ne, Ar, Kr, Xe, CO2</i> | 1977-Bese 0954 |
| 1978 | Chu, W. K. Braun, M. Davies, J. A. Matsunami, N. Thompson, D. A. 'Energy Loss of He Ions in Solidified Gases' <i>Nucl. Inst. Methods, 149, 115-120 (1978)</i> <i>Comment : S. 0.5-2.0 MeV He -> Solid Ar, O, CO2</i> | 1978-Chu 0963 |
| | Hanke, C. C. Laursen, J. 'Stopping Cross Sections for Alpha Particles from 1.0 to 8.5 MeV in H2, He, N2, O2, Ne, Kr, and Xe.' <i>Nucl. Inst. Methods, 151, 253-260 (1978)</i> <i>Comment : S. 1.0 - 8.5 MeV He -> H, He, N, O, Ne, Kr, Xe.</i> | 1978-Hank 1082 |
| 1979 | 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. 40, 1-39 (1979)</i> <i>Comment : S. 40 keV-1 MeV H And 100 keV-2.4 MeV He -> H2, He, N2, O2, CO2, Ne, Ar, Kr, Xe</i> | 1979-Bese 1160 |
| | Dennis, J. A. Powers, D. 'The Dependence of Stopping Power on Physical and Chemical States' <i>Preprint (1979) 8</i> <i>Comment : S. H, He -> Gases (Review Of Current Data)</i> | 1979-Denn 1193 |
| 1982 | Fukuda, A. 'Stopping Powers of H2, O2, C2H4 for 40-200 keV He and N Ions' <i>Phys. Med. Biol., 27 (1), 73-39 (1982)</i> <i>Comment : S. He, N (40-200 keV) -> H, O, C2H4 (gases)</i> | 1982-Fuku 1557 |

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| 1983 | 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, 215, 319-328 (1983)</i> <i>Comment : S. He (0.1-1.2 MeV) -> 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. 'Proton and Helium Stopping Cross-Sections in N2, O2, NO and N2O' <i>Nucl. Inst. Methods, B27, 287-292 (1987)</i> <i>Comment : S. H, He (50-3000 keV) -> N, O, N2O, NO</i> | 1987-Reit 1439 |
| 1990 | 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, B44, 399-411 (1990)</i> <i>Comment : S. H, He (0.7-3.0 MeV) -> H, He, N, O, Ne, Ar, Kr, Xe, CH4</i> | 1990-Reit 1933 |
| 2002 | Geissel, H. Weick, H. Scheidenberger, C. Bimbot, R. Gardes, D. 'Experimental Studies of Heavy-Ion Slowing Down in Matter' <i>Nucl. Inst. Methods, B195, 3-54 (2002)</i> <i>Comment : S. Summary of 18 Heavy Ion Stopping in 26 Targets</i> | 2002-Geis 3141 |