

Stopping for Ion : He , Target = Cu

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
1905	Bragg, W. H. Kleeman, R. 'On the Alpha Particles of Radium and Their Loss of Range in Passing through Various Atoms and Molecules' <i>Phil. Mag., 10, 318-340 (1905)</i> <i>Comment : S. 7.7 MeV He -> H2, Al, Cu, Ag, Sn, Pt, Au, Hydrocarbons: All Rel. To Air</i>	1905-Brag 0024
1911	Rutherford, E. 'The Scattering of Alpha and Beta Particles by Matter and the Structure of the Atom' <i>Phil. Mag., Series 6, 21, 669-688 (1911)</i> <i>Comment : Theory. Derives masses of Al(27), Cu(63), Ag(108) and Pt(194) from stopping and scattering.</i>	1911-Ruth 1998
1913	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 -> Al, Cu, Au, Air, Mica</i>	1913-Mars2 0088
1925	Henderson, D. 'The Capture and Loss of Electrons by Alpha-Particles' <i>Proc. Royal Soc., 109, 157-165 (1925)</i> <i>Comment : S. He (5-7 MeV) -> Air</i>	1925-Hend 1991
1926	Consigny, J. 'Pouvoir D'Arret De Quelques Metaux Pour Les Rayons Alpha' <i>C. R. Acad. Sci., 183, 127-29 (1926)</i> <i>Comment : S Rel. To Air. 5.3 MeV He -> Al, Cu, Ag, Au</i>	1926-Cons 0618
1928	Rosenblum, S. 'Recherches Experimentales Sur Le Passage Des Rayons Alpha a Travers La Matiere' <i>Ann. de Physique, 10, 408-471 (1928)</i> <i>Comment : S. 5.3 - 7.7 MeV He -> Li, Al, Fe, Ni, Cu, Zn, Mo, Pd, Ag, Cd, Sn, Pt, Au, Pb, Mica, AuAg Alloys, Ag-Cu Alloys</i>	1928-Rose 0110
1949	Kelly, E. L. 'Experimental Determination of Stopping Powers using Alpha-Particles of 15-37 MeV' <i>Phys. Rev., 75, 1006-07 (1949)</i> <i>Comment : S. 28, 37 MeV He -> Cu, Ag, Ta, Bi, Th Rel. To Al</i>	1949-Kell 0077
1962	Gott, Yu. V. Telkovskiy, V. G. 'Energy Losses of Light Ions in Thin Metallic Foils' <i>Radiotekhnika I. Elek. (USSR), 7, 1956-61 (1962) [Engl. Trans:Rad. Eng. and Electron Phys., 7, 1813-19 (1962)]</i> <i>Comment : S. 2-15 keV H, D, He -> Al, Ti, Cu, Ge, Ag, Sn, Au</i>	1962-Gott 0159

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1967	Vasilievsky, I. M. Prokoshkin, Yu. D. 'Ionization Energy Loss of Protons, Deuterons and Alpha-Particles' <i>Yaderna Fiz. (Russia), 4, 549-55 (1966)[Engl. Trans. Sov. Phys. Nucl. Phys., 4, 390-94 (1967)]</i> <i>Comment : S. (267-650 MeV) H, D, He -> Cu, H, C, Al, Sn, Pb</i>	1967-Vasi 0313
1968	Duc, T. M. Demeyer, A. Tousset, J. Chery, R. 'Determination Experimentale De La Perte D'Energie, Des Parcours Et De La Dispersion D'Un Faisceau De Particules Alpha De 54' <i>MeV Dans Quelques Elements. J. Physique, 29, 129-135 (1968)</i> <i>Comment : R, S, dS. 54.4 MeV He -> Cu, Ag, Tb, Tm, Au, S, dS. 50-54 MeV He, 27 MeV D -> Al</i>	1968-Duc 0329
1968	Ehrhardt, P. Rupp, W. Sizmann, R. 'Stopping Power of 0.5 to 3.5 MeV Alpha-Particles in Cu-Au Alloys.' <i>Phys. Stat. Sol., 28, K35-37 (1968)</i> <i>Comment : S. 0.5-3.5 MeV He -> Cu, Au, Cu-Au Alloys</i>	1968-Ehrh 0368
1969	Chu, W. K. Powers, D. 'Alpha-Particle Stopping Cross Sections in Solids from 400 keV to 2 MeV' <i>Phys. Rev., 187, 478-90 (1969)</i> <i>Comment : S. 0.4-2.0 MeV He -> Be, C, Mg, Al, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Ge, Pd, Ag, In, Sn</i>	1969-Chu 0382
1969	White, W. Mueller, R. M. 'Electron-Stopping Cross Sections of 1H, 4He Particles in Cr, Mn, Fe, Co, Ni, and Cu at Energies Near 100 keV' <i>Phys. Rev., 187, 499-503 (1969)</i> <i>Comment : S. 25-140 keV H, 40-120 keV He -> Cr, Mn, Fe, Co, Ni, Cu</i>	1969-Whit 0389
1971	Ishiwari, R. Shiomi, N. Shirai, S. Ohata, T. Uemura, Y. 'Stopping Power of Be, Al, Cu, Mo, Ta and Au for 28 MeV Alpha Particles' <i>Bull. Inst. Chem. Res. Kyoto Univ., 49, 403-08 (1971)</i> <i>Comment : S. 28 MeV He -> Be, Al, Cu, Mo, Ta, Au</i>	1971-Ishi2 0436
1973	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 -> Al, Si, V, Fe, Co, Ni, Cu, In, Ge, Mo, Sb, Te, Gd, Hf, Ta, W, Ir, Pt, Au, Pb</i>	1973-Chu 3 0124
1973	Feng, J. S. -Y. Chu, W. K. Nicolet, M. -A. Mayer, J. W. 'Relative Measurements of Stopping Cross Section Factors by Back-Scattering' <i>Thin Solid Films, 19, 195-204 (1973)</i> <i>Comment : S (1-2 MeV) He -> Au, Ag, Cu, Al, Si. Relative Stopping</i>	1973-Feng 0503

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1973	Feng, J. S. -Y. Chu, W. K. Nicolet, M-A. 'Bragg's Rule Study in Binary Metal Alloys Metal Oxides for MeV 4He+ Ions' <i>Thin Solid Films, 19, 227-236 (1973)</i> Comment : S. 0.5-2.25 MeV He -> AuAg, AuCu, AuAl, Fe ₂ O ₃ , Fe ₃ O ₄ , Al ₂ O ₃	1973-Feng2 0506
1973	Ishiwari, R. Shiomi, N. Shirai, S. 'Tabulated Results of Stopping Power Measurements of Be, Al, Ti, V, Fe, Co, Ni, Cu, Mo, Rh, Ag, Ta, and Au for 28.8 MeV Alpha Particles.' <i>J. Phys. Soc. Jap. (1973).</i> Comment : S. 28.8 MeV He -> Be, Al, Ti, V, Fe, Co, Ni, Cu, Mo, Rh, Ag, Ta, Au	1973-Ishi 0920
1974	Nomura, A. Kiyono, S. Kamayama, M. 'Penetration of Low Energy Helium Ions through Copper Thin Films' <i>Jap. J. Appl. Phys., 13, 1159-60 (1974)</i> Comment : S. 6-16 keV He -> Cu	1974-Nomu 0637
1975	Ishiwari, R. Shiomi, N. Shirai, S. 'Z1*3 Effect on the Stopping Powers of Several Metallic Elements for 28.8 MeV Alpha Particles: Deviations of Experimental Data from Theories.' <i>Phys. Letters A, 51, 54-54 (1975)</i> Comment : S. 28.8 MeV He -> Al, Ti, Fe, Ni, Cu, Mo, Ag, Ta, Au	1975-Ishi 0781
1975	Ishiwari, R. Shiomi, N. Katayama-Kinoshita, T. Sawada-Yasue, F. 'Search for Possible Geometrical Effect on Stopping Power Measurement' <i>J. Phys. Soc. Jap., 39, 557-65 (1975)</i> Comment : S. 8.78 MeV He -> Al, Cu, Ag, Ta	1975-Ishi2 0783
1975	Nomura, A. Kiyono, S. 'Stopping Power of Copper, Silver and Gold for Protons and Helium Ions of Low Energy' <i>J. Phys. D: Appl. Phys., 8, 1551-59 (1975)</i> Comment : S. 4-16 keV H, He -> Cu, Ag, Au	1975-Nomu 0752
1976	Hoffman, G. E. Powers, D. 'Energy Straggling of Alpha Particles in Solid Materials' <i>Phys. Rev. A, 13, 2042-48 (1976).</i> Comment : S, dS. 0.5-2.0 MeV He -> Ti, Cr, Co, Cu, Ag	1976-Hoff2 0865
1976	Luomajarvi, M. Fontell, A. Bister, M. 'Energy Straggling of 4He Ions in Al and Cu in the Backscattering Geometry' <i>Meyer, G. Linker and F. Kappeler (Ed.): Ion Beam Surface Layer Analysis, Plenum, N.Y., P.75-85, (1976)</i> Comment : S, dS. 0.5-2 MeV He -> Al, Cu	1976-Luom 0854

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1977	Andersen, H. H. Bak, J. F. Knudsen, H. Moller-Petersen, P. Nielsen, B. R. 'Experimental Investigation of Higher-Order Z1 Corrections to the Bethe Stopping-Power Formula' <i>Nucl. Inst. Methods, 140, 537-540 (1977)</i> Comment : S. H (2-5.2 MeV) -> Al, Cu, Ag, Au	1977-Ande3 0908
1977	Mertens, P. 'Energy Loss of Light 100 - 300 keV Ions in Thin Metal Foils' <i>Nucl. Inst. Methods, 149, 149-153 (1978)</i> Comment : S, dS.H, He, Li, Be, B, C, N, O, F, Ne (300 keV) -> C, Ni, Co, Nb. 300 keV He, Ne, F, O, N -> C, Al, Ti, Mn, Fe, Co, Ni, Cu, Nb, Ag, Au	1977-Mert 0928
1978	Andersen, H. H. Knudsen, H. Martini, V. 'An Improved Method for Measuring Relative Stopping Powers of Light Ions in Solids' <i>Nucl. Inst. Methods, 149, 137-142 (1978)</i> Comment : S. 200-2000 keV H, He -> Cu, Ag	1978-Ande2 1132
1978	Ishiwari, R. Shiomi, N. Sakamoto, N. 'Re-Evaluation of Stopping Powers of Be,Al, Ti, V, Fe, Co, Ni, Cu, Mo, Rh, Ag, Ta, and Au for 28 MeV Alpha Particles' <i>Bull. Inst. Chem. Res. Kyoto Univ., 56, 47-48 (1978)</i> Comment : S, dS. 28 MeV He -> Be, Al, Ti, V, Fe, Co, Ni, Cu, Mo, Rh, Ag, Ta, Au	1978-Ishi3 1169
1979	Mertens, P. 'Electronic Stopping Cross Sections of 50-300 keV He and Li Ions' <i>Phys. Rev. A, 19, 1442-1447 (1979)</i> Comment : S. 50-300 keV He, Li -> C, Al, Cu, Ag, Au	1979-Mert 1130
1979	Mertens, P. 'Influence of the Foil Structure on Energy Loss Spectra' <i>Preprint (1979) 9</i> Comment : dS. 300 keV He, Ne, Ar -> Cu	1979-Mert2 1195
1979	Pucherov, N. N. Chesnokova, T. D. 'Energy loss of Helium Ions 3-7 MeV in B, Ti, Fe, Ni, Ni, Cu (In Russian)' <i>Ukr. Fiz. Zh., 24, 372-376 (1979)</i> Comment : S. He (3-7 MeV) -> B, Bi, Fe, Ni, Cu..	1979-Puch 1956
1980	Bednyakov, A. A. Bulgakov, Y. V. Nikolaev, V. S. Chernov, V. L. 'Energy Losses and their Straggling for H and He Ions with Energies of Several Hundreds of keV on Passage through Metal and Polystyrene Films' <i>Sov. Phys., JETP 51, 954 (1980)</i> Comment : S, dS. H, He (120-1300 keV) -> Al, Cu, Ag, Au, polystyrene	1980-Bedn 1615

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1980	Mertens, P. Krist, Th. 'Stopping Ratios of 50-300 keV Light Ions in Metals' <i>Nucl. Inst. Methods, 168, 33-39 (1980)</i> <i>Comment : S, dS. 30-300 keV H, He, Li, Be -> C, Al, Cu, Ag, Au</i>	1980-Mert 1313
1982	Mertens, P. Krist, Th. 'Stopping Ratios of 50 - 300 keV Light Ions in Metals' <i>Nucl. Inst. Methods, 194, 57 (1982)</i> <i>Comment : S. 50-300 keV H, He, Li, Be -> C, Al, Cu, Ag, Au</i>	1982-Mert 1133
1983	Krist, Th. Mertens, P. 'Stopping Ratios for 30-330 keV Light Ions in Materials with 57 <=Z2 <=83' <i>Nucl. Inst. Methods, 218, 821-826 (1982)</i> <i>Comment : S. H, He, Li (50-300 keV) -> C, Al, Cu, Ag, Au</i>	1983-Kris 1312
1984	Desmarais, D. Duggan, J. L. 'An Undergraduate Alpha Particle Time of Flight Experiment for Determining the Mean Excitation Energy for Electronic Stopping Power of Al, Cu, Ag and Au' <i>Am. J. Phys., 52, 408-411 (1984)</i> <i>Comment : S. He (2.5-3.8 MeV) -> Al, Cu, Ag, Au</i>	1984-Desm 1638
1984	Krist, Th. Mertens, P. 'Application of Brandt's Effective Charge Theory to Measurements for 50-350 keV Ions with 1<=Z1<=5' <i>Nucl. Inst. Methods, B2, 119-122 (1984)</i> <i>Comment : S. H, He, Li, Be, B (50-350 keV) -> C, Al, V, Cr, Fe, Ni, Cu, Zn, Ag, Pt, Au, Bi</i>	1984-Kris 1467
1985	Kuldeep Jain, A. K. 'Stopping Cross Sections of He Ions in Bismuth' <i>Nucl. Inst. Methods, B9, 259-262(1985)</i> <i>Comment : S. He (1.6-3.4 MeV) -> Bi, Cu</i>	1985-Kuld 1421
1987	Harith, M. A. Osman, W. H. Gaafar, N. S. El-Nadi, L. M. 'Stopping Power Measurements for MegaElectron Volt He Ions via Thin Films of Metals and Binary Metal Alloys' <i>Thin Solid Films, 149, 219 (1987)</i> <i>Comment : S. He (1.2-1.8 MeV) -> Cu, Ag, CuAg Alloys.</i>	1987-Hari 1967
1989	Borgesen, P. Lilienfeld, D. A. 'Stopping Cross Sections for RBS Analysis of High-Tc Superconductors' <i>Nucl. Inst. Methods, B36, 1-6 (1989)</i> <i>Comment : S. He (0.6-5.14 MeV) -> Y, Ba, Cu, YBa₂Cu₃O₇</i>	1989-Borg 1943

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1991	Sakamoto, N. Ogawa, H. Mannami, M. Kimura, K. Susuki, Y. 'Stopping Powers of Metallic Elements for High Energy Ions' <i>Rad. Effects, 117, 193-195 (1991)</i> <i>Comment : S. H (55-73MeV), He (13 MeV/amu), C (13 MeV/amu) -> Al, Ti, Mo, Sn, Ta, Au, Pb, Cu, Ag, Pt</i>	1991-Saka 1753
1994	Bae, Y. D. Bak, H. I. 'Measurement of He Ion Stopping Cross Sections for Cu, Ag and Au around the Maximum' <i>New Physics (Korea), 34, 423-433 (1994)</i> <i>Comment : S. He (0.2-2.0 MeV) -> Cu, Ag, Au</i>	1994-Bae 1666
1994	Bak, H. I. Bae, Y. D. Kim, C. S. Kim, M. S. 'Measurement of the Stopping Cross Sections of Cu, Ag, Au for 0.2-1.9 MeV He Ions' <i>Nucl. Inst. Methods, B93, 234-240 (1994)</i> <i>Comment : S. He (0.2-1.9 MeV) -> Cu, Ag, Au</i>	1994-Bak 1472
1994	Benka, O. Steinbauer, E. Bauer, P. 'Kinetic Electron Emission Yield induced by H and He Ions versus Stopping Power for Al, Cu, Ag and Au' <i>Nucl. Inst. Methods, B90, 64-66 (1994)</i> <i>Comment : S. H, He (0.5-4.8 MeV) -> Al, Cu, Ag, Au Electron emission effects.</i>	1994-Benk 2045
1995	Bak, H. Bae, Y. D. Byun, S. H. 'Reliability Analysis for the Method of Stopping Cross Section Determination with the Energy Width of RBS' <i>Sae Mulli (Korea), 35, 202-206 (1995)</i> <i>Comment : S. He (0.4-2.0 MeV) -> Cu, Ag, Au</i>	1995-Bak 1839
1995	Hae-Ill-Bak Young-Dug-Bae Soo-Hyun-Byun 'Reliability Analysis for the Method of Stopping Cross-Section Determination with the Energy Width of Rutherford Backscattering Spectrum' <i>Sae-Mulli, 35, 202-206 (1995)</i> <i>Comment : S. dS. He (0.4 - 2.0 MeV) -> Cu, Ag, Au</i>	1995-Hae 2379
1997	Vakevainen, K. 'Stopping Cross Sections of ZnSe, Zn and Cu for H, He and Li Ions' <i>Nucl. Inst. Methods, B122, 187-193 (1997)</i> <i>Comment : S. H, He, Li (0.4-8.9 MeV) -> ZnSe, Zn, Cu</i>	1997-Vake 2163
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