

Citations for Target : **CH4**

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
1953	Cook, C. J. Jones, E. Jr. Jorgensen, . 'Range-Energy Relations of 10- to 250-keV Protons and Helium Ions in Various Gases' <i>Phys. Rev.</i> , 91 , 1417-22 (1953) <i>Comment</i> : R. (4-250 keV) H, He -> H2, Ar, Air, N2, CO, CH4, O2 . Ionization Ranges.	1953-Cook 0762
1954	Boicourt, G. P. Brolley, J. E. 'Po Alpha Ranges in Various Counting Mixtures' <i>Rev. Sci. Inst.</i> , 25 , 95-96 (1954) <i>Comment</i> : R. 5.3 MeV He -> H2, He, N2, Ar, Ar + xx% CO2, CH4, Kr,	1954-Boic 0023
1955	Riezler, U. Rudloff, A. 'Ionisation und Energieverlust von Alpha-Teilchen in Verschiedenen Gasen' <i>Ann. Physik</i> , 18 , 224-245 (1955) <i>Comment</i> : R. S Rel. To Air. 5.3 MeV He -> He, Ne, Ar, Kr, Xe, H2, N2, O2, NH3, CO, CO2, NO, N2O, CH4, C2H6, C3H8, C4H10	1955-Riez 0567
1961	Riezler, W. Schepers, H. 'Ionisation und Energieverlust von Alpha-Teilchen in Verschiedenen Gasen' <i>Ann. Physik</i> , 8 , 270-277 (1961) <i>Comment</i> : R. S Rel. To Air 8.78 MeV He -> Air, He, Ne, Ar, Kr, H2, N2, O2, CO, CO2, CH4, C2H6, C3H8, C4H10	1961-Riez 0568
1966	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.</i> , 12 , 1475-80 (1966) <i>Comment</i> : S. 0.3-5 MeV He -> N2, Air, Kr, CO2, CH4	1966-Kerr 0793
1967	Hughes, S. 'The Range of 5-50 keV Heavy Ions in Various Gases' <i>Phys. Med. Biol.</i> , 12 , 565-71 (1967) <i>Comment</i> : R. 5-50 keV H+ -> Ar, CO2, N2, CH4, C2H5, C2H4, C3H8, C4H10. 5-30 keV N+ -> CH4	1967-Hugh 0642
1968	Rotondi, E. 'Energy Loss of Alpha Particles in Tissue' <i>Rad. Res.</i> , 33 , 1-9 (1968) <i>Comment</i> : S. 0.L-5.3 MeV He -> N2, O2, CH4, CO2	1968-Roto 0437
1969	Macdonald, J. R. Sidenius, G. 'The Total Ionization in Methane of Ions with $1 \leq Z1 \leq 20$ at Energies from 10 to 120 keV' <i>Phys. Letters A</i> , 28 , 543-44 (1969) <i>Comment</i> : S. 10-120 keV H, He, Li, Be, B, C, N, O, F, Ne, Na, Mg, Al, Si, P, S, Cl, Ar, Ca, V, Sc, Ti -> CH4	1969-Macd 0373

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Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb
1970	Swint, J. B. Prior, R. M. Ramirez, J. J. 'Energy Loss of Protons in Gases' <i>Nucl. Inst. Methods, 80, 134-40 (1970)</i> <i>Comment : S. 0.4-3.4 MeV H -> N2, Air, O2, Ne, Ar, Kr, CH4, CO2</i>	1970-Swin 0403
1972	Huetter, G. T. Madey, R. Yushak, S. M. 'Fluctuations in the Energy Loss of 66- and 100-MeV Protons in a Thin Proportional Counter' <i>Phys. Rev. A, 6, 250-55 (1972)</i> <i>Comment : dS. 66, 100 MeV H -> (0.9 Xe, 0.1 CH4)</i>	1972-Huet 0467
1973	Al-Bedri, M. B. Harris, S. J. Sykes, D. A. 'The Dependence of Energy Straggling on the Atomic Number of Absorber' <i>Nucl. Inst. Methods, 106, 241-43 (1973)</i> <i>Comment : dS. 5.2 MeV He -> He, Ne, Ar, Kr, CH4, CO2, N2, Air.</i>	1973-AI 0472
1973	Nakhutin, I. E. Demidovich, N. N. 'Range and Energy Loss of U-238 Alpha Particles in Certain Gases' <i>Yaderna Fiz., 17, 1245 (1973), English transl.: Sov. J. Nucl. Phys., 17, 649-653 (1973)</i> <i>Comment : R. He (0.6-5.5 MeV) -> CF4, CF2Cl2, SF6, CH4, CO2</i>	1973-Nakh 1727
1974	Demidovich, N. N. Nakhutin, I. E. Shatunov, V. G. 'Energy-Loss and Range Straggling of Alpha Particles from Pu238 in Some Gases' <i>Yaderna Fiz. (Russia), 18, 133-41 (1973). [Engl. Trans. Sov. J. Nucl. Phys., 18, 70-73 (1974).]</i> <i>Comment : S, dS. 3-5.5 MeV He -> CH4, CO2, CF4, CF2Cl2, SF6</i>	1974-Demi 0687
1974	Sidenius, G. 'Systematic Stopping Cross Section Measurements with Low Energy Ions in Gases' <i>Kgl. Danske Videnskab. Selskab. Mat. Fys.Medd., 39, No. 4, 1-32 (1974)</i> <i>Comment : S. 0.6-70 keV H, He, 2-120 keV 6Li, 7Li, 3-120 keV Be, B, C, N, O, F, Ne -> CH4</i>	1974-Side 0612
1975	Al-Bedri, M. B. Harris, S. J. 'Energy Straggling of Fission Fragments in Gases and Solids' <i>Nucl. Inst. Methods, 124, 125-130 (1975)</i> <i>Comment : dS. Cf Fiss. Frag. -> He, N, CO2, Ar, Kr, Ne, Air, Al, Ag, Cu, Au, CH4, Tissue Eq. Gas</i>	1975-AI 1273
1975	Brendle, M. Gugel, F. Steidle, G. 'The Ranges of Alpha Particles in H2, He, CH4 and CO2 at Energies from 0.5 to 5.3 MeV.' <i>Nucl. Inst. Methods, 130, 253-256 (1975)</i> <i>Comment : R. 0.5-5.3 MeV He -> H2, He, CH4, CO2</i>	1975-Bren 0790

Citations for Target : **CH₄**

Pub. Year	Authors, Title, Journal Citation and Comments	Citation Numb		
1976	<p>Thorngate, J. H. 'Measurements of Distributions of Energy Loss for 51, 102, and 153 keV Protons in Nine Hydrocarbon Gases' <i>Nucl. Inst. Methods, 137, 569-75 (1976)</i></p> <p><i>Comment : dS. 50-150 keV H -> CH₄ and many other Hydrocarbons</i></p>	<table border="1"> <tr><td style="text-align: center;">1976-Thor2</td></tr> <tr><td style="text-align: center;">0913</td></tr> </table>	1976-Thor2	0913
1976-Thor2				
0913				
1978	<p>Schmidt-Bocking, H. Hornung, H. 'Energy Straggling of Cl Ions in Gases' <i>Z. Physik A, 286, 253-261 (1978)</i></p> <p><i>Comment : dS. 9.4, 17.1, 27.1, 39.4 MeV Cl -> Ar-CH₄, Isobutane</i></p>	<table border="1"> <tr><td style="text-align: center;">1978-Schm</td></tr> <tr><td style="text-align: center;">1246</td></tr> </table>	1978-Schm	1246
1978-Schm				
1246				
1979	<p>Whillock, M. J. Edwards, A. A. 'Determination of the Stopping Cross Sections of N, H, CH₄, C₄H₁₀ and C₃H₆ using Alpha Particles in the Range 1.3-4.2 MeV' <i>Phys. Med. Biol., 24, 518-524 (1979)</i></p> <p><i>Comment : S. He (1.3-4.2 MeV) -> N, H, CH₄, C₄H₁₀, C₃H₆</i></p>	<table border="1"> <tr><td style="text-align: center;">1979-Whil</td></tr> <tr><td style="text-align: center;">1540</td></tr> </table>	1979-Whil	1540
1979-Whil				
1540				
1980	<p>Nguyen, V. D. Chemtob, M. Chary, J. Posny, F. Parmentier, N. 'Recent Experimental Results on W-Values (Average Energy Loss per Ion Pair) for Heavy Particles' <i>Phys. Med. Biol., 25 (3), 509-518 (1980)</i></p> <p><i>Comment : S. H, He, C, N, O, Ar (25-375 keV) -> CH₄, CO₂, N₂ (ionization chamber)</i></p>	<table border="1"> <tr><td style="text-align: center;">1980-Ngyu</td></tr> <tr><td style="text-align: center;">1487</td></tr> </table>	1980-Ngyu	1487
1980-Ngyu				
1487				
1980	<p>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., 25 (5), 865-875 (1980)</i></p> <p><i>Comment : S. He (0.2-5.5 MeV) -> He, N, Ar, CH₄, Air</i></p>	<table border="1"> <tr><td style="text-align: center;">1980-Thwa</td></tr> <tr><td style="text-align: center;">1489</td></tr> </table>	1980-Thwa	1489
1980-Thwa				
1489				
1981	<p>Thwaites, D. I. Watt, D. E. Yeung, T. K. 'Stopping Powers for Neutron Dosimetry' <i>Proc.4th Sym. on Neutron Dosimetry, EurAtom Rpt. 7448, 1, 291-303 (1981)</i></p> <p><i>Comment : S. He (0.3-5.4 MeV) -> CH₄, C₂H₄, C₃H₆, C₄H₁₀ (gases)</i></p>	<table border="1"> <tr><td style="text-align: center;">1981-Thwa2</td></tr> <tr><td style="text-align: center;">1563</td></tr> </table>	1981-Thwa2	1563
1981-Thwa2				
1563				
1982	<p>Thwaites, D. I. 'Stopping Cross Sections of CH₄, C₂H₄, C₃H₆ and C₄H₁₀ for Alpha Particles in the Energy Region 0.3-5.5 MeV' <i>Phys. Med. Biol., 27 (4), 565-571 (1982)</i></p> <p><i>Comment : S.He (0.3-5.5 MeV) -> CH₄, C₂H₄, C₃H₆, C₄H₁₀</i></p>	<table border="1"> <tr><td style="text-align: center;">1982-Thwa</td></tr> <tr><td style="text-align: center;">1491</td></tr> </table>	1982-Thwa	1491
1982-Thwa				
1491				
1983	<p>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></p> <p><i>Comment : S. He (0.1-1.2 MeV) -> H₂, He, N₂, O₂, Ne, Ar, Kr, Xe, CH₄ and CO₂</i></p>	<table border="1"> <tr><td style="text-align: center;">1983-Baum3</td></tr> <tr><td style="text-align: center;">1450</td></tr> </table>	1983-Baum3	1450
1983-Baum3				
1450				

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1984	Wilson, W. E. Miller, J. H. Toburen, L. H. Manson, S. T. 'Differential Cross Sections for Ionization of Methane, Ammonia and Water Vapor by High Velocity Ions' <i>J. Chem. Phys.</i> , 80 , 5631 (1984) <i>Comment</i> : S. H (3-4.2 MeV) -> H ₂ O, Ammonia, Methane	1984-Wils2 1786
1988	Herauld, J. Bimbot, R. Gauvin, H. Anne, R. Bastin, G. 'Interaction of 20-100 MeV/amu Heavy Ions with Cold Matter' <i>J. Physique Coll.</i> , 49C , 7-33 (1988) <i>Comment</i> : S. O, Ar, Ca, Kr, Mo, Xe (24-95 MeV/amu) -> Ne, Ar, Kr, Xe, CH ₄ , C ₄ H ₁₀ , N, CO ₂ , CF ₄ , Be, Al, Si, Ti, Ni, Cu, Ag, Ta, Au	1988-Hera 1972
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</i> , B44 , 399-411 (1990) <i>Comment</i> : S. H, He (0.7-3.0 MeV) -> H, He, N, O, Ne, Ar, Kr, Xe, CH ₄	1990-Reit 1933
2001	Diwan, P. K. Kumar, S. Singh, G. Singh, L. 'Energy Loss of Heavy Ions in Gases: A Comparative Study' <i>Rad. Meas.</i> , 33 , 193-202 (2001) <i>Comment</i> : S. Ne, S, Cl, Ar, Cu, Kr (1 - 80 MeV/u) -> H, He, N, Ar, Ne, Xe, CH ₄ , C ₄ H ₁₀ , CO ₂ , CF ₄	2001-Diwa2 2369