539.12

REGENERATION AMPLITUDES $f_{21} = |f_{21}| \exp(i\varphi_{21})$

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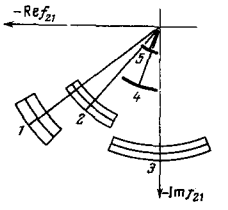
Nucleus	φ_{21}	$\lvert f_{21}\rvert$, 10^{-13} cm	P_K, GeV/c	Method of determination	Reference
$_{26}Fe^{56}$	$-142° \pm 7°$	13.7 ± 1.0	$P_{K^\pm} = 0.78$	Elastic scattering and total cross sections of $K^\pm$ mesons on iron	1
$_{29}Cu$	$-132° \pm 16°$	9.7 ± 0.8	$P_{K^\pm} = 1.1$	$K^\pm$-nucleon scattering amplitudes and total cross sections	2
$_{29}Cu$	$-90° \pm 23°$ *)	11.7 ± 0.7	$P_{K^\pm} = 2.7$	Total cross sections of $K^\pm$ on copper**	3
			$P_{K^0} = 1.0-5.0$	Regeneration cross section	4
$_6C^{12}$	$-109° \pm 18°$ *)	5.70 ± 0.23	$P_{K^\pm} = 4.5$	Total cross sections of $K^\pm$ on carbon**	3
$T = 0$			$P_{K^0} = 3.0-8.0$	Regeneration cross section	5
$_4Be^9$	$-114° \pm 20°$ *)	2.56 ± 0.21	$P_{K^\pm} = 1.55$	Total cross sections of $K^\pm$ on beryllium**	3
$T = 1/2$			$P_{K^0} = 0.8-2.8$	Regeneration cross section	6

*It is assumed that Re $f_{21} < 0$

** $\mathrm{Im}\, f_{21} = \frac{1}{2}\mathrm{Im}\,(f_K - f_{\bar{K}}) = \frac{k}{8\pi}[\sigma_{K^+}^{(tot)} - \sigma_{K^-}^{(tot)}]$.



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