

Table S: The MAC (cm²/g), LAC (cm⁻¹), Z_{eff}, HVL (cm), TVL (cm) values for the studied zeolite framework structures at selected photon energies (MeV), highlighting their gamma-ray interaction efficiency.

AFO- type/ Energy (MeV)	E=0.015					E=0.15					E=1.5					E=5.0					E=10.0					E=15.0				
	MAC	LAC	Z _{eff}	HVL	TVL	MAC	LAC	Z _{eff}	HVL	TVL	MA	LAC	Z _{eff}	HVL	TVL	MAC	LAC	Z _{eff}	HVL	TVL	MAC	LAC	Z _{eff}	HVL	TVL	MAC	LAC	Z _{eff}	HVL	TVL
AlPO-41	7.21	27.86	13.28	0.025	0.083	0.139	0.537	10.99	1.293	4.287	0.051	0.196	10.89	3.529	11.725	0.028	0.110	11.00	6.316	20.981	0.023	0.088	11.15	7.875	26.161	0.021	0.082	11.26	8.425	27.989
SAPO-41	7.14	27.54	13.23	0.025	0.084	0.139	0.536	10.97	1.293	4.295	0.051	0.196	10.86	3.534	11.739	0.028	0.110	10.97	6.326	21.016	0.023	0.088	11.13	7.893	26.219	0.021	0.082	11.23	8.447	28.060
MnAPO-41	9.06	35.33	14.96	0.020	0.065	0.141	0.550	11.33	1.261	4.189	0.051	0.198	11.12	3.506	11.647	0.028	0.111	11.27	6.239	20.727	0.023	0.090	11.48	7.719	25.641	0.022	0.084	11.62	8.215	27.290
MnAPSO-41	9.03	35.16	14.95	0.020	0.065	0.141	0.549	11.32	1.262	4.193	0.051	0.198	11.11	3.508	11.654	0.028	0.111	11.26	6.244	20.743	0.023	0.090	11.46	7.727	25.668	0.022	0.84	11.61	8.225	27.323