

Distribution of tissue optical properties in the human head

850 nm

Tissue	Origin	Absorption coefficient (μ_a) (mm $^{-1}$)	Scattering coefficient (μ_s) (mm $^{-1}$)	Scattering anisotropy factor (g)	Refractive index (n)	Citation
WM	Native head	0.08	14	0.95	-	Roggan <i>et al</i> (1994)
WM	Native head	0.1	34.2	0.88	-	Yaroslavsky <i>et al</i> (2002)
WM	Coagulated head	0.09	17	0.94	-	Roggan <i>et al</i> (1994)
WM	Coagulated head	0.09	30	0.88	-	Yaroslavsky <i>et al</i> (2002)
Scalp	Cadaveric head	0.012	1.8 (μ'_s)	-	-	Yue <i>et al</i> (2015); Yue & Humayun (2015)
Skull	Cadaveric head	0.025	1.6 (μ'_s)	-	-	Yue <i>et al</i> (2015); Yue & Humayun (2015)
GM	Cadaveric head	0.036	0.9 (μ'_s)	-	-	Yue <i>et al</i> (2015); Yue & Humayun (2015)
WM	Cadaveric head	0.014	1.1 (μ'_s)	-	-	Yue <i>et al</i> (2015); Yue & Humayun (2015)
CSF	Cadaveric head	0.009	0.8 (μ'_s)	-	-	Yue <i>et al</i> (2015)

WM	Monte Carlo Simulation	0.10	35	0.87	1.37	Cassano et al., (2019)
GM	Monte Carlo Simulation	0.033	7	0.9	1.37	Cassano et al., (2019)
CSF	Monte Carlo Simulation	0.0420	-	-	1.37	Cassano et al., (2019)
Skull	Monte Carlo Simulation	0.011	-	-	1.37	Cassano et al., (2019)
Scalp	Cadaveric head	0.0180	1.30 (μ'_s)	-	1.4	Sawosz et al., (2016)
Skull	Cadaveric head	0.0118	1.20 (μ'_s)	-	1.4	Sawosz et al., (2016)
CSF	Cadaveric head	0.0041	1.00 (μ'_s)	-	1.4	Sawosz et al., (2016)

760 nm

* = 759 nm

Tissue	Origin	Absorption coefficient (μ_a) (mm ⁻¹)	Scattering coefficient (μ_s) (mm ⁻¹)	Scattering anisotropy factor (g)	Refractive index (n)	Citation
Scalp	Adult head	0.02	1.0 (μ'_s)	-	-	Okada et al., (2009), conference paper
Skull	Adult head	0.016	0.8 (μ'_s)	-	-	Okada et al., (2009), conference paper
GM	Adult head	0.036	2.26 (μ'_s)	-	-	Okada et al., (2009), conference

						paper
WM	Adult head	0.016	9.25 (μ' _s)	-	-	Okada et al., (2009), conference paper
*Scalp	Adult head	0.015	1.5 (μ' _s)	0	1.37	Hoshi et al., (2005)
*Skull	Adult head	0.012	0.7 (μ' _s)	0	1.37	Hoshi et al., (2005)
*CSF	Adult head	0.0033	0.1 (μ' _s)	0	1.37	Hoshi et al., (2005)

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