

Table 5: Literature comparison of heat transfer mechanisms in heat sinks.
Sources: Culham & Muzychka (2001), Teertstra et al. (2000), Kraus & Bar-Cohen (1995).

Cooling Method	Convection %	Other %	Application	Reference
Natural convection	85	15	Passive cooling	Kraus & Bar-Cohen (1995)
Forced convection (low)	92	8	Desktop PC fans	Teertstra et al. (2000)
Forced convection (medium)	95	5	Server cooling	Culham & Muzychka (2001)
Forced convection (high)	97	3	Industrial cooling	Electronics Cooling Mag.
Monte Carlo Results				
Silver (high α)	38.7	61.3	Fast heat spreading	This work
Copper (medium α)	50.1	49.9	Balanced behavior	This work
Steel carbon (low α)	92.9	7.1	Residence time effect	This work