Kind of trap	Bond-Energy in K Joule/mol	Classification
Interstitial resolved atoms (N, C, Si, Ti)	3 5	Weak bonding Reversible
Hydrogen on interstitial locations (bcc; fcc)	4.2	Weak bonding Reversible
Electromagnetic field adjacent to a dislocation	0 20	Weak bonding Reversible
Core of a screw dislocation	20 30	Weak bonding Reversible
One dimensional defect (Hole)	46	Weak bonding Reversible
Core of an Edge Dislocation	60	"Transitional" Trap
Grain Boundary	60	"Transitional" Trap
Free Iron Surface (Crack)	70 100	Strong Bonding Irreversible
Phase Boundary Fe/AIN	65	Strong Bonding Irreversible
Phase Boundary Fe/Cementite	80 84	Strong Bonding Irreversible
Phase Boundary Fe/TiC	90 96	Strong Bonding Irreversible