

Numbers for Point Defect Diffusion

Here a few numbers to point defect diffusion

- Numbers like this always should be taken with a grain of salt; they are often to a bit of doubt. It is not uncommon that newer measurements or new interpretations of old measurements give quite different results.

Illustration

Diffusing Atom	Host Crystal	Diffusion Mechanism	Migration Enthalpy (eV)	D_0 [cm^2/s]
C	Fe	interstitial	1,25	0,008
N	Fe	interstitial	0,78	0,007
H	Fe	interstitial	0,43	0,01
Ni	Fe	substitutional	2,86	0,5
Co	Fe	substitutional	2,34	0,2
Si	Fe	substitutional	2,08	0,4
Al	Cu	substitutional	1,69	0,07
S	GaAs	substitutional	4,0	4000
Zn	GaAs	substitutional	2,47	$1,5 \cdot 10^{-8}$
P	Si	substitutional		
As	Si	substitutionell		
B	Si	substitutional		
Si	Si			
O	Si			
Cu	Si			
Li	Si			