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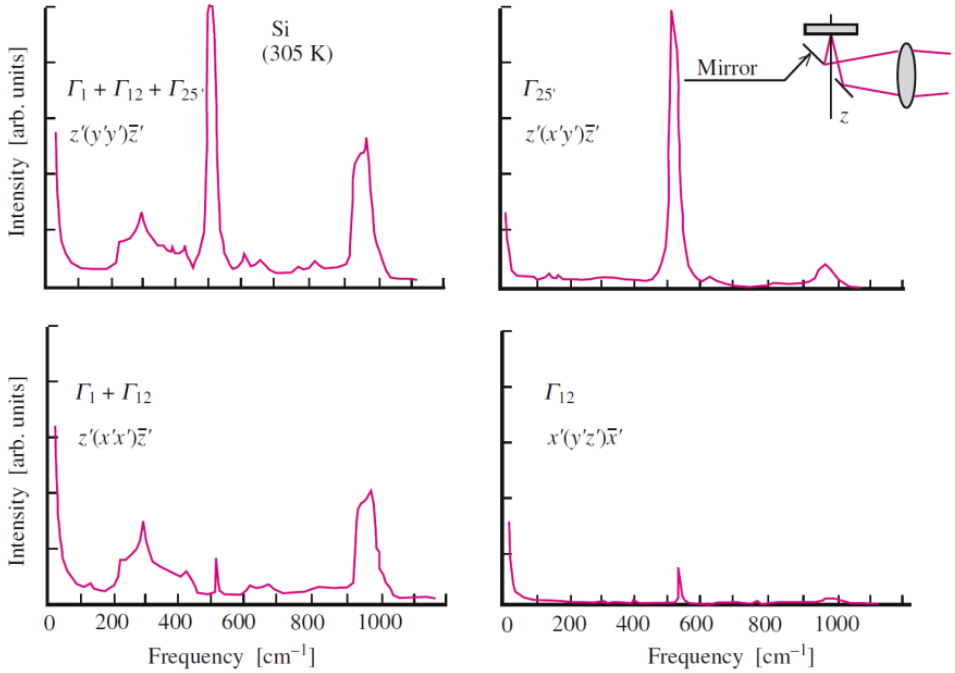
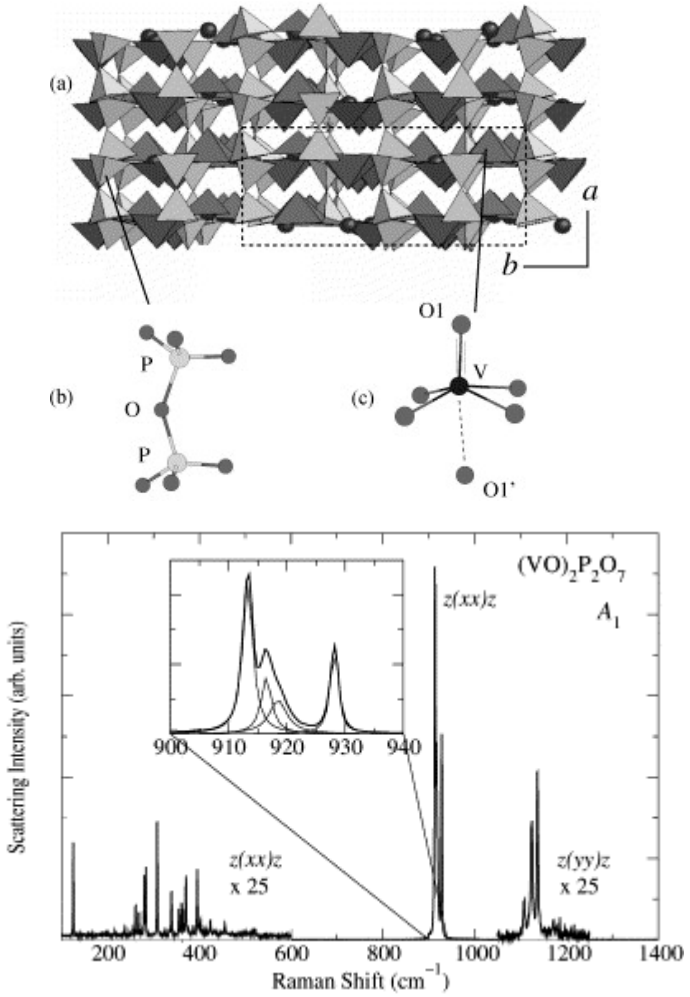
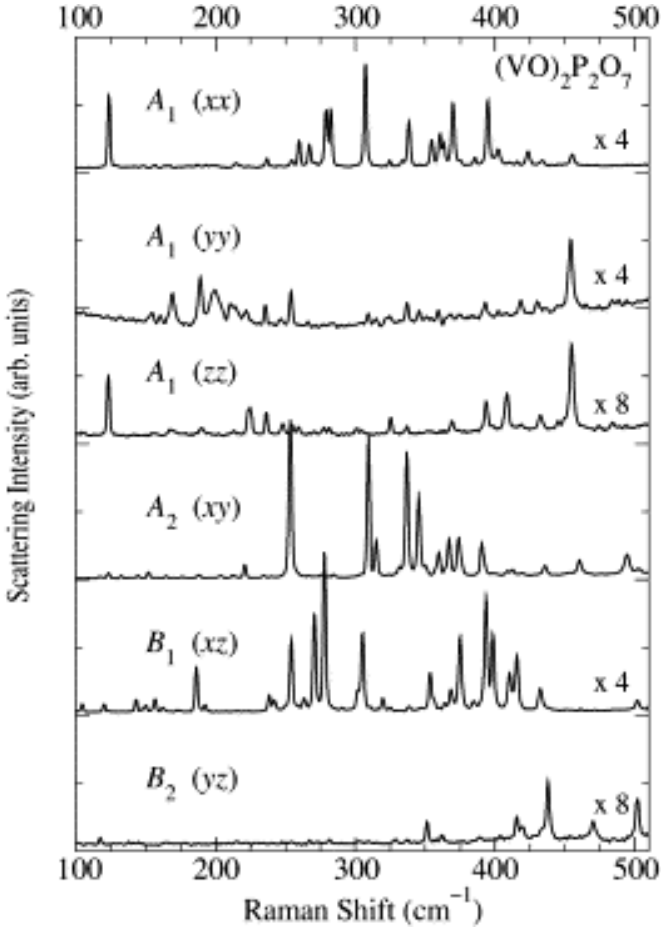


VOPO - Vanadyl pyrophosphate





Kuhlmann, Physica B (2001)

VOPO - Vanadyl pyrophosphate

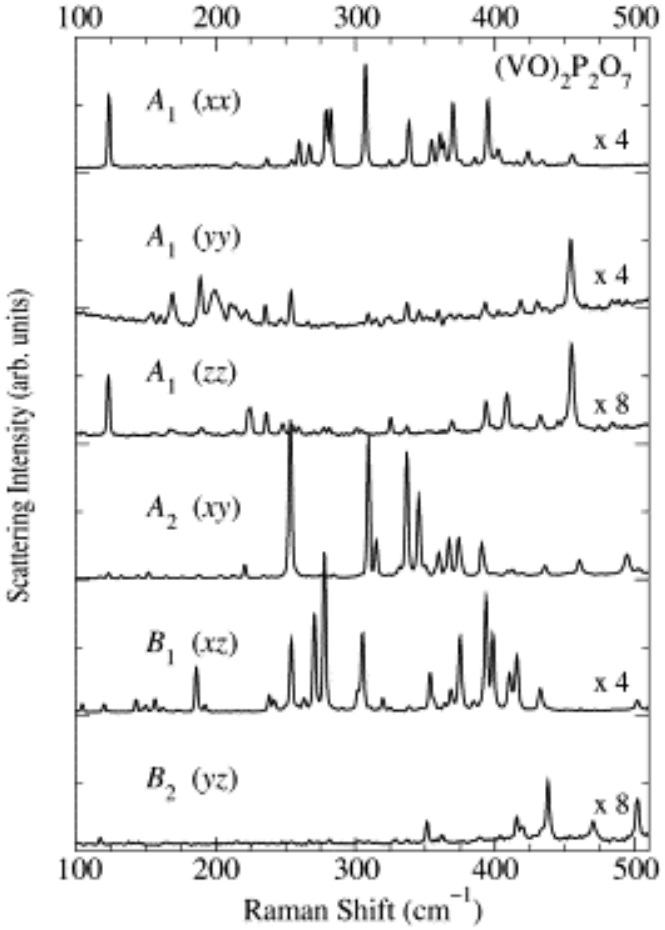
C_{2v} Point Group

Abelian, 4 irreducible representations

Subgroups of C_{2v} point group: C_s, C_2

Character table for C_{2v} point group

	E	C_2 (z)	σ_v(xz)	σ_v(yz)	linear, rotations	quadratic
A_1	1	1	1	1	z	x^2, y^2, z^2
A_2	1	1	-1	-1	R_z	xy
B_1	1	-1	1	-1	x, R_y	xz
B_2	1	-1	-1	1	y, R_x	yz



Kuhlmann, Physica B (2001)

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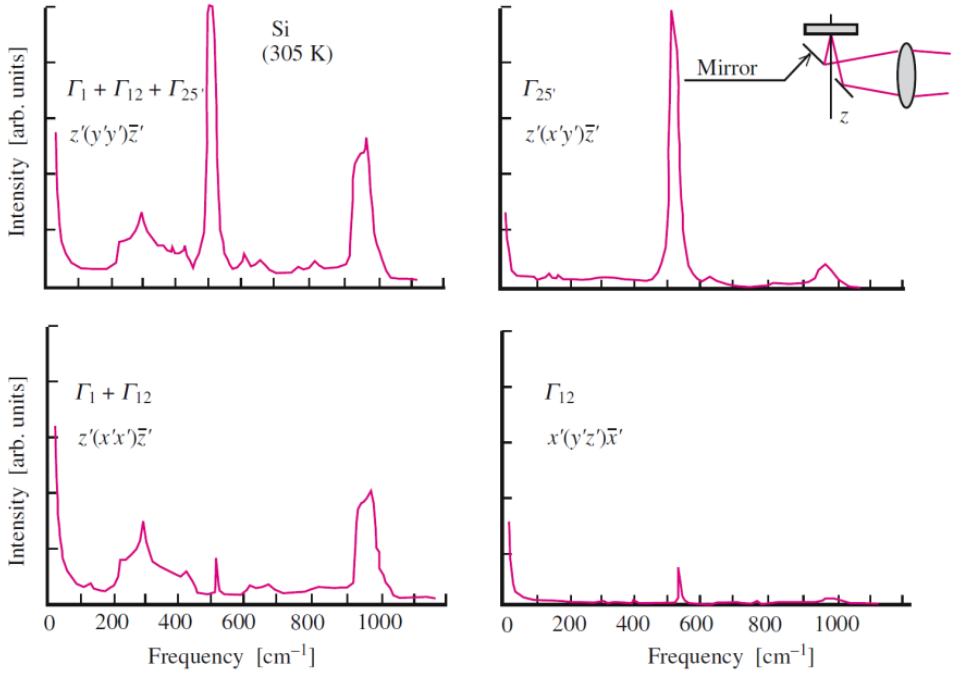

Phonon DOS & 2nd order Raman

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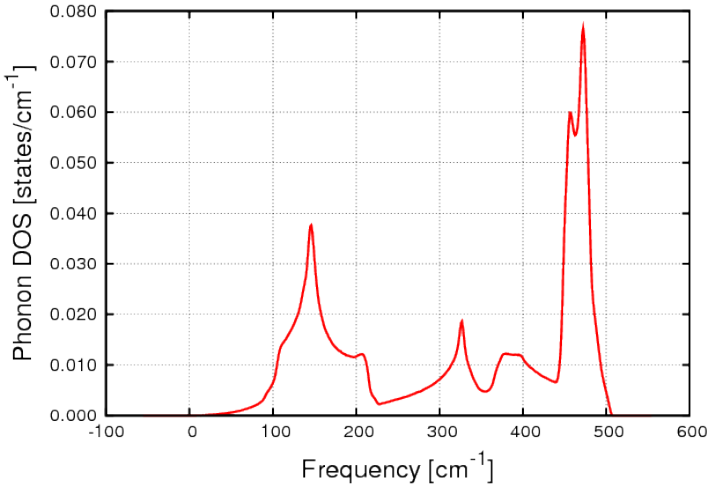
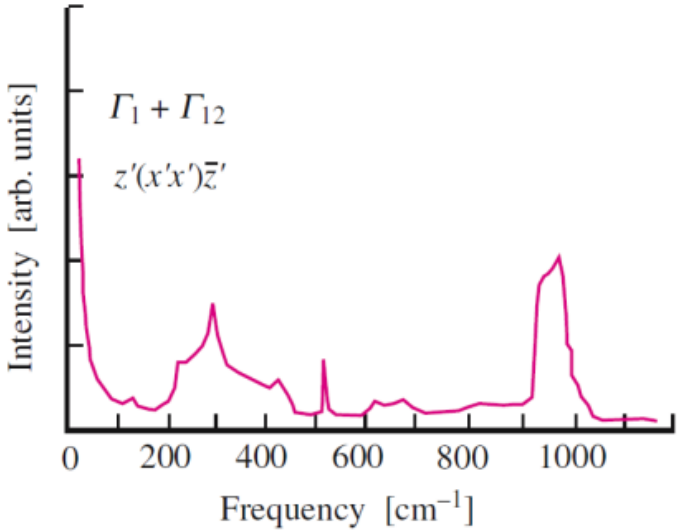
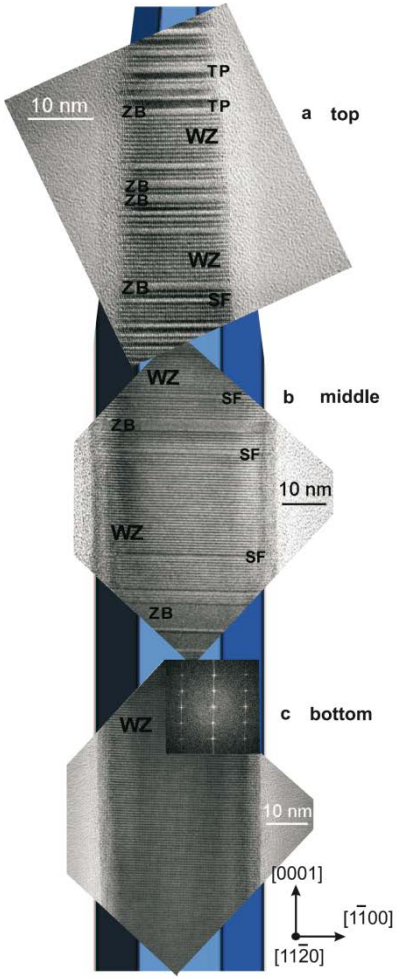
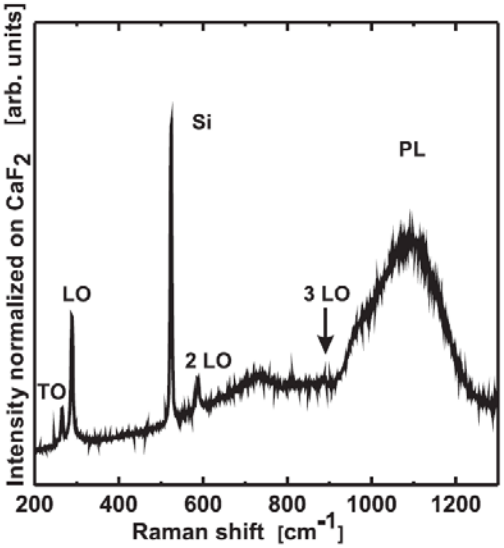
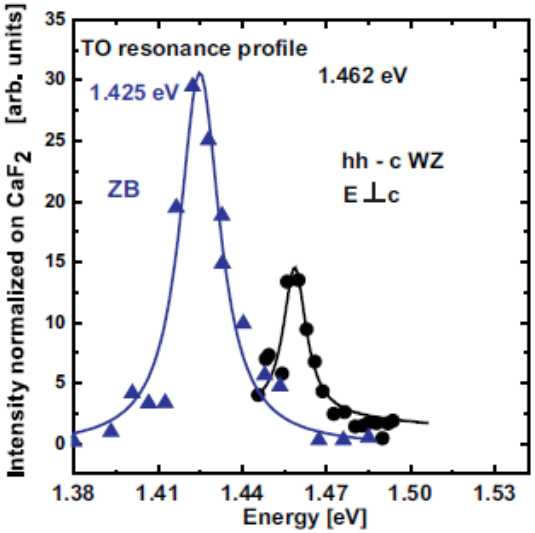


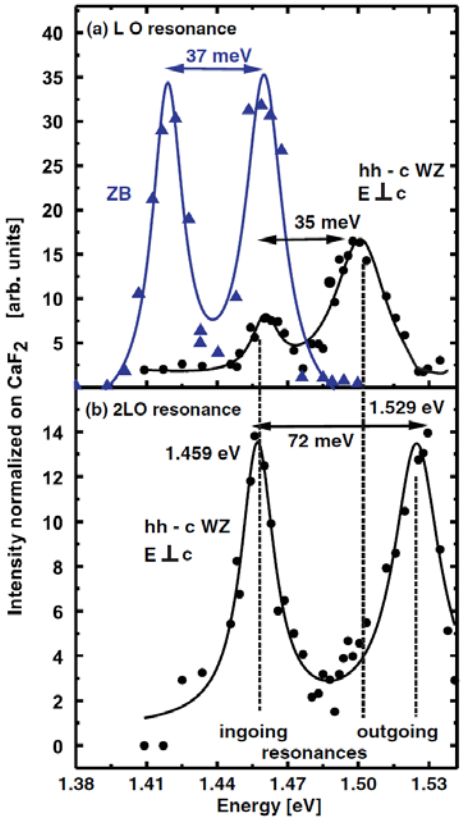


Resonant Raman scattering

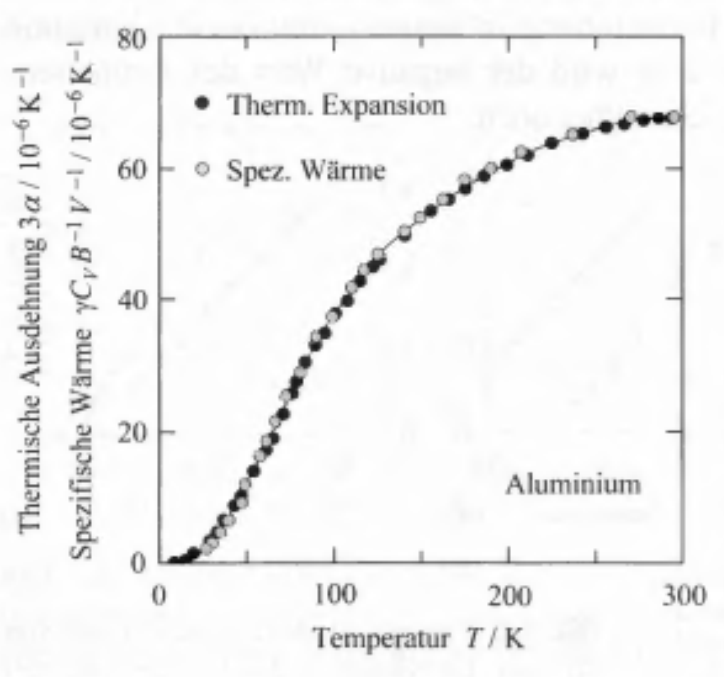






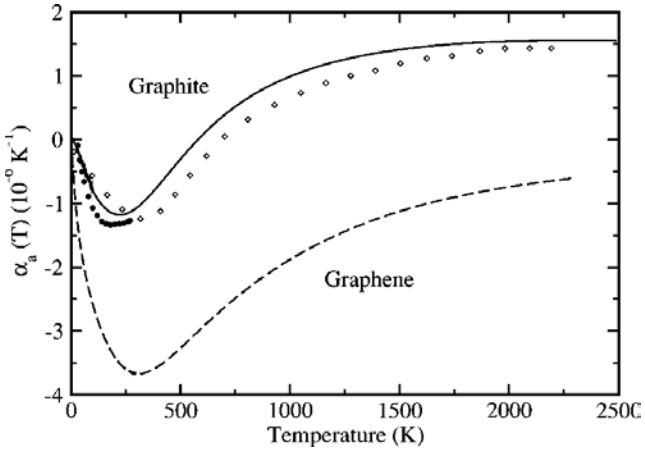


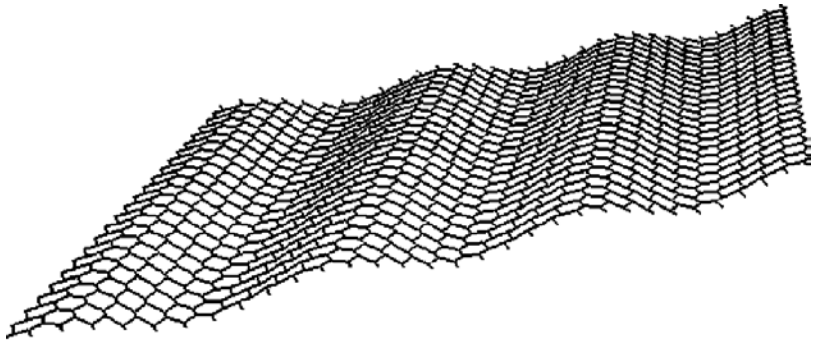
Thermal expansion

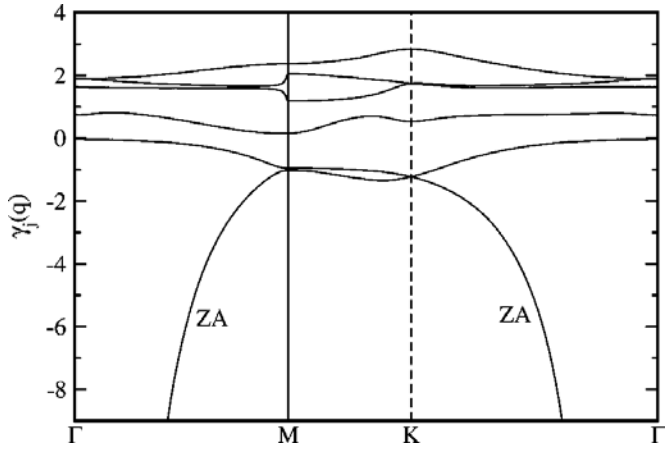


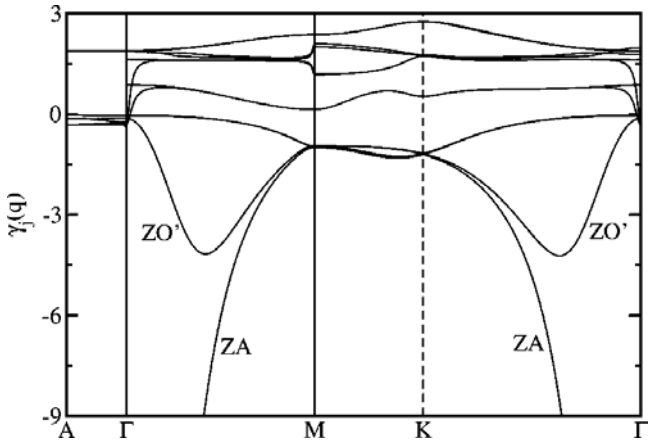
Hunklinger

Thermal expansion - graphite



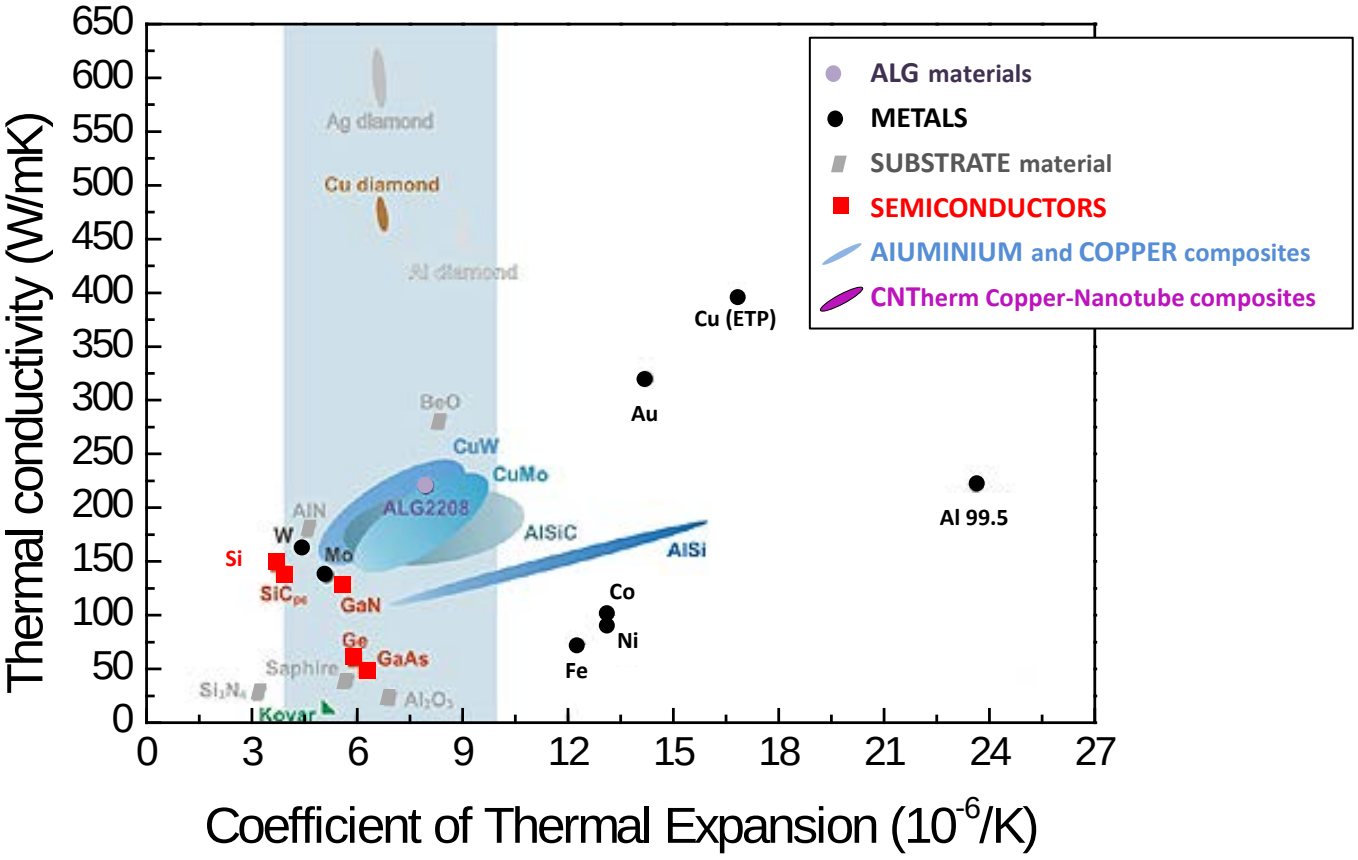






Bonini, Phys. Rev. B (2005)

CTE engineering



CTE engineering

Copper composites with carbon nanotubes and graphene