

occurs only over a limited range of x , and the superconducting phase usually is sandwiched between a conducting and a semiconducting phase, (2) T_c increases rapidly as x approaches the semiconducting phase boundary and disappears abruptly beyond the phase boundary, and (3) they all have atoms occupying the octahedral sites with

six oxygen nearest neighbors. Further study is under way way to look for possible pressure or temperature induced electronic transition in $\text{BaPb}_{1-x}\text{Bi}_x\text{O}_3$ and to understand the causes responsible for the peculiar superconducting behavior in these high T_c oxide systems.

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