





















## Superconductivity in $\text{Sr}_2\text{RuO}_4$ and $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$

between the ions in each compound (compare Table 6 and Table 7), which is reflected on their different Debye temperatures.

The results for the superconducting constants in the bottom table point out that the superconductivity in  $\text{Sr}_2\text{RuO}_4$  is BCS-like whereas the superconductivity in  $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$  could also correspond to the BCS theory or, on the other hand, an as yet unknown second pairing mechanism must be available.

Superconductor	$c$
$\text{Sr}_2\text{RuO}_4$	2.43
$\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$	0.91

**Table 11:** Calculated superconducting constant in  $\text{Sr}_2\text{RuO}_4$  and  $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ .

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## Superconductivity in $\text{Sr}_2\text{RuO}_4$ and $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$

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