

**TITLE:** Critical temperature of a SN sandwich

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**ABSTRACT:** From a comparison of the experimental and theoretical dependences  $T_c$  ( $d/S$ ) it follows that transition-metal thin films are close in their structure to the sandwiches treated, and consist of a film of a superconductor with a critical temperature  $T_c$  coated with a layer of a normal metal with zero or low critical temperature. This comparison also confirms that the calculations of the critical temperature of a SN sandwich actually allow one to determine the values of the parameters  $\gamma$  and  $\gamma_M$  for particular pairs of S and N metals. Knowing these parameters is especially important in the search for new materials for Josephson weak links, both with direct and tunneling conduction.

**NUMBER OF REFERENCES:** 16

**DESCRIPTORS:** [Josephson-effect](#); [superconducting-junction-devices](#); [superconducting-transition-temperature](#); [superconductive-tunnelling](#)

**IDENTIFIERS:** [superconductor-normal-sandwich](#); [superconducting-transition-temperature](#); [transition-metal-thin-films](#); [critical-temperature](#); [Josephson-weak-links](#); [tunneling-conduction](#)

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**TREATMENT**