

Abstract Submitted  
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**Oxygen Anneal Effect on Single Crystalline  $\text{Sr}_2\text{RhO}_4 - x$**   
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UMEYAMA, NAOKI SHIRAKAWA, NANOELECTRONICS RESEARCH INSTI-  
TUTE, AIST TEAM — Two dimensional perovskite-type transition metal oxides  
provide rich issues which originate from strong electron-electron correlation such as a  
spin triplet superconductivity in  $\text{Sr}_2\text{RuO}_4$ , quantum criticality at around the meta-  
magnetic transition in  $\text{Sr}_3\text{Ru}_2\text{O}_7$  and antiferromagnetic metal phase in  $\text{Ca}_3\text{Ru}_2\text{O}_7$ .  
We regard Rh oxides as another intriguing materials because of the similarity. Es-  
pecially,  $\text{Sr}_2\text{RhO}_4$  has been studied using single crystals grown by a floating-zone  
method. The importance of the oxygen content in  $\text{Sr}_2\text{RhO}_4$  will be discussed based  
upon the results of electrical resistivity, magnetic susceptibility and specific heat.

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