

Patent title:	Semiconductor detector, radiation detector and radiation detection apparatus
FBK center:	CMM
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Abstract:	Provided are a semiconductor detector (1), a radiation detector (2) and a radiation detection apparatus that allow for reduction in size of the radiation detector (2) and enhancement in accuracy of radiation detection by loosening the condition of cooling. A semiconductor detector (1) for detecting radiation comprises a first semiconductor part (11) in which an electron and a hole are generated by incident radiation; a signal output electrode (14) outputting a signal base on the electron or the hole; and a gettering part (13) gettering impurities in the first semiconductor part (11). In addition, the semiconductor detector (1) further comprises a second semiconductor part (12) doped with a type of dopant impurities and having dopant impurity concentration higher than that of the first semiconductor part (11). The second semiconductor part (12) is in contact with the first semiconductor part (11). The gettering part (13) is in contact with the second semiconductor part (12) and not in contact with the first semiconductor part (11).