

The invention relates to the field of obtaining semiconductor materials monocrystals and may be used in growing silicon monocrystal of the melt by Czochralski technique. The aim of the invention is to provide formation of optimal dynamics of gas flow above the melt which results in the lack of deposition of silicon monoxide and volatile evaporated admixtures, and also formation of optimal gas flow above the melt while changing diameter of monocrystal to be grown. This is achieved by the proposed method of silicon monocrystal growing of the melt which comprises forming gas flow above the melt in the presence of the screen disposed above the plane of the melt coaxially to the silicon monocrystal to be grown, at that lower end of the said screen is disposed above the melt plane at a height being calculated according to the formula:

$$h = (A - D) / B,$$

wherein h – height of disposition of the lower end of screen above the level of melt, mm,

D – given diameter of the silicon monocrystal ingot being in the range of 75-150 mm,

A – dimension factor being in the range of 210-240,

B – coefficient being in the range of 4.6-5.0, and at that diameter of cylindrical screen is equal to 235-245 mm.