

亚磁空间生物学效应研究的实验系统

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直径2 m的补偿式亚磁空间中, 内置非铁磁性智能化多功能实验箱系统, 箱内温控范围20~40°C, 精度0.1°C, 过温报警, 湿度可控范围40%~80%, 通风和光照任意。箱内中央空间(长×宽×高=66.0 cm × 40.0 cm × 28.3 cm)中, 80%、15%和5%的位点剩余磁场分别平均为地磁场的0.5%~0.6%、1.3%~1.5%和2.7%~4.2%。箱内中央空间的高度为43.0 cm时, 55%、35%和10%的位点剩余磁场分别平均为地磁场的1.9%、2.3%和3.3%。可用于多种生物学效应的观察和研究。

AN EXPERIMENTAL SYSTEM FOR RESEARCH THE BIOLOGICAL EFFECTS OF HYPOMAGNETIC FIELD SPACE

A nonmagnetic and intelligentized multifunctional experimental box system is placed inside of a compensatory hypomagnetic field space with 2 m of diameter. In the box, the temperature can be controlled in the range of 20~40°C at the precision of 0.1°C. When the temperature exceeded the limits, it will give an alarm. Its humidity range is 40%~80% and the aeration and illumination are controlled automatically. In the space of the box (length × width × height=66.0 cm × 40.0 cm × 28.3 cm), the remanent magnetic-field intensities at 80%, 15% and 5% of the measuring points are 0.5%~0.6%, 1.3%~1.5% and 2.7%~4.2% of the geomagnetic field intensity, respectively. When the height of the middle space of the box is expanded to 43.0 cm, the remanent magnetic-field intensities at 55%, 35% and 10% of the measuring points are 1.9%, 2.3% and 3.3% of the geomagnetic field intensity, respectively. The system can be used in the observation and study for many biological effects.

关键词

亚磁空间(Hypomagnetic field space); 生物学效应(Biological effects); 实验系统(Experimental system)