

专刊

Source identification of individual PM_{2.5} particles in Shanghai air in the winter of 2007 with synchrotron X-ray fluorescence microprobe

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摘要 In order to further understand the sources of PM_{2.5} in Shanghai air, the synchrotron X-ray fluorescence microprobe at the BL-4A Beamline of Photon Factory of High Energy Accelerator Research Organization, Japan, was applied to analyze the individual PM_{2.5} particles collected from Shanghai air in the winter of 2007. Eight categories of emission sources were recognized in these individual particles. The source identification shows that most of the analyzed PM_{2.5} particles are derived from vehicle exhaust and metallurgical emissions. This suggests that the important emission sources of PM_{2.5} in Shanghai air would be vehicle exhaust and metallurgical activities.

关键词 [synchrotron X-ray fluorescence microprobe](#), [PM_{2.5}](#), [individual particle analysis](#)

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