Formation of carbide particles by the advanced gas evaporation method

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On focusing the growth of metallic carbide particles and the formation of pre-solar grain, a new attempt has been tried on Fe-C and Ti-C systems. The smoke of metallic particles which was produced by the evaporation of metal from the under evaporation source in Ar gas at 80 Torr passed through the evaporation source of carbon. In the case of iron particles, Fe3C layer of 5nm thickness covered the spherical iron particle. The present particles covered with Fe3C were isolated. This shows that iron particles with zigzag chain became to isolate particle with accompany the growth of surface carbide layer. In the case of Ti-C system, TiC particles were produced and a lot of TiC particles were covered with amorphous carbon layer.