

عنوان مقاله:

Surveying aerosol deposition in a turbulent duct flow

محل انتشار:

بیستمین کنفرانس سالانه مهندسی مکانیک (سال: 1391)

تعداد صفحات اصل مقاله: 4

نویسنده:

خلاصه مقاله:

Transport and deposition of nano and micro particles in a fully developed turbulent duct flow ($Re=6657$) are studied. An empirical mean velocity profile and anisotropy DNS data for turbulent intensities are used in the analysis. The dispersed phase is studied in the Lagrangian frame of reference. The computational predictions of particles deposition velocity are compared to the available experimental data and those of our earlier studies. Results reveal that albeit DNS data was used in the simulations belong to a flow with Reynolds number of 13000, the predicted particles deposition velocity agree well with the experimental data.

کلمات کلیدی:

aerosol, anisotropy, deposition, DNS, Lagrangian, turbulence

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/151538>

