METHOD FOR FORMING METAL OXIDE

ABSTRACT

A novel method for forming a metal oxide is provided. The metal oxide is formed using a precursor with a high decomposition temperature while a substrate is heated to higher than or equal to 300 °C and lower than or equal to 500 °C. In the formation, plasma treatment, microwave treatment, or heat treatment is preferably performed as impurity removal treatment in an atmosphere containing oxygen. The impurity removal treatment may be performed while irradiation with ultraviolet light is performed. The metal oxide is formed by alternate repetition of precursor introduction and oxidizer introduction. For example, the impurity removal treatment is preferably performed every time the precursor introduction is performed more than or equal to 5 times and less than or equal to 10 times.

Figure. 1E