

Evolution of materials by photochemical reactions in molecular cloud

Akira Kouchi[1], Naoki Watanabe[2]

[1] Inst. Low Temp. Sci., Hokkaido Univ, [2] Inst. of Low Temp. Sci., Hokkaido Univ.

We review the evolution of materials (molecule, organic materials, etc.) in interstellar clouds by photochemical reactions. We focus our attention to: (i) formation of simple molecules in icy grains, (ii) formation of organic matter by photochemical reaction in molecular cloud, (iii) metamorphism of organic matter in diffuse cloud.