

Showcasing research from the group of Associate Professor Tomonori Ohba at the Graduate School of Science, Chiba University, Japan

Extremely permeable porous graphene with high $\rm H_2/CO_2$ separation ability achieved by graphene surface rejection

This paper reports that graphene has the potential to be an extremely thin gas separator. Porous single-, bi-, and four-layer graphene has high selectivity among H_2 , CO_2 , and CH_4 . Extremely high permeability with high selectivity was seen compared with other materials. The different dynamic and interaction properties of the gases provided different permeation rates *via* porous graphene despite the larger pores of graphene.

As featured in:



See K. Shimizu and T. Ohba, Phys. Chem. Chem. Phys., 2017, **19**, 18201.

