Ultrathin, Molecular-Sieving Graphene
Selective Gas Transport Through Separated 3-Aminophenol Conformers with Cold Ca++ Ions
Specific Chemical Reactivities of Spatially Separated 3-Aminophenol Conformers with Cold Ca++ Ions
Selective Gas Transport Through Few-Layered Graphene and Graphene Oxide Membranes
Ultrathin, Molecular-Sieving Graphene Oxide Membranes for Selective Hydrogen Separation
A molecular beam technique measures the rotational conformations.
Nitrogen Isotopic Composition and Density of the Archean Atmosphere
Earth’s Archean atmosphere contained roughly as much nitrogen between 3.0 and 3.5 billion years ago as it does today.

Following Gene Duplication, Paralog Interference Constrains Transcriptional Circuit Evolution
C. R. Baker et al.
Interactions between recent gene duplicates may create functional interference, selecting for regulatory complexity.

Surviving in a Marine Desert: The Sponge Loop Retains Resources Within Coral Reefs
J. M. de Goeij et al.
Sponges take up dissolved organic matter and convert it into consumable cellular material.

Allele-Specific Silencing of Mutant Myh6 Transcripts in Mice Suppresses Hypertrophic Cardiomyopathy
J. Jiang et al.
In a mouse model, heart disease can be delayed by a therapy that prevents expression of the disease-causing mutation.

A Thylakoid-Located Two-Pore K+ Channel Controls Photosynthetic Light Utilization in Plants
L. Carraretto et al.
The electrochemical gradient used to make adenosine triphosphate in photosynthesis is modulated by potassium counterflow.

Fungal Small RNAs Suppress Plant Immunity by Hijacking Host RNA Interference Pathways
A. Weiberg et al.
A pathogenic fungus delivers small RNA molecules to disable gene regulatory systems in the target plant.

Crystal Structure of Na+, K+-ATPase in the Na+-Bound State
M. Nyblom et al.
The location of three bound sodium ions and the mechanism of sodium release in a key plasma membrane ion pump are revealed.

Quantifying Long-Term Scientific Impact
D. Wang et al.
Early citation history can be used to model the total number of citations a paper will receive and to compare journals.