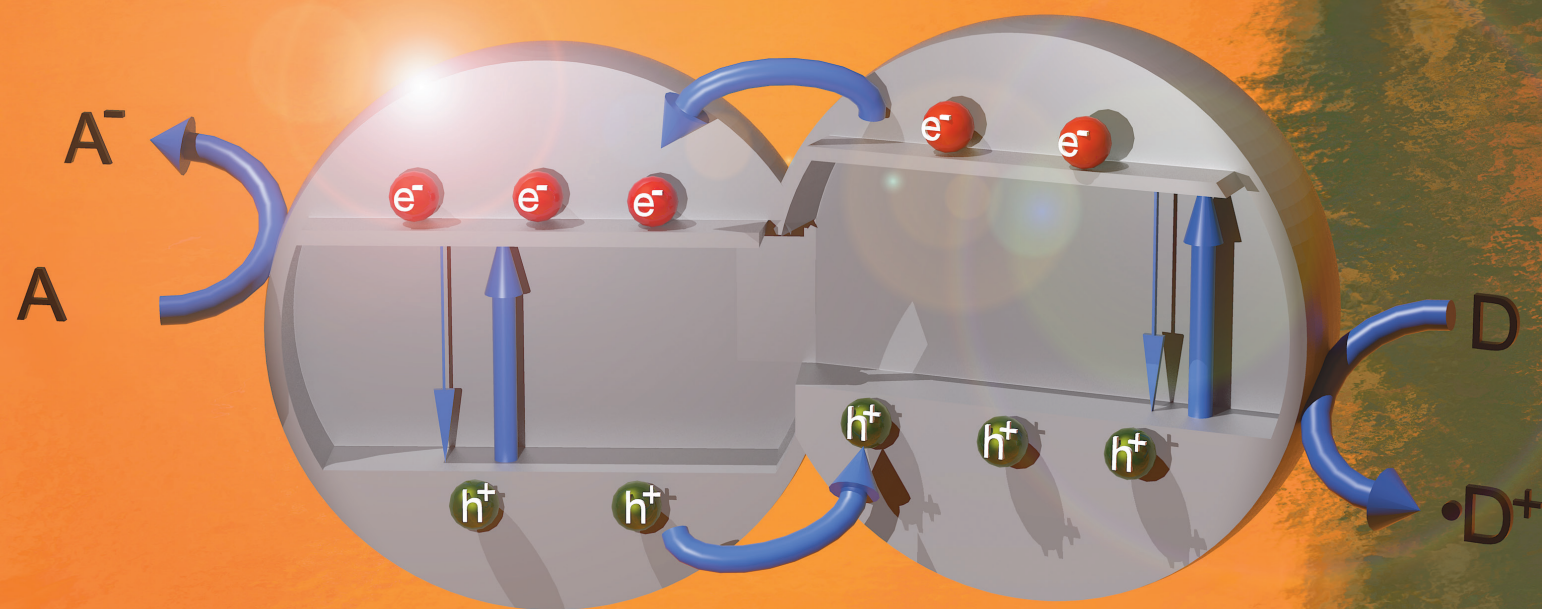


ADVANCED FUNCTIONAL MATERIALS



PHOTOCATALYSIS

R. Marschall discusses semiconductor composites on page 2421, a currently highly investigated strategy to improve photocatalytic efficiencies. The image shows the possible “fates” of photoexcited electrons in multiphase or multicomponent semiconductor heterojunctions, depicting charge carrier generation followed by their separation on different components of the composite, resulting in enhanced photocatalytic activities due to reduced electron-hole recombination. The article discusses multiphase and multicomponent heterojunctions, including very recent concepts like carbon nitride composites.