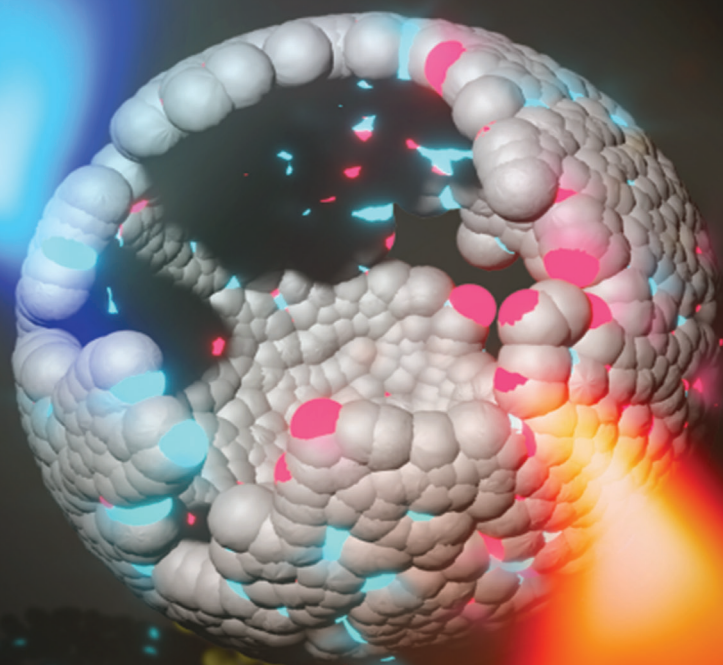
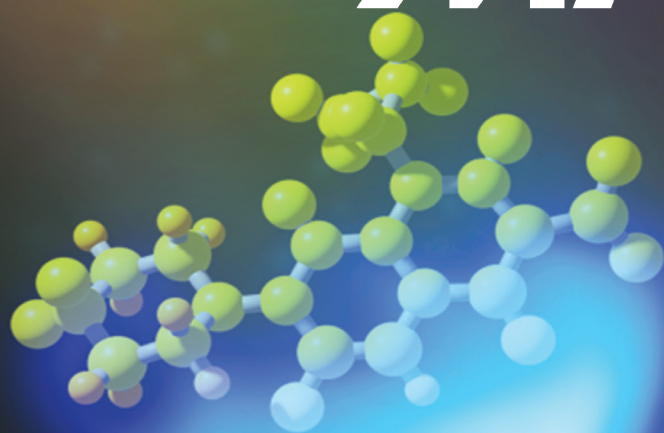


ADVANCED FUNCTIONAL MATERIALS



HIERARCHICAL NANOSTRUCTURES

In article number 2212486, Elisa Moretti, Alberto Vomiero, and co-workers, applied TiO₂ hollow spheres with defect-engineered surface as highly efficient photocatalysts. The hollow structure results in strongly confined solar light, and surface defects boost the photogeneration of active charges for photocatalytic processes. Advanced spectroscopies revealed the presence of oxygen vacancies and bulk Ti³⁺ centers, which enabled strong photodegradation of a target drug (Ciprofloxacin) under simulated sunlight.