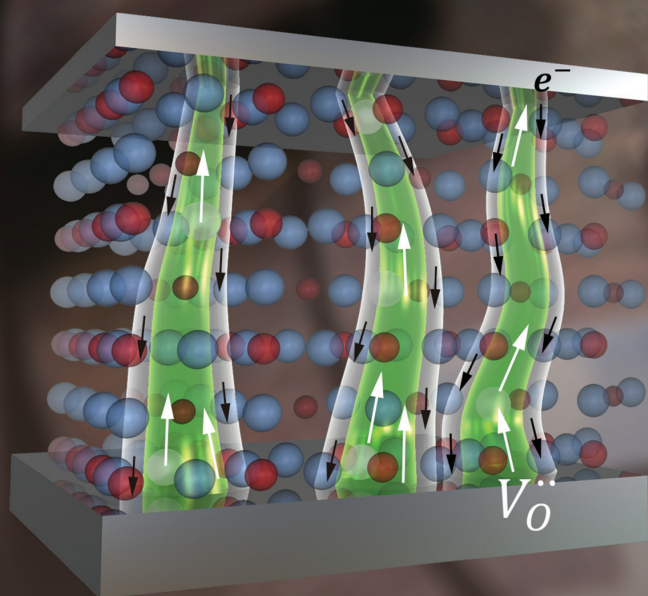


ADVANCED FUNCTIONAL MATERIALS



MEMRISTORS

The Memristor-based Cottrell analysis to derive material-dependent diffusion characteristics is demonstrated on page 7448 by J. L. M. Rupp and co-workers for mixed anionic-electronic conducting resistive switches. The integrated strategy is for the first time exemplified for stable switching bits based on the model material $\text{SrTiO}_{3-\delta}$. Involved defects and their kinetics play a key role to define material selection strategies and lead the way to enhanced performance metal oxide-based memristors in the future.