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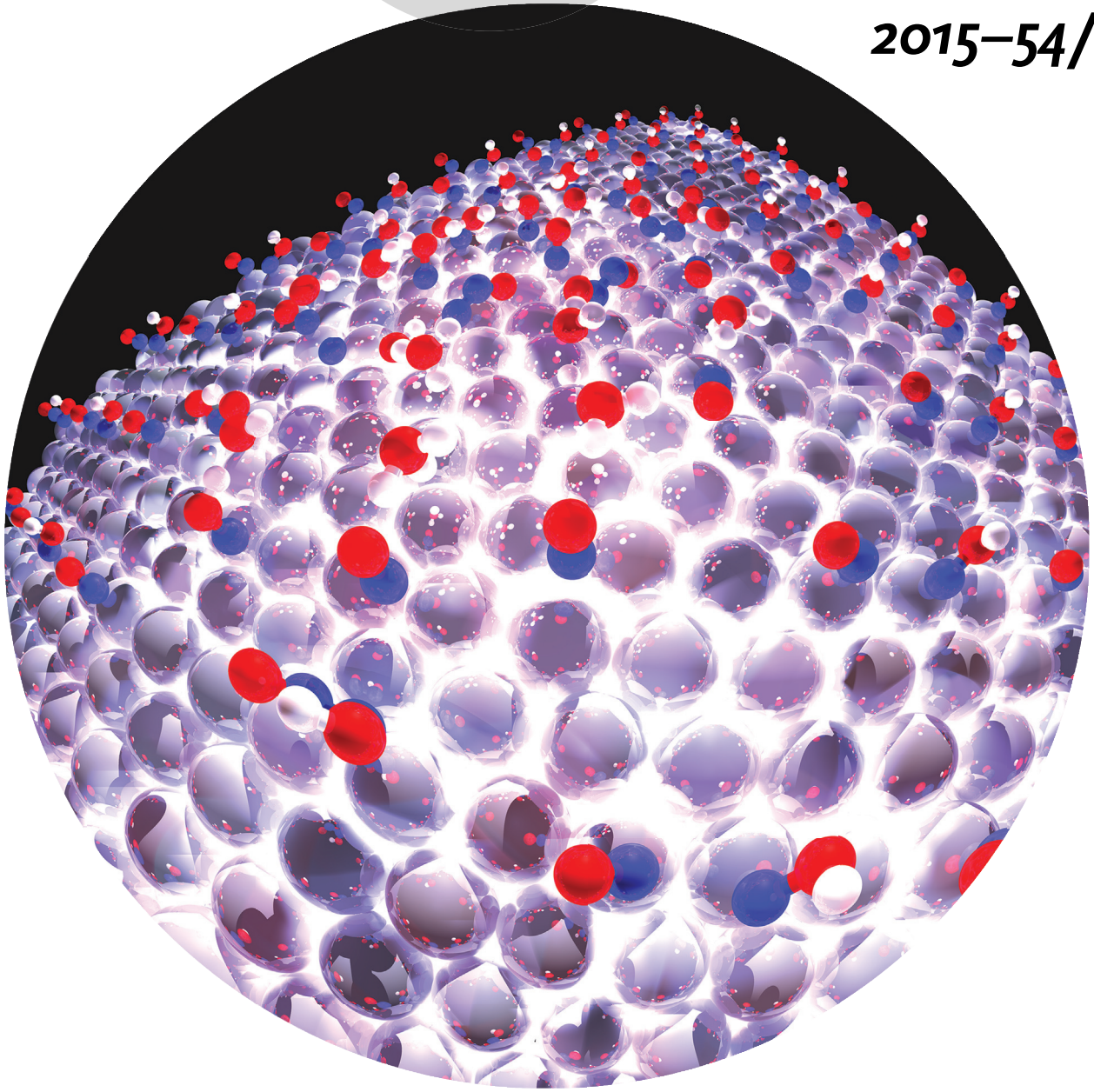

The crucial role of water ...

... in determining the mechanism of NO electroreduction on single-crystal Pt(111) surfaces is revealed by first principles density functional theory calculations, as described by J. Greeley et al. in their Communication on page 8255 ff. Water facilitates proton transfer to adsorbed surface intermediates with very low kinetic barriers, leading to ammonia production at modest overpotentials. It also promotes an unusual Eley–Rideal-type mechanism, wherein NO is converted into N_2O through a specifically adsorbed *trans*-$(NO)_2$ dimer at lower overpotentials.

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