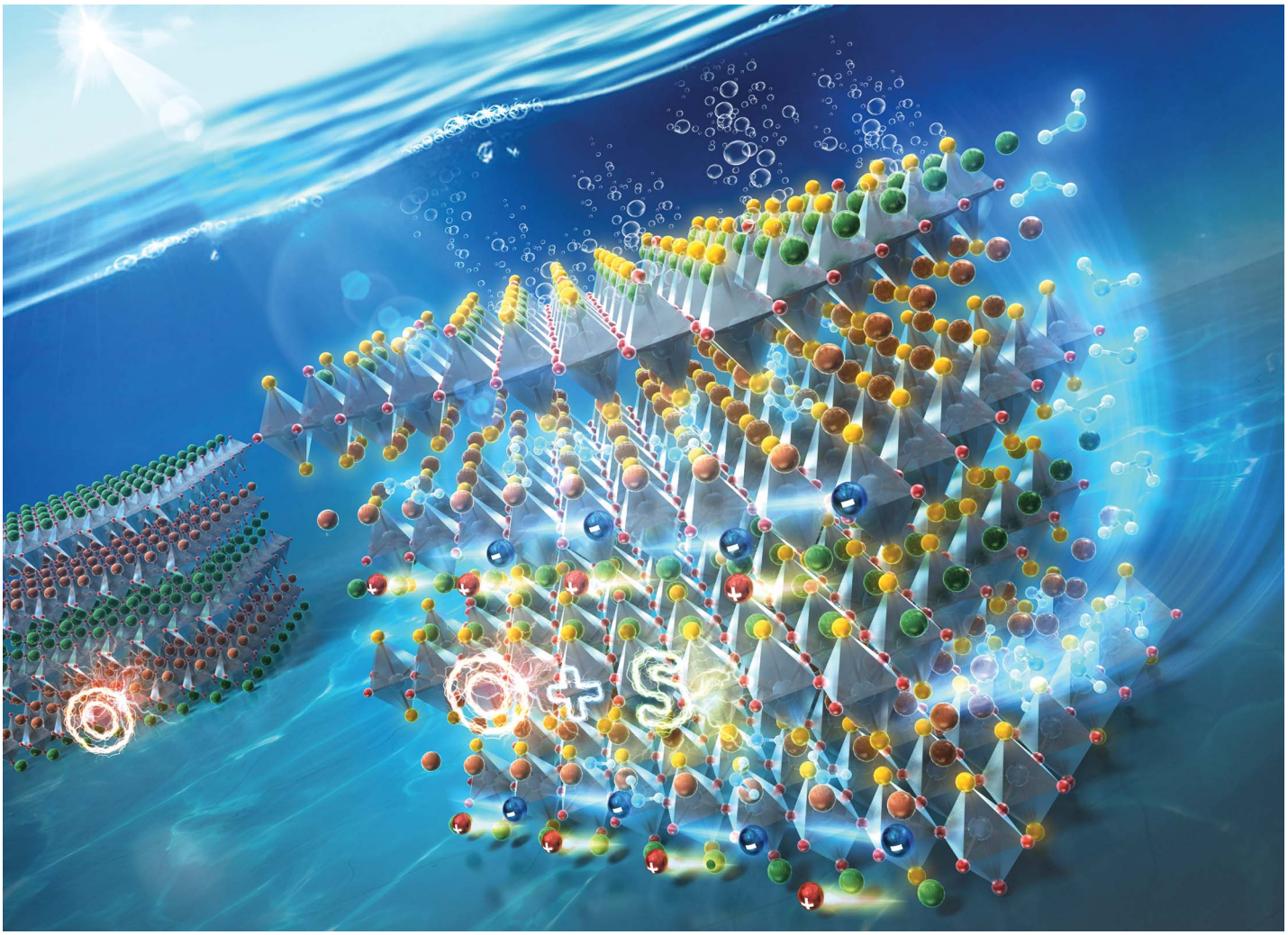

**Showcasing research from Dr. Hajime Suzuki's group in Prof. Ryu Abe's laboratory, Graduate School of Engineering, Kyoto University, Japan.**

Interlayer-active layered oxysulfides $NaMTiO_{2.2}S_{1.8}$ (M = Nd, Sm) with an $n$ = 1 Ruddlesden–Popper structure acting as photocatalysts for visible light water splitting

This study reports the first synthesis of $n$ = 1 Ruddlesden–Popper layered oxysulfides, $NaMTiO_{2.2}S_{1.8}$ (M = Nd, Sm). $NaMTiO_{2.2}S_{1.8}$ is also the first example of an "interlayer-active" oxysulfide (*i.e.*, exhibiting ion exchange and interlayer hydration capabilities), with potential for visible-light-driven overall water splitting.

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## As featured in:


See Hajime Suzuki, Ryu Abe *et al.*, *Chem. Sci.*, 2025, **16**, 16534.

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