

# Environmental Science journals

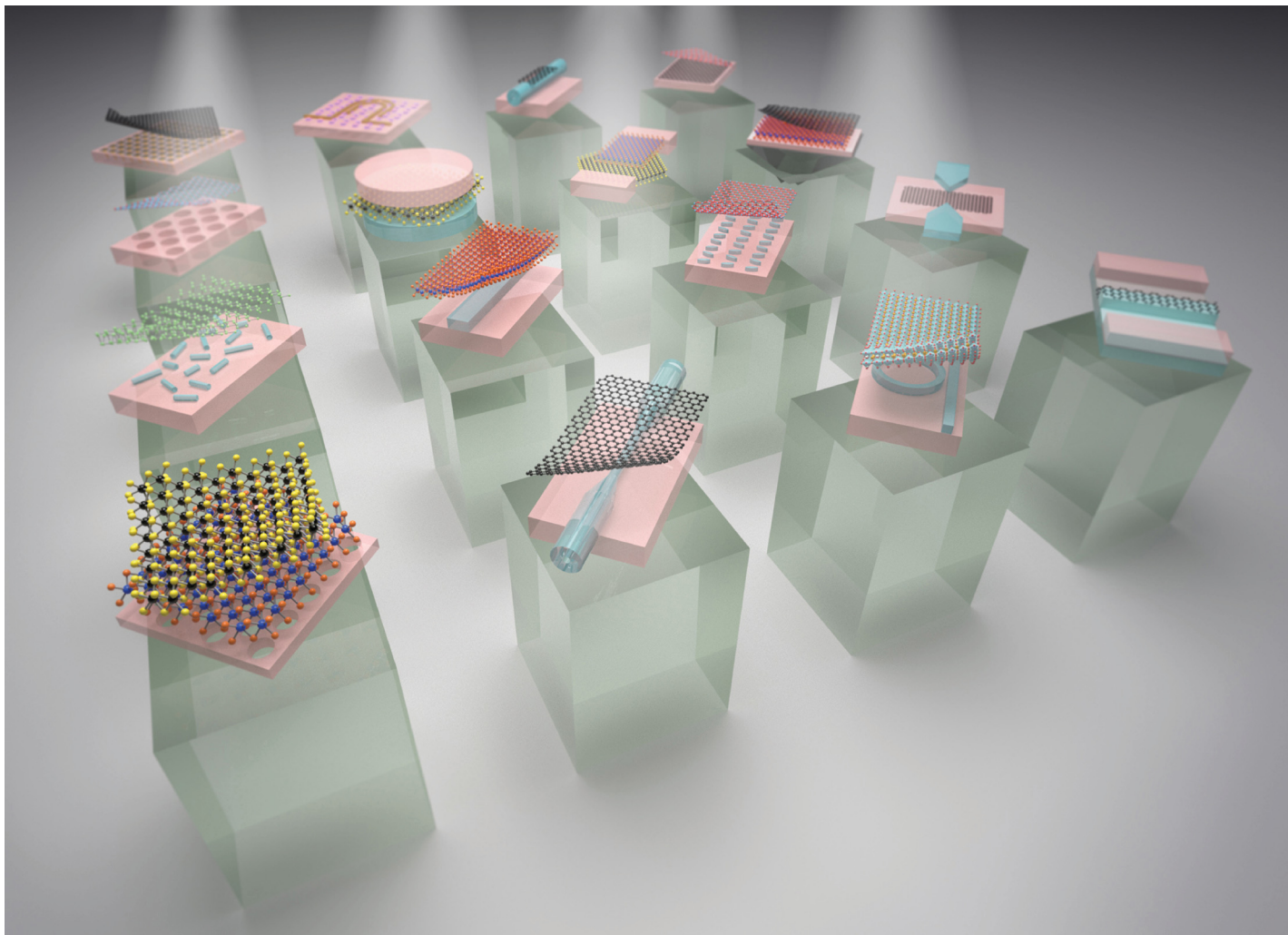
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Fundamental questions  
Elemental answers





Showcasing research from Professor Sang-Hoon Bae's lab at Washington University in St. Louis, USA, and Prof. Qirong Xiao's lab at Tsinghua University, China.

Functionalizing nanophotonic structures with 2D van der Waals materials

Integration of 2D van der Waals materials can infuse new functionalities to nanophotonic structures, like integrated waveguides, photonic crystals, optical fibres, microcavities, and metasurfaces. Novel optical and optoelectronic applications can be thus prototyped with enhanced performance and reconfigurability for photonic integrated circuits and beyond. We here review the latest advances on synergizing 2D materials to functionalize a vast library of nanophotonic architectures with awaiting challenges and exciting perspectives.

As featured in:



See Qirong Xiao, Sang-Hoon Bae *et al.*, *Nanoscale Horiz.*, 2023, **8**, 1345.