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Supporting Information

Band gap engineering of few-layered MoS₂ with low

concentration of S vacancies

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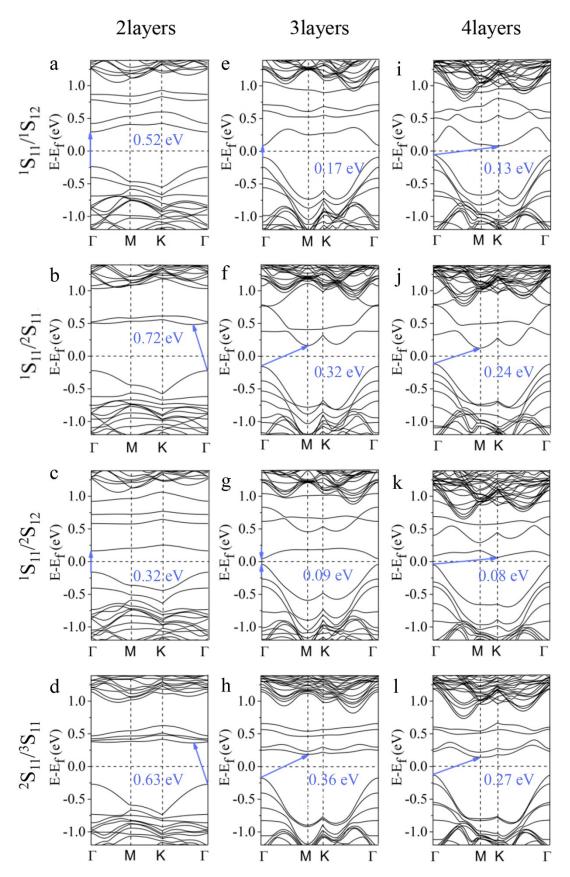


Fig.S1 Band structures for (a-d) 2-, (e-h) 3-, (i-l) 4-layered MoS_2 with $^1S_{11}/^1S_{12}$, $^1S_{11}/^2S_{11}$, $^1S_{11}/^2S_{12}$, $^2S_{11}/^3S_{11}$ combinational vacancies at 4% average concentrations.

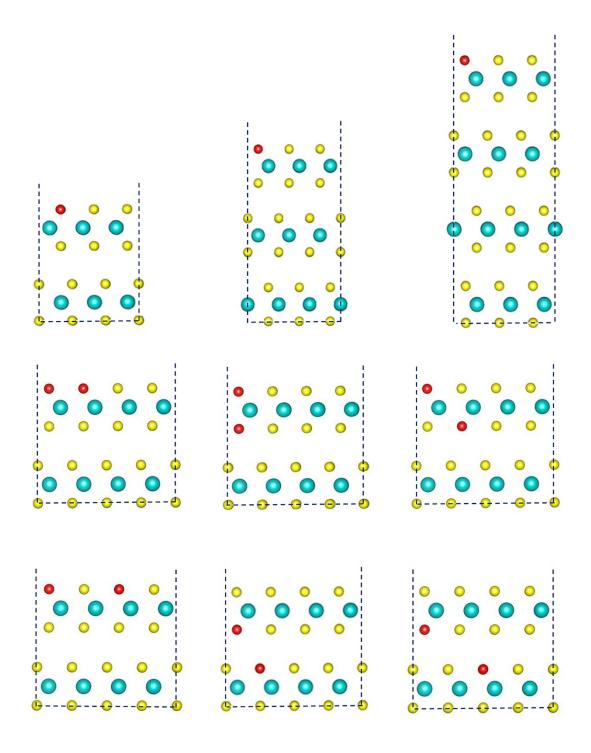


Fig.S2 The structures of MoS_2 with S vacancies (blue, yellow and red balls represent Mo, S atoms and vacancies, respectively).