

A multi-scale modeling and simulation study to investigate the effect of roughness of a surface on its self-clean performance

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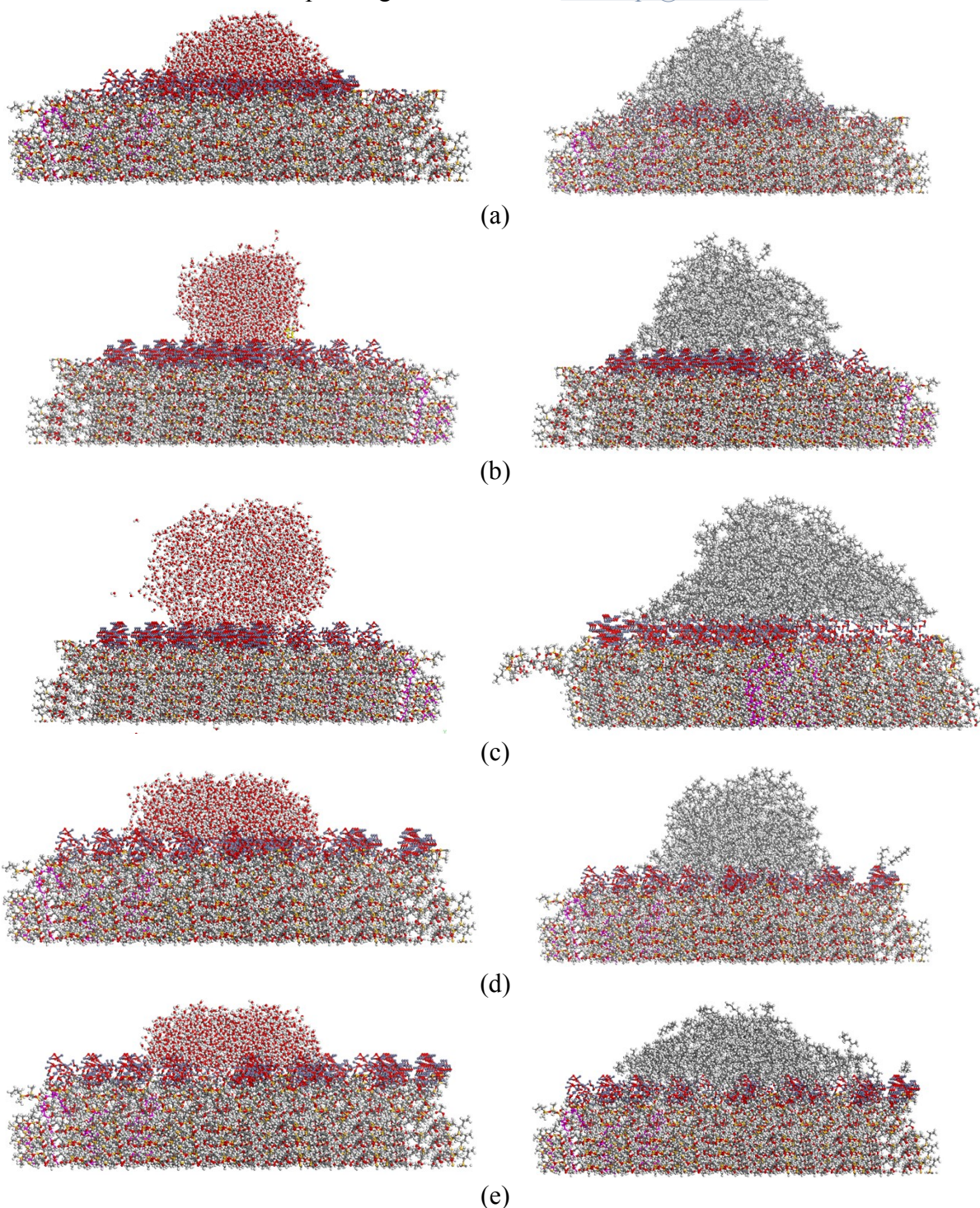


Figure S1: Illustration of atomistic water and oil droplet profiles of BM-5Zn at different filler interspacing gap of (a) 7 Å (b) 9 Å (c) 11 Å (d) 13 Å and (e) 15 Å.

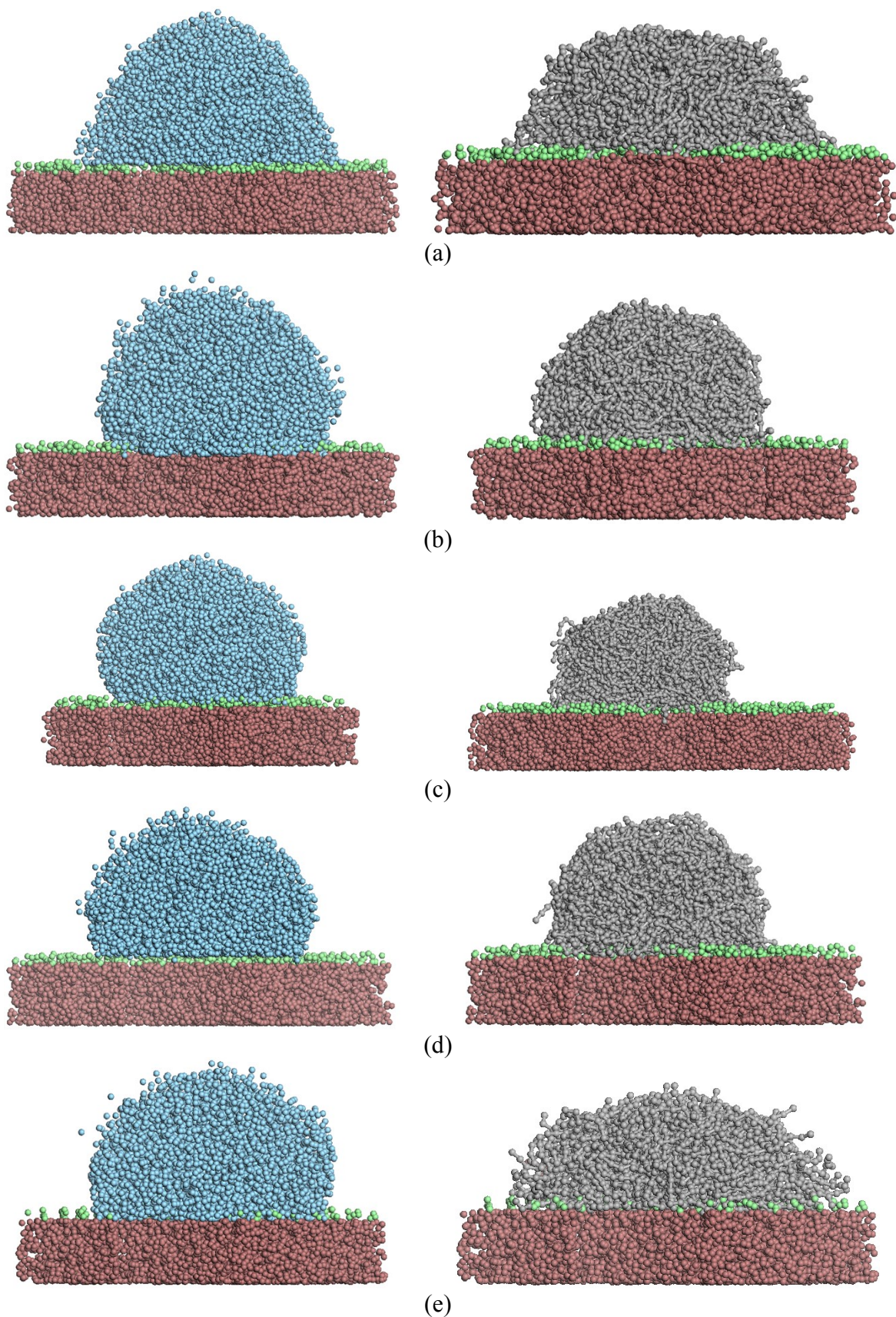
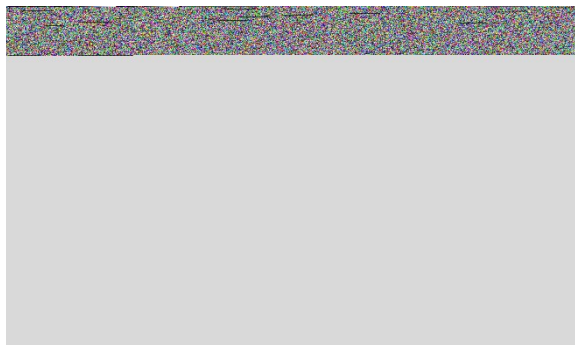
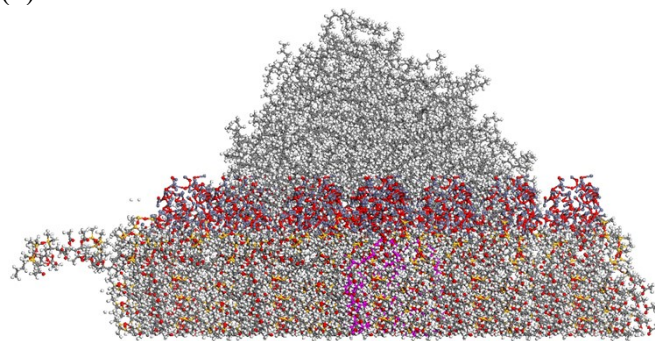
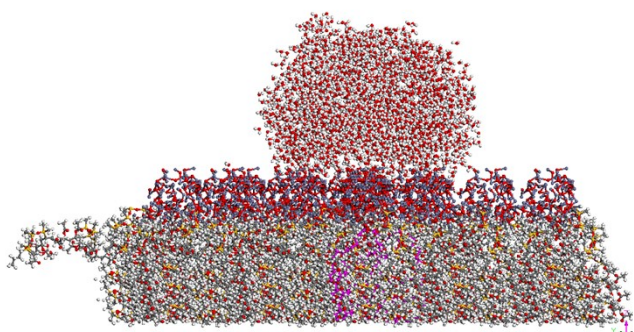


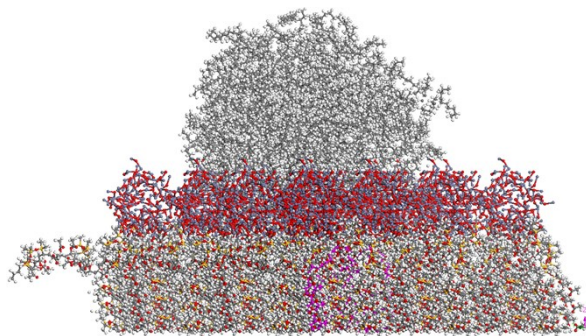
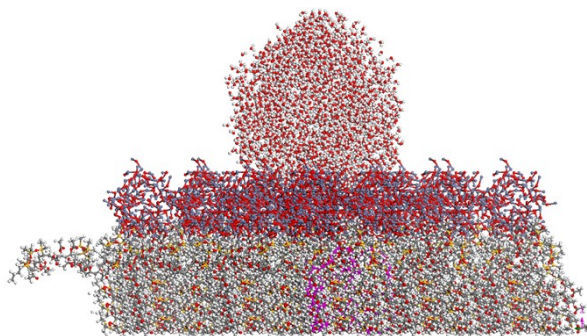
Figure S2: Illustration of mesoscopic water and oil droplet profiles of BM-5Zn at different filler interspacing gap of (a) 7 Å (b) 9 Å (c) 11 Å (d) 13 Å and (e) 15 Å.



(a)

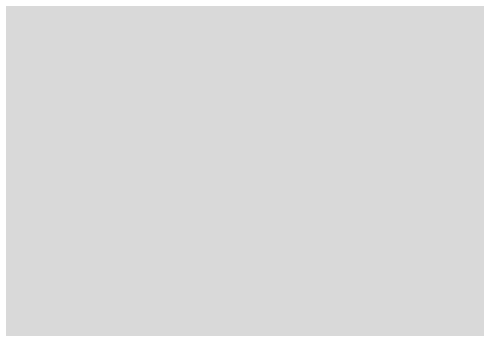


(b)

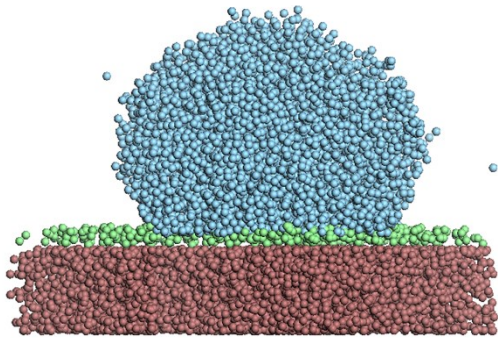
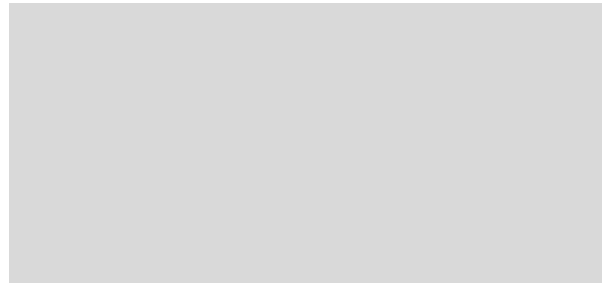


(c)

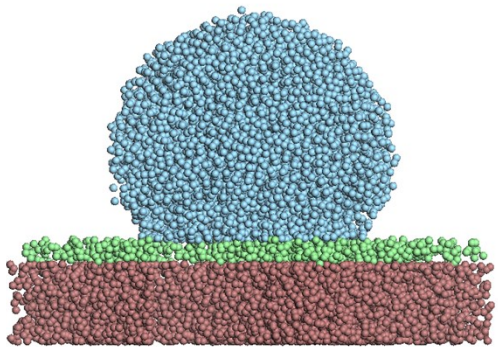
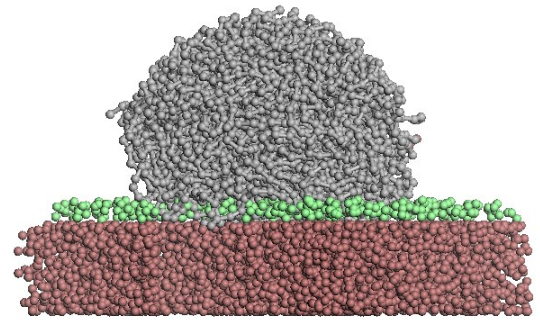
Figure S3: Illustration of atomistic water and oil droplet profiles of (a) BM-5Zn (b) BM-10Zn and (c) BM-15Zn coating surface.



(a)



(b)



(c)

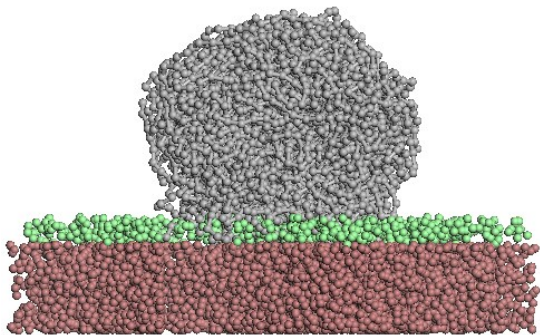


Figure S4: Illustration of mesoscopic water and oil droplet profiles of (a) BM-5Zn (b) BM-10Zn and (c) BM-15Zn coating surface.