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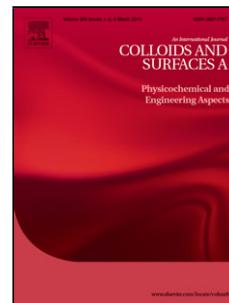
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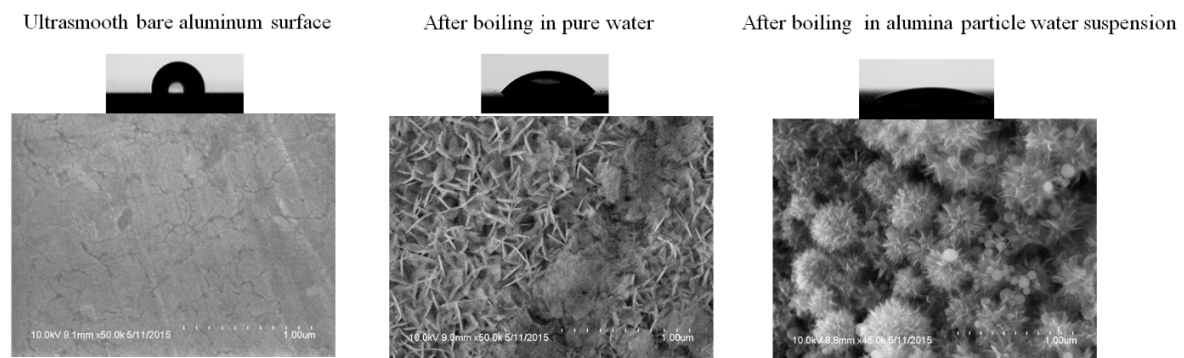
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Aluminum surface wettability changes by pool boiling of nanofluids

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Graphical abstract



Highlights

- Experimental investigation of Al surface modified by nanofluid boiling is reported
- Superhydrophilicity is achieved at 1.0wt.% (0.25 vol.%) nanoparticle concentration
- Boehmite grown on the agglomerated particles forms hierarchical structures
- Topography study results agree well with Wenzel's model revealing the mechanism

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