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High temperature dislocation processes in precipitation hardened crystals investigated by a 3D discrete dislocation dynamics

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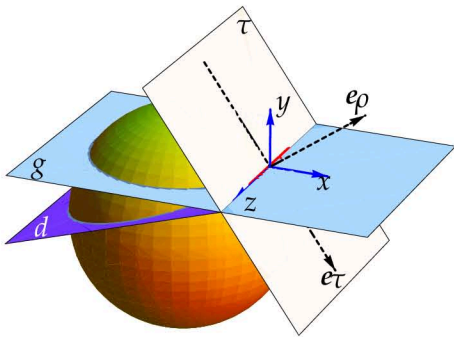
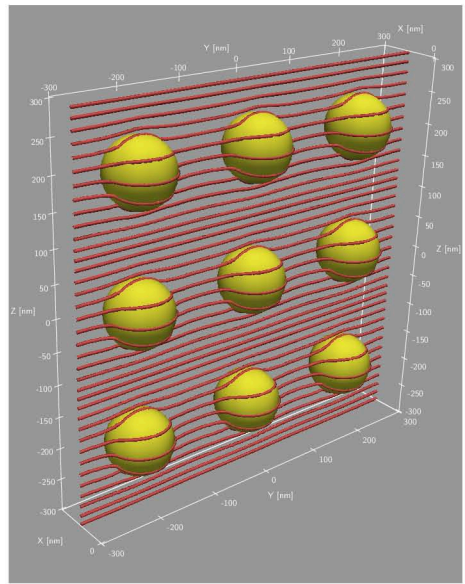
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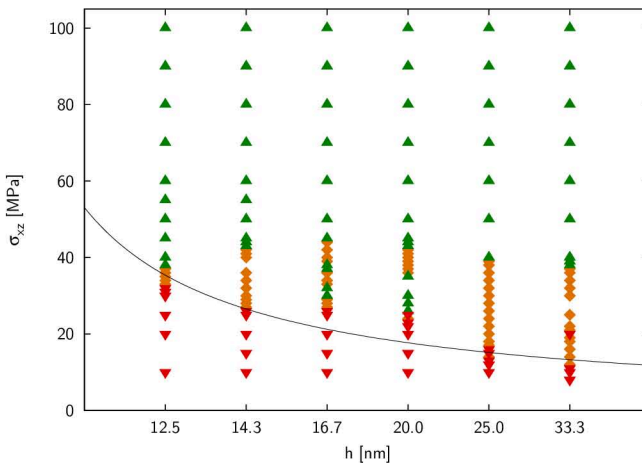
Our 3D DDD model opens following new opportunities:

- incorporates general dislocation segments
- offers improved segment kinetics at high temperature
- addresses precipitate hardening



Results of the calculations have been compared to experiments:

- transmission electron microscopy investigations
- threshold stresses of oxide dispersion strengthened materials



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