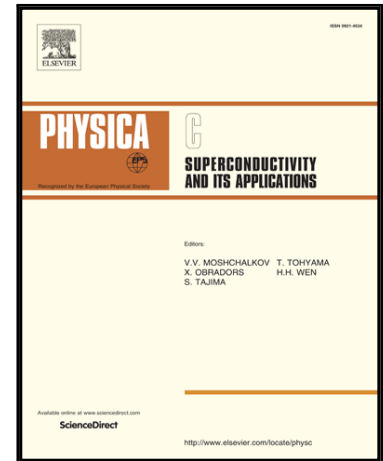


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Flux pinning properties of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ thin films containing a high density of nanoprecipitates: a comparative study to reveal size effects

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Highlights

- We measured $J_c(H, T)$ in YBCO films containing a high density of nanoprecipitates.
- Films containing fine nanoprecipitates showed a steep J_c increase with decreasing T .
- Films containing relatively large nanoprecipitates showed a gradual J_c increase.
- Due to these general trends interesting crossing of the $J_c(T)$ curves were observed.
- The experimental results are reasonably explained with several flux-pinning models.

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