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Synthesis of hybrid paper sheets with enhanced air barrier and antimicrobial properties for food packaging

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Highlights:

- Nanocellulose (NC) extracted from agricultural residue and chitosan (Ch) were used to modify paper sheets.
- Modified paper sheets showed minor improvement in burst and air permeability properties.
- Coating of paper sheets with NC/Ch formulations enhanced their mechanical and air permeability properties.
- Paper with antibacterial power have been obtained.

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