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Electroosmotic flow of power-law fluids in curved rectangular microchannel with high zeta potentials

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Highlights

- Electroosmotic flow of power-law fluid in curved geometry is solved numerically.
- Secondary flows in shear-thinning electroosmotic flows are comparatively stronger.
- Variation of electrokinetic separation distance changes secondary flow patterns.
- Increasing of curvature intensifies the circulation strength considerably.
- Increasing of zeta potential considerably increases the performance of mixing.

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