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Newtonian and generalized Newtonian reacting flows in serpentine microchannels: pressure driven and centrifugal microfluidics

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Highlights

- Newtonian/Generalized Newtonian reacting flows in LOCD/LOC are studied and compared.
- In LOCD devices, Newtonian/Generalized Newtonian products generate in the corners.
- In LOC devices, Newtonian/Generalized Newtonian products generate on horizontal walls.
- Rectangular configuration is the best for the maximum species production in reactions.
- The best fabrication angle depends on the configuration of the microchannel.

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