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Efficient Passive Microfluidic Mixer

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Description:

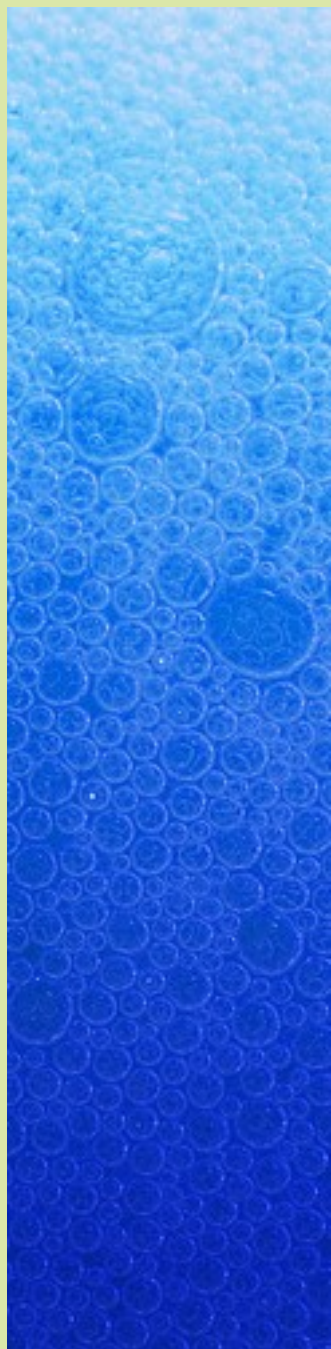
The invention describes a microfluidic device particularly well suited to mix chemical or particulate matter, even living cells. The device uses a unique geometry of microchannels that allows passive, non-energy intensive mixing of fluids. The geometry also allows a smooth flow of materials, which facilitates more biochemical reactions and avoids problems over multiple cycles. The system works equally well for mixing thick and watery fluids. Fabrication of the device is a simple, single-layered process.

Advantages:

- More efficient mixing
- Simple fabrication
- Faster, more frequent reactions

Commercial Uses:

- Mix and analyze chemical species or cells
- Medical point of care diagnostics
- Drug testing in human and animal cells
- Detecting harmful chemicals



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