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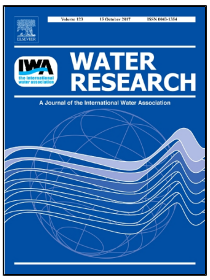

Comparative power demand of mechanical and aeration imposed shear in an immersed membrane bioreactor

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Highlights

Mechanical and aeration-imposed shear in an immersed membrane bioreactor compared

Sludge rheology encompassed using literature viscosity (η) vs shear (γ) relationships

Specific power demand determined as a function of γ for both systems

Power demand for mechanical shear 20-70% less than that of conventional air scouring

Absolute power demand strongly dependent on sludge rheological properties (η vs. γ)