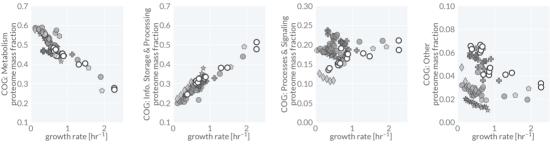
## comparison of mass spectrometry measurements with literature datasets

© Caglar et al. 2017 © Li et al. 2014 🗣 Mori et al. 2021 \* Peebo et al. 2015 © Schmidt et al. 2016 © Soufi et al. 2015 🌣 Valgepea et al. 2013 O This Study (A) (B)



(C)

(D)

(H)

Dai et al. 2016 Erickson et al. 2017

Li et al. 2018 ★ Mori et al. 2017

You et al. 2013

1 growth rate hr[-1] o Zhu & Dai 2019

Scott et al. 2010 △ Si et al. 2017 **⋖** Wu et al. 2021

Forchhammer & Lindahl 1971

## comparison of average cell size measurements with literature datasets △ Basan et al. 2015 #Grossman et al. 1982 ♥ Pierucci 1978 △ Si et al. 2017 ▶ Zaritsky et al. 1993 O This Study

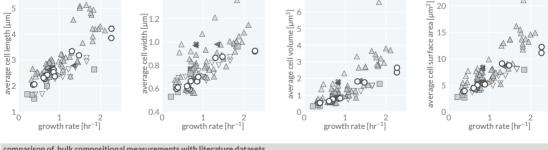
(E)

(F)

1.4 20 5 average cell volume [µm³] average cell length [µm] average cell width [µm] 0.1.0 8.0 9.0 9.0 5 10 3

(G)

■Trueba & Woldringh 1980 ■Zaritsky & Woldringh 1978



growth rate [hr-1]

comparison of bulk compositional measurements with literature datasets Neidhardt et al. 1992 © Chohji et al. 1976 ★ Dennis & Bremer 1974 ♦ This Study Bremer & Dennis 2008 ► Churchward et al. 1982 ■ Dennis & Bremer 1987 △ Basan et al. 2015 (1) (J) (K) 1000 500 0.7 △ Basan et al. 2015 ## Bremer & Dennis 2008 ■ Brunschede et al. 1977

0.6 800 total protein [fg / cell] 300 100 100 total RNA [fg / cell] RNA-to-protein 8.0 2.0 8.0 2.0 8.0 2.0 600 400 200 0.1 0.0 0 0

growth rate [hr-1]