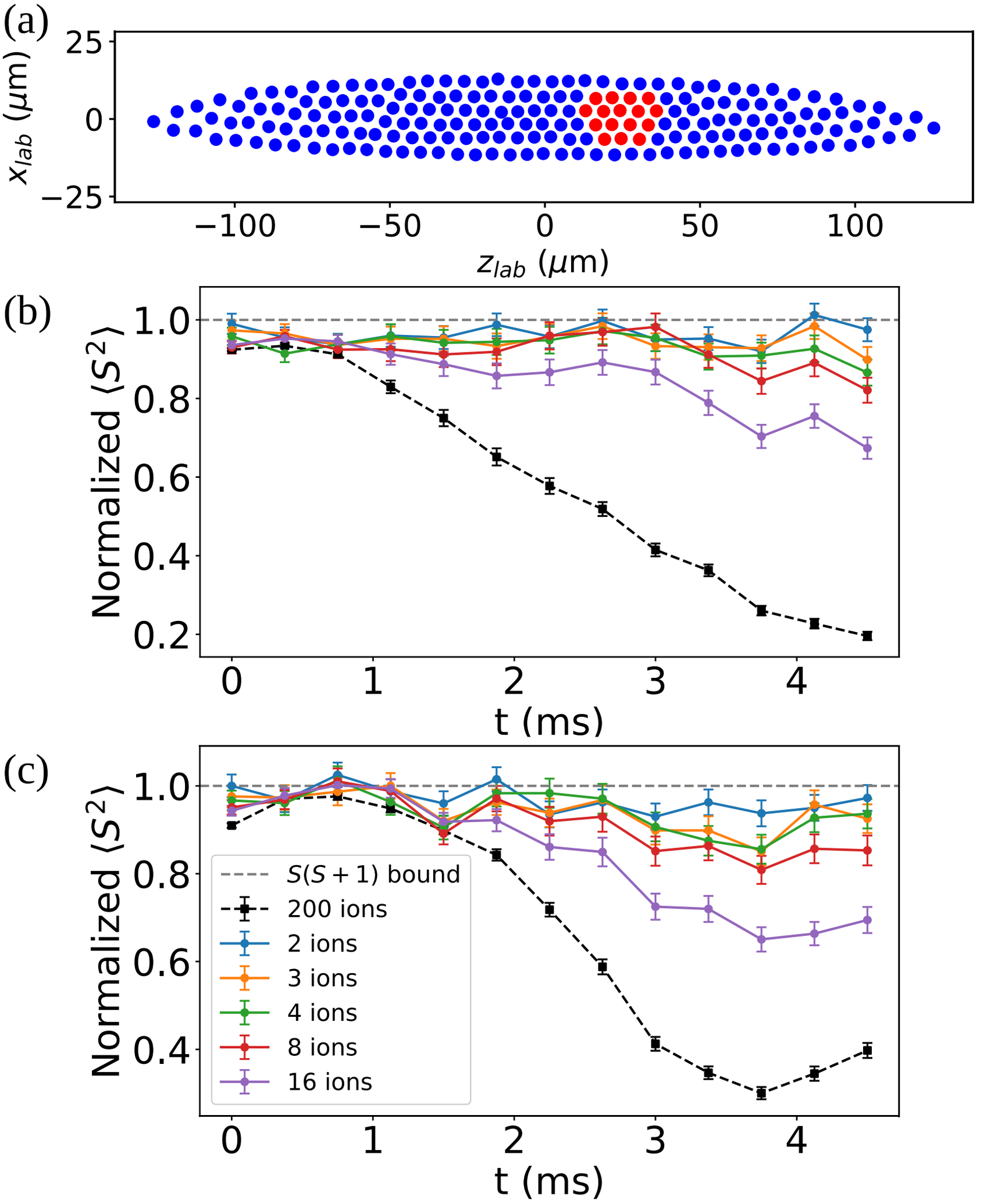

(a)
25
0
−25
x_{lab} (μm)
−100
−50
0
50
100
z_{lab} (μm)
(b)
Normalized $\langle S^2 \rangle$
1.0
0.8
0.6
0.4
0.2
0
1
2
3
4
t (ms)
(c)
Normalized $\langle S^2 \rangle$
1.0
0.8
0.6
0.4
$S(S+1)$ bound
200 ions
2 ions
3 ions
4 ions
8 ions
16 ions
0
1
2
3
4
t (ms)