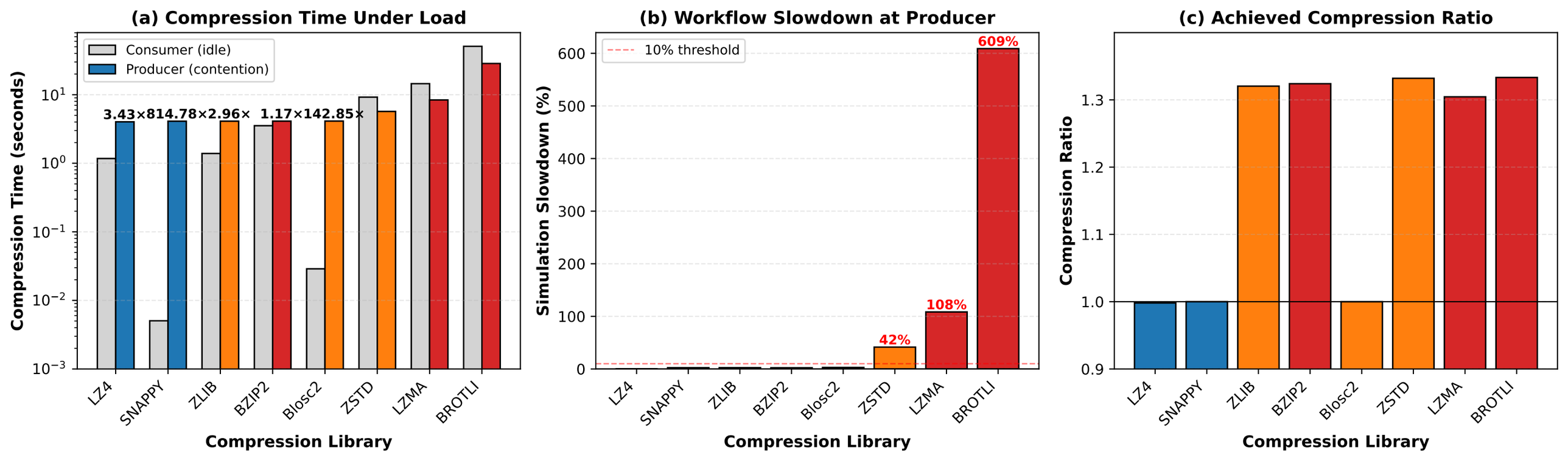
(a) Compression Time Under Load
Consumer (idle)
Producer (contention)
Compression Time (seconds)
3.43×
814.78×
2.96×
1.17×
142.85×
LZ4
SNAPPY
ZLIB
BZIP2
Blosc2
ZSTD
LZMA
BROTLI
Compression Library
(b) Workflow Slowdown at Producer
10% threshold
Simulation Slowdown (%)
609%
108%
42%
Compression Library
(c) Achieved Compression Ratio
Compression Ratio
Compression Library