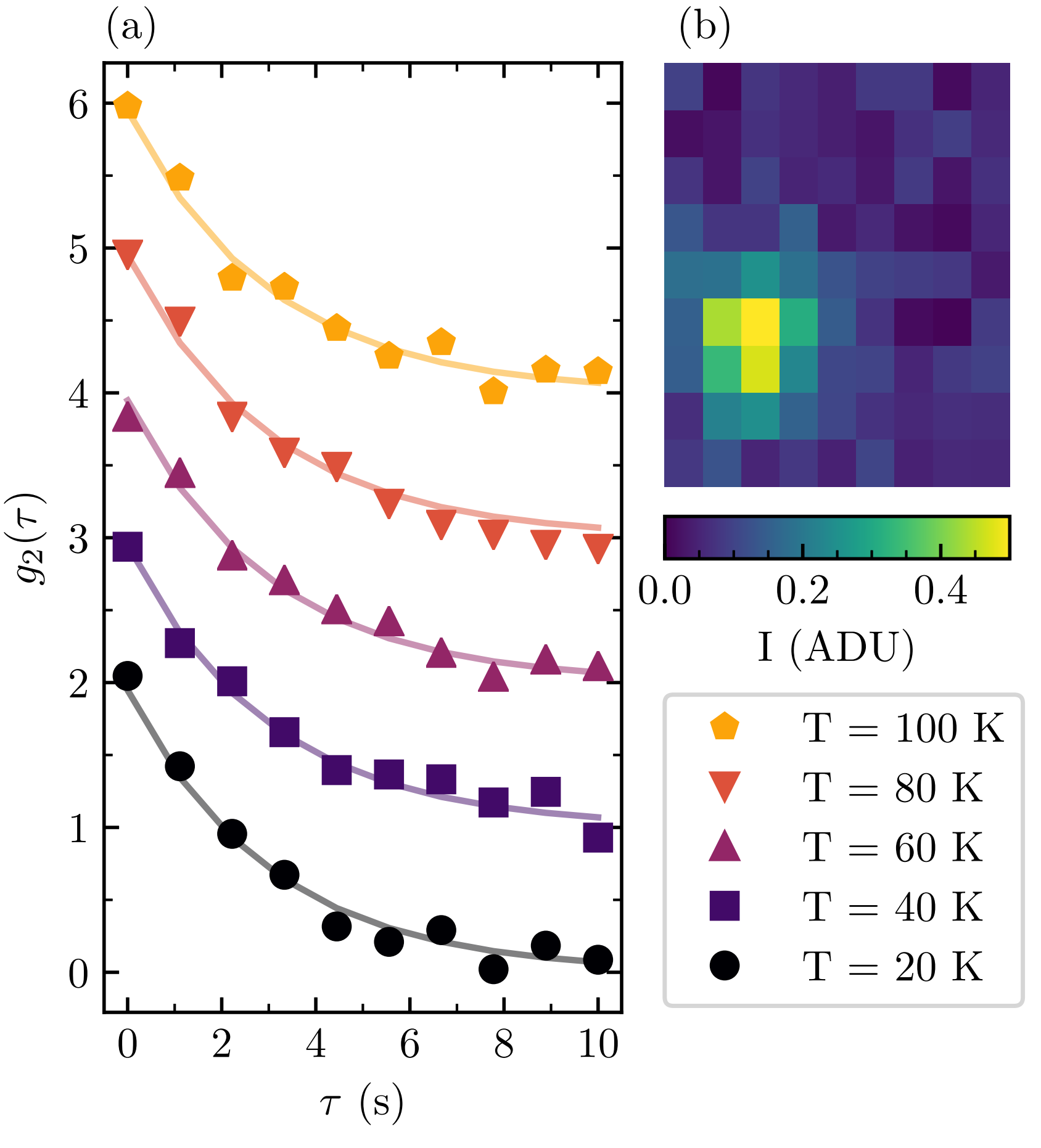
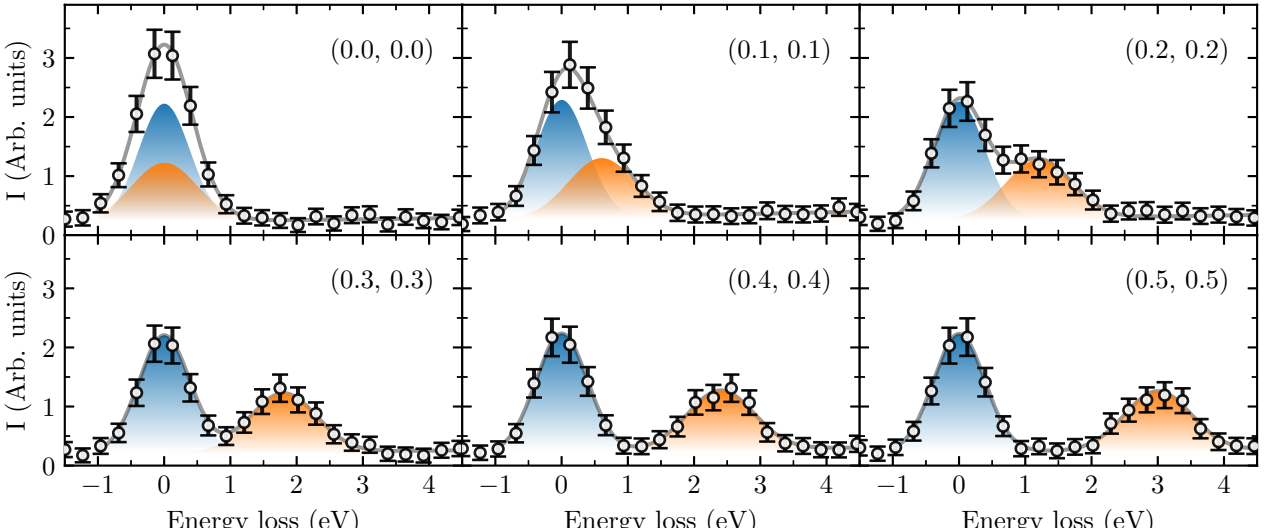
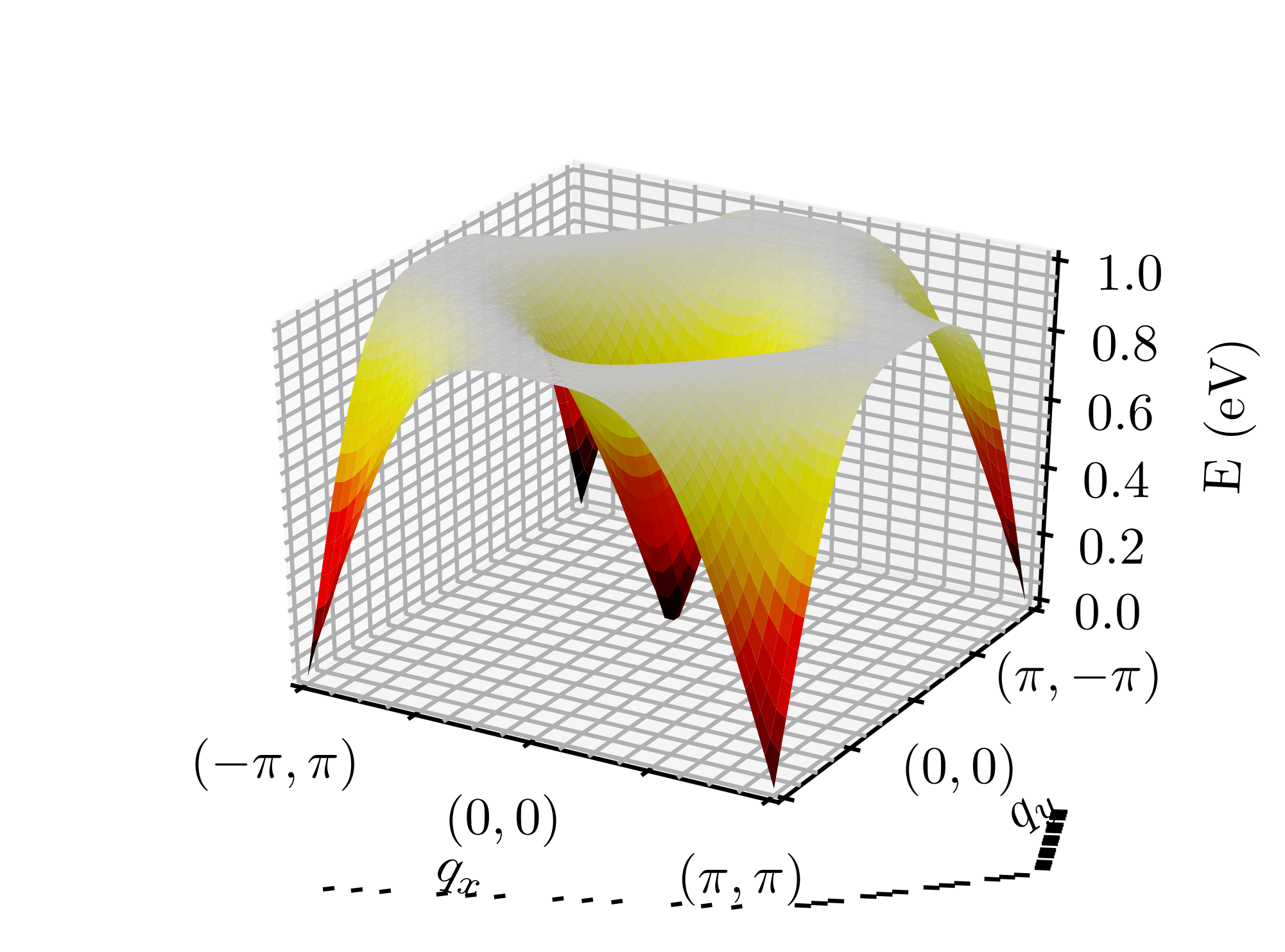
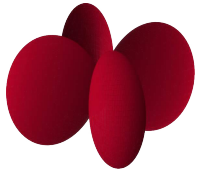

(a)
(b)
$g_2(\tau)$
τ (s)
0
1
2
3
4
5
6
0
2
4
6
8
10
0.0
0.2
0.4
I (ADU)
T = 100 K
T = 80 K
T = 60 K
T = 40 K
T = 20 K


(0.0, 0.0)
(0.1, 0.1)
(0.2, 0.2)
(0.3, 0.3)
(0.4, 0.4)
(0.5, 0.5)
I (Arb. units)
I (Arb. units)
0
1
2
3
−1
0
1
2
3
4
Energy loss (eV)
Energy loss (eV)
Energy loss (eV)

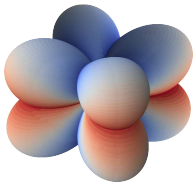

1.0
0.8
0.6
0.4
0.2
0.0
E (eV)
$(\pi, -\pi)$
$(0, 0)$
q_y
$(-\pi, \pi)$
$(0, 0)$
q_x
(π, π)

$L_z = 0$

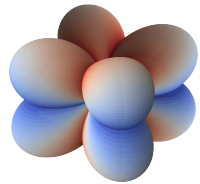


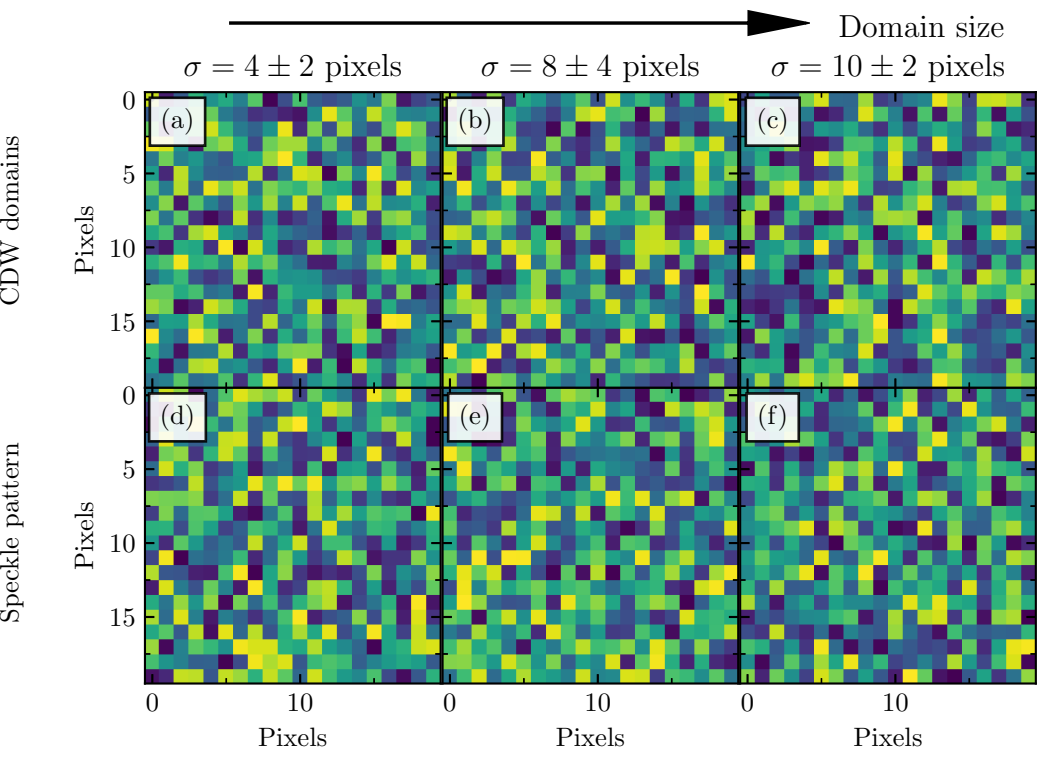
$L_z = 1$

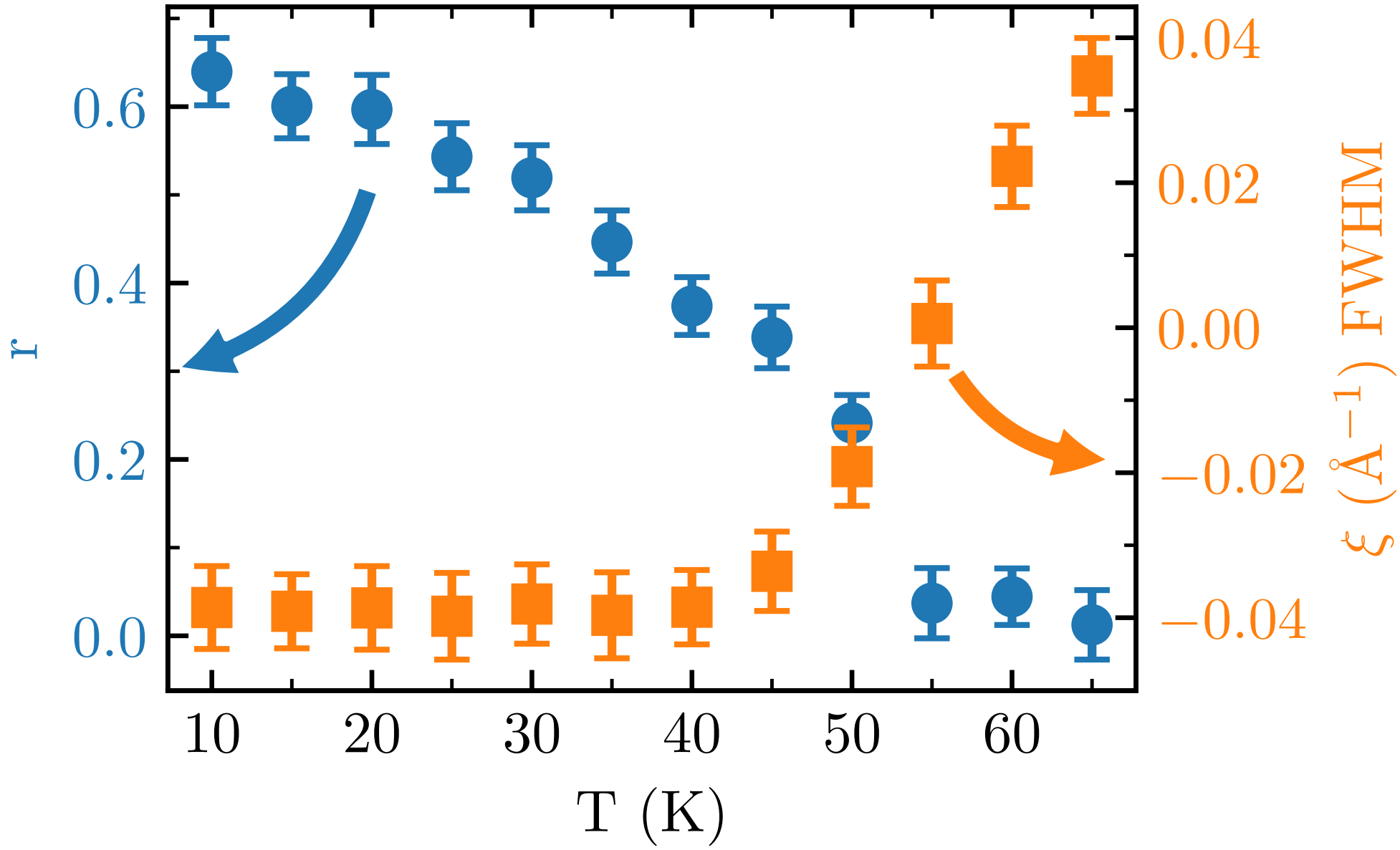
Isospin Up

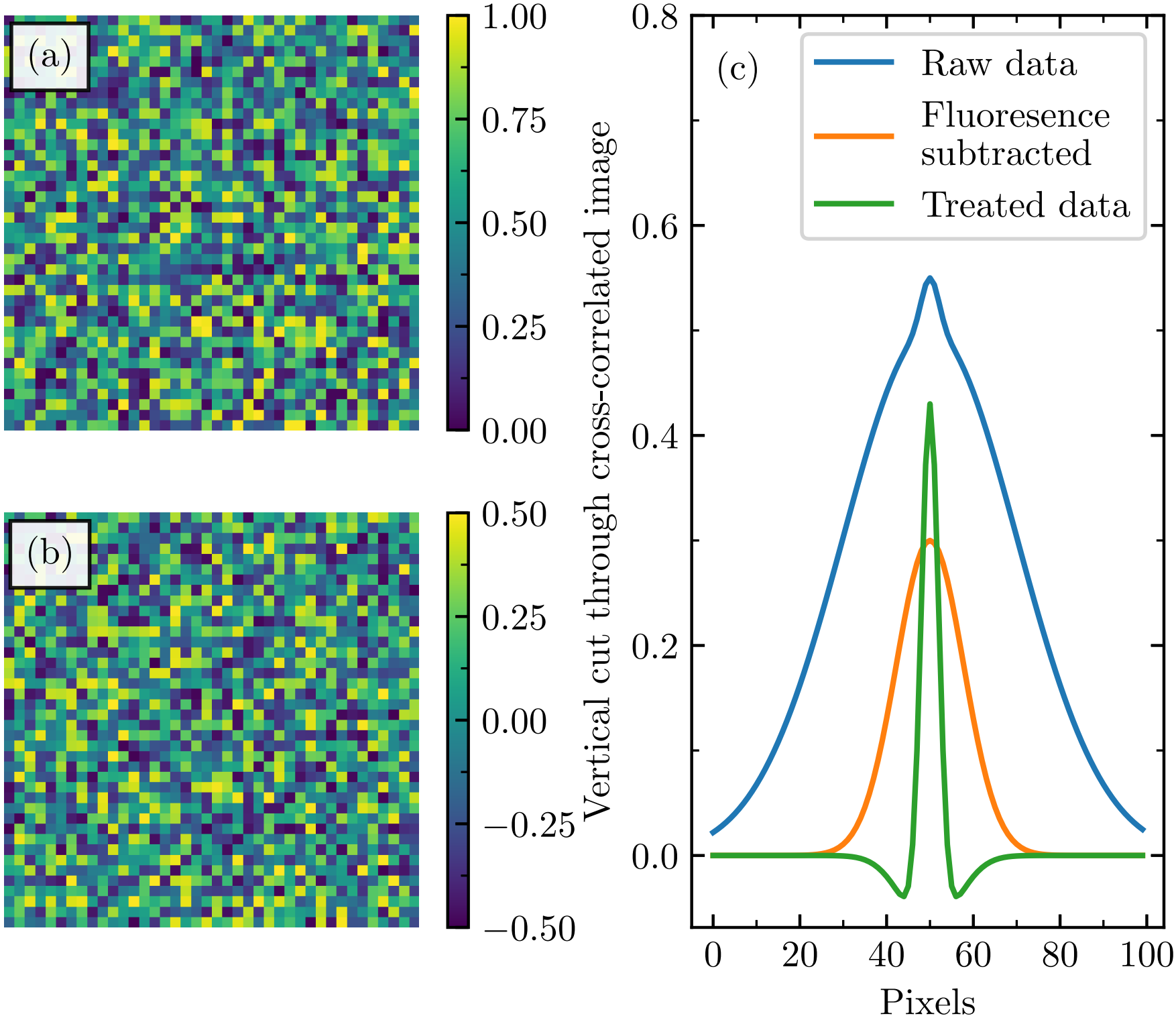


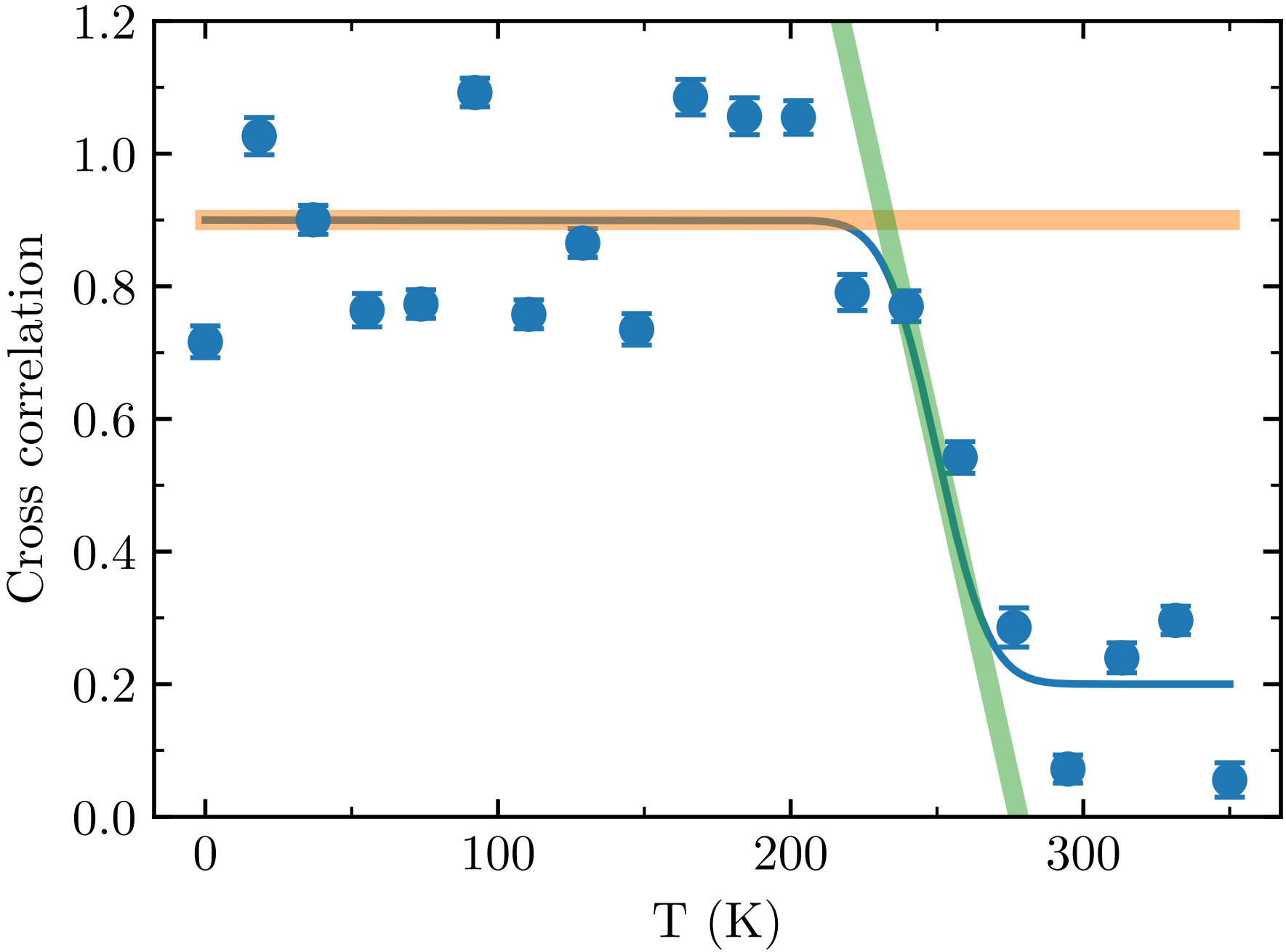
Isospin Down

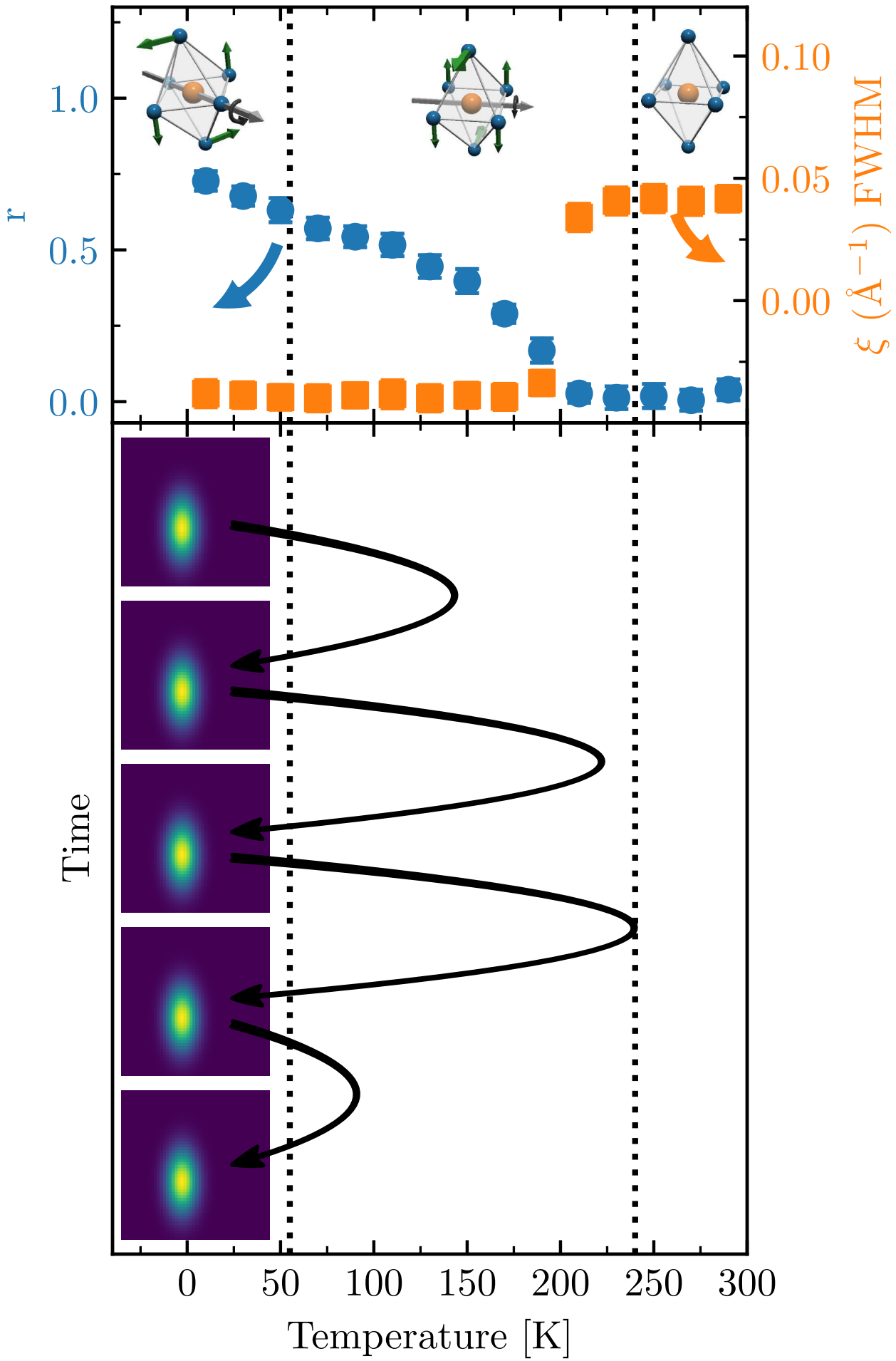


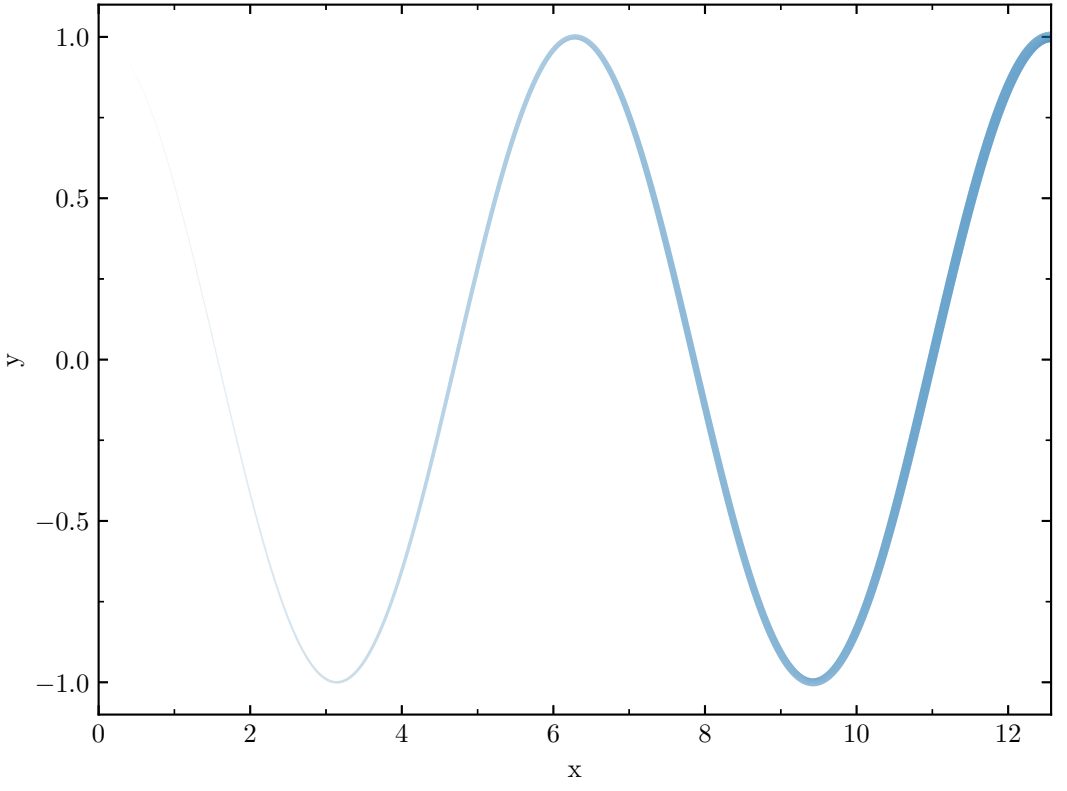

Domain size
$\sigma = 4 \pm 2$ pixels
$\sigma = 8 \pm 4$ pixels
$\sigma = 10 \pm 2$ pixels
CDW domains
Speckle pattern
(a)
(b)
(c)
(d)
(e)
(f)
Pixels
Pixels
Pixels
Pixels
Pixels
Pixels
0
5
10
15
0
10

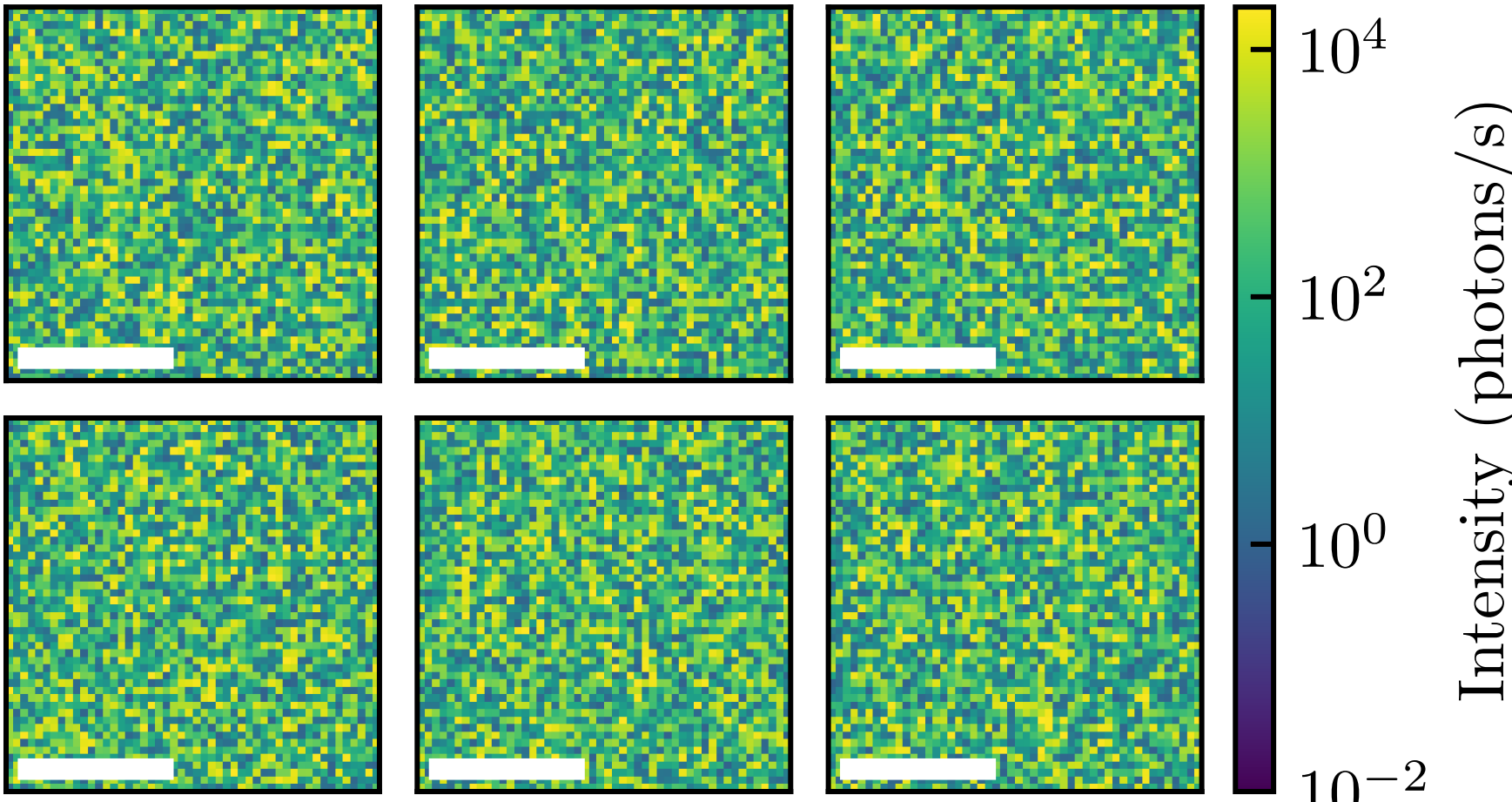

r
0.0
0.2
0.4
0.6
0.04
0.02
0.00
−0.02
−0.04
ξ (Å^{-1}) FWHM
10
20
30
40
50
60
T (K)

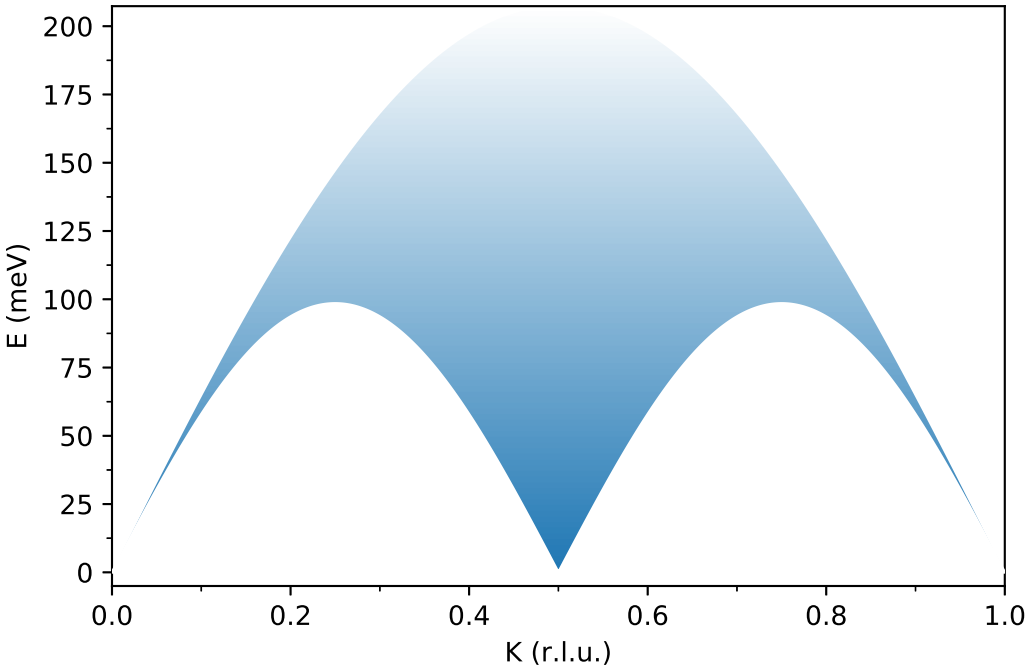

(a)
(b)
(c)
1.00
0.75
0.50
0.25
0.00
0.50
0.25
0.00
−0.25
−0.50
0.8
0.6
0.4
0.2
0.0
0
20
40
60
80
100
Pixels
Vertical cut through cross-correlated image
Raw data
Fluoresence subtracted
Treated data

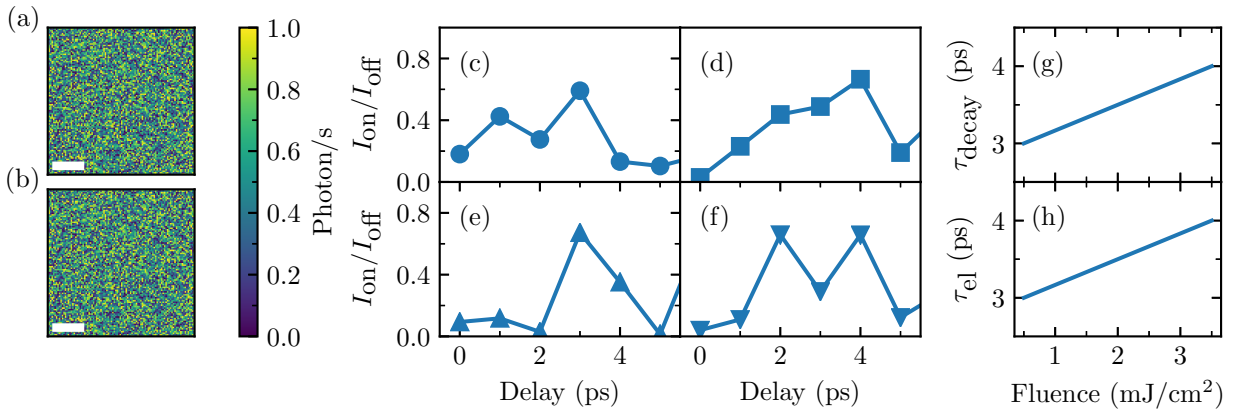

1.2
1.0
0.8
0.6
0.4
0.2
0.0
Cross correlation
0
100
200
300
T (K)

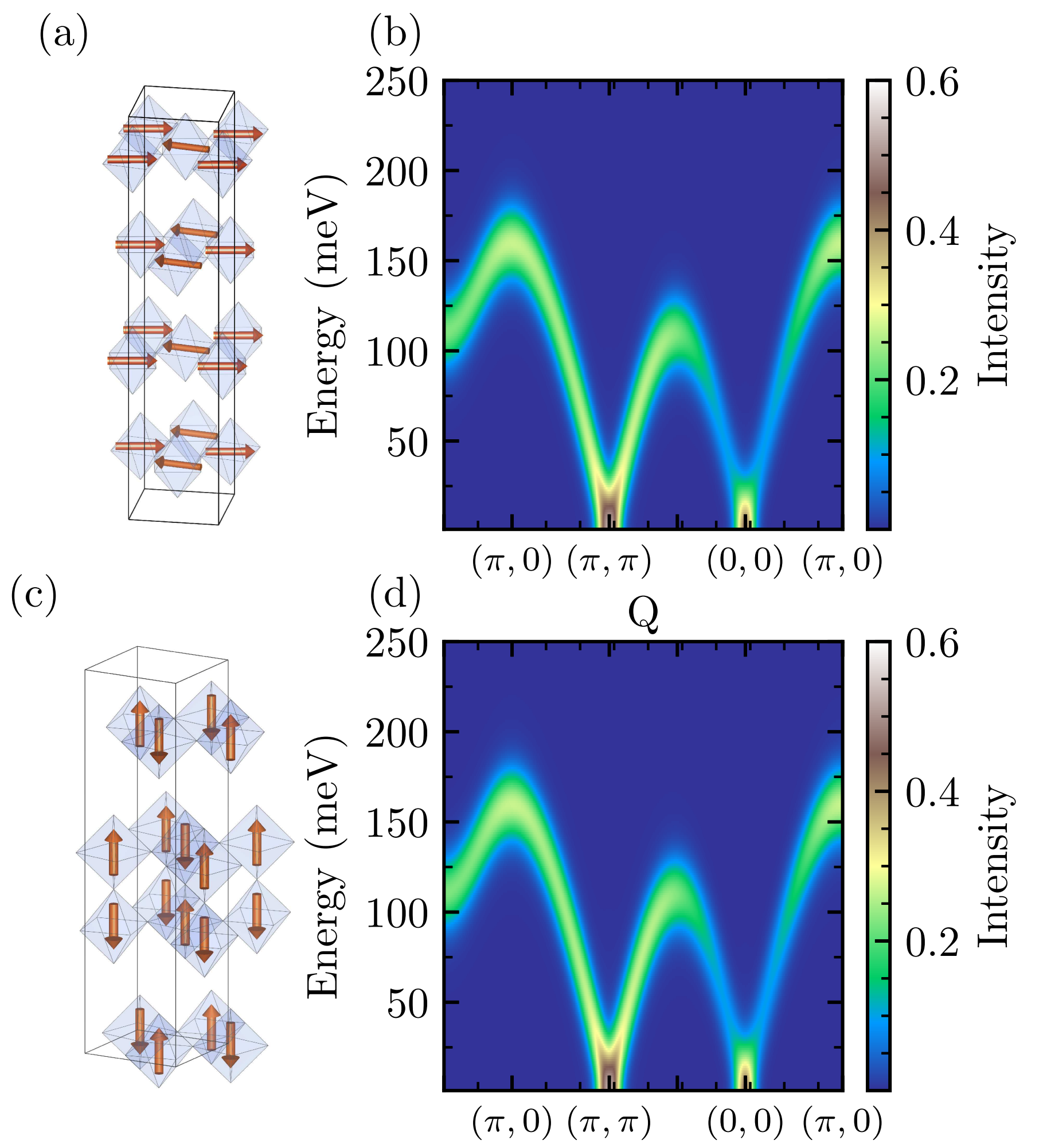

r
1.0
0.5
0.0
0.10
0.05
0.00
ξ (Å⁻¹) FWHM
Time
0
50
100
150
200
250
300
Temperature [K]

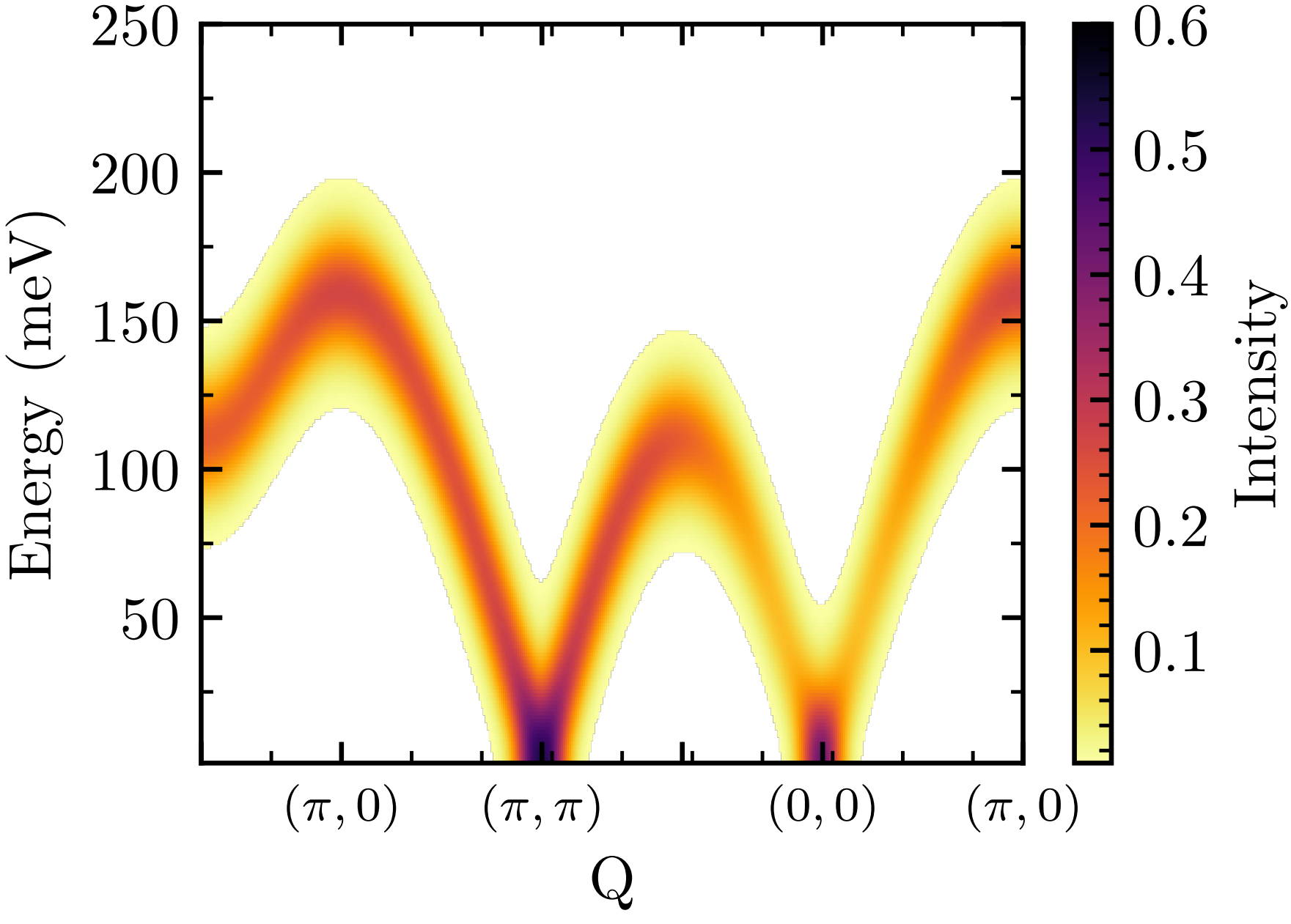

1.0
0.5
0.0
−0.5
−1.0
y
0
2
4
6
8
10
12
x

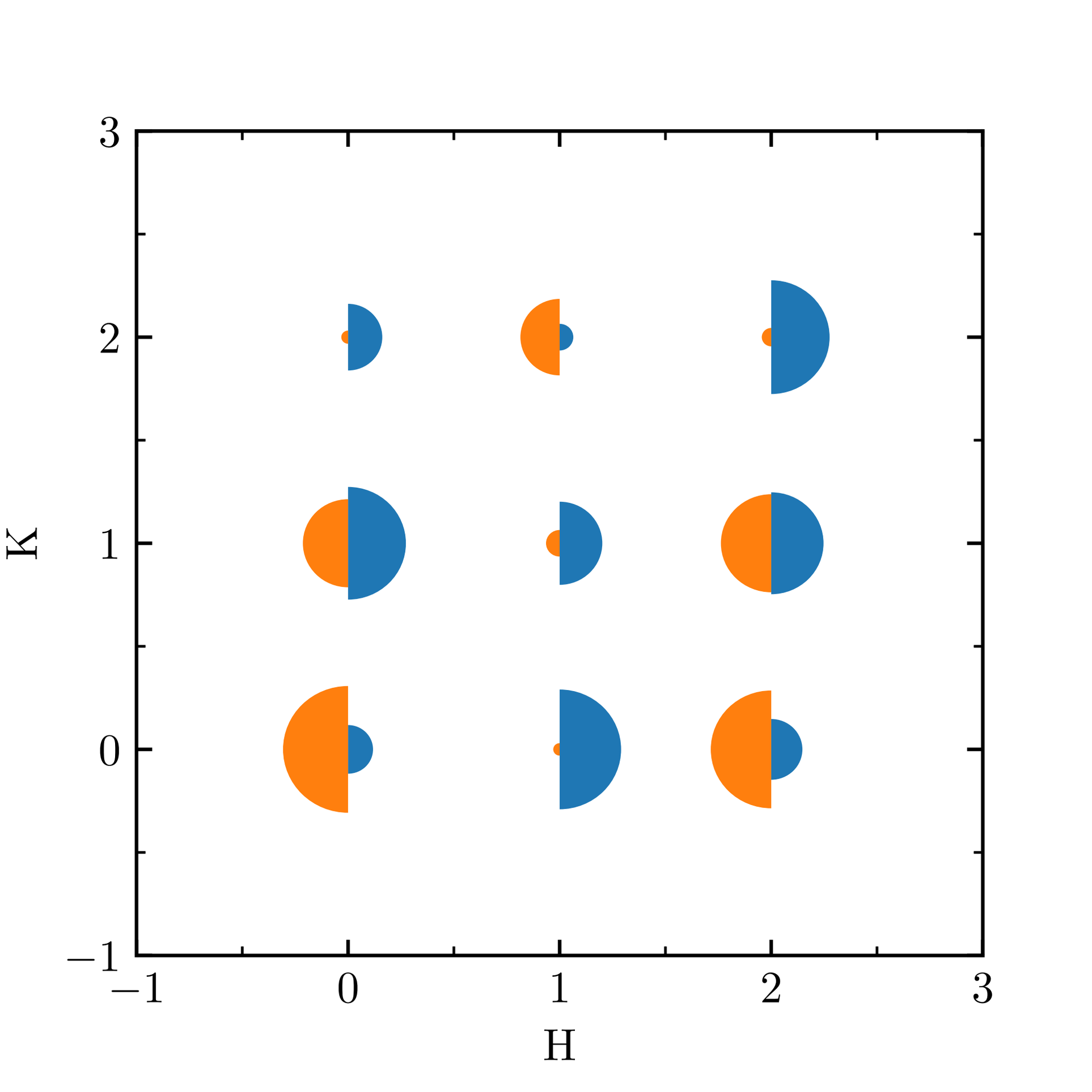

10^4
10^2
10^0
10^{-2}
Intensity (photons/s)


200
175
150
125
100
75
50
25
0
E (meV)
0.0
0.2
0.4
0.6
0.8
1.0
K (r.l.u.)


(a)
(b)
1.0
0.8
0.6
0.4
0.2
0.0
Photon/s
(c)
(d)
(e)
(f)
I_{on}/I_{off}
0.8
0.4
0.0
0
2
4
Delay (ps)
(g)
(h)
τ_{decay} (ps)
τ_{el} (ps)
4
3
1
2
3
Fluence (mJ/cm^2)


(a)
(b)
(c)
(d)
250
200
150
100
50
Energy (meV)
0.6
0.4
0.2
Intensity
$(\pi, 0)$ (π, π) $(0, 0)$ $(\pi, 0)$
Q


250
200
150
100
50
Energy (meV)
(π, 0)
(π, π)
(0, 0)
(π, 0)
Q
0.6
0.5
0.4
0.3
0.2
0.1
Intensity


3
2
1
0
−1
K
−1
0
1
2
3
H