

# Multi-Lens Array Full-Field X-ray Microscopy

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**Table S1.** Summarized parameters of the used MFCRL.

Number $n$ of CRLs in the array [ $n \times n$ ]	9
Photon energy designed for [keV]	9.25
Sample distance from entrance aperture [mm]	50
Constant or variable aperture along optical axis?	variable
Image distance from entrance aperture [mm]	700
FoV, edge length [ $\mu\text{m}$ ]	100
Entrance aperture, $A_1$ [ $\mu\text{m}$ ]	46
Smallest aperture [ $\mu\text{m}$ ]	43.1
Exit aperture [ $\mu\text{m}$ ]	47.9
Minimal distance between two lens elements, orthogonal to optical axis, i.e. $b_1$ [ $\mu\text{m}$ ]	27
Air gap $a$ between lens elements parallel to optical axis [ $\mu\text{m}$ ]	30
Designed radius in parabola apex, vertically focusing lens elements [ $\mu\text{m}$ ]	6.082
Designed radius in parabola apex, horizontally focusing lens elements [ $\mu\text{m}$ ]	6.085
Lens elements per dimension, vertically / horizontally focusing	19 / 20
Total length of CRL [mm]	4.7
Magnification	13.1
Distance of neighboring images (center to center) [ $\mu\text{m}$ ]	956
Edge length of one image [ $\mu\text{m}$ ]	1310

**Table S2.** All aperture sizes of the used MFCRL. The aperture  $A_i$  is the same for lens element  $N_{v,i}$  and  $N_{h,i}$ , i.e. for the  $i$ th vertically and  $i$ th horizontally focusing lens element.

$i$ th lens element $N_{v/h,i}$	Aperture $A_i$ [ $\mu\text{m}$ ]
1	46.00
2	45.73
3	45.44
4	45.14
5	44.83
6	44.51
7	44.17
8	43.83
9	43.47
10	43.10
11	43.12
12	43.70
13	44.26

14	44.81
15	45.35
16	45.88
17	46.39
18	46.90
19	47.39
20*	47.87

\*only horizontally focusing lens element  $N_{h,20}$  existing.