

M-DEI (Multiple-diffraction enhanced imaging)
に関する密度分解能の定量的な評価
Quantitative density resolution analysis with the M-DEI
(Multiple-diffraction enhanced imaging)

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X-ray Phase contrast imaging is now a powerful tool to identify the tiny electronic-density difference in a subject. However diffraction enhanced imaging (DEI), which is widely utilizing in many research fields, has a limitation to analyze the extremely tiny electronic-density difference such as inside the soft tissue. We have proposed multiple-diffraction enhanced imaging (M-DEI) system to improve the density resolution of a DEI image. M-DEI system is using a multiple-diffraction Bragg-type analyzer, which is a key point of the imaging system, to get a specific rocking curve to improve the density resolution. We report here quantitative analysis of density resolution on the M-DEI system.