0 1 1	17 .
Symbol	Meaning
$X^{\mathrm{ref}} = \{x_i\}_{i=1}^N$	Reference images
$X^{\text{ref}} = \{x_i\}_{i=1}^{N}$ $K^{\text{ref}} = \{k_i\}_{i=1}^{N}$	Intrinsics of X^{ref}
\hat{K}^{ref}	Estimated intrinsics of X^{ref}
\hat{K}	Estimated shared intrinsics of X^{ref}
$\Pi^{\text{ref}} = \{\pi_i\}_{i=1}^N$	Extrinsics of X^{ref}
Π^{nov}	Extrinsics of viewpoints in repair path
$\hat{\Pi}^{ ext{ref}}$	Estimated extrinsics of X^{ref}
$M^{\text{ref}} = \{m_i\}_{i=1}^N$	Masks of X ^{ref}
μ	Center location of Gaussian
q	Rotation quaternion of Gaussian
S	Scale vector of Gaussian
σ	Opacity of Gaussian
sh	Spherical harmonic coefficients of Gaussian
\mathcal{G}_c	Coarse 3D Gaussians
\mathcal{R}	Diffusion based Gaussian repair model
3	Latent diffusion encoder of $\mathcal R$
$\mathcal D$	Latent diffusion decoder of ${\mathcal R}$
x'	Degraded rendering
â	Image repaired by $\mathcal R$
$\epsilon_{\scriptscriptstyle S}$	3D Noise added to attributes of G_c
ϵ	2D Gaussian noise for fine-tuning
$\epsilon_{ heta}$	2D Noise predicted by $\mathcal R$
c^{tex}	Object-specific language prompt
\mathcal{P}	Coarse point cloud predicted by DUSt3R