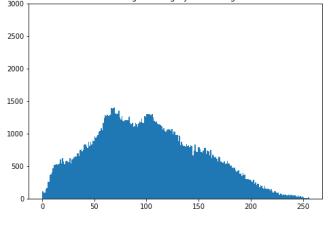
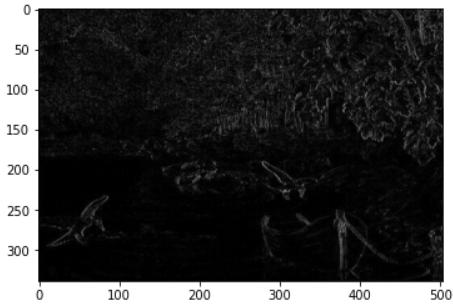
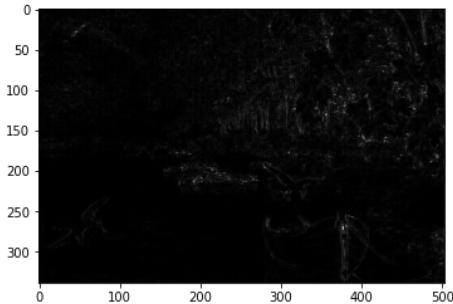
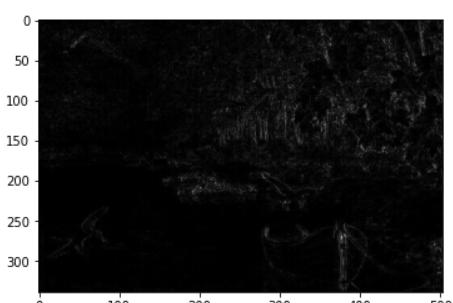


TEXTURE ANALYSIS ON SAMPLE IMAGES

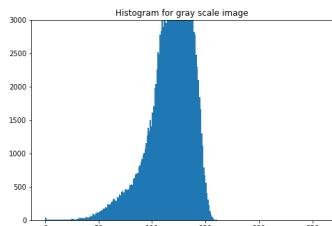
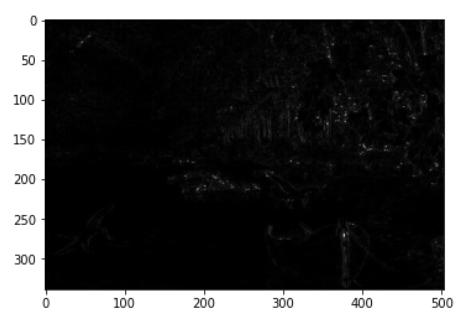
Image name	Image and Histogram	Gray-level Histogram	Gray-level Difference	Gray-level Difference image
sample-image_original.jpg	 	Mean = 0.3943 Variance = 2635.9630 Contrast = 51.3416 Entropy = 4.9738	Mean = 0.0557 Entropy = 4.9062 Contrast = 352.2494	
sample-image_gamma_0.15.jpg	 	Mean = 0.8457 Variance = 468.10920 Contrast = 21.6358 Entropy = 3.8828359	Mean = 0.024356 Entropy = 3.7676 Contrast = 189.4317	
sample-image_gamma_0.15_subtract_50.jpg	 	Mean = 0.6506 Variance = 455.3835 Contrast = 21.3397 Entropy = 3.8828356	Mean = 0.02767 Entropy = 3.7653 Contrast = 134.2751	

sample-image-gamma_0.15_subtract_100.jpg



Mean = 0.4553
Variance = 445.8494
Contrast = 21.1151
Entropy = 3.8828356

Mean = 0.03463
Entropy = 3.7536
Contrast = 96.2442



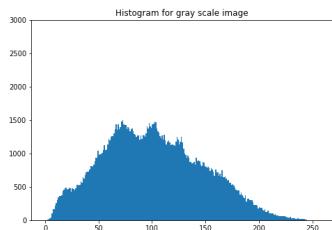
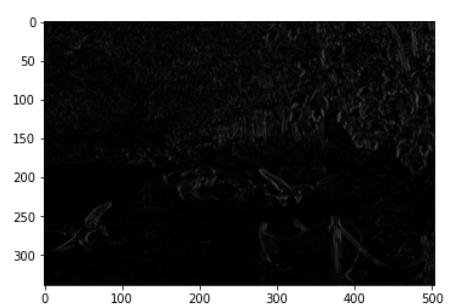
Skewness = 2.8268945
Kurtosis = 7.925684

sample-image-GaussianBlur-1.jpg



Mean = 0.3943
Variance = 2162.1333
Contrast = 46.4987
Entropy = 4.8390265

Mean = 0.0310
Entropy = 4.0059
Contrast = 100.6024



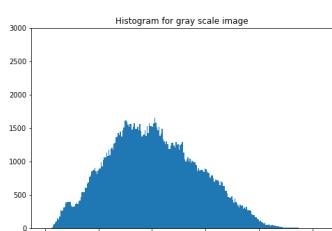
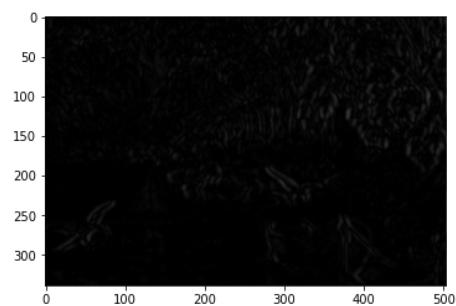
Skewness = 0.9781611
Kurtosis = 0.02138591

sample-image-GaussianBlur-2.jpg



Mean = 0.3943
Variance = 1790.6897
Contrast = 42.3165
Entropy = 3.8828356

Mean = 0.0217
Entropy = 3.2569
Contrast = 41.6866



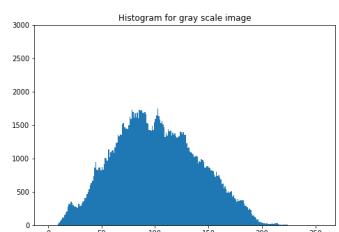
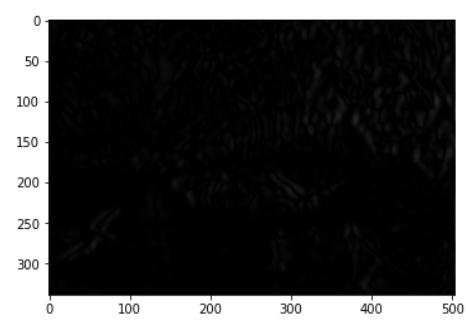
Skewness = 1.4473498
Kurtosis = 1.3170638

sample-image-GaussianBlur-3.jpg



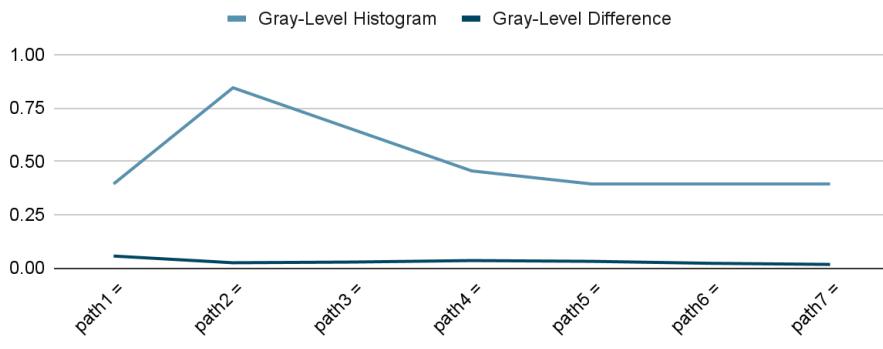
Mean = 0.3943
Variance = 1566.7097
Contrast = 39.5816
Entropy = 4.53414

Mean = 0.01652
Entropy = 2.8146
Contrast = 27.998

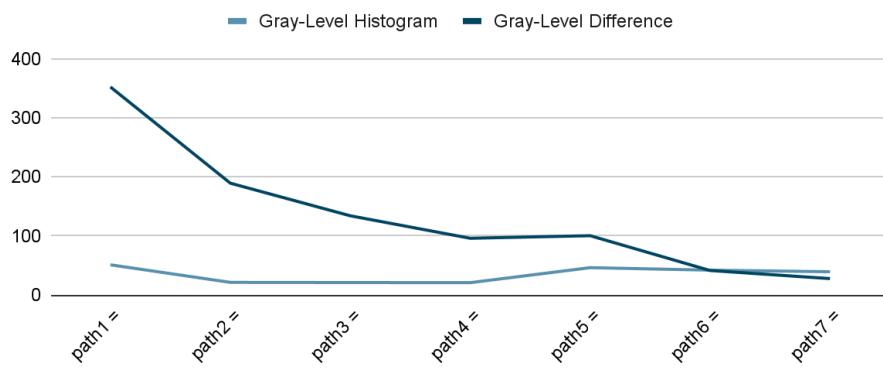


Skewness = 1.5139582
Kurtosis = 1.6800013

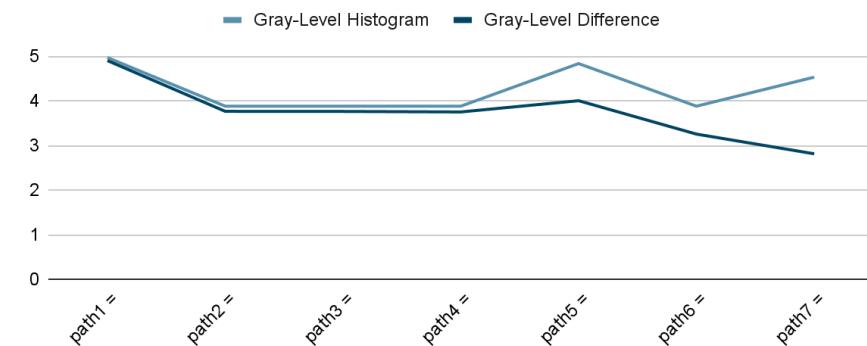
MEAN



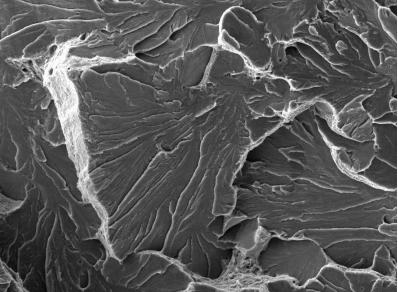
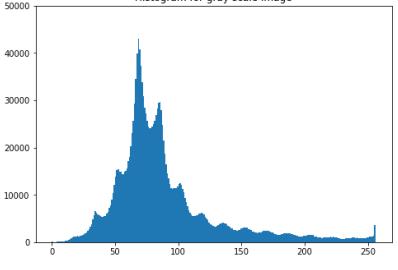
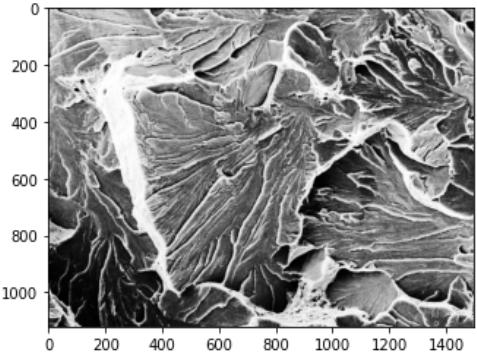
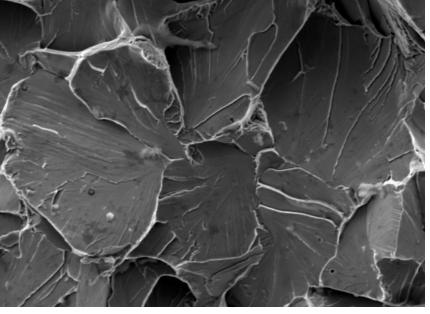
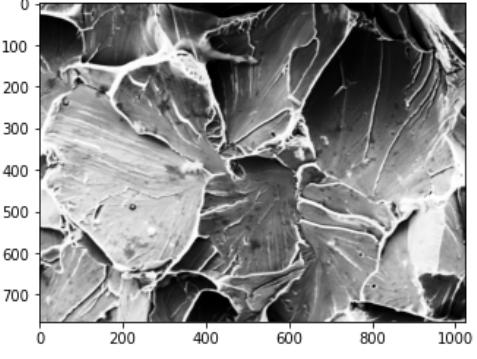
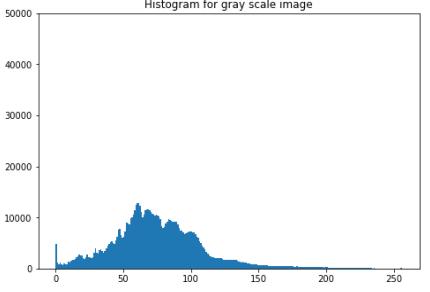
CONTRAST



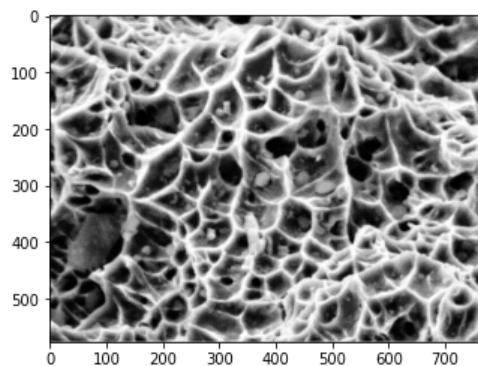
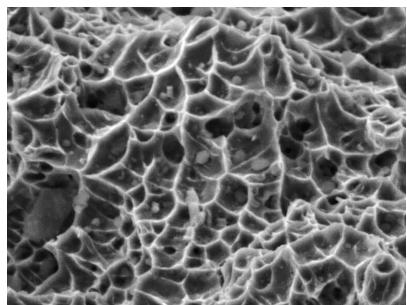
ENTROPY



GRAY LEVEL HISTOGRAM ON SEM

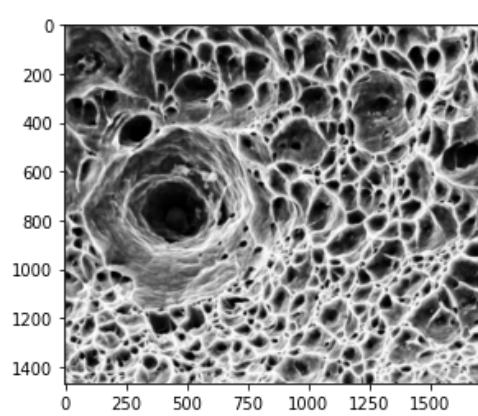
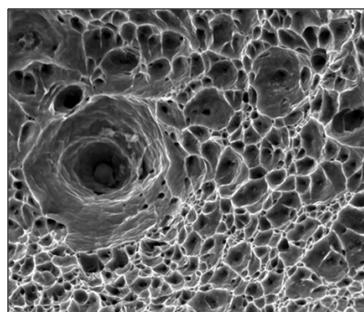
Image name	Image and Histogram	Equalized Image	Gray-level Histogram
brittle-1.jpg	 		Mean = 0.3465 Variance = 1763.4552 Contrast = 41.9935 Entropy = 4.6688
			Skewness = 2.3731 Kurtosis = 6.2379
brittle-2.jpg			Mean = 0.2944 Variance = 1206.2008 Contrast = 34.7304 Entropy = 4.5081
			Skewness = 2.6827 Kurtosis = 9.6803

ductile-1.jpg



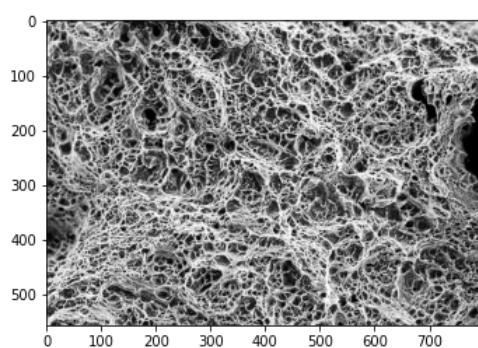
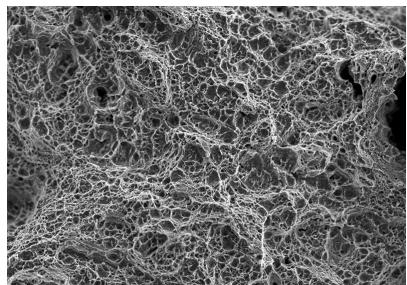
Mean = 0.4138
Variance = 2851.72538
Contrast = 53.4015
Entropy = 5.0914

ductile-2.jpg

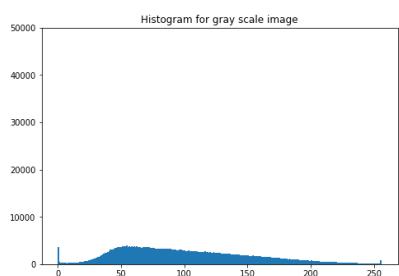


Mean = 0.3797
Variance = 2567.1605
Contrast = 50.6671
Entropy = 1.3529

ductile-3.jpg

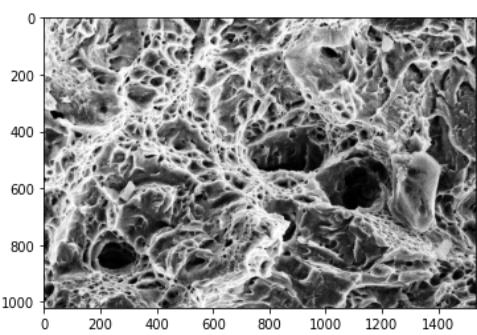
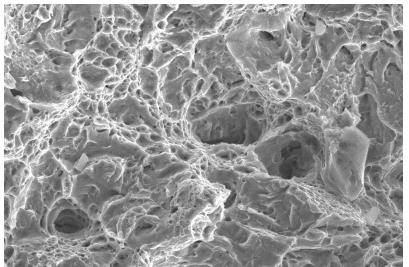


Mean = 0.3958
Variance = 2696.04947
Contrast = 51.9234
Entropy = 5.1481

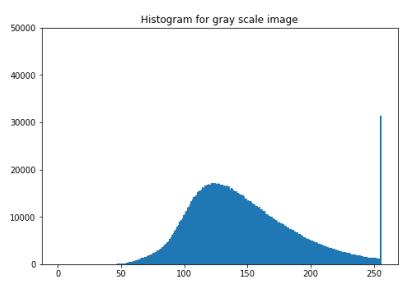


Skewness = 0.6022
Kurtosis = -0.1343

mixed-1.tif

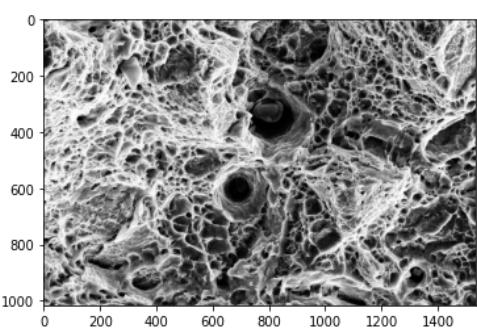
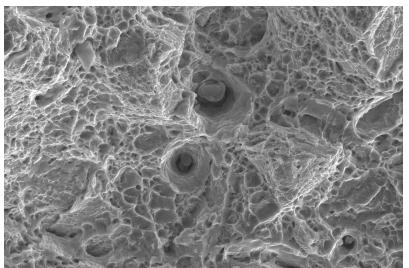


Mean = 0.57006
Variance = 1703.3654
Contrast = 41.2718
Entropy = 5.0092

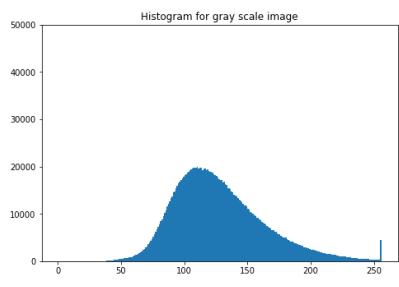


Skewness = 1.9063
Kurtosis = 10.2299

mixed-2.tif

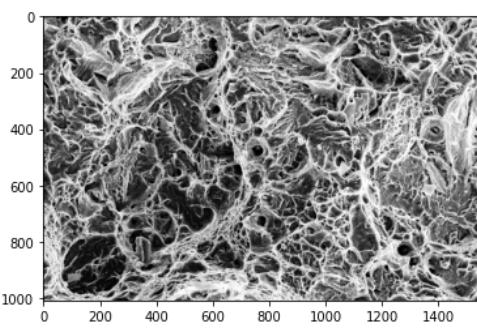
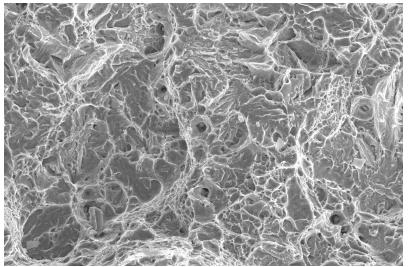


Mean = 0.4973
Variance = 1248.5377
Contrast = 35.3346
Entropy = 4.8063

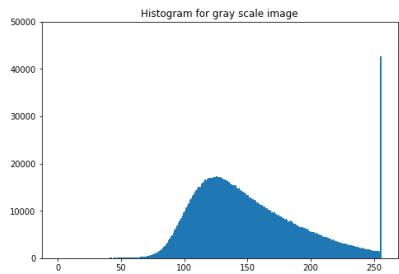


Skewness = 1.2822
Kurtosis = 0.8163

mixed-3.tif

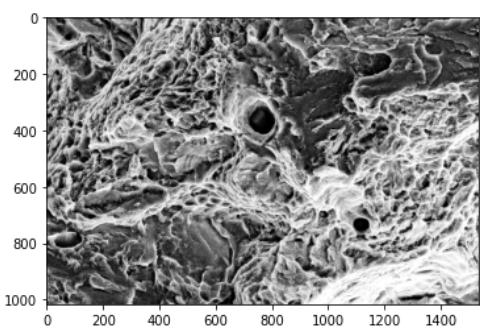
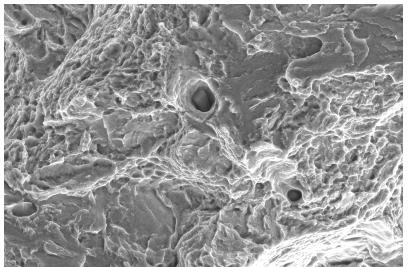


Mean = 0.5880
Variance = 1756.0383
Contrast = 41.9051
Entropy = 4.8955

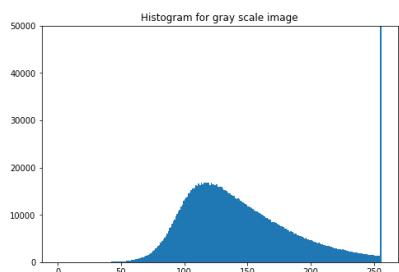


Skewness = 2.8580
Kurtosis = 16.3526

mixed-4.tif

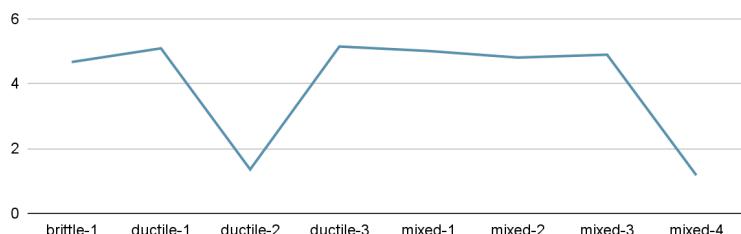


Mean = 0.5701
Variance = 2038.7419
Contrast = 45.1524
Entropy = 1.1741

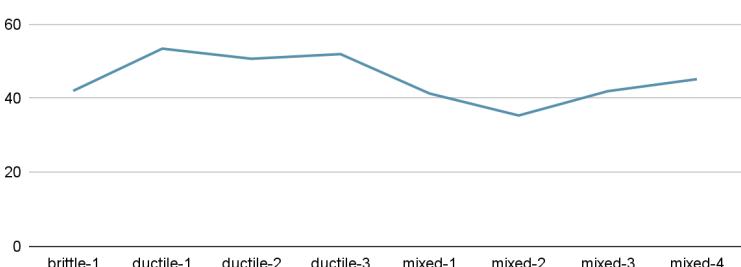


Skewness = 1.3957
Kurtosis = 1.1741

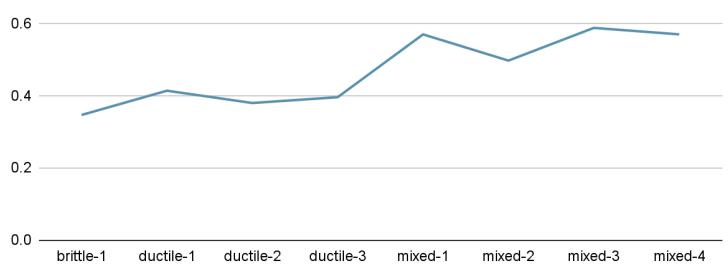
Entropy



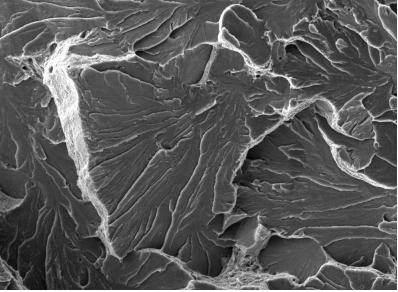
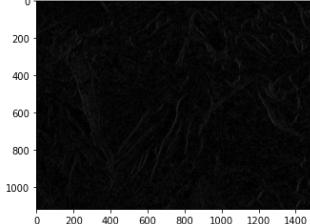
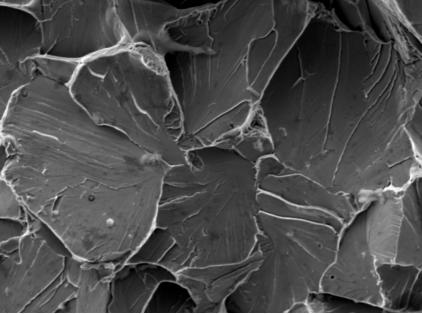
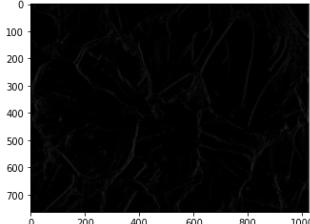
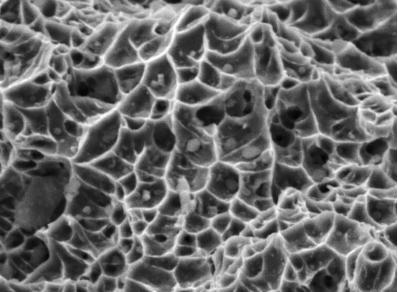
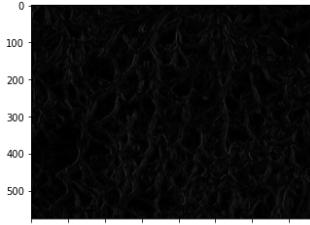
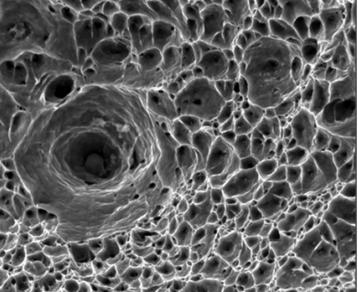
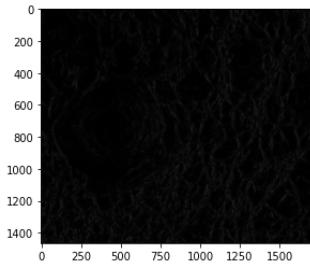
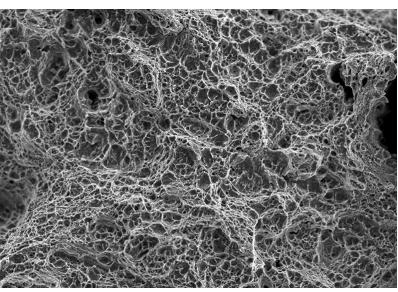
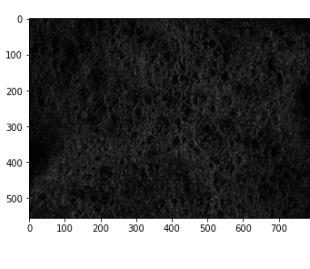
Contrast



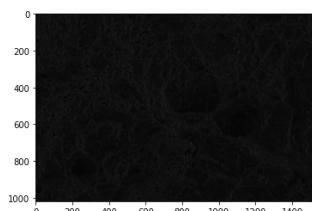
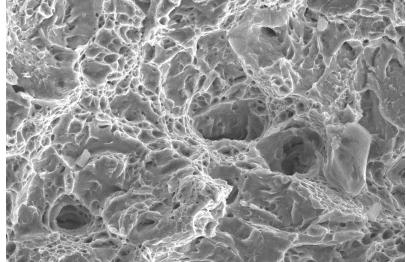
Mean



GRAY LEVEL DIFFERENCE ON SEM

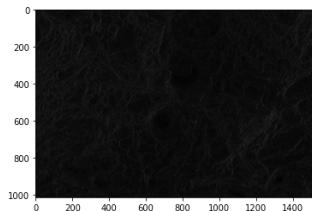
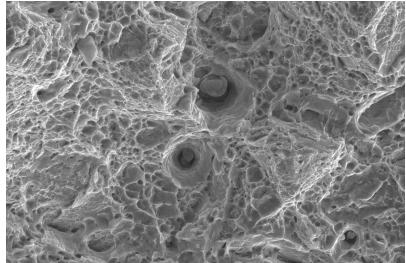
Image name	Image and Histogram		Gray-level Difference
brittle-1.jpg			Mean = 0.0361 Contrast = 127.552 Entropy = 4.4232
brittle-2.jpg			Mean = 0.0167 Contrast = 50.1972 Entropy = 3.219
ductile-1.jpg			Mean = 0.0322 Contrast = 110.20340 Entropy = 4.2491
ductile-2.jpg			Mean = 0.02721 Contrast = 119.5788 Entropy = 4.0535
ductile-3.jpg			Mean = 0.0915 Contrast = 996.9513 Entropy = 5.9532

mixed-1.tif



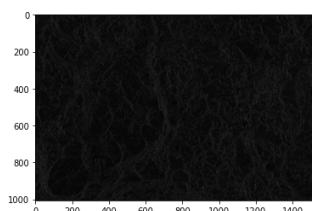
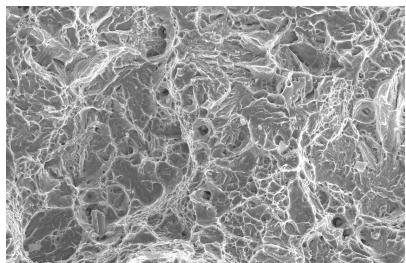
Mean = 0.0604
Contrast = 387.2611
Entropy = 5.2989

mixed-2.tif



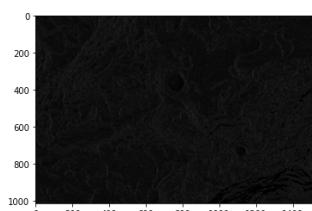
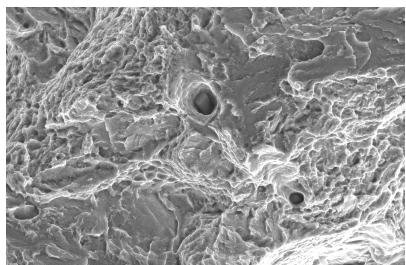
Mean = 0.05815
Contrast = 257.117
Entropy = 5.0127

mixed-3.tif



Mean = 0.0646
Contrast = 485.3123
Entropy = 5.4250

mixed-4.tif



Mean = 0.0658
Contrast = 481.4895
Entropy = 5.4453