

## DAFTAR PUSTAKA

- A. Hayat *et al.*, “Dye-sensitized solar cells based on axially ligated phosphorus-phthalocyanine dyes,” *Appl. Phys. Express*, vol. 8, no. 4, pp. 1–5, 2015.
- Ade Ryane, dkk. 2014. “Penggunaan Teknologi Plasma Dalam Mengurangi Kandungan BOD dan Warna pada Limbah Cair Industri Minuman Ringan”. Jurusan Teknik Lingkungan dan Teknik Elektro Fakultas Teknik Universitas Diponegoro. Semarang.
- D. Mustikasari, A. Supriyanto, and R. Suryana, Karakteristik Lapisan TiO<sub>2</sub> Metode *Spray* dalam Dye-Sensitized Solar Cell, *Jurnal Teori dan Aplikasi Fisika*, vol. 01, no. 02, 2013, pp. 105-111.
- F. C. Krebs, Fabrication and processing of polymer solar cells: A review of printing and coating techniques, *Solar Energy Materials & Solar Cells* 93, 394 (2009)
- Febrian, Andreas, Arief, R., Edwin, K., Gita, L., Intan, S.H.H.Z, Isnina, E.H., Mega, P., dan Rangga, M.J. 2011. *Microwave Oven*, (online), (<http://scele.cs.ui.ac.id> diakses 02 November 2018).
- G. Lin, J. Chen, W. Tseng, and F. Lu, “Formation of Anatase TiO<sub>2</sub> coatings by plasma electrolytic oxidation for photocatalytic applications,” *Surf. Coat. Technol.*, 2018.
- Gratzel, M. 2001, “*Photoelectrochemical Cells*”. *Nature* 414: h. 338-344.
- Gratzel, M., 2003. Dye-sensitized Solar Cell. *Journal of Photochemistry and Photobiology*, Volume IV, pp. 145-153.
- H. Cui, H-S. Shen, Y-M. Gao, K. Dwight, and A. Wold, Photocatalytic Properties of Titanium (IV) Oxide Thin Films Prepared by Spin Coating and Spray Pyrolysis. *Materials Research Bulletin*, vol. 28, 1993, 195-201.
- H. Nagasawa, J. Xu, M. Kanezashi, and T. Tsuru, “Atmospheric-pressure plasma-enhanced chemical vapor deposition of UV-shielding TiO<sub>2</sub> coatings on transparent plastics,” *Mater. Lett.*, vol. 228, pp. 479–481, 2018.
- (1992). *Film Deposition by Plasma Techniques*. USA: Springer-Verlag.



- N. A. Karim, U. Mehmood, H. F. Zahid, and T. Asif, "Nanostructured photoanode and counter electrode materials for efficient Dye-Sensitized Solar Cells (DSSCs)," *Sol. Energy*, vol. 185, no. March, pp. 165–188, 2019.
- N. Amaliyah, S. Mukasa, S. Nomura, and H. Toyota, "Plasma In-liquid Method for Reduction of Zinc Oxide in Zinc Nanoparticle Synthesis," *Mater. Res. Express*, vol. 2, no. 2, 2015.
- Nur, Muhammad. 2011. "Fisika Plasma dan Aplikasinya". Universitas Diponegoro. Semarang.
- Nurdin, M.F. 2016. Perancangan Teknologi Sederhana Untuk Membangkitkan Microwave Plasma Dalam Cairan. Jurusan Mesin, Fakultas Teknik, Universitas Hasanuddin.
- Potter F. dan Christopher. 2010. Fisika Modern Di Sekitar Kita. P.T. Indeks Jakarta
- Putra, A.E.E. 2013. Produksi Hidrogen Melalui Dekomposisi *Metana* Dengan *High Frequency Plasma*. Jurusan Teknik Mesin. Universitas Hasanuddin. Makassar.
- Rahman, T., Fadhlulloh, M.A., Nandiyanto, A.B.D., dan Mudzakir, A. 2014. Sintesi Titanium Dioksida Nanopartikel. Program Studi Kimia, Jurusan Pendidikan Kimia, Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam, Universitas Pendidikan Indonesia.
- R. Nuryadi, Efek Adsorpsi Dye ke dalam Lapisan TiO<sub>2</sub> dengan Metode Elektroforesis: DSSC Berbasis Lapisan TiO<sub>2</sub> Terbuat dengan Metode Slip Casting dan Metode Elektroforesis. *Jurnal Rekayasa Kimia dan Lingkungan*, vol.8, no.1, 2011, pp. 35-40.
- S. Umale, V. Sudhakar, S. M. Sontakke, K. Krishnamoorthy, and A. B. Pandit, "Improved Efficiency of DSSC using Combustion Synthesized TiO<sub>2</sub>," *Mater. Res. Bull.*, 2018.
- Surya, Y. 2010. *Oven Microwave*, (online), (<http://soerya.surabaya.go.id>, diakses tanggal 01 November 2018).

H., Subagio, A., Supriyanto, E., Arifin, P., Budiman, M., Sukirno, dan armawi, M. 2005. Pengaruh Laju Alir Gas Nitrogen Terhadap Intensitas



Emisi Optik Plasma Nitrogen Yang Dibangkitkan Oleh Gelombang Mikro 2,45 Ghz Dengan Metoda *Optical Emission Spectroscopy*. Vol. 7: 22-28. ISSN 1411-1349.

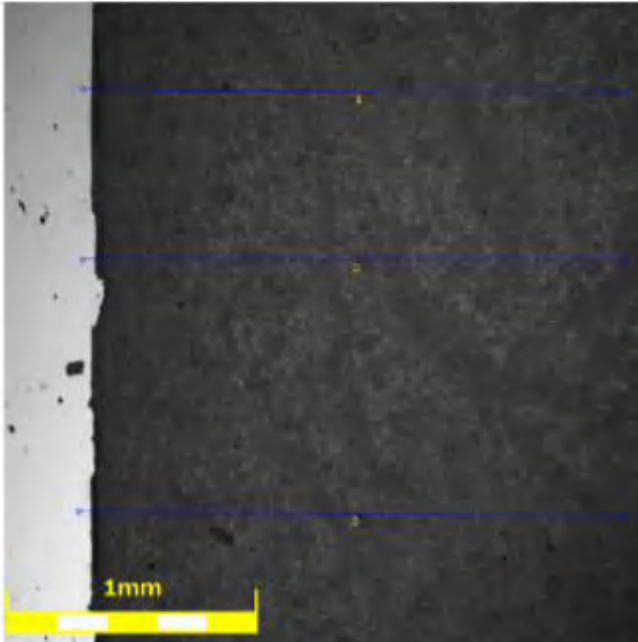
Tang, Zheng. 2010. Studies of Inverted Organic Solar Cells Fabricated by Doctor Blading Technique. Department of Physics, Chemistry and Biology. Linköping University.

Yang Jiao, dkk, 2012, “*Dye Sensitized Solar Cells Principles and New Design*“, Beijing National Laboratory for Condensed Matter Physics and Institute of Physics, Chinese Academy of Sciences, Beijing China.

Y. Liu, Y. Lu, Y. Zeng, C. Liao, J. Chung, and T. Wei, Nanostructured Mesoporous Titanium Dioxide Thin Film Prepared by Sol-Gel Method for Dye-Sensitized Solar Cell. *International Journal of Photoenergy*, 2011, pp. 1-9.



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

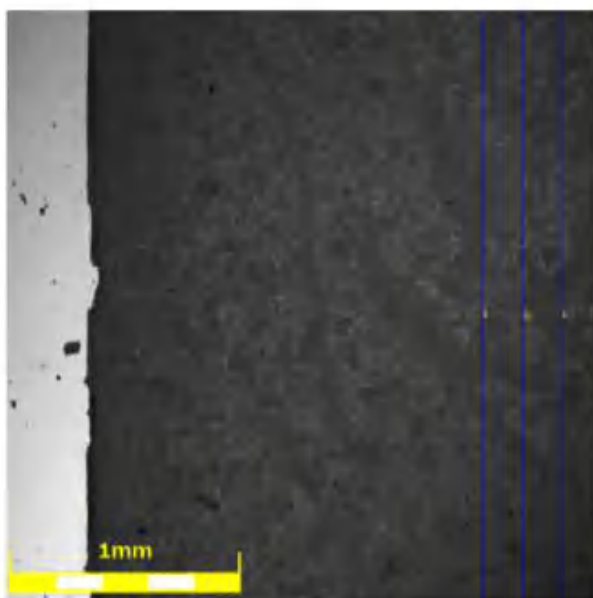
190729\_122554  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	17.171	2171.874	2171.942	0.453	190729_122554
<input checked="" type="checkbox"/>	2	11.334	2155.129	2155.159	0.301	190729_122554
<input checked="" type="checkbox"/>	3	15.548	2178.575	2178.630	0.409	190729_122554
Count		3	3	3	3	3
Average		14.684	2168.526	2168.577	0.388	-
Min.		11.334	2155.129	2155.159	0.301	-
Max.		17.171	2178.575	2178.630	0.453	-
Range		5.836	23.446	23.471	0.152	-
σ		3.013	12.076	12.092	0.078	-
3σ		9.038	36.228	36.276	0.234	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Lower tolerance		0	0	0	0	-
Tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_122554  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

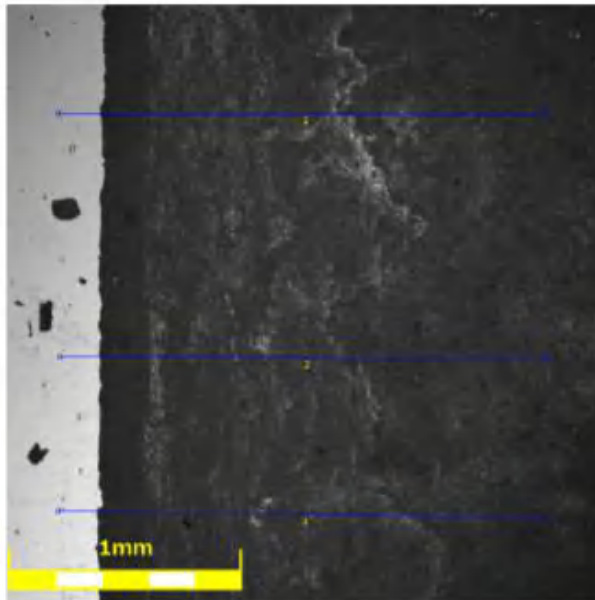
Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rōc	Rmr	Rz	js	Ac[μ]	ls[μ]	lf[μ]	File
1		17.8	17.6	35.5	21.5	41.4	4.770	6.08	0.06	3.31	77.2	99.7	9.91	100.	31.9	800.	-	-	-	190
2		18.0	16.6	34.7	18.3	40.5	4.167	5.30	-0.04	3.38	72.0	87.2	8.68	100.	29.9	800.	-	-	-	190
3		16.6	14.1	30.8	15.9	32.3	3.757	4.80	0.17	3.52	72.0	81.0	7.87	100.	24.9	800.	-	-	-	190
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		17.5	16.1	33.7	18.5	38.1	4.231	5.39	0.06	3.40	73.7	89.3	8.82	100.	28.9	-	-	-	-	-
Min.		16.6	14.1	30.8	15.9	32.3	3.757	4.80	-0.04	3.31	72.0	81.0	7.87	100.	24.9	-	-	-	-	-
Max.		18.0	17.6	35.5	21.5	41.4	4.770	6.08	0.17	3.52	77.2	99.7	9.91	100.	31.9	-	-	-	-	-
Range		1.39	3.50	4.68	5.62	9.05	1.013	1.28	0.22	0.20	5.20	18.7	2.03	0.00	7.06	-	-	-	-	-
σ		0.75	1.81	2.51	2.82	4.99	0.510	0.64	0.11	0.10	2.99	9.55	1.02	0.00	3.63	-	-	-	-	-
3σ		2.25	5.42	7.55	8.46	14.9	1.529	1.93	0.33	0.32	8.97	28.6	3.07	0.00	10.9	-	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR  
 USER

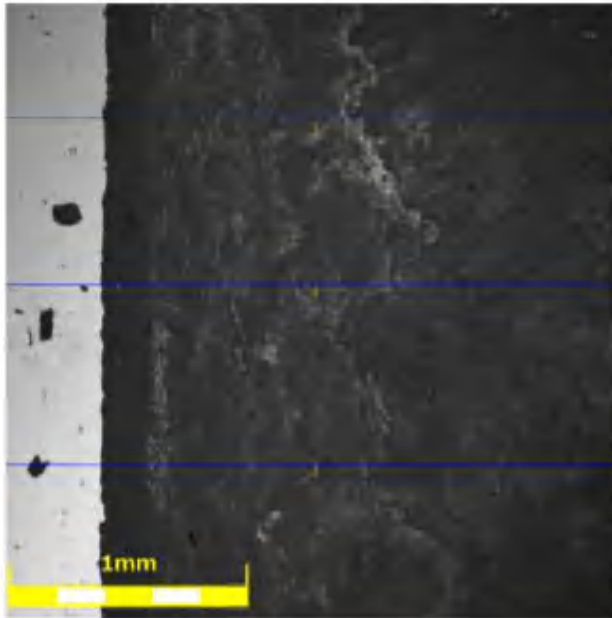
191024\_111604  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	7.315	2098.415	2098.428	0.200	191024_111604
<input checked="" type="checkbox"/>	2	7.017	2091.767	2091.779	0.192	191024_111604
<input checked="" type="checkbox"/>	3	9.589	2091.960	2091.982	0.263	191024_111604
Count		3	3	3	3	3
Average		7.974	2094.048	2094.063	0.218	-
Min.		7.017	2091.767	2091.779	0.192	-
Max.		9.589	2098.415	2098.428	0.263	-
Range		2.572	6.648	6.649	0.070	-
σ		1.407	3.784	3.781	0.039	-
3σ		4.220	11.351	11.344	0.116	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

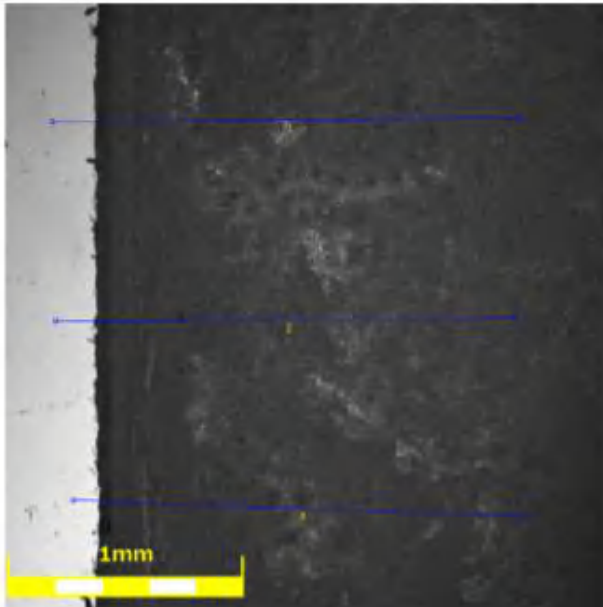
191024\_111604  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzj	λc[μ]	λs[μ]	λf[μ]	File n
<input checked="" type="checkbox"/>	1	18.4	19.1	37.5	21.4	50.9	4.49	5.98	0.00	3.73	111.1	110.1	9.23	100	31.7	800	2.50	-	1910
<input checked="" type="checkbox"/>	2	21.6	40.5	62.1	31.6	103	4.37	6.31	-1.35	18.9	84.6	132	8.99	100	49.9	800	2.50	-	1910
<input checked="" type="checkbox"/>	3	25.5	16.6	42.2	22.4	52.0	4.06	5.41	0.81	5.52	136	102	8.03	100	33.3	800	2.50	-	1910
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		21.8	25.4	47.3	25.2	68.7	4.31	5.90	-0.15	9.40	110.1	115	8.75	100	38.3	-	-	-	-
Min.		18.4	16.6	37.5	21.4	50.9	4.06	5.41	-1.35	3.73	84.6	102	8.03	100	31.7	-	-	-	-
Max.		25.5	40.5	62.1	31.6	103	4.49	6.31	0.81	18.9	136	132	9.23	100	49.9	-	-	-	-
Range		7.13	23.8	24.6	10.1	52.4	0.42	0.89	2.21	15.2	51.4	29.7	1.19	0.00	18.2	-	-	-	-
σ		3.57	13.1	13.0	5.62	29.9	0.22	0.45	1.12	8.31	25.7	15.5	0.63	0.00	10.0	-	-	-	-
3σ		10.7	39.3	39.2	16.8	89.9	0.66	1.35	3.35	24.9	77.2	46.5	1.89	0.00	30.2	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_110931  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

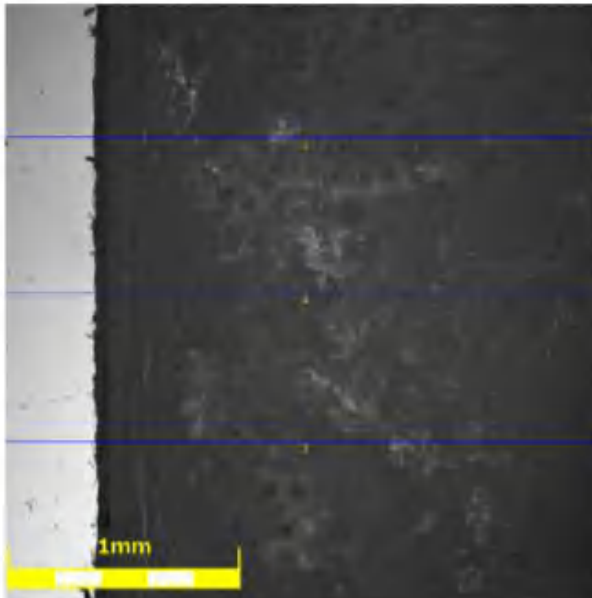
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	7.461	1985.058	1985.072	0.215	191024_110931
<input checked="" type="checkbox"/>	2	9.040	1948.362	1948.383	0.266	191024_110931
<input checked="" type="checkbox"/>	3	14.347	1916.221	1916.275	0.429	191024_110931
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		10.282	1949.881	1949.910	0.303	-
Min.		7.461	1916.221	1916.275	0.215	-
Max.		14.347	1985.058	1985.072	0.429	-
Range		6.886	68.837	68.797	0.214	-
σ		3.607	34.444	34.424	0.112	-
3σ		10.821	103.331	103.272	0.335	-
<b>Tolerance</b>		<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

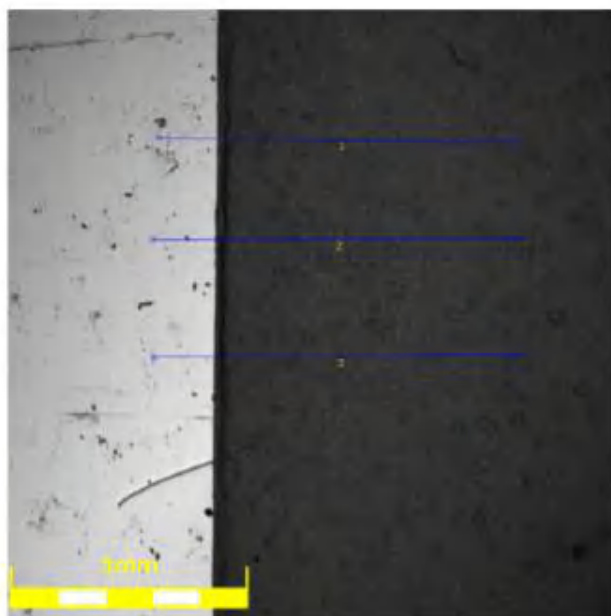
191024\_110931  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RDq	Rdc	Rmr	Rz	is	Ac[μ]	ls[μ]	lf[μ]	File
<input checked="" type="checkbox"/>	1	23.6	18.1	41.8	25.2	48.5	5.409	7.20	0.26	3.71	169.	102.	10.4	100.	27.5	800.	2.50	-	191	
<input checked="" type="checkbox"/>	2	15.9	15.4	31.3	19.5	43.1	4.354	5.68	0.09	3.19	167.	88.9	8.30	100.	26.7	800.	2.50	-	191	
<input checked="" type="checkbox"/>	3	20.8	17.9	38.7	24.1	51.4	4.915	6.44	0.34	3.40	176.	96.5	9.50	100.	32.7	800.	2.50	-	191	
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Average		20.1	17.1	37.3	22.9	47.7	4.893	6.44	0.23	3.44	171.	96.0	9.41	100.	28.9	-	-	-	-	
Min.		15.9	15.4	31.3	19.5	43.1	4.354	5.68	0.09	3.19	167.	88.9	8.30	100.	26.7	-	-	-	-	
Max.		23.6	18.1	41.8	25.2	51.4	5.409	7.20	0.34	3.71	176.	102.	10.4	100.	32.7	-	-	-	-	
Range		7.73	2.68	10.4	5.76	8.28	1.055	1.52	0.24	0.51	8.08	13.7	2.12	0.00	6.00	-	-	-	-	
σ		3.91	1.50	5.36	3.05	4.20	0.528	0.76	0.12	0.26	4.35	6.87	1.06	0.00	3.25	-	-	-	-	
3σ		11.7	4.51	16.0	9.15	12.6	1.584	2.28	0.37	0.78	13.0	20.6	3.18	0.00	9.76	-	-	-	-	
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



## Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

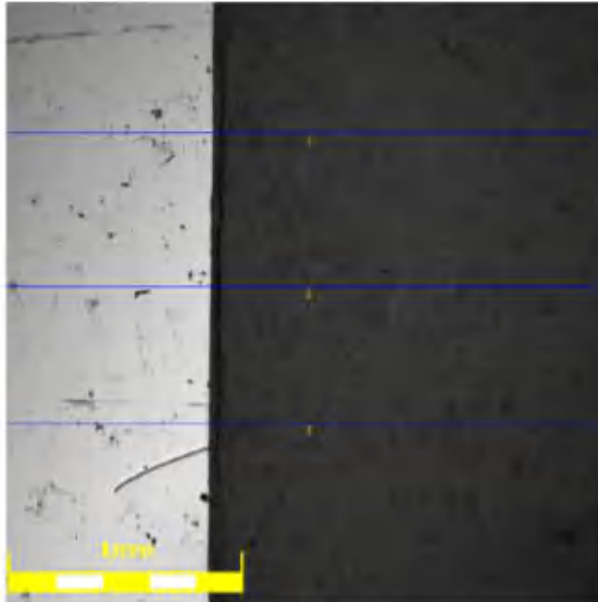
191024\_105635  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	13.815	1501.386	1501.449	0.527	191024_105635
<input checked="" type="checkbox"/>	2	14.973	1534.616	1534.689	0.559	191024_105635
<input checked="" type="checkbox"/>	3	10.671	1541.343	1541.380	0.397	191024_105635
Count		3	3	3	3	3
Average		13.153	1525.781	1525.839	0.494	-
Min.		10.671	1501.386	1501.449	0.397	-
Max.		14.973	1541.343	1541.380	0.559	-
Range		4.302	39.957	39.930	0.162	-
σ		2.226	21.393	21.386	0.086	-
3σ		6.679	64.180	64.157	0.258	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

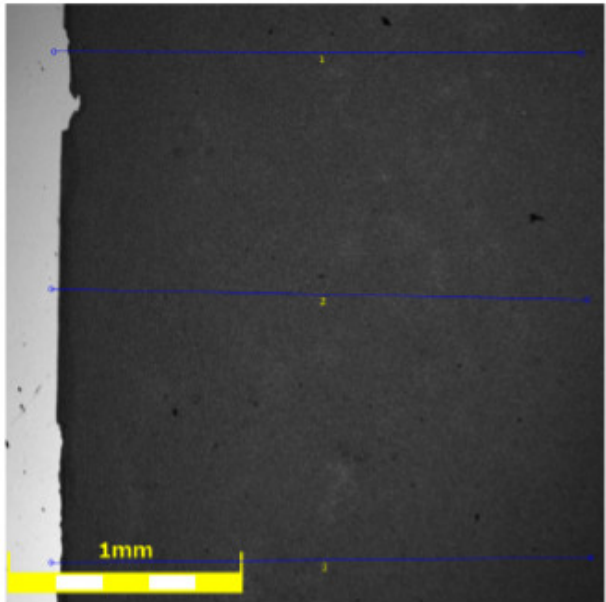
191024\_105635  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzj	λc[μ]	λs[μ]	λf[μ]	File
<input checked="" type="checkbox"/>	1	33.5	14.8	48.3	17.7	97.4	4.896	8.22	0.37	8.83	69.5	79.9	7.36	100	39.1	800	2.50	-	19:
<input checked="" type="checkbox"/>	2	32.8	11.8	44.7	16.7	95.8	4.315	7.29	0.52	9.53	82.4	75.7	7.07	100	35.5	800	2.50	-	19:
<input checked="" type="checkbox"/>	3	33.5	17.8	51.3	24.9	100	6.033	9.08	0.11	7.13	112.1	87.2	10.2	100	48.2	800	2.50	-	19:
Count		3	3	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3
Average		33.3	14.8	48.1	19.8	98.0	5.081	8.20	0.34	8.50	88.0	80.9	8.21	100	40.9	-	-	-	
Min.		32.8	11.8	44.7	16.7	95.8	4.315	7.29	0.11	7.13	69.5	75.7	7.07	100	35.5	-	-	-	
Max.		33.5	17.8	51.3	24.9	100	6.033	9.08	0.52	9.53	112.1	87.2	10.2	100	48.2	-	-	-	
Range		0.62	5.99	6.61	8.12	4.92	1.718	1.79	0.41	2.39	42.5	11.4	3.13	0.00	12.6	-	-	-	
σ		0.35	2.99	3.31	4.44	2.51	0.874	0.89	0.21	1.23	21.8	5.79	1.73	0.00	6.50	-	-	-	
3σ		1.07	8.99	9.93	13.3	7.53	2.622	2.69	0.62	3.69	65.4	17.3	5.19	0.00	19.5	-	-	-	
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*	



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_123141  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

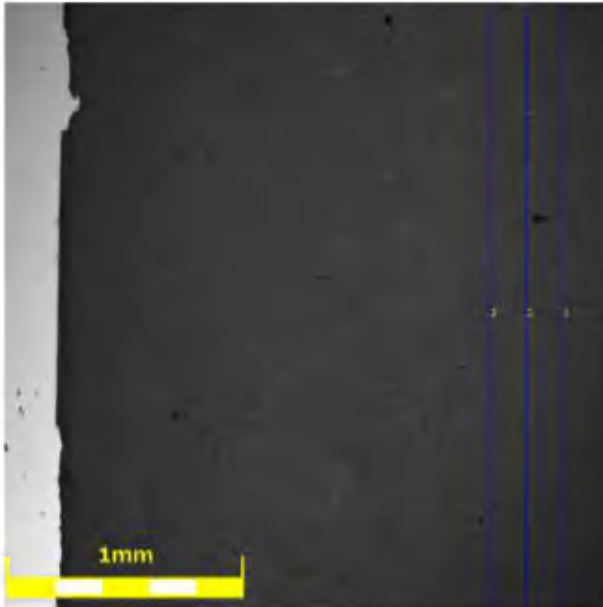
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	12.202	2255.223	2255.256	0.310	190729_123141
<input checked="" type="checkbox"/>	2	17.664	2292.390	2292.458	0.441	190729_123141
<input checked="" type="checkbox"/>	3	10.467	2305.342	2305.366	0.260	190729_123141
Count		3	3	3	3	3
Average		13.444	2284.318	2284.360	0.337	-
Min.		10.467	2255.223	2255.256	0.260	-
Max.		17.664	2305.342	2305.366	0.441	-
Range		7.198	50.119	50.110	0.181	-
σ		3.756	26.016	26.018	0.094	-
3σ		11.268	78.049	78.054	0.281	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_123141  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

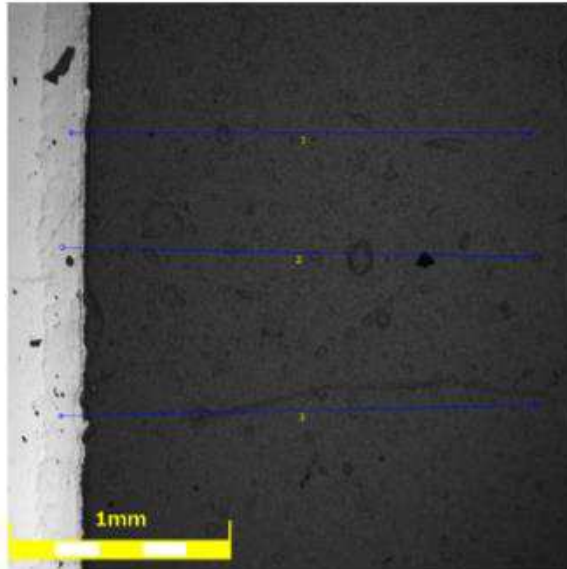
Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq[μ]	Rδc[μ]	Rmr[μ]	Rzjis	λc[μ]	λs[μ]	λf[μ]	File r
<input checked="" type="checkbox"/>	1	17.4	17.6	35.0	20.2	41.4	4.671	5.87	-0.03	3.13	73.6	98.0	10.0	100.	32.3	800.	-	-	190
<input checked="" type="checkbox"/>	2	16.0	21.7	37.8	19.6	52.4	4.557	5.92	-0.41	3.93	63.2	97.1	8.94	100.	31.5	800.	-	-	190
<input checked="" type="checkbox"/>	3	12.3	14.7	27.0	16.8	31.5	4.087	5.07	-0.16	2.86	68.1	86.4	8.86	100.	25.0	800.	-	-	190
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		15.2	18.0	33.3	18.9	41.8	4.438	5.62	-0.20	3.30	68.3	93.9	9.29	100.	29.6	-	-	-	-
Min.		12.3	14.7	27.0	16.8	31.5	4.087	5.07	-0.41	2.86	63.2	86.4	8.86	100.	25.0	-	-	-	-
Max.		17.4	21.7	37.8	20.2	52.4	4.671	5.92	-0.03	3.93	73.6	98.0	10.0	100.	32.3	-	-	-	-
Range		5.14	7.07	10.8	3.37	20.9	0.584	0.85	0.37	1.06	10.4	11.6	1.19	0.00	7.36	-	-	-	-
σ		2.66	3.55	5.63	1.80	10.4	0.310	0.47	0.19	0.55	5.20	6.46	0.66	0.00	4.04	-	-	-	-
3σ		7.98	10.6	16.8	5.41	31.4	0.929	1.43	0.57	1.66	15.6	19.3	2.00	0.00	12.1	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_115218  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

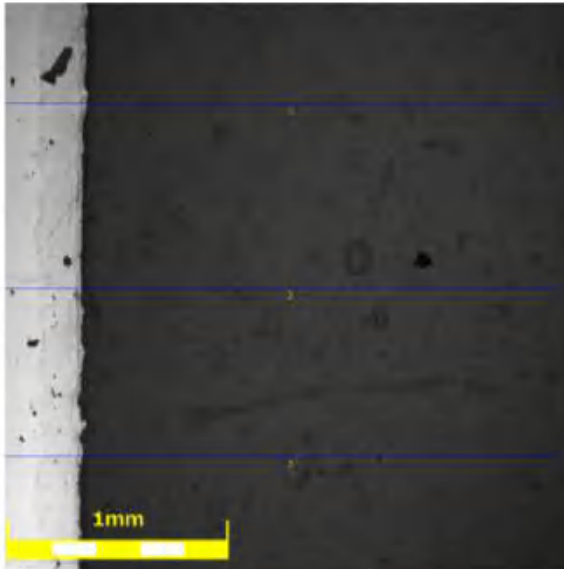
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	23.469	2071.726	2071.859	0.649	191024_115218
<input checked="" type="checkbox"/>	2	18.535	2115.544	2115.626	0.502	191024_115218
<input checked="" type="checkbox"/>	3	14.993	2152.304	2152.357	0.399	191024_115218
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		18.999	2113.192	2113.280	0.517	-
Min.		14.993	2071.726	2071.859	0.399	-
Max.		23.469	2152.304	2152.357	0.649	-
Range		8.476	80.578	80.497	0.250	-
σ		4.257	40.340	40.300	0.126	-
3σ		12.771	121.021	120.899	0.377	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

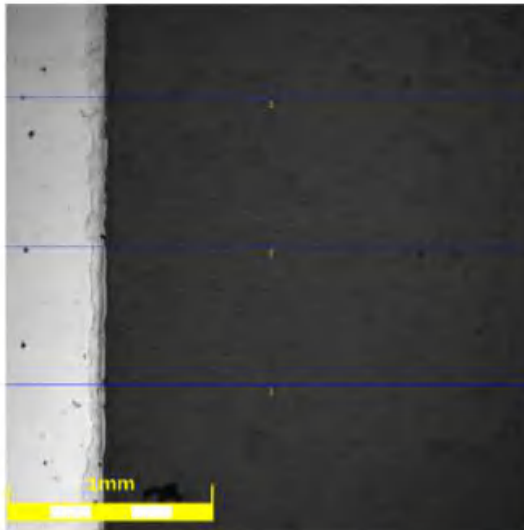
191024\_115218  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr[Rz]	Is	Ac[μ]	As[μ]	Af[μ]	File	
<input checked="" type="checkbox"/>	1	26.1	17.9	44.0	24.8	61.9	4.697	6.22	0.35	4.37	134	108	9.54	100	37.7	800	2.50	-	19:	
<input checked="" type="checkbox"/>	2	54.1	16.5	70.6	40.2	131	5.033	7.33	2.04	23.6	98.6	143	10.2	100	55.9	800	2.50	-	19:	
<input checked="" type="checkbox"/>	3	17.7	14.3	32.1	18.5	42.4	4.174	5.50	0.28	3.78	156	103	8.77	100	27.1	800	2.50	-	19:	
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Average		32.6	16.2	48.9	27.9	78.5	4.635	6.35	0.89	10.6	129	118	9.51	100	40.2	-	-	-	-	
Min.		17.7	14.3	32.1	18.5	42.4	4.174	5.50	0.28	3.78	98.6	103	8.77	100	27.1	-	-	-	-	
Max.		54.1	17.9	70.6	40.2	131	5.033	7.33	2.04	23.6	156	143	10.2	100	55.9	-	-	-	-	
Range		36.3	3.59	38.4	21.7	88.7	0.859	1.83	1.76	19.8	58.2	40.2	1.46	0.00	28.8	-	-	-	-	
σ		19.0	1.80	19.6	11.1	46.6	0.433	0.92	0.99	11.3	29.3	21.8	0.73	0.00	14.5	-	-	-	-	
3σ		57.1	5.42	59.0	33.5	139	1.299	2.77	2.98	33.9	88.0	65.4	2.19	0.00	43.7	-	-	-	-	
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

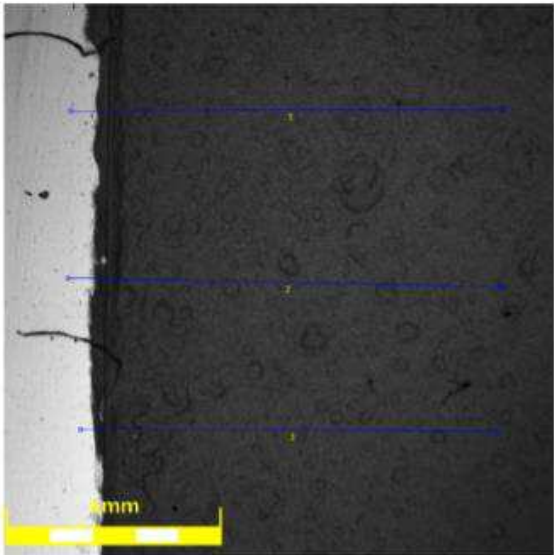
191024\_113754  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ro[μm]	Rq[μ]	Rsk	Rku	Rsm	RDq	Rδc	Rmr	Rzjis	λc[μ]	λs[μ]	λf[μ]	File
<input checked="" type="checkbox"/>	1	22.9	15.3	38.2	21.5	44.1	4.847	6.56	0.54	3.90	184.	98.0	9.50	100.	30.1	800.	2.50	-	191
<input checked="" type="checkbox"/>	2	17.9	15.2	33.1	18.6	41.8	4.614	6.07	0.00	3.04	142.	88.9	9.33	100.	27.5	800.	2.50	-	191
<input checked="" type="checkbox"/>	3	21.0	17.6	38.6	19.1	47.0	5.159	6.73	-0.00	3.06	156.	98.8	9.96	100.	30.4	800.	2.50	-	191
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		20.6	16.0	36.7	19.7	44.3	4.873	6.45	0.20	3.33	161.	95.3	9.60	100.	29.3	-	-	-	-
Min.		17.9	15.2	33.1	18.6	41.8	4.614	6.07	-0.00	3.04	142.	88.9	9.33	100.	27.5	-	-	-	-
Max.		22.9	17.6	38.6	21.5	47.0	5.159	6.73	0.54	3.90	184.	98.8	9.96	100.	30.4	-	-	-	-
Range		4.99	2.37	5.46	2.90	5.19	0.545	0.66	0.56	0.85	41.8	9.86	0.63	0.00	2.98	-	-	-	-
σ		2.52	1.33	3.06	1.54	2.60	0.273	0.34	0.30	0.48	21.4	5.49	0.32	0.00	1.62	-	-	-	-
3σ		7.56	4.00	9.18	4.63	7.80	0.820	1.03	0.90	1.46	64.2	16.4	0.98	0.00	4.87	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_113009  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

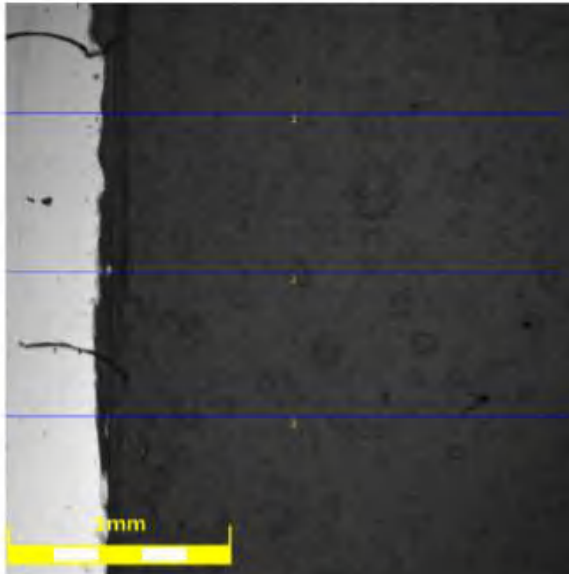
No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	24.127	2011.688	2011.832	0.687	191024_113009
<input checked="" type="checkbox"/>	2	14.467	2015.414	2015.466	0.411	191024_113009
<input checked="" type="checkbox"/>	3	16.716	1941.630	1941.702	0.493	191024_113009
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		18.437	1989.577	1989.666	0.531	-
Min.		14.467	1941.630	1941.702	0.411	-
Max.		24.127	2015.414	2015.466	0.687	-
Range		9.660	73.784	73.764	0.276	-
σ		5.055	41.565	41.579	0.142	-
3σ		15.164	124.696	124.736	0.425	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



Optimization Software:  
[www.balesio.com](http://www.balesio.com)



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_113009  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

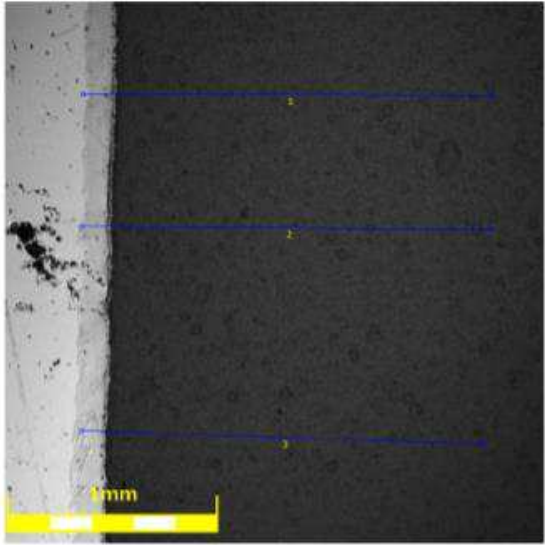
Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq	RÖc	Rmr	Rzjis	Ac[μ]	As[μ]	Al[μ]	File
<input checked="" type="checkbox"/>	1	44.4	24.9	69.3	54.6	108.	8.212	12.0	1.13	5.26	173.	116.	13.4	100.	43.9	800.	2.50	-	191
<input checked="" type="checkbox"/>	2	48.9	24.0	73.0	62.1	114.	8.688	13.1	1.12	5.81	205.	99.2	15.0	100.	-	800.	2.50	-	191
<input checked="" type="checkbox"/>	3	45.2	26.1	71.4	44.0	87.5	8.706	12.1	0.85	4.92	234.	124.	13.2	100.	59.5	800.	2.50	-	191
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3
Average		46.2	25.0	71.2	53.8	103.	8.535	12.4	1.03	5.33	204.	113.	13.9	100.	51.7	-	-	-	-
Min.		44.4	24.0	69.3	44.0	87.5	8.212	12.0	0.85	4.92	173.	99.2	13.2	100.	43.9	-	-	-	-
Max.		48.9	26.1	73.0	62.1	114.	8.706	13.1	1.13	5.81	234.	124.	15.0	100.	59.5	-	-	-	-
Range		4.57	2.06	3.73	18.1	26.8	0.494	1.01	0.28	0.88	60.3	25.0	1.82	0.00	15.5	-	-	-	-
σ		2.43	1.04	1.86	9.09	14.0	0.280	0.56	0.16	0.44	30.2	12.8	0.99	0.00	10.9	-	-	-	-
3σ		7.31	3.11	5.60	27.2	42.1	0.840	1.68	0.48	1.34	90.6	38.4	2.99	0.00	32.9	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-





**Report Title**



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_112318  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

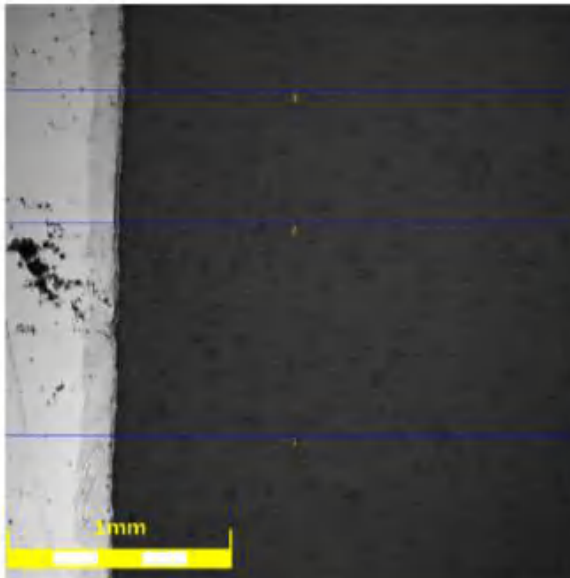
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	15.828	1938.293	1938.358	0.468	191024_112318
<input checked="" type="checkbox"/>	2	17.049	1945.000	1945.075	0.502	191024_112318
<input checked="" type="checkbox"/>	3	14.168	1909.318	1909.371	0.425	191024_112318
Count		3	3	3	3	3
Average		15.681	1930.871	1930.935	0.465	-
Min.		14.168	1909.318	1909.371	0.425	-
Max.		17.049	1945.000	1945.075	0.502	-
Range		2.881	35.682	35.704	0.077	-
σ		1.446	18.964	18.974	0.039	-
3σ		4.338	56.891	56.923	0.116	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



**Optimization Software:**  
[www.balesio.com](http://www.balesio.com)

# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR  
 USER

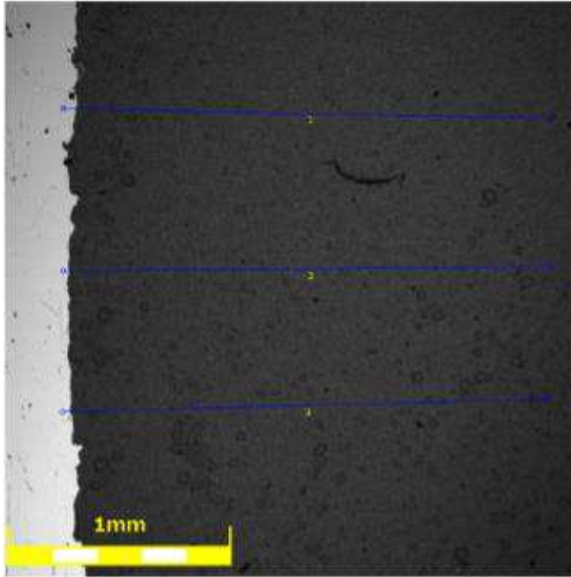
191024\_112318  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzj	is	λc[μ]	λs[μ]	λf[μ]	File
<input checked="" type="checkbox"/>	1	25.0	17.6	42.7	24.0	51.4	4.320	5.95	0.90	5.87	157.	94.9	8.57	100.	37.8	800.	2.50	-	191	
<input checked="" type="checkbox"/>	2	17.4	12.8	30.2	17.3	39.5	3.684	4.93	0.47	4.27	113.	91.2	7.47	100.	23.0	800.	2.50	-	191	
<input checked="" type="checkbox"/>	3	19.7	18.3	38.1	16.8	43.4	4.157	5.56	0.31	4.00	110.	102.	8.52	100.	29.3	800.	2.50	-	191	
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Average		20.7	16.3	37.0	19.4	44.8	4.054	5.48	0.56	4.71	127.	96.3	8.19	100.	30.0	-	-	-	-	
Min.		17.4	12.8	30.2	16.8	39.5	3.684	4.93	0.31	4.00	110.	91.2	7.47	100.	23.0	-	-	-	-	
Max.		25.0	18.3	42.7	24.0	51.4	4.320	5.95	0.90	5.87	157.	102.	8.57	100.	37.8	-	-	-	-	
Range		7.62	5.52	12.4	7.21	11.9	0.636	1.02	0.59	1.87	46.7	11.4	1.10	0.00	14.7	-	-	-	-	
σ		3.91	3.00	6.28	4.02	6.08	0.330	0.51	0.30	1.01	26.2	5.86	0.62	0.00	7.43	-	-	-	-	
3σ		11.7	9.01	18.8	12.0	18.2	0.991	1.54	0.91	3.04	78.6	17.5	1.87	0.00	22.2	-	-	-	-	
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR  
 USER

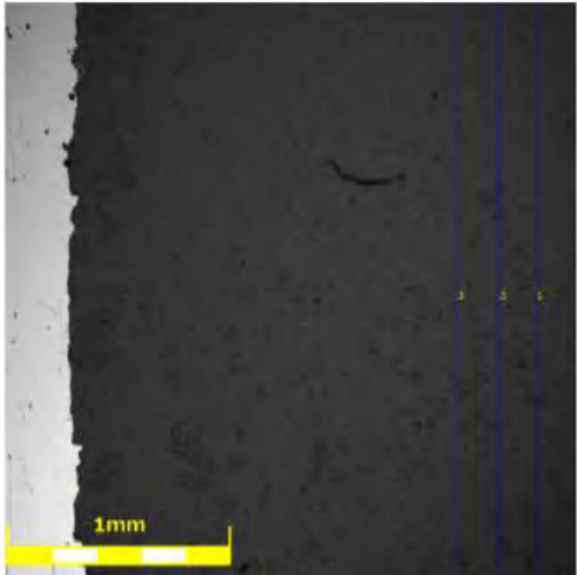
190729\_125123  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	18.882	2175.582	2175.664	0.497	190729_125123
<input checked="" type="checkbox"/>	2	12.738	2181.882	2181.920	0.335	190729_125123
<input checked="" type="checkbox"/>	3	14.591	2162.552	2162.601	0.387	190729_125123
Count		3	3	3	3	3
Average		15.404	2173.339	2173.395	0.406	-
Min.		12.738	2162.552	2162.601	0.335	-
Max.		18.882	2181.882	2181.920	0.497	-
Range		6.144	19.331	19.319	0.163	-
σ		3.152	9.859	9.857	0.083	-
3σ		9.455	29.576	29.572	0.249	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_125123  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

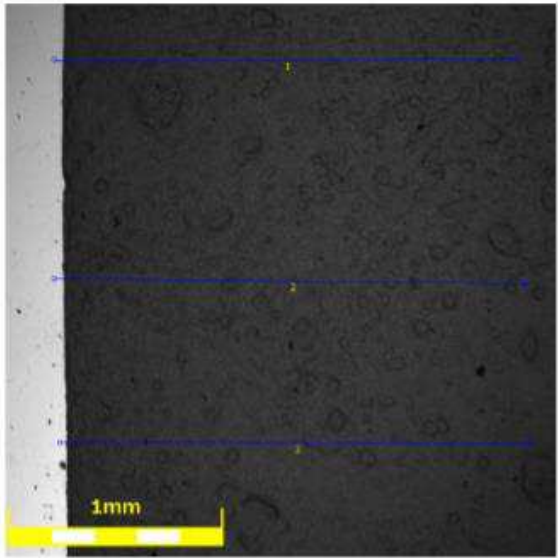
Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq	RΔc	Rmr	Rzjis	λc[μ]	λs[μ]	λf[μ]	File r
<input checked="" type="checkbox"/>	1	22.0	22.3	44.4	23.2	66.3	5.24	6.90	0.01	3.74	75.2	109.	10.3	100.	44.4	800.	-	-	1907
<input checked="" type="checkbox"/>	2	20.0	21.1	41.1	20.3	54.6	4.70	6.08	-0.12	3.77	65.0	99.1	9.57	100.	35.5	800.	-	-	1907
<input checked="" type="checkbox"/>	3	33.4	23.3	56.8	20.7	64.7	4.92	6.97	1.02	7.09	66.8	98.4	9.26	100.	38.5	800.	-	-	1907
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Average		25.1	22.2	47.4	21.4	61.9	4.95	6.65	0.30	4.87	69.0	102.	9.72	100.	39.5	-	-	-	-
Min.		20.0	21.1	41.1	20.3	54.6	4.70	6.08	-0.12	3.74	65.0	98.4	9.26	100.	35.5	-	-	-	-
Max.		33.4	23.3	56.8	23.2	66.3	5.24	6.97	1.02	7.09	75.2	109.	10.3	100.	44.4	-	-	-	-
Range		13.4	2.17	15.6	2.92	11.6	0.53	0.89	1.14	3.35	10.2	10.6	1.07	0.00	8.94	-	-	-	-
σ		7.26	1.09	8.26	1.57	6.32	0.26	0.49	0.62	1.93	5.48	5.95	0.55	0.00	4.54	-	-	-	-
3σ		21.7	3.26	24.7	4.71	18.9	0.80	1.48	1.87	5.79	16.4	17.8	1.65	0.00	13.6	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_125949  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

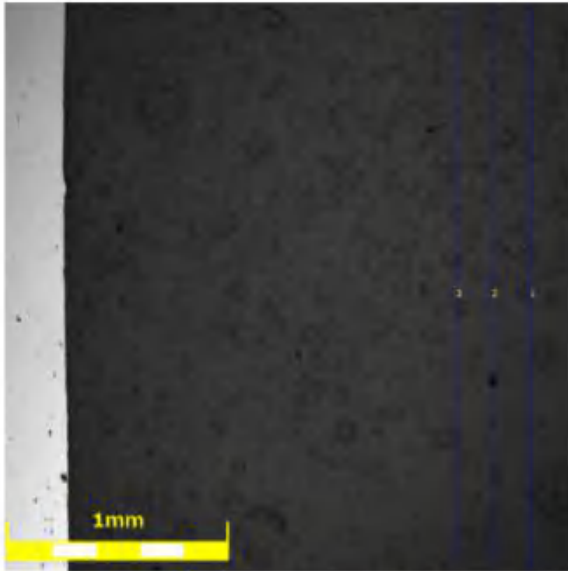
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	15.849	2138.451	2138.510	0.425	190729_125949
<input checked="" type="checkbox"/>	2	15.188	2188.616	2188.669	0.398	190729_125949
<input checked="" type="checkbox"/>	3	16.448	2175.149	2175.211	0.433	190729_125949
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		15.828	2167.405	2167.463	0.418	-
Min.		15.188	2138.451	2138.510	0.398	-
Max.		16.448	2188.616	2188.669	0.433	-
Range		1.260	50.165	50.159	0.036	-
σ		0.630	25.983	25.961	0.019	-
3σ		1.891	77.890	77.884	0.056	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance			0	0	0	0
Standard			0	0	0	0
Lower tolerance			0	0	0	0





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

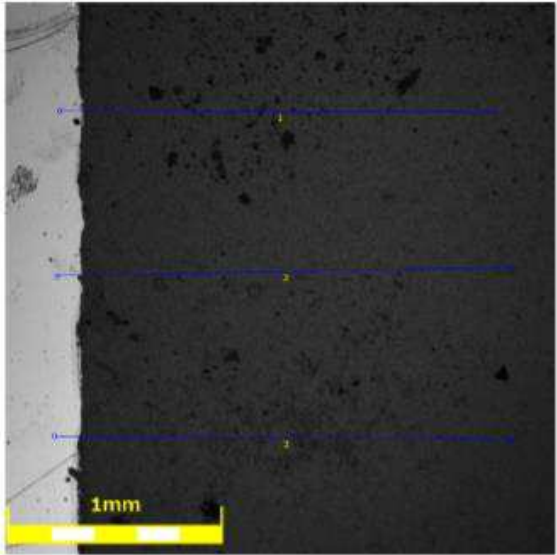
190729\_125949  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq	RΔc	Rmr	Rz	is	λc[μ]	λs[μ]	λf[μ]	File r
<input checked="" type="checkbox"/>	1	25.7	37.2	62.9	27.5	94.4	7.856	10.3	-0.66	6.59	92.9	100.	15.1	100.	48.2	800.	-	-	1907	
<input checked="" type="checkbox"/>	2	27.7	32.9	60.7	29.7	88.8	7.118	9.08	-0.11	4.35	112.	105.	15.3	100.	44.5	800.	-	-	1907	
<input checked="" type="checkbox"/>	3	27.2	22.5	49.8	24.7	54.3	7.383	9.36	0.54	3.09	124.	89.0	14.5	100.	39.7	800.	-	-	1907	
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		26.9	30.9	57.8	27.3	79.2	7.452	9.61	-0.07	4.68	110.1	98.3	15.0	100.	44.1	-	-	-	-	
Min.		25.7	22.5	49.8	24.7	54.3	7.118	9.08	-0.66	3.09	92.9	89.0	14.5	100.	39.7	-	-	-	-	
Max.		27.7	37.2	62.9	29.7	94.4	7.856	10.3	0.54	6.59	124.	105.	15.3	100.	48.2	-	-	-	-	
Range		1.96	14.6	13.1	4.94	40.1	0.738	1.29	1.20	3.50	31.4	16.7	0.88	0.00	8.49	-	-	-	-	
σ		1.03	7.55	7.03	2.47	21.7	0.374	0.68	0.60	1.77	15.9	8.52	0.45	0.00	4.26	-	-	-	-	
3σ		3.09	22.6	21.1	7.43	65.2	1.122	2.04	1.80	5.32	47.7	25.5	1.37	0.00	12.7	-	-	-	-	
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	



Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_121715  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

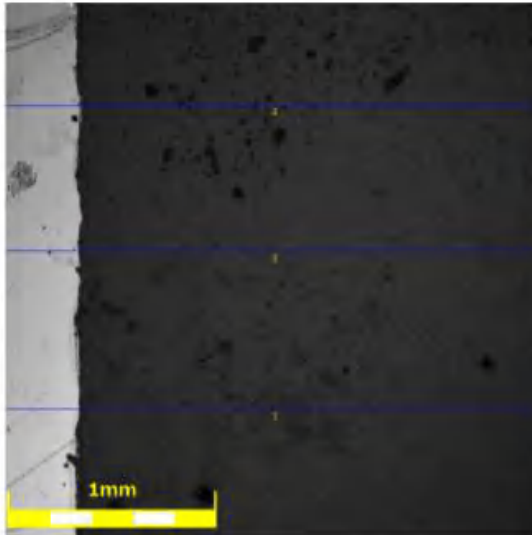
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	19.984	2018.360	2018.459	0.567	191024_121715
<input checked="" type="checkbox"/>	2	18.664	2098.600	2098.883	0.510	191024_121715
<input checked="" type="checkbox"/>	3	21.669	2121.834	2121.945	0.585	191024_121715
Count		3	3	3	3	3
Average		20.106	2079.665	2079.762	0.554	-
Min.		18.664	2018.360	2018.459	0.510	-
Max.		21.669	2121.834	2121.945	0.585	-
Range		3.005	103.475	103.486	0.076	-
σ		1.506	54.327	54.328	0.040	-
3σ		4.518	162.980	162.985	0.119	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



Optimization Software:  
[www.balesio.com](http://www.balesio.com)

# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

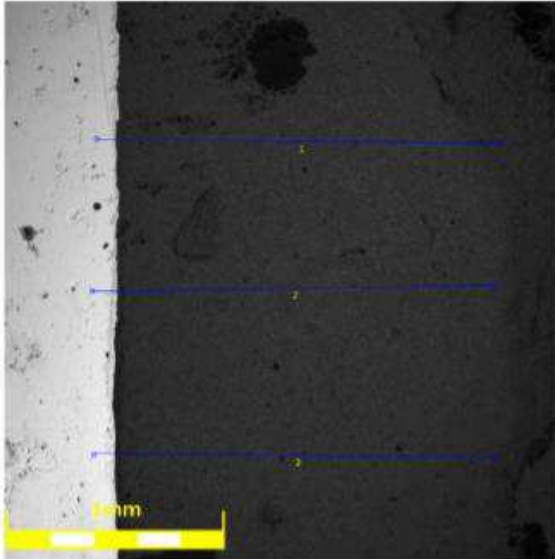
191024\_121715  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzj	Is	Ac[μ]	As[μ]	Alf[μ]	File
<input checked="" type="checkbox"/>	1	18.1	14.7	32.8	19.3	39.0	4.088	5.31	0.19	3.45	134.	101.	8.73	100.	29.4	800.	2.50	-	191	
<input checked="" type="checkbox"/>	2	16.2	13.0	29.2	17.6	37.3	3.741	4.81	0.22	3.51	123.	93.0	7.97	100.	24.7	800.	2.50	-	191	
<input checked="" type="checkbox"/>	3	15.5	21.5	37.0	20.6	47.3	4.310	5.60	-0.12	4.24	108.	99.0	9.01	100.	31.0	800.	2.50	-	191	
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		16.6	16.4	33.0	19.2	41.2	4.046	5.24	0.09	3.73	122.	97.7	8.57	100.	28.4	-	-	-	-	-
Min.		15.5	13.0	29.2	17.6	37.3	3.741	4.81	-0.12	3.45	108.	93.0	7.97	100.	24.7	-	-	-	-	-
Max.		18.1	21.5	37.0	20.6	47.3	4.310	5.60	0.22	4.24	134.	101.	9.01	100.	31.0	-	-	-	-	-
Range		2.60	8.52	7.81	3.00	9.99	0.569	0.79	0.34	0.78	26.2	8.12	1.03	0.00	6.27	-	-	-	-	-
σ		1.34	4.51	3.91	1.51	5.34	0.287	0.39	0.19	0.43	13.1	4.21	0.53	0.00	3.25	-	-	-	-	-
3σ		4.04	13.5	11.7	4.53	16.0	0.860	1.19	0.57	1.31	39.4	12.6	1.61	0.00	9.75	-	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

191024\_122411  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

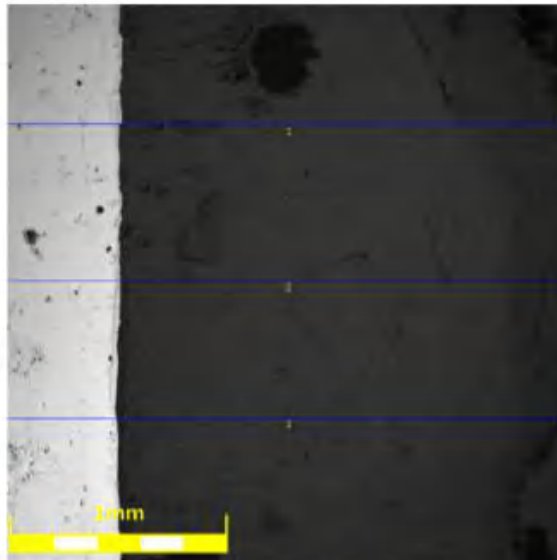
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	57.915	1861.660	1862.560	1.782	191024_122411
<input checked="" type="checkbox"/>	2	52.680	1841.730	1842.483	1.638	191024_122411
<input checked="" type="checkbox"/>	3	56.021	1844.947	1845.797	1.739	191024_122411
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		55.539	1849.445	1850.280	1.720	-
Min.		52.680	1841.730	1842.483	1.638	-
Max.		57.915	1861.660	1862.560	1.782	-
Range		5.235	19.930	20.078	0.143	-
σ		2.651	10.700	10.763	0.074	-
3σ		7.952	32.099	32.290	0.221	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR  
 USER

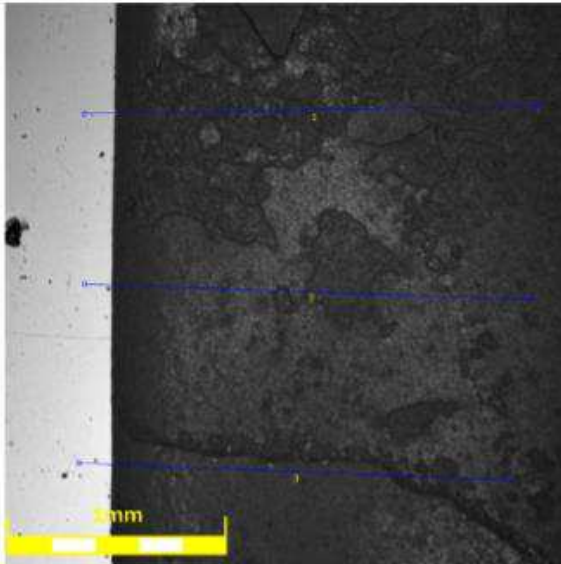
191024\_122411  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzjis	λc[μ]	λs[μ]	λf[μ]	File
<input checked="" type="checkbox"/>	1	18.6	20.1	38.8	19.1	44.9	4.183	5.61	-0.14	4.63	166.	107.	8.78	100.	34.0	800.	2.50	-	191
<input checked="" type="checkbox"/>	2	17.5	14.3	31.8	22.3	74.0	4.099	5.46	0.00	3.41	96.1	91.7	9.22	100.	28.4	800.	2.50	-	191
<input checked="" type="checkbox"/>	3	23.2	16.5	39.8	21.3	52.1	4.489	6.04	0.25	4.05	172.	96.7	8.89	100.	30.5	800.	2.50	-	191
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		19.8	17.0	38.8	20.9	57.0	4.257	5.71	0.04	4.03	145.	98.6	8.96	100.	31.0	-	-	-	-
Min.		17.5	14.3	31.8	19.1	44.9	4.099	5.46	-0.14	3.41	96.1	91.7	8.78	100.	28.4	-	-	-	-
Max.		23.2	20.1	39.8	22.3	74.0	4.489	6.04	0.25	4.63	172.	107.	9.22	100.	34.0	-	-	-	-
Range		5.70	5.84	7.95	3.17	29.0	0.390	0.58	0.39	1.21	76.6	15.7	0.44	0.00	5.58	-	-	-	-
σ		3.02	2.94	4.32	1.62	15.1	0.205	0.30	0.20	0.60	42.5	8.05	0.23	0.00	2.81	-	-	-	-
3σ		9.07	8.84	12.9	4.87	45.4	0.616	0.90	0.60	1.82	127.	24.1	0.69	0.00	8.44	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

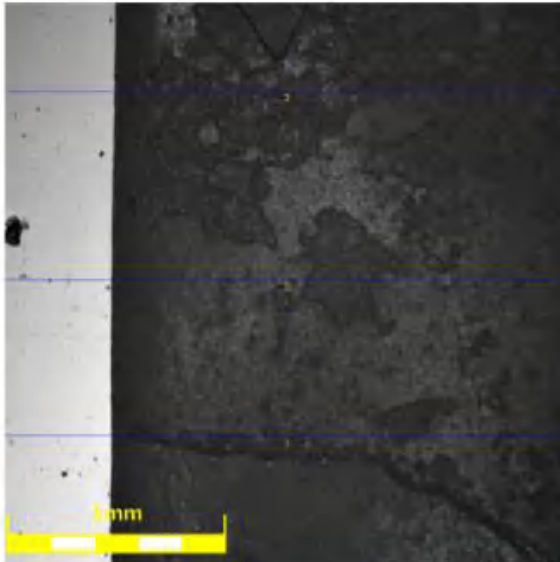
191024\_115914  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	21.428	2071.997	2072.108	0.593	191024_115914
<input checked="" type="checkbox"/>	2	20.202	2039.579	2039.679	0.568	191024_115914
<input checked="" type="checkbox"/>	3	16.455	1953.147	1953.217	0.483	191024_115914
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		19.362	2021.575	2021.668	0.548	-
Min.		16.455	1953.147	1953.217	0.483	-
Max.		21.428	2071.997	2072.108	0.593	-
Range		4.973	118.850	118.892	0.110	-
σ		2.591	61.437	61.458	0.058	-
3σ		7.773	184.310	184.375	0.173	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

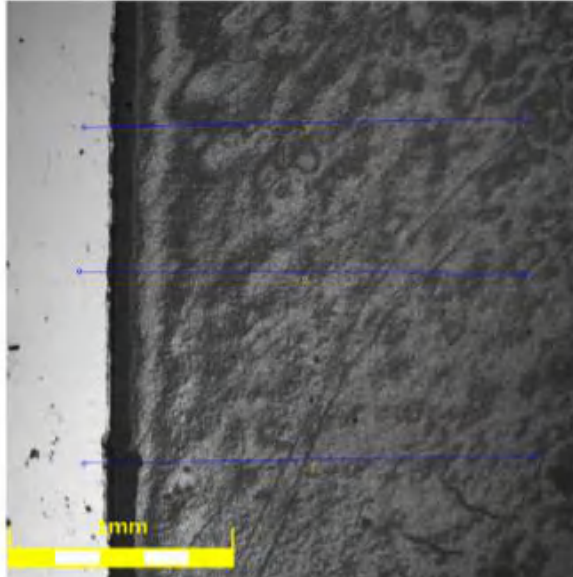
191024\_115914  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr[Rz]	Is	Ac[μ]	As[μ]	Alf[μ]	File
<input checked="" type="checkbox"/>	1	37.9	24.9	62.8	36.5	99.6	7.433	10.8	0.66	4.33	121.	109.	11.2	100.	50.2	800.	2.50	-	19:
<input checked="" type="checkbox"/>	2	31.7	19.3	51.0	22.9	91.5	6.387	9.26	0.48	3.93	264.	95.1	9.30	100.	27.5	800.	2.50	-	19:
<input checked="" type="checkbox"/>	3	33.1	23.9	57.1	30.4	88.4	7.855	10.8	0.28	3.77	258.	109.	14.1	100.	32.1	800.	2.50	-	19:
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		34.2	22.7	57.0	29.9	93.2	7.225	10.3	0.47	4.01	214.	104.	11.5	100.	36.6	-	-	-	-
Min.		31.7	19.3	51.0	22.9	88.4	6.387	9.26	0.28	3.77	121.	95.1	9.30	100.	27.5	-	-	-	-
Max.		37.9	24.9	62.8	36.5	99.6	7.855	10.8	0.66	4.33	264.	109.	14.1	100.	50.2	-	-	-	-
Range		6.20	5.63	11.8	13.6	11.2	1.468	1.59	0.37	0.55	142.	14.4	4.82	0.00	22.6	-	-	-	-
σ		3.24	3.00	5.92	6.82	5.81	0.756	0.91	0.18	0.28	80.8	8.22	2.42	0.00	11.9	-	-	-	-
3σ		9.72	9.01	17.7	20.4	17.4	2.267	2.74	0.56	0.86	242.	24.6	7.27	0.00	35.8	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR  
 USER

191024\_120835  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

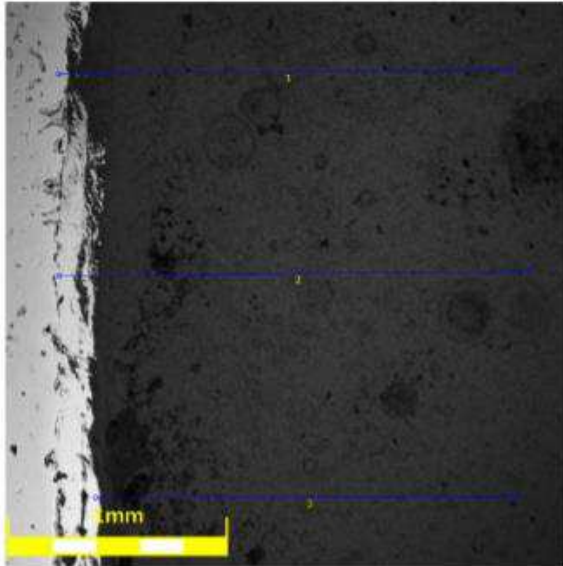
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	60.068	2005.284	2006.184	1.716	191024_120835
<input checked="" type="checkbox"/>	2	68.522	1981.677	1982.861	1.980	191024_120835
<input checked="" type="checkbox"/>	3	70.935	1952.040	1953.329	2.081	191024_120835
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		66.506	1979.667	1980.791	1.926	-
Min.		60.068	1952.040	1953.329	1.716	-
Max.		70.935	2005.284	2006.184	2.081	-
Range		10.867	53.244	52.855	0.365	-
σ		5.707	26.679	26.488	0.189	-
3σ		17.120	80.036	79.464	0.566	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-





# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190729\_130516  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

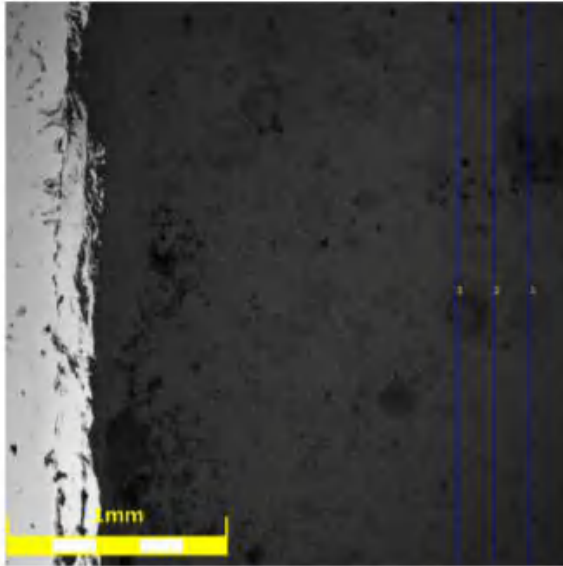
Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	28.915	2061.816	2062.019	0.803	190729_130516
<input checked="" type="checkbox"/>	2	27.270	2141.913	2142.087	0.729	190729_130516
<input checked="" type="checkbox"/>	3	11.478	1921.613	1921.647	0.342	190729_130516
<b>Count</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Average		22.554	2041.781	2041.918	0.625	-
Min.		11.478	1921.613	1921.647	0.342	-
Max.		28.915	2141.913	2142.087	0.803	-
Range		17.437	220.300	220.440	0.461	-
σ		9.628	111.508	111.586	0.248	-
3σ		28.883	334.525	334.758	0.743	-
<b>Tolerance</b>		<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



**Optimization Software:**  
[www.balesio.com](http://www.balesio.com)

# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

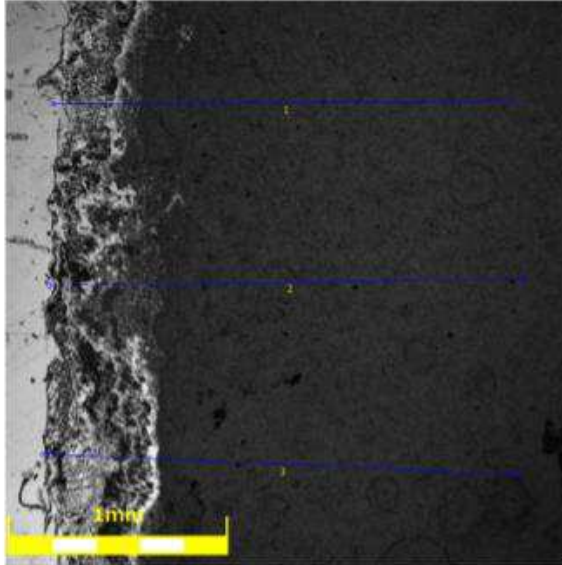
190729\_130516  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μ]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzj	is	lc[μ]	ls[μ]	lf[μ]	File
<input checked="" type="checkbox"/>	1	26.9	39.3	66.2	26.8	100.	6.330	8.22	-0.42	6.78	88.3	121.	13.1	100.	45.5	800.	-	-	-	190
<input checked="" type="checkbox"/>	2	37.2	23.0	60.3	24.0	74.8	5.238	6.93	0.55	6.92	81.4	105.	10.7	100.	40.5	800.	-	-	-	190
<input checked="" type="checkbox"/>	3	27.9	20.3	48.2	19.6	62.4	5.226	6.82	0.27	5.80	75.5	95.2	10.1	100.	35.8	800.	-	-	-	190
Count		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average		30.7	27.5	58.2	23.5	79.2	5.598	7.32	0.13	6.50	81.7	107.	11.3	100.	40.6	-	-	-	-	-
Min.		26.9	20.3	48.2	19.6	62.4	5.226	6.82	-0.42	5.80	75.5	95.2	10.1	100.	35.8	-	-	-	-	-
Max.		37.2	39.3	66.2	26.8	100.	6.330	8.22	0.55	6.92	88.3	121.	13.1	100.	45.5	-	-	-	-	-
Range		10.3	19.0	17.9	7.23	37.9	1.104	1.39	0.98	1.12	12.7	26.0	3.00	0.00	9.72	-	-	-	-	-
σ		5.70	10.2	9.16	3.64	19.3	0.634	0.77	0.50	0.61	6.39	13.0	1.60	0.00	4.86	-	-	-	-	-
3σ		17.1	30.8	27.4	10.9	58.0	1.901	2.32	1.51	1.83	19.1	39.2	4.81	0.00	14.5	-	-	-	-	-
Tolerance		Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

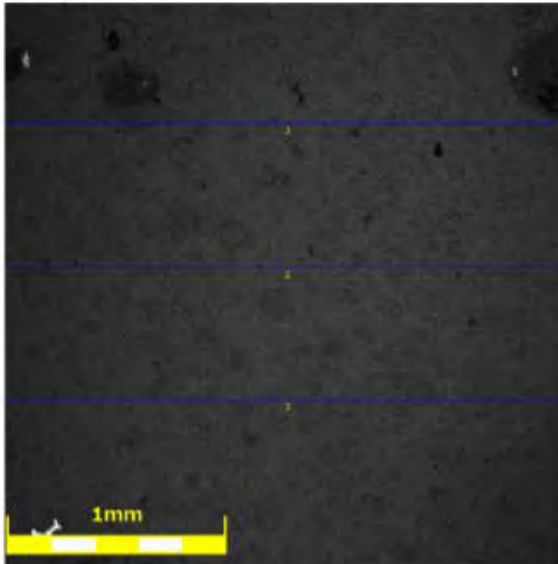
190820\_160627  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Result	Height[μm]	Width[μm]	Length[μm]	Angle[°]	File name
<input checked="" type="checkbox"/>	1	15.576	2088.450	2088.508	0.427	190820_160627
<input checked="" type="checkbox"/>	2	29.553	2155.340	2155.543	0.786	190820_160627
<input checked="" type="checkbox"/>	3	19.577	2157.170	2157.259	0.520	190820_160627
Count		3	3	3	3	3
Average		21.569	2133.653	2133.770	0.578	-
Min.		15.576	2088.450	2088.508	0.427	-
Max.		29.553	2157.170	2157.259	0.786	-
Range		13.977	68.720	68.751	0.358	-
σ		7.198	39.158	39.207	0.186	-
3σ		21.594	117.474	117.622	0.558	-
Tolerance		Off	Off	Off	Off	Off
Upper tolerance		0	0	0	0	-
Standard		0	0	0	0	-
Lower tolerance		0	0	0	0	-



# Report Title



User ID: ADMIN  
 User name: Administrator  
 Description: FIRST ADMINISTRATOR USER

190820\_161211  
 [Acquisition parameters]  
 Scanning mode: XYZ fast scan + Color  
 Image size[pixels]: 1024X1024  
 Image size[μm]: 2560x2571  
 Objective lens: MPLFLN5x  
 Zoom: 1x  
 DIC: Off

Comment

No.	Resu	Rp[μ]	Rv[μ]	Rz[μ]	Rc[μ]	Rt[μ]	Ra[μm]	Rq[μ]	Rsk	Rku	Rsm	RΔq	Rδc	Rmr	Rzjis	λc[μ]	λs[μ]	λf[μ]	File
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average	23.7	27.6	51.3	28.6	74.4	6.069	7.94	-0.42	6.54	128.	122.	12.2	100.	42.2	-	-	-	-	-
Min.	22.3	18.3	41.1	26.5	45.2	5.478	7.39	-1.36	2.90	111.	111.	10.8	100.	37.7	-	-	-	-	-
Max.	25.9	40.3	66.3	30.9	119.	6.930	8.53	0.20	13.4	154.	134.	13.9	100.	48.3	-	-	-	-	-
Range	3.60	21.9	25.1	4.39	74.1	1.452	1.13	1.51	10.5	42.8	22.4	3.10	0.00	10.5	-	-	-	-	-
σ	1.96	11.3	13.2	2.21	39.4	0.763	0.57	0.78	5.99	22.5	11.2	1.57	0.00	5.46	-	-	-	-	-
3σ	5.88	34.1	39.6	6.63	118.	2.288	1.71	2.36	17.9	67.5	33.7	4.71	0.00	16.3	-	-	-	-	-
Tolerance	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Upper tolera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-
Lower tolera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-

Datasheet don't have enough space to display 3 measurement records. To show all measurement records increase space for datasheet.



Optimization Software:  
[www.balesio.com](http://www.balesio.com)