



Correction

Correction: Smirnov et al. Experimental and Statistical Modeling for Effect of Nozzle Diameter, Filling Pattern, and Layer Height of FDM-Printed Ceramic–Polymer Green Body on Biaxial Flexural Strength of Sintered Alumina Ceramic. *J. Compos. Sci.* 2023, 7, 381

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The authors would like to highlight the following correction to their published paper [1].

1. Experimental data (weight, diameter, thickness and strength of 3D printed and sintered 60Al₂O₃/40PLA samples) presented in Table 1 was changed.
2. New text (**From the presented results it can be seen that the printed samples with filling type “line” and layer height 0.4 mm have the best mechanical properties. This can be explained by the fact that the fewer horizontal layers in the sample, the fewer voids between them, which negatively affect the mechanical properties. In addition, the greater the line thickness, the fewer horizontal layers need to be extruded to achieve a given disk height, and therefore fewer voids are formed in the printed object. Printing an object with the fill type “line” creates a two-dimensional grid where only one axis is printed along one layer. For the mold sample studied and a density of 100%, this fill type allowed the slicer to place the extruded filaments with as much contact between them as possible, in contrast to the “zigzag” and “concentric” fill patterns**) describing the effect of filler pattern on flexural strength has been added to the “Conclusions” section.

The authors state that the scientific conclusions are unaffected. These corrections were approved by the Academic Editor. The original publication has also been updated.

Table 1. Weight (w), diameter (d), thickness (h), and strength (σ_H) of 3D-printed and sintered 60Al₂O₃/40PLA samples as a function of selected FDM printing parameters.

№	Nozzle Diameter, mm	Layer Height, mm	Filling Pattern	Samples						σ_H , MPa
				Printed			Sintered			
				w , g	d , mm	h , mm	W , g	D , mm	H , mm	
1	0.6	0.2	Zigzag	2.7	25.9	2.2	2.3	21.6	1.6	242
2		0.3		2.5	25.9	1.9	2.1	22.3	1.6	245
3		0.4		2.8	25.8	2.3	2.5	22.2	2.1	268
4		0.2	Line	2.7	25.9	2.3	2.3	22.4	1.6	277
5		0.3		2.5	25.5	2.1	2.2	21.9	1.7	315
6		0.4		2.8	25.7	2.2	2.3	21.9	1.9	332
7		0.2	Concentric	2.6	25.9	2.0	2.2	22.3	1.6	228
8		0.3		2.4	25.6	1.9	2.0	22.0	1.6	236
9		0.4		2.7	25.8	2.1	2.3	21.8	1.8	248
10	0.8	0.2	Zigzag	2.7	25.4	2.0	2.3	22.1	1.7	215
11		0.3		2.5	25.4	1.9	2.1	21.9	1.6	260
12		0.4		2.5	25.3	1.9	2.2	21.5	1.6	265
13		0.2	Line	2.7	25.8	2.2	2.3	21.1	2.0	280
14		0.3		2.5	25.7	2.0	2.1	21.8	1.7	292
15		0.4		2.5	24.8	2.0	2.2	21.0	1.8	322
16		0.2	Concentric	2.7	25.6	2.0	2.3	22.0	1.9	191
17		0.3		2.5	25.5	1.9	2.1	22.0	1.7	196
18		0.4		2.8	25.4	2.0	2.0	21.3	1.7	250
19	1.0	0.2	Zigzag	2.8	26.1	2.3	2.4	22.5	1.9	275
20		0.3		2.6	25.3	2.1	2.1	21.9	1.7	280
21		0.4		2.8	25.1	2.3	2.4	21.3	1.9	295
22		0.2	Line	2.8	25.2	2.2	2.4	21.5	2.0	277
23		0.3		2.8	25.2	2.3	2.4	21.9	2.0	298
24		0.4		3.2	25.4	2.4	2.7	21.9	2.0	327
25		0.2	Concentric	2.9	25.3	2.3	2.5	21.5	1.9	180
26		0.3		2.9	25.2	2.3	2.6	21.7	2.0	203
27		0.4		2.7	25.5	2.2	2.3	21.8	1.9	230

Reference

- Smirnov, A.; Nikitin, N.; Peretyagin, P.; Khmyrov, R.; Kuznetsova, E.; Solis Pinargote, N.W. Experimental and Statistical Modeling for Effect of Nozzle Diameter, Filling Pattern, and Layer Height of FDM-Printed Ceramic–Polymer Green Body on Biaxial Flexural Strength of Sintered Alumina Ceramic. *J. Compos. Sci.* **2023**, *7*, 381. [[CrossRef](#)]

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