

Appendix 1: Analysis of Variance for the size and nPDI of nanoparticles

Source	Sum of Squares		D _f		Mean Square		F-Value		P-value		Prob>F	
	Size	PDI	Size	PDI	Size	PDI	Size	PDI	Size	PDI	Size	PDI
Model	62499.29	0.081	8	8	7812.41	0.010	310.67	43.43	<0.0001	<0.0001	Significant	Significant
A-A	306.03	0.016	1	1	306.03	0.16	12.17	69.15	0.0028	<0.0001		
B-B	5038.90	7.651E-003	1	1	5038.90	7.651E-003	200.38	32.79	0.0001	<0.0001		
C-C	53644.65	7.788E-003	1	1	53644.65	7.788E-003	2133.28	33.38	0.0001	0.0001		
AB	806.01	1.128E-003	1	1	806.01	1.128E-003	32.05	4.84	0.0001	0.0420		
AC	654.16	5.333E-004	1	1	654.16	5.333E-004	26.01	2.29	0.0001	0.1489		
BC	1218.07	9.020E-003	1	1	1218.07	9.020E-003	48.44	38.66	0.0001	0.0001		
A ²	342.79	0.038	1	1	342.79	0.038	13.63	164.94	0.0018	0.0001		
B ²	755.82	3.393E-003	1	1	755.82	3.393E-003	30.06	14.54	0.0001	0.0014		
Residual	427.49	3.966E-003	17	17	25.15	2.333E-004						
Lack-of-fit	217.04	2.838E-003	9	9	24.12	3.154E-004	0.92	2.24	0.5543	0.1354	Not Significant	Not Significant
Pure Error	210.45	1.128E-003	8	8	26.31	1.410E-004						
Core Total	62926.78	0.085	25	25								

A: The concentration of *Pistacia atlantica* oleoresin (v/w), B: aqueous/organic volume ratio, C: the solvent type