

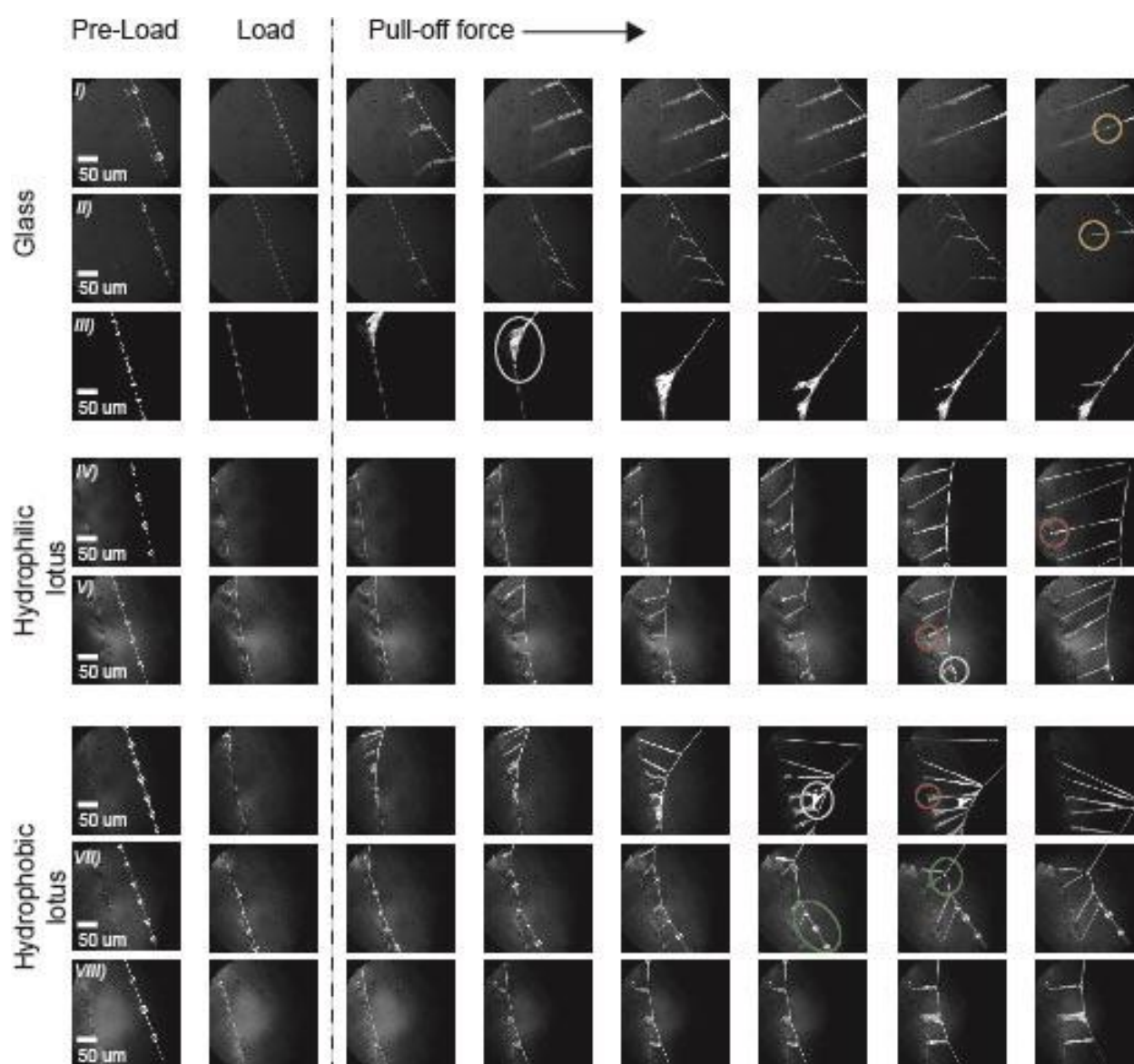


Fig. S1. Pre-load, load and pull off snapshots of viscid silk from glass, hydrophilic lotus and hydrophobic lotus. Each row represents still images in sequence from a single pull off event. They are arranged chronologically from left to right but are at varying time intervals to best show key events in the sequence. The first two frames show the capture thread being pushed onto the sample while the six frames to the right show the thread being pulled off the substrate, hence total adhesive force increases toward the far right. Snapshots of the last frames before total pull-off for glass (Fig. S1II),

superhydrophobic lotus (Fig. S1VI), and hydrophilic lotus (Fig. S1IV) are also shown in Figure 5. This test was repeated three times for each substrate, using viscid silk thread from three different webs. Yellow circles suggest an interfacial failure where the glue narrowest part is located. White circles indicate instances of coalescence of droplets. Measurements at these points were not possible, and test III was excluded completely. Red circles indicate wide attachments at the glue-substrate interface suggesting failure of glue at the bulk where the narrowest part of the extended glue was located. Green circles show droplets that did not adhere to the substrate probably because of the height/roughness variation of the lotus substrate.

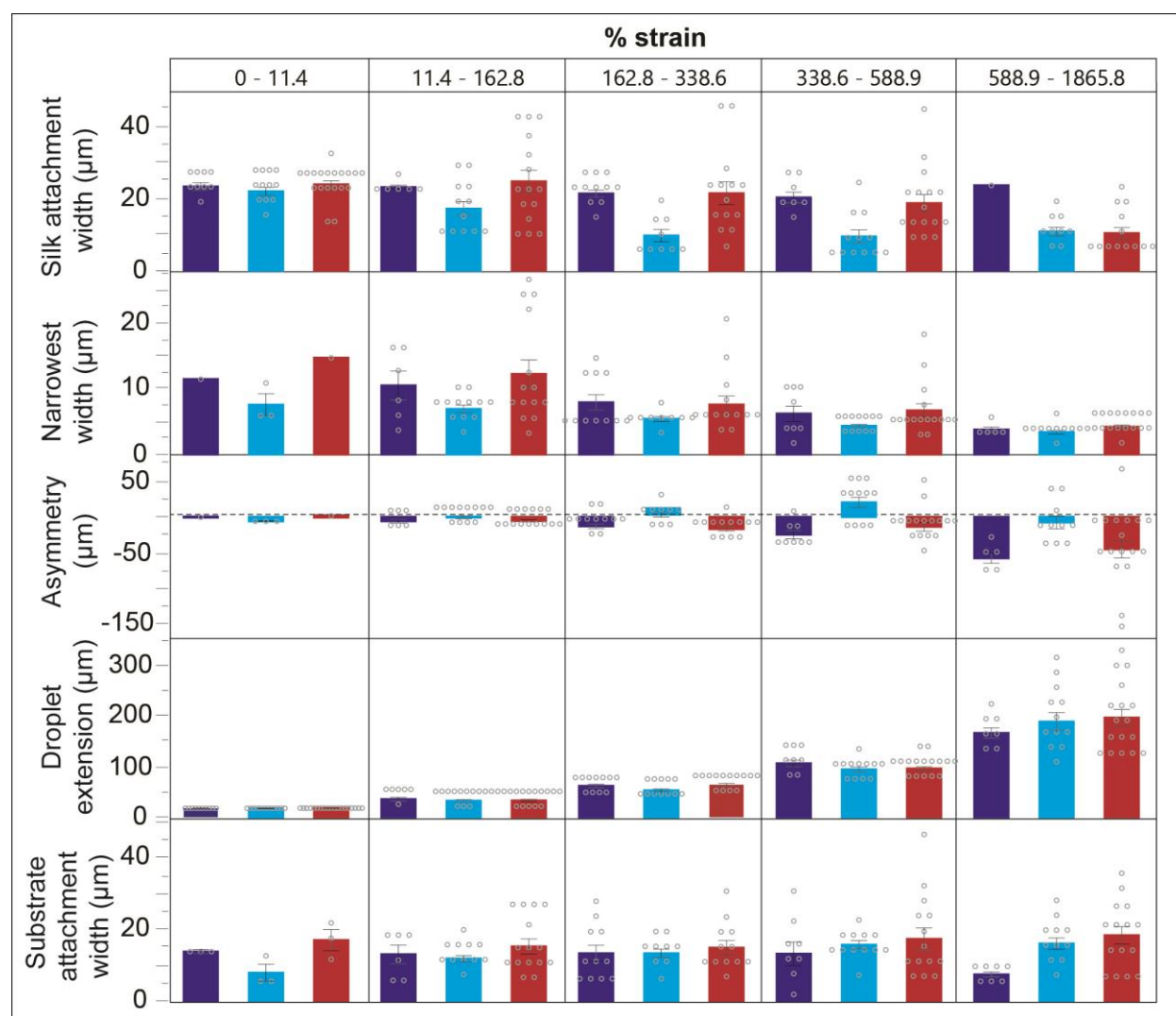


Fig. S2. Droplet measurements at different strains. We measured the widths at the glue-silk attachment, the glue-substrate attachment and the narrowest part of the extended droplet. We also measured extension or droplet length to calculate strains, and the asymmetry of the droplet, which refers to the position of the narrowest part of the droplet in respect to the droplet's true center. Bars represent the mean of all droplets measured in frame from 2-3 strands. Error bars represent the standard error. This graph is meant to be a visual representation of the measurements, and no statistical tests were performed because of the small sample size.

Table S1. Mechanical data of viscid capture silk pull-off testing for three substrates: glass, raw lotus and hydrophilic lotus. Values represent mean of three replicates per web.

Treatment	Spider and Web #	Peak Load (uN)	Peak Load (ln uN)	Work of Adhesion (J)	Work of Adhesion (nJ)	Work of Adhesion (ln nJ)	Extension (mm)	Extension (ln mm)
Philic Lotus	La.co07.01	970.09	6.88	3.30E-06	3300.00	8.10	11.73	2.46
Philic Lotus	La.co100.01	1163.47	7.06	6.20E-06	6200.00	8.73	13.37	2.59
Philic Lotus	La.co102.01	941.36	6.85	5.57E-06	5566.67	8.62	16.57	2.81
Philic Lotus	La.co106.01	1034.29	6.94	7.24E-06	7242.86	8.89	18.53	2.92
Philic Lotus	La.co111.01	555.44	6.32	4.50E-06	4500.00	8.41	19.76	2.98
Philic Lotus	La.co112.01	817.62	6.71	4.60E-06	4600.00	8.43	12.48	2.52
Philic Lotus	La.co112.02	1184.81	7.08	8.30E-06	8300.00	9.02	16.57	2.81
Philic Lotus	La.co118.01	657.44	6.49	3.57E-06	3566.67	8.18	14.66	2.69
Philic Lotus	La.co119.01	555.15	6.32	2.63E-06	2633.33	7.88	11.39	2.43
Philic Lotus	La.co12.01	186.39	5.23	3.60E-07	360.00	5.89	7.01	1.95
Philic Lotus	La.co127.01	491.21	6.20	1.90E-06	1895.00	7.55	9.88	2.29
Philic Lotus	La.co128.01	885.47	6.79	6.17E-06	6166.67	8.73	18.97	2.94
Philic Lotus	La.co129.01	914.12	6.82	4.77E-06	4766.67	8.47	12.97	2.56
Philic Lotus	La.co134.01	460.31	6.13	3.77E-06	3766.67	8.23	21.74	3.08
Philic Lotus	La.co137.01	560.17	6.33	2.63E-06	2633.33	7.88	12.32	2.51
Philic Lotus	La.co20.01	288.74	5.67	4.57E-07	456.67	6.12	4.54	1.51
Philic Lotus	La.co21.01	734.92	6.60	1.53E-06	1533.33	7.34	6.38	1.85
Philic Lotus	La.co21a.01	560.46	6.33	3.23E-06	3233.33	8.08	16.10	2.78
Philic Lotus	La.co21a.02	601.02	6.40	2.40E-06	2400.00	7.78	10.81	2.38
Philic Lotus	La.co23.01	807.07	6.69	5.42E-06	5416.67	8.60	15.33	2.73
Philic Lotus	La.co50.01	782.62	6.66	2.73E-06	2733.33	7.91	8.84	2.18
Philic Lotus	La.co54.01	296.23	5.69	8.30E-07	829.50	6.72	7.63	2.03
Philic Lotus	La.co55.01	465.33	6.14	1.93E-06	1933.33	7.57	9.67	2.27
Philic Lotus	La.co55.03	639.19	6.46	2.13E-06	2133.33	7.67	9.26	2.23
Philic Lotus	La.co55.04	350.40	5.86	1.43E-06	1433.33	7.27	11.32	2.43

Philic Lotus	La.co55.05	607.06	6.41	3.10E-06	3100.00	8.04	14.61	2.68
Philic Lotus	La.co61.01	1180.71	7.07	5.83E-06	5833.33	8.67	13.40	2.60
Philic Lotus	La.co61.02	1023.08	6.93	4.90E-06	4900.00	8.50	10.01	2.30
Philic Lotus	La.co61.03	361.49	5.89	1.13E-06	1126.67	7.03	8.72	2.17
Philic Lotus	La.co62.02	1118.65	7.02	6.50E-06	6500.00	8.78	14.30	2.66
Philic Lotus	La.co64.01	1067.02	6.97	9.27E-06	9266.67	9.13	23.05	3.14
Philic Lotus	La.co66.01	532.76	6.28	2.07E-06	2066.67	7.63	10.50	2.35
Philic Lotus	La.co67.01	540.15	6.29	1.90E-06	1900.00	7.55	8.76	2.17
Philic Lotus	La.co69.01	857.19	6.75	2.73E-06	2733.33	7.91	9.40	2.24
Philic Lotus	La.co69.04	633.04	6.45	2.60E-06	2600.00	7.86	11.27	2.42
Philic Lotus	La.co70.01	1310.03	7.18	7.20E-06	7200.00	8.88	15.17	2.72
Philic Lotus	La.co70.03	991.60	6.90	5.40E-06	5400.00	8.59	16.96	2.83
Philic Lotus	La.co71.01	1071.98	6.98	4.43E-06	4433.33	8.40	10.49	2.35
Philic Lotus	La.co71.02	709.83	6.57	2.67E-06	2666.67	7.89	9.96	2.30
Philic Lotus	La.coGH.03	882.22	6.78	5.57E-06	5566.67	8.62	15.77	2.76
Raw Lotus	La.co07.01	1146.12	7.04	4.80E-06	4800.00	8.48	14.06	2.64
Raw Lotus	La.co100.01	903.61	6.81	4.46E-06	4456.75	8.40	11.45	2.44
Raw Lotus	La.co102.01	564.86	6.34	2.71E-06	2712.50	7.91	14.41	2.67
Raw Lotus	La.co106.01	1121.35	7.02	7.43E-06	7425.00	8.91	19.23	2.96
Raw Lotus	La.co111.01	573.51	6.35	3.73E-06	3733.33	8.23	19.32	2.96
Raw Lotus	La.co112.01	1239.09	7.12	5.83E-06	5833.33	8.67	13.85	2.63
Raw Lotus	La.co112.02	1670.27	7.42	1.32E-05	13200.00	9.49	20.69	3.03
Raw Lotus	La.co118.01	1094.85	7.00	6.77E-06	6766.67	8.82	20.34	3.01
Raw Lotus	La.co119.01	594.33	6.39	2.73E-06	2733.33	7.91	12.05	2.49
Raw Lotus	La.co12.01	210.77	5.35	5.10E-07	510.00	6.23	7.74	2.05
Raw Lotus	La.co127.01	1136.69	7.04	4.50E-06	4500.00	8.41	13.09	2.57
Raw Lotus	La.co128.01	864.84	6.76	5.37E-06	5366.67	8.59	17.10	2.84
Raw Lotus	La.co129.01	846.99	6.74	6.70E-06	6700.00	8.81	18.84	2.94
Raw Lotus	La.co134.01	366.51	5.90	1.73E-06	1733.33	7.46	15.03	2.71
Raw Lotus	La.co137.01	645.60	6.47	2.87E-06	2866.67	7.96	13.20	2.58
Raw Lotus	La.co20.01	692.95	6.54	1.46E-06	1460.00	7.29	7.62	2.03

Raw Lotus	La.co21.01	1046.27	6.95	2.60E-06	2600.00	7.86	7.81	2.05
Raw Lotus	La.co21a.01	540.04	6.29	5.58E-06	5577.50	8.63	22.62	3.12
Raw Lotus	La.co21a.02	685.37	6.53	2.53E-06	2533.33	7.84	10.22	2.32
Raw Lotus	La.co23.01	906.87	6.81	4.36E-06	4361.25	8.38	14.29	2.66
Raw Lotus	La.co50.01	1551.30	7.35	7.23E-06	7233.33	8.89	11.96	2.48
Raw Lotus	La.co54.01	560.82	6.33	2.23E-06	2233.33	7.71	13.73	2.62
Raw Lotus	La.co55.01	692.73	6.54	2.13E-06	2133.33	7.67	13.22	2.58
Raw Lotus	La.co55.03	1037.17	6.94	5.20E-06	5200.00	8.56	12.90	2.56
Raw Lotus	La.co55.04	845.15	6.74	3.90E-06	3900.00	8.27	13.88	2.63
Raw Lotus	La.co55.05	534.46	6.28	2.40E-06	2400.00	7.78	15.18	2.72
Raw Lotus	La.co61.01	1569.73	7.36	1.28E-05	12833.33	9.46	21.95	3.09
Raw Lotus	La.co61.02	1141.34	7.04	5.17E-06	5166.67	8.55	13.96	2.64
Raw Lotus	La.co61.03	932.43	6.84	1.07E-05	10733.33	9.28	27.24	3.30
Raw Lotus	La.co62.02	1714.66	7.45	9.10E-06	9100.00	9.12	15.76	2.76
Raw Lotus	La.co64.01	897.67	6.80	7.05E-06	7050.00	8.86	22.45	3.11
Raw Lotus	La.co66.01	689.63	6.54	5.45E-06	5450.00	8.60	21.04	3.05
Raw Lotus	La.co67.01	850.92	6.75	7.25E-06	7250.00	8.89	21.04	3.05
Raw Lotus	La.co69.01	773.47	6.65	2.07E-06	2066.67	7.63	8.81	2.18
Raw Lotus	La.co69.04	634.72	6.45	2.30E-06	2300.00	7.74	10.52	2.35
Raw Lotus	La.co70.01	1516.15	7.32	1.49E-05	14850.00	9.61	27.30	3.31
Raw Lotus	La.co70.03	1359.28	7.21	8.07E-06	8066.67	9.00	19.21	2.96
Raw Lotus	La.co71.01	794.80	6.68	2.14E-06	2142.50	7.67	8.74	2.17
Raw Lotus	La.co71.02	904.43	6.81	2.93E-06	2933.33	7.98	10.10	2.31
Raw Lotus	La.coGH.03	852.08	6.75	7.08E-06	7075.00	8.86	19.24	2.96
Glass	La.co07.01	644.47	6.47	2.53E-06	2533.33	7.84	11.22	2.42
Glass	La.co100.01	336.44	5.82	9.50E-07	950.00	6.86	8.34	2.12
Glass	La.co102.01	495.71	6.21	2.60E-06	2600.00	7.86	15.42	2.74
Glass	La.co106.01	407.81	6.01	1.85E-06	1846.67	7.52	13.95	2.64
Glass	La.co111.01	541.27	6.29	2.33E-06	2333.33	7.76	15.53	2.74
Glass	La.co112.01	327.89	5.79	1.33E-06	1330.00	7.19	10.24	2.33
Glass	La.co112.02	202.95	5.31	7.37E-07	736.67	6.60	8.84	2.18

Glass	La.co118.01	211.05	5.35	8.30E-07	830.00	6.72	10.98	2.40
Glass	La.co119.01	540.60	6.29	1.83E-06	1833.33	7.51	9.78	2.28
Glass	La.co12.01	306.10	5.72	1.02E-06	1020.00	6.93	9.45	2.25
Glass	La.co127.01	144.13	4.97	3.77E-07	376.67	5.93	5.81	1.76
Glass	La.co128.01	264.83	5.58	1.10E-06	1100.00	7.00	12.82	2.55
Glass	La.co129.01	228.92	5.43	7.47E-07	746.67	6.62	8.13	2.10
Glass	La.co134.01	202.25	5.31	9.77E-07	976.67	6.88	14.44	2.67
Glass	La.co137.01	471.87	6.16	1.97E-06	1966.67	7.58	12.37	2.51
Glass	La.co20.01	631.51	6.45	1.57E-06	1566.67	7.36	7.23	1.98
Glass	La.co21.01	965.57	6.87	2.90E-06	2900.00	7.97	10.42	2.34
Glass	La.co21a.01	272.56	5.61	1.00E-06	1003.33	6.91	9.34	2.23
Glass	La.co21a.02	318.74	5.76	1.39E-06	1390.00	7.24	11.81	2.47
Glass	La.co23.01	388.92	5.96	1.44E-06	1436.67	7.27	10.49	2.35
Glass	La.co50.01	249.94	5.52	6.93E-07	693.33	6.54	7.02	1.95
Glass	La.co54.01	190.95	5.25	6.20E-07	620.00	6.43	9.23	2.22
Glass	La.co55.01	516.86	6.25	1.65E-06	1645.00	7.41	8.33	2.12
Glass	La.co55.03	187.46	5.23	5.30E-07	530.00	6.27	7.23	1.98
Glass	La.co55.04	447.77	6.10	1.63E-06	1633.33	7.40	12.40	2.52
Glass	La.co55.05	316.27	5.76	1.60E-06	1600.00	7.38	12.97	2.56
Glass	La.co61.01	317.08	5.76	1.33E-06	1333.33	7.20	11.47	2.44
Glass	La.co61.02	395.18	5.98	1.10E-06	1096.67	7.00	7.98	2.08
Glass	La.co61.03	336.16	5.82	9.23E-07	923.33	6.83	8.20	2.10
Glass	La.co62.02	341.31	5.83	1.36E-06	1355.00	7.21	10.57	2.36
Glass	La.co66.01	199.56	5.30	5.63E-07	563.33	6.33	7.07	1.96
Glass	La.co67.01	355.50	5.87	9.85E-07	985.00	6.89	8.69	2.16
Glass	La.co69.01	166.64	5.12	3.63E-07	363.33	5.90	5.58	1.72
Glass	La.co69.04	296.69	5.69	8.33E-07	833.33	6.73	7.77	2.05
Glass	La.co70.01	838.01	6.73	3.30E-06	3300.00	8.10	15.19	2.72
Glass	La.co70.03	464.88	6.14	2.40E-06	2400.00	7.78	14.62	2.68
Glass	La.co71.01	369.35	5.91	1.30E-06	1300.00	7.17	10.40	2.34
Glass	La.co71.02	162.85	5.09	6.43E-07	643.33	6.47	6.91	1.93
Glass	La.coGH.03	316.27	5.76	1.60E-06	1600.00	7.38	11.93	2.48
Glass	La.co64	610.07	6.41	2.47E-06	2466.67	7.81	13.25	2.58

Table S2. Contact angle measurements of water on the testing surfaces.

Treatment	Substrate ID	Leaf #	Contact Angle
Raw Lotus	R3A	3	144.1
Raw Lotus	R3A	3	131.2
Raw Lotus	R3A	3	146.1
Raw Lotus	R4A	4	145.2
Raw Lotus	R4A	4	140.9
Raw Lotus	R4A	4	145.4
Raw Lotus	R4B	4	145.5
Raw Lotus	R4B	4	144.9
Raw Lotus	R4B	4	141.5
Raw Lotus	R6A	6	138.7
Raw Lotus	R6A	6	147.1
Raw Lotus	R6A	6	152.1
Raw Lotus	R7A	7	147.1
Raw Lotus	R7A	7	143.4
Raw Lotus	R7A	7	140.4

*Philic and glass substrates had a contact angle of zero

Table S3. Cohesive failure and behavior of glue on tested lotus substrates: hydrophobic (raw) and hydrophilic (philic).

Treatment	Substrate ID	Leaf #	Total samples tested	Cohesive failure	Cohesive failure (%)	Tendrils	Comments
Philic Lotus	PT3A	3	9	9	100	Yes (1)	
Philic Lotus	PT3B	3	9	9	100	Yes (3)	Thread left behind
Philic Lotus	PT4A	4	12	1	8	No	Thread left behind
Philic Lotus	PT4B	4	9	2	22	No	
Philic Lotus	PT7A	7	9	0	0	No	
Philic Lotus	PT7B	7	9	No SEM		NA	
Philic Lotus	PT7C	7	11	4	36	No	
Philic Lotus	PT7D	7	13	No SEM		NA	
Philic Lotus	PT7E	7	9	5	56	No	
Philic Lotus	PT8A	8	9	0	0	0	
Philic Lotus	PT8B	8	9	6	67	0	
Philic Lotus	PT8C	8	9	No SEM		NA	
Raw Lotus	R3A	3	10	10	100	Yes	
Raw Lotus	R3B	3	11	8	73	Yes	
Raw Lotus	R4A	4	10	2	20	Yes	
Raw Lotus	R4B	4	10	3	30	Yes	
Raw Lotus	R7A	7	10	0	0	Yes	
Raw Lotus	R7B	7	10	5	50	Yes	
Raw Lotus	R7D	7	9	2	22	Yes	
Raw Lotus	R7E	7	11	1	9	Yes	
Raw Lotus	R7F	7	14	No SEM		NA	
Raw Lotus	R8A	8	10	4	40	Yes	
Raw Lotus	R8B	8	10	0	0	Yes	
Raw Lotus	R8C	8	10	10	100	Yes	Thread left behind

Table S4. Pull off measurement data of viscid capture silk for three substrates: glass, hydrophobic raw lotus (phobic) and hydrophilic lotus. Two to three capture silk strands were tested per substrate. All droplets in-frame were measured. Picture order 0 represents the pre-load suspended samples, 1 represents the loaded spread sample, and 7 represents the last picture right before detachment. Some measurements were difficult to obtain and therefore we kept the cells empty.

Treatment	Sample	Name on figure S1	Picture order	Droplet #	Width silk-glue (um)	Width middle (um)	Width thinnest part (um)	% change of thinnest part from suspended droplet	Width substrate-glue (um)	Height of thinnest part (um)	Droplet pulled length (um)	% strain
Glass	La.co01.02	I	0	1	25.885						20.292	0
Glass	La.co01.02	I	1	1								
Glass	La.co01.02	I	2	1	14.836	14.539	12.868	50.287811	25.75	43.83	68.449	237.32013
Glass	La.co01.02	I	3	1	14.794	16.128	7.99	69.132702	30.661	69.342	132.643	553.6714
Glass	La.co01.02	I	4	1		9.051			9.306		168.067	728.24266
Glass	La.co01.02	I	5	1					5.964		178.887	781.56416
Glass	La.co01.02	I	6	1								
Glass	La.co01.02	I	7	1								
Glass	La.co01.02	I	0	2	27.048						21.789	0
Glass	La.co01.02	I	1	2								
Glass	La.co01.02	I	2	2	22.248	16.745	16.317	39.673913	19.364	19.225	40.909	87.7507
Glass	La.co01.02	I	3	2	18.669	12.915	12.159	55.046584	23.658	40.036	79.728	265.9094
Glass	La.co01.02	I	4	2	18.331	10.53	10.216	62.230109	13.807	35.795	109.171	401.03722
Glass	La.co01.02	I	5	2	17.096	10.196	9.367	65.368974	12.905	26.182	117.166	437.73005
Glass	La.co01.02	I	6	2		10.112	5.22	80.700976	9.334	22.361	176.683	710.88164
Glass	La.co01.02	I	7	2		6.806	3.311	87.758799	7.898	23.504	209.769	862.7289
Glass	La.co01.02	I	0	3	25.799						20.931	0
Glass	La.co01.02	I	1	3								

Glass	La.co01.02	I	2	3	20.998	17.555	16.127	37.489825	18.32	10.762	25.531	21.976972
Glass	La.co01.02	I	3	3	23.254	12.924	12.73	50.657002	17.401	27.531	50.307	140.34685
Glass	La.co01.02	I	4	3	21.916	13.281	13.8		19.293	14.115	69.104	230.15145
Glass	La.co01.02	I	5	3	21.722	12.389	12.126	52.998178	19.343	32.336	76.214	264.1202
Glass	La.co01.02	I	6	3		11.51	9.023	65.025776	22.275	55.362	123.923	492.05485
Glass	La.co01.02	I	7	3			3.995	84.514904	8.474	26.622	158.209	655.85973
Phobic	La.co02.01	VII	0	1	24.314						18.979	0
Phobic	La.co02.01	VII	1	1								
Phobic	La.co02.01	VII	2	1								
Phobic	La.co02.01	VII	3	1								
Phobic	La.co02.01	VII	4	1								
Phobic	La.co02.01	VII	5	1								
Phobic	La.co02.01	VII	6	1								
Phobic	La.co02.01	VII	7	1								
Phobic	La.co02.01	VII	0	2	22.305						16.967	0
Phobic	La.co02.01	VII	1	2								
Phobic	La.co02.01	VII	2	2	20.706	17.907			8.63		19.528	15.094006
Phobic	La.co02.01	VII	3	2	17.627	10.535	3.244	85.456176	5.749	7.101	31.434	85.265515
Phobic	La.co02.01	VII	4	2	16.608	4.048	3.476	84.41605	10.351	20.296	49.082	189.27919
Phobic	La.co02.01	VII	5	2	14.859	3.675	2.105		5.907	6.796	84.072	395.50304
Phobic	La.co02.01	VII	6	2	18.133	3.059	2.847	87.236046		2.097	120.168	608.24542
Phobic	La.co02.01	VII	7	2	16.382	3.711	1.773	92.05111		2.054	141.783	735.63977
Phobic	La.co02.01	VII	0	3	23.121						17.588	0
Phobic	La.co02.01	VII	1	3								
Phobic	La.co02.01	VII	2	3								
Phobic	La.co02.01	VII	3	3	14.963	15.294	14.667	36.564162	21.749	10.225	17.626	0.2160564
Phobic	La.co02.01	VII	4	3	11.435	13.259	10.146	56.117815	12.744	7.84	34.537	96.366841
Phobic	La.co02.01	VII	5	3	11.696	7.558	5.059	78.119459	18.806	10.336	66.495	278.07028
Phobic	La.co02.01	VII	6	3	13.379	5.525	4.795	79.261278	12.583	8.732	97.912	456.69775
Phobic	La.co02.01	VII	7	3	13.116	4.727	3.964	82.855413	11.685	41.055	109.183	520.78121
Phobic	La.co02.01	VII	0	4	23.956						18.563	0

Phobic	La.co02.01	VII	1	4								
Phobic	La.co02.01	VII	2	4								
Phobic	La.co02.01	VII	3	4								
Phobic	La.co02.01	VII	4	4								
Phobic	La.co02.01	VII	5	4								
Phobic	La.co02.01	VII	6	4								
Phobic	La.co02.01	VII	7	4								
Phobic	La.co02.01	VII	0	5	22.477						17.138	0
Phobic	La.co02.01	VII	1	5								
Phobic	La.co02.01	VII	2	5								
Phobic	La.co02.01	VII	3	5	10.413	10.169	9.369	58.317391	9.097	14.361	31.368	83.031859
Phobic	La.co02.01	VII	4	5	10.951	8.349	6.119	72.776616	8.313	9.789	53.044	209.51103
Phobic	La.co02.01	VII	5	5	23.405	6.736	6.052	73.074699		15.314	64.659	277.2844
Phobic	La.co02.01	VII	6	5	21.796	6.485	4.9	78.199938	7.645	21.121	79.668	364.86171
Phobic	La.co02.01	VII	7	5	20.736	4.795	4.663	79.254349		27.317	95.356	456.40098
Phobic	La.co02.01	VII	0	6	22.201						16.576	0
Phobic	La.co02.01	VII	1	6								
Phobic	La.co02.01	VII	2	6	12.254	11.269			11.568		18.462	11.377896
Phobic	La.co02.01	VII	3	6	8.702	7.934	7.379	66.762758	9.647	27.945	43.037	159.63441
Phobic	La.co02.01	VII	4	6	6.691	8.306	4.079		10.865	9.745	62.935	279.67543
Phobic	La.co02.01	VII	5	6	23.406	7.449			11.376		70.443	324.96984
Phobic	La.co02.01	VII	6	6	21.796	7.456	6.202	72.064321	9.586	33.137	85.651	416.71694
Phobic	La.co02.01	VII	7	6	20.736	6.389	5.506	75.199315	8.251	44.17	102.618	519.07577
Glass	La.co02.02	II	0	1	20.293						16.273	0
Glass	La.co02.02	II	1	1								
Glass	La.co02.02	II	2	1	23.711	10.757	8.08	60.183314	11.344	6.116	28.64	75.99705
Glass	La.co02.02	II	3	1	21.878	8.179	4.875	75.976938	5.546	3.744	54.951	237.68205
Glass	La.co02.02	II	4	1	25.009	6.388	4.034	80.121224	7.83	13.29	92.142	466.22626
Glass	La.co02.02	II	5	1	18.957	6.281	3.754	81.50101	7.565	14.155	105.707	549.5852
Glass	La.co02.02	II	6	1		5.549	2.997	85.231361	5.464	22.409	129.44	695.42801
Glass	La.co02.02	II	7	1	23.537	4.487	3.3033		4.892	25.324	141.091	767.02513

Glass	La.co02.02	II	0	2	20.114						16.827	0
Glass	La.co02.02	II	1	2								
Glass	La.co02.02	II	2	2	21.672	14.594			13.691		18.496	9.9185832
Glass	La.co02.02	II	3	2	24.806	9.633	4.698	76.643134	5.87	3.449	46.901	178.72467
Glass	La.co02.02	II	4	2	21.631	6.692	4.271	78.766034	5.482	9.386	65.958	291.97718
Glass	La.co02.02	II	5	2	24.306	5.435	1.74	91.349309	1.74	0	83.454	395.95293
Glass	La.co02.02	II	6	2								
Glass	La.co02.02	II	7	2								
Glass	La.co02.02	II	0	3	19.042						15.982	0
Glass	La.co02.02	II	1	3								
Glass	La.co02.02	II	2	3	22.679	10.854			12.827		12.594	-21.19885
Glass	La.co02.02	II	3	3	25.368	9.035	3.69		4.932	4.423	32.719	104.72406
Glass	La.co02.02	II	4	3	18.073	7.588	5.767	69.714316	10.569	11.774	48.842	205.60631
Glass	La.co02.02	II	5	3	25.77	6.562	5.374	71.778175	11.167	15.287	60.51	278.61344
Glass	La.co02.02	II	6	3	22.931	5.853	3.4	82.144733	8.2	11.545	83.17	420.39795
Glass	La.co02.02	II	7	3								
Glass	La.co02.02	II	0	4							17.027	0
Glass	La.co02.02	II	1	4								
Glass	La.co02.02	II	2	4								
Glass	La.co02.02	II	3	4	26.622	13.794	11.43	57.065585	14.677	6.869	14.709	-13.61367
Glass	La.co02.02	II	4	4	22.594	10.028	5.887	77.88671	6.443	2.383	35.05	105.84953
Glass	La.co02.02	II	5	4	24.514	8.747	5.67	78.701826	11.332	7.584	44.747	162.80026
Glass	La.co02.02	II	6	4	20.266	7.725	5.265	80.223124	7.667	13.208	59.922	251.92342
Glass	La.co02.02	II	7	4								
Phobic	La.co02.04	VII	0	1	27.218						18.453	0
Phobic	La.co02.04	VII	1	1								
Phobic	La.co02.04	VII	2	1							21.003	13.818891
Phobic	La.co02.04	VII	3	1	19.045	14.689	8.189	69.913293	13.782	3.978	32.381	75.478242
Phobic	La.co02.04	VII	4	1	23.224	10.796	7.647	71.904622	12.017	3.995	43.74	137.03463
Phobic	La.co02.04	VII	5	1	13.907	9.217	5.07	81.372621	6.754	2.773	54.732	196.60218
Phobic	La.co02.04	VII	6	1	20.743	7.831	4.76	82.511573		2.359	72.057	290.48935

Phobic	La.co02.04	VII	7	1	13.213	7.608	4.406	83.812183		1.796	97.359	427.60527
Phobic	La.co02.04	VII	0	2	26.872						18.643	0
Phobic	La.co02.04	VII	1	2								
Phobic	La.co02.04	VII	2	2								
Phobic	La.co02.04	VII	3	2	37.275	27.082	25.397	5.4889848	26.416	5.106	21.025	12.776914
Phobic	La.co02.04	VII	4	2	41.48	24.37	23.025	14.316017	27.067	14.376	33.324	78.748056
Phobic	La.co02.04	VII	5	2	43.884	23.537	22.045	17.962935	25.972	22.158	47.503	154.80341
Phobic	La.co02.04	VII	6	2	46.17	20.614	20.575	23.433313	30.633	25.226	63.953	243.04028
Phobic	La.co02.04	VII	7	2	44.605	17.953	18.239	32.126377	30.266	29.679	87.607	369.919
Phobic	La.co02.04	VII	0	3	24.344						18.235	0
Phobic	La.co02.04	VII	1	3								
Phobic	La.co02.04	VII	2	3	32.364	16.696			17.463		17.646	-3.230052
Phobic	La.co02.04	VII	3	3	29.882	12.785	4.875	79.974532	8.546	7.116	30.899	69.448862
Phobic	La.co02.04	VII	4	3	21.682	10.507	4.755	80.467466	11.192	11.304	46.539	155.21799
Phobic	La.co02.04	VII	5	3	23.916	9.749	5.883		15.023	18.545	61.186	235.54154
Phobic	La.co02.04	VII	6	3	28.248	8.253	6.355		8.496	14.307	79.969	338.54675
Phobic	La.co02.04	VII	7	3	27.235	7.986	5.462		11.931	23.357	105.108	476.40801
Hydrophilic	La.co02.03	IV	0	1	26.186555						19.460504	0
Hydrophilic	La.co02.03	IV	1	1								
Hydrophilic	La.co02.03	IV	2	1								
Hydrophilic	La.co02.03	IV	3	1	15.449412	8.3213445	5.4742857	79.095052	5.8631933	2.7267227	17.815462	-8.453234
Hydrophilic	La.co02.03	IV	4	1	17.521345	8.610084	6.3203361		5.0033613	5.9431933	21.529748	10.633043
Hydrophilic	La.co02.03	IV	5	1	19.415798	6.472605	4.4369748	83.056287	6.1687395	23.234286	65.177479	234.92184
Hydrophilic	La.co02.03	IV	6	1	9.3011765	5.3848739	3.9458824	84.931648	7.1684034	33.333445	98.162017	404.41662
Hydrophilic	La.co02.03	IV	7	1	7.3236975	2.9781513	2.3781513	90.918426	7.245042	93.450756	212.4884	991.89567
Hydrophilic	La.co02.03	IV	0	2	26.268571						19.750252	0
Hydrophilic	La.co02.03	IV	1	2								
Hydrophilic	La.co02.03	IV	2	2								
Hydrophilic	La.co02.03	IV	3	2	20.620168	7.6803361	7.1089076	72.937594	11.396975	11.130756	24.897815	26.063278
Hydrophilic	La.co02.03	IV	4	2	16.823866	10.496471	10.496471	60.041715	13.310924	14.527731	31.198319	57.964157
Hydrophilic	La.co02.03	IV	5	2	14.562017	9.1384874	5.947563	77.358635	11.640336	22.25042	67.821849	243.39738

Hydrophilic	La.co02.03	IV	6	2	16.023193	6.7751261	5.2319328	80.082919	16.16605	39.129076	111.16471	462.85209
Hydrophilic	La.co02.03	IV	7	2	8.5731092	2.2521008	2.2521008	91.426634	16.60437	117.38084	231.65143	1072.9037
Hydrophilic	La.co02.03	IV	0	3	26.136471						19.81479	0
Hydrophilic	La.co02.03	IV	1	3								
Hydrophilic	La.co02.03	IV	2	3	24.092773	16.604034	10.843025	58.513812	12.545882	2.707563	20.099496	1.4368352
Hydrophilic	La.co02.03	IV	3	3	29.512941	9.0887395	7.4406723	71.531457	9.4571429	7.9778151	33.903193	71.100443
Hydrophilic	La.co02.03	IV	4	3	28.673277	8.4510924	5.9421849	77.264777	10.180504	13.73479	44.38521	124.00041
Hydrophilic	La.co02.03	IV	5	3	24.350588	4.9630252	4.382521	83.232162	12.59395	43.746555	107.35294	441.78188
Hydrophilic	La.co02.03	IV	6	3	16.990252	4.1966387	3.7146218	85.787592	26.893109	59.33042	155.08101	682.6528
Hydrophilic	La.co02.03	IV	7	3	14.181513	5.3996639	3.2386555	87.608673	16.583529	101.86252	277.87126	1302.3427
Hydrophilic	La.co02.03	IV	0	4	26.378487						19.319664	0
Hydrophilic	La.co02.03	IV	1	4								
Hydrophilic	La.co02.03	IV	2	4	19.206723	5.9331092	3.4278992		7.3378151	10.488067	29.283697	51.57457
Hydrophilic	La.co02.03	IV	3	4	21.512605	6.9092437	5.2127731		12.334454	16.997647	50.598319	161.90062
Hydrophilic	La.co02.03	IV	4	4	13.571765	6.777479	5.805042	77.993272	10.4	20.792269	62.492773	223.46719
Hydrophilic	La.co02.03	IV	5	4	16.147227	4.9408403	4.7216807	82.10026	12.662521	59.164034	127.62924	560.61835
Hydrophilic	La.co02.03	IV	6	4	13.133109	4.4497479	4.1381513	84.312401	14.84437	81.280672	169.78924	778.8416
Hydrophilic	La.co02.03	IV	7	4		4.1996639	4.1942857	84.099597	10.85042	113.02319	299.63294	1450.9221
Phobic	La.co09.01	VI	0	1	24.88						16.868	0
Phobic	La.co09.01	VI	0	2	24.717						17.337	0
Phobic	La.co09.01	VI	1	2								
Phobic	La.co09.01	VI	2	2								
Phobic	La.co09.01	VI	3	2								
Phobic	La.co09.01	VI	4	2								
Phobic	La.co09.01	VI	5	2	10.682	10.949	7.183	70.93903	23.532	69.556	81.315	369.02578
Phobic	La.co09.01	VI	6	2	8.492	8.194	4.398	82.206578	24.112	109.49	115.864	568.30478
Phobic	La.co09.01	VI	7	2	6.998	11.414	5.689		25.501	144.841	155.774	798.50609
Phobic	La.co09.01	VI	0	3	24.771						17.271	0
Phobic	La.co09.01	VI	1	3								
Phobic	La.co09.01	VI	2	3								
Phobic	La.co09.01	VI	3	3								

Phobic	La.co09.01	VI	4	3								
Phobic	La.co09.01	VI	5	3	8.797	14.808	13.58	45.177829	46.499	38.807	84.291	388.04933
Phobic	La.co09.01	VI	6	3	8.808	7.823	6.31	74.526664	35.557	50.635	119.139	589.82109
Phobic	La.co09.01	VI	7	3	6.788	8.08	3.958	84.021638	31.485	41.131	206.971	1098.373
Phobic	La.co09.01	VI	0	4	27.303						19.596	0
Phobic	La.co09.01	VI	1	4								
Phobic	La.co09.01	VI	2	4								
Phobic	La.co09.01	VI	3	4								
Phobic	La.co09.01	VI	4	4								
Phobic	La.co09.01	VI	5	4	30.412	10.348	9.265	66.066	26.229	48.104	134.991	588.87018
Phobic	La.co09.01	VI	6	4	22.983	5.468	3.53	87.071018	27.407	61.008	158.706	709.88977
Phobic	La.co09.01	VI	7	4	6.788	6.727	3.769		14.007	42.94	224.307	1044.6571
Phobic	La.co09.01	VI	0	5	25.027						17.167	0
Phobic	La.co09.01	VI	1	5								
Phobic	La.co09.01	VI	2	5	27.914	25.87	24.239	3.1485995	28.276	15.76	22.228	29.480981
Phobic	La.co09.01	VI	3	5	42.174	13.794	12.245	51.072841	21.258	22.081	43.36	152.57762
Phobic	La.co09.01	VI	4	5	44.79	16.343	14.753		23.425	22.109	53.695	212.78033
Phobic	La.co09.01	VI	5	5	14.384	6.668	6.445	74.247812	20.932	33.277	160.387	834.27506
Phobic	La.co09.01	VI	6	5	5.21	5.356	4.279	82.902465	14.516	78.595	190.213	1008.0154
Phobic	La.co09.01	VI	7	5	7.59	4.505	3.741	85.052144	13.903	106.983	260.442	1417.1084
Phobic	La.co09.01	VI	0	6	25.941						19.479	0
Phobic	La.co09.01	VI	1	6								
Phobic	La.co09.01	VI	2	6	13.837	9.678	9	65.305886	14.492	28.459	55.987	187.42235
Phobic	La.co09.01	VI	3	6	14.704	7.172	7.055	72.80367	18.85	13.539	83.535	328.84645
Phobic	La.co09.01	VI	4	6	16.348	7.13	6.254	75.891446	16.398	17.554	97.462	400.34396
Phobic	La.co09.01	VI	5	6	7.459	5.687	4.987	80.775606	22.917	72.585	191.578	883.51045
Phobic	La.co09.01	VI	6	6	5.329	4.443	3.916	84.904206	20.493	93.835	226.313	1061.8307
Phobic	La.co09.01	VI	7	6	7.661	4.338	4.259		20.639	127.941	307.133	1476.7391
Phobic	La.co09.01	VI	0	7	23.118						16.745	0
Phobic	La.co09.01	VI	1	7	14.007	10.154	8.452	63.439744	7.317	6.565	23.807	42.173783
Phobic	La.co09.01	VI	2	7	12.192	7.392	5.993	74.076477	7.095	26.18	75.57	351.2989

Phobic	La.co09.01	VI	3	7		5.852	4.448	80.759581	7.372	15.896	120.789	621.34368
Phobic	La.co09.01	VI	4	7		5.077	4.677		5.982	7.033	130.143	677.20514
Phobic	La.co09.01	VI	5	7		4.882	3.481	84.942469	6.614	8.198	291.502	1640.8301
Phobic	La.co09.01	VI	6	7		3.531	3.025	86.914958	7.06	11.883	329.166	1865.7569
Phobic	La.co09.01	VI	7	7								
Hydrophilic	La.co09.02	V	0	1	20.542						14.583866	0
Hydrophilic	La.co09.02	V	1	1								
Hydrophilic	La.co09.02	V	2	1								
Hydrophilic	La.co09.02	V	3	1	11.426	8.021	7.168	65.105637	14.935	25.079	30.414	108.54553
Hydrophilic	La.co09.02	V	4	1	10.309	9.285	7.904		14.063	28.536	35.966	146.615
Hydrophilic	La.co09.02	V	5	1	7.219	8.77	7.074	65.563236	14.558	22.473	39.741	172.49977
Hydrophilic	La.co09.02	V	6	1	10.053	8.255	5.827	71.633726	17.518	43.91	58.509	301.18993
Hydrophilic	La.co09.02	V	7	1		6.348	3.982	80.615325	11.614	94.002	109.252	649.12923
Hydrophilic	La.co09.02	V	0	2	20.896						13.809076	0
Hydrophilic	La.co09.02	V	1	2								
Hydrophilic	La.co09.02	V	2	2								
Hydrophilic	La.co09.02	V	3	2							30.822	123.20104
Hydrophilic	La.co09.02	V	4	2							46.425	236.19195
Hydrophilic	La.co09.02	V	5	2							49.654	259.57512
Hydrophilic	La.co09.02	V	6	2							57.551	316.76215
Hydrophilic	La.co09.02	V	7	2							116.642	744.67638
Hydrophilic	La.co09.02	V	0	3	19.983						14.29479	0
Hydrophilic	La.co09.02	V	1	3								
Hydrophilic	La.co09.02	V	2	3	14.147	10.149	9.926	50.327779		13.481	19.568	36.889035
Hydrophilic	La.co09.02	V	3	3	6.116	7.296	6.166	69.143772	12.639	41.782	41.782	192.28831
Hydrophilic	La.co09.02	V	4	3	5.718	5.577	5.151	74.22309	14.844	35.562	50.782	255.24831
Hydrophilic	La.co09.02	V	5	3	5.724	6.705	4.746	76.249812	14.383	34.575	52.87	269.85503
Hydrophilic	La.co09.02	V	6	3	5.252	5.551	4.67	76.630136	15.551	70.151	76.645	436.17437
Hydrophilic	La.co09.02	V	7	3	7.743	7.857	4.151	79.227343	20.341	65.89	155.951	990.96392
Hydrophilic	La.co09.02	V	0	4	19.187						15.107227	0
Hydrophilic	La.co09.02	V	1	4	10.413	6.718	6.718	64.98671	8.832	13.793	20.169	33.50564

Hydrophilic	La.co09.02	V	2	4	11.507	7.933	7.037		10.424	17.669	33.221	119.90138
Hydrophilic	La.co09.02	V	3	4	8.298	7.427	5.656	70.521707	15.041	57.937	66.298	338.84957
Hydrophilic	La.co09.02	V	4	4	8.825	5.958	4.699	75.50946	15.134	74.871	78.548	419.93659
Hydrophilic	La.co09.02	V	5	4	4.819	6.248	2.821		17.507	77.946	81.84	441.72748
Hydrophilic	La.co09.02	V	6	4	4.294	5.491	3.609	81.190389	14.295	93.124	102.429	578.01325
Hydrophilic	La.co09.02	V	7	4	11.586	3.95	3.142	83.624329	15.829	59.478	192.129	1171.7688
Hydrophilic	La.co09.02	V	0	5	20.125						15.134454	0
Hydrophilic	La.co09.02	V	1	5	10.9	4.51	4.51	77.590062	17.14	16.072	35.835	136.77762
Hydrophilic	La.co09.02	V	2	5	5.053	6.134	3.336		17.185	28.681	40.406	166.98023
Hydrophilic	La.co09.02	V	3	5	5.383	7.18	5.077	74.772671	22.575	81.606	89.032	488.27363
Hydrophilic	La.co09.02	V	4	5	5.221	6.272	3.742	81.406211	19.392	87.534	92.887	513.74531
Hydrophilic	La.co09.02	V	5	5	5.383	6.527	3.549	82.365217	19.383	89.092	96.874	540.08917
Hydrophilic	La.co09.02	V	6	5	6.339	5.43	4.376		19.491	100.929	122.628	710.25719
Hydrophilic	La.co09.02	V	7	5	11.219	4.003	1.707	91.518012	15.414	35.85	216.905	1333.1868