Appendix A

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	*Gt* (MJ/m3)	D_{spread} (cm)
2015	Arezoo Emdadi [80]	1	CM	0.00	0.35	0.00	0.005	/	0.00	0	0	0	0	0.000	55.00	2.46	/	46.00
		2	PS1	0.00	0.35	0.00	0.005	PP	0.01	20	6	3.45	400	0.147	55.00	2.62	/	45.00
		3	PS2	0.00	0.35	0.00	0.005	PP	0.03	20	6	3.45	400	0.147	53.20	2.80	/	45.00
		4	PS3	0.00	0.35	0.00	0.005	PP	0.05	20	6	3.45	400	0.147	53.00	2.84	/	44.00
		5	PS4	0.00	0.35	0.00	0.005	PP	0.07	20	6	3.45	400	0.147	52.00	2.88	/	43.00
		6	PS5	0.00	0.35	0.00	0.005	PP	0.10	20	6	3.45	400	0.147	51.70	3.06	/	43.00
		7	PS6	0.00	0.35	0.00	0.005	PP	0.30	20	6	3.45	400	0.147	50.70	3.06	/	42.00
		8	PS7	0.00	0.35	0.00	0.005	PP	0.50	20	6	3.45	400	0.147	50.00	3.15	/	40.00
		9	PS8	0.00	0.35	0.00	0.005	PP	0.70	20	6	3.45	400	0.147	48.30	3.15	/	37.00
		10	PM1	0.00	0.35	0.00	0.005	PP	0.01	20	12	3.45	400	0.175	53.00	2.62	/	44.00
		11	PM2	0.00	0.35	0.00	0.005	PP	0.03	20	12	3.45	400	0.175	52.00	2.68	/	43.00
		12	PM3	0.00	0.35	0.00	0.005	PP	0.05	20	12	3.45	400	0.175	52.00	2.86	/	42.00
		13	PM4	0.00	0.35	0.00	0.005	PP	0.07	20	12	3.45	400	0.175	51.00	2.96	/	42.00
		14	PM5	0.00	0.35	0.00	0.005	PP	0.10	20	12	3.45	400	0.175	51.50	3.12	/	42.00
		15	PM6	0.00	0.35	0.00	0.005	PP	0.30	20	12	3.45	400	0.175	50.50	3.20	/	37.00
		16	PM7	0.00	0.35	0.00	0.005	PP	0.50	20	12	3.45	400	0.175	47.80	3.25	/	34.00
		17	PM8	0.00	0.35	0.00	0.005	PP	0.70	20	12	3.45	400	0.175	41.00	3.10	/	32.00
		18	PL1	0.00	0.35	0.00	0.005	PP	0.01	20	28	3.45	400	0.217	53.00	2.70	/	43.00
		19	PL2	0.00	0.35	0.00	0.005	PP	0.03	20	28	3.45	400	0.217	53.00	3.00	/	43.00
		20	PL3	0.00	0.35	0.00	0.005	PP	0.05	20	28	3.45	400	0.217	53.00	3.10	/	42.00
		21	PL4	0.00	0.35	0.00	0.005	PP	0.07	20	28	3.45	400	0.217	52.00	3.22	/	42.00
		22	PL5	0.00	0.35	0.00	0.005	PP	0.10	20	28	3.45	400	0.217	51.70	3.40	/	39.50
		23	PL6	0.00	0.35	0.00	0.005	PP	0.30	20	28	3.45	400	0.217	43.00	3.30	/	30.00
		24	PL7	0.00	0.35	0.00	0.005	PP	0.50	20	28	3.45	400	0.217	38.60	3.00	/	28.00
		25	PL8	0.00	0.35	0.00	0.005	PP	0.70	20	28	3.45	400	0.217	33.40	2.80	/	24.00
2013	Iman Mehdipour	26	CM	0.00	0.35	0.00	0.005	/	0.00	0	0	0	0	0.000	55.00	2.46	/	46.00
		27	SG1	0.00	0.35	0.00	0.005	GF	0.10	40	6	70	3000	0.197	55.00	2.60	/	45.00
		28	SG2	0.00	0.35	0.00	0.005	GF	0.20	40	6	70	3000	0.197	54.00	2.66	/	43.00

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	[75]	29	SG3	0.00	0.35	0.00	0.005	GF	0.50	40	6	70	3000	0.197	54.00	2.80	/	38.00
		30	SG4	0.00	0.35	0.00	0.005	GF	1.00	40	6	70	3000	0.197	56.00	3.50	/	35.00
		31	SG5	0.00	0.35	0.00	0.005	GF	2.00	40	6	70	3000	0.197	53.00	4.30	/	30.00
		32	SG6	0.00	0.35	0.00	0.005	GF	3.00	40	6	70	3000	0.197	53.00	5.20	/	28.00
		33	SG7	0.00	0.35	0.00	0.005	GF	4.00	40	6	70	3000	0.197	37.00	4.20	/	22.00
		34	SG8	0.00	0.35	0.00	0.005	GF	5.00	40	6	70	3000	0.197	30.00	3.10	/	12.00
		35	LG1	0.00	0.35	0.00	0.005	GF	0.50	60	12	70	3000	0.162	56.00	3.70	/	36.00
		36	LG2	0.00	0.35	0.00	0.005	GF	1.00	60	12	70	3000	0.162	52.00	4.50	/	32.00
		37	LG3	0.00	0.35	0.00	0.005	GF	2.00	60	12	70	3000	0.162	50.00	5.60	/	28.00
		38	LG4	0.00	0.35	0.00	0.005	GF	3.00	60	12	70	3000	0.162	28.00	3.30	/	11.00
		39	M	0.00	0.30	0.50	0.004	/	0.00	0	0	0	0	0.000	72.92	/	/	/
		40	CS0.1	0.00	0.30	0.50	0.004	PVA	0.10	40	6	36.7	1500	0.161	73.00	/	/	/
		41	CS0.3	0.00	0.30	0.50	0.004	PVA	0.30	40	6	36.7	1500	0.161	76.88	/	/	/
		42	CS0.5	0.00	0.30	0.50	0.004	PVA	0.50	40	6	36.7	1500	0.161	70.94	/	/	/
		43	CS0.8	0.00	0.30	0.50	0.004	PVA	0.80	40	6	36.7	1500	0.161	77.69	/	/	/
		44	CS1.0	0.00	0.30	0.50	0.004	PVA	1.00	40	6	36.7	1500	0.161	75.63	/	/	/
		45	CS1.5	0.00	0.30	0.50	0.004	PVA	1.50	40	6	36.7	1500	0.161	77.75	/	/	/
		46	CS2.0	0.00	0.30	0.50	0.004	PVA	2.00	40	6	36.7	1500	0.161	70.31	/	/	/
		47	CS2.5	0.00	0.30	0.50	0.004	PVA	2.50	40	6	36.7	1500	0.161	75.88	/	/	/
		48	CS3.0	0.00	0.30	0.50	0.004	PVA	3.00	40	6	36.7	1500	0.161	68.50	/	/	/
		49	CS3.5	0.00	0.30	0.50	0.004	PVA	3.50	40	6	36.7	1500	0.161	70.95	/	/	/
2020	Wen Si [76]	50	CL0.1	0.00	0.30	0.50	0.004	PVA	0.10	40	12	36.7	1500	0.192	72.63	/	/	/
		51	CL0.3	0.00	0.30	0.50	0.004	PVA	0.30	40	12	36.7	1500	0.192	73.13	/	/	/
		52	CL0.5	0.00	0.30	0.50	0.004	PVA	0.50	40	12	36.7	1500	0.192	71.81	/	/	/
		53	CL0.8	0.00	0.30	0.50	0.004	PVA	0.80	40	12	36.7	1500	0.192	75.88	/	/	/
		54	CL1.0	0.00	0.30	0.50	0.004	PVA	1.00	40	12	36.7	1500	0.192	72.38	/	/	/
		55	CL1.5	0.00	0.30	0.50	0.004	PVA	1.50	40	12	36.7	1500	0.192	72.75	/	/	/
		56	CL2.0	0.00	0.30	0.50	0.004	PVA	2.00	40	12	36.7	1500	0.192	71.38	/	/	/
		57	CL2.5	0.00	0.30	0.50	0.004	PVA	2.50	40	12	36.7	1500	0.192	69.31	/	/	/
		58	CL3.0	0.00	0.30	0.50	0.004	PVA	3.00	40	12	36.7	1500	0.192	68.13	/	/	/
		59	JL0.1	0.00	0.30	0.50	0.004	PVA	0.10	31	12	39	1600	0.247	69.94	/	/	/
		60	JL0.3	0.00	0.30	0.50	0.004	PVA	0.30	31	12	39	1600	0.247	78.50	/	/	/
		61	JL0.5	0.00	0.30	0.50	0.004	PVA	0.50	31	12	39	1600	0.247	79.63	/	/	/

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		62	JL0.8	0.00	0.30	0.50	0.004	PVA	0.80	31	12	39	1600	0.247	80.00	/	/	/
		63	JL1.0	0.00	0.30	0.50	0.004	PVA	1.00	31	12	39	1600	0.247	82.56	/	/	/
		64	JL1.5	0.00	0.30	0.50	0.004	PVA	1.50	31	12	39	1600	0.247	80.44	/	/	/
		65	JL2.0	0.00	0.30	0.50	0.004	PVA	2.00	31	12	39	1600	0.247	77.94	/	/	/
		66	JL2.5	0.00	0.30	0.50	0.004	PVA	2.50	31	12	39	1600	0.247	77.88	/	/	/
		67	JL3.0	0.00	0.30	0.50	0.004	PVA	3.00	31	12	39	1600	0.247	78.63	/	/	/
2013	F.J. Baeza [74]	68	CM	0.00	0.50	0.00	0.000	/	0.00	0	0	0	0	0.000	/	/	/	/
		69	PAN3-0.1	0.00	0.50	0.00	0.000	CF	0.06	7.2	3	242	3800	1.170	/	/	/	/
		70	PAN3-0.2	0.00	0.50	0.00	0.000	CF	0.12	7.2	3	242	3800	1.170	/	/	/	/
		71	PAN3-0.3	0.00	0.50	0.00	0.000	CF	0.18	7.2	3	242	3800	1.170	/	/	/	/
		72	PAN3-0.4	0.00	0.50	0.00	0.000	CF	0.23	7.2	3	242	3800	1.170	/	/	/	/
		73	PAN3-0.5	0.00	0.50	0.00	0.000	CF	0.28	7.2	3	242	3800	1.170	/	/	/	/
		74	PAN3-1.0	0.00	0.50	0.00	0.000	CF	0.56	7.2	3	242	3800	1.170	/	/	/	/
		75	PAN6-0.1	0.00	0.50	0.00	0.000	CF	0.06	7.2	6	242	3800	1.392	/	/	/	/
		76	PAN6-0.15	0.00	0.50	0.00	0.000	CF	0.09	7.2	6	242	3800	1.392	/	/	/	/
		77	PAN6-0.2	0.00	0.50	0.00	0.000	CF	0.12	7.2	6	242	3800	1.392	/	/	/	/
		78	PAN6-0.25	0.00	0.50	0.00	0.000	CF	0.14	7.2	6	242	3800	1.392	/	/	/	/
		79	PAN6-0.3	0.00	0.50	0.00	0.000	CF	0.17	7.2	6	242	3800	1.392	/	/	/	/
		80	PAN6-0.5	0.00	0.50	0.00	0.000	CF	0.29	7.2	6	242	3800	1.392	/	/	/	/
		81	PAN12-0.05	0.00	0.50	0.00	0.000	CF	0.03	7.2	12	242	3800	1.658	/	/	/	/
		82	PAN12-0.1	0.00	0.50	0.00	0.000	CF	0.06	7.2	12	242	3800	1.658	/	/	/	/
		83	PAN12-0.15	0.00	0.50	0.00	0.000	CF	0.09	7.2	12	242	3800	1.658	/	/	/	/
		84	PAN12-0.3	0.00	0.50	0.00	0.000	CF	0.17	7.2	12	242	3800	1.658	/	/	/	/
		85	PAN12-0.5	0.00	0.50	0.00	0.000	CF	0.29	7.2	12	242	3800	1.658	/	/	/	/
2012	Liberato Ferrara [79]	86	wb32hr35	0.00	0.32	0.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	36.20
		87	wb32hr45	0.00	0.32	0.00	0.006	/	0.00	0	0	0	0	0.000	/	/	/	41.70
		88	wb32hr55	0.00	0.32	0.00	0.007	/	0.00	0	0	0	0	0.000	/	/	/	47.30
		89	wb36hr35	0.00	0.36	0.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	39.00
		90	wb36hr45	0.00	0.36	0.00	0.006	/	0.00	0	0	0	0	0.000	/	/	/	43.30
		91	wb36hr55	0.00	0.36	0.00	0.007	/	0.00	0	0	0	0	0.000	/	/	/	48.50
		92	wb40hr35	0.00	0.40	0.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	40.80
		93	wb40hr45	0.00	0.40	0.00	0.006	/	0.00	0	0	0	0	0.000	/	/	/	47.40

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		94	wb40hr55	0.00	0.40	0.00	0.008	/	0.00	0	0	0	0	0.000	/	/	/	50.50
2017	Leo Gu Li [81]	95	0.00-0.25	0.00	0.25	1.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	0.00
		96	0.00-0.30	0.00	0.30	1.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	14.20
		97	0.00-0.35	0.00	0.35	1.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	19.00
		98	0.00-0.40	0.00	0.40	1.00	0.005	/	0.00	0	0	0	0	0.000	/	/	/	22.70
		99	0.05-0.25	0.00	0.25	1.00	0.005	PP	0.06	30.5	6	3.45	400	0.100	/	/	/	0.00
		100	0.05-0.30	0.00	0.30	1.00	0.005	PP	0.05	30.5	6	3.45	400	0.100	/	/	/	10.90
		101	0.05-0.35	0.00	0.35	1.00	0.005	PP	0.05	30.5	6	3.45	400	0.100	/	/	/	15.80
		102	0.05-0.40	0.00	0.40	1.00	0.005	PP	0.05	30.5	6	3.45	400	0.100	/	/	/	22.70
		103	0.10-0.25	0.00	0.25	1.00	0.005	PP	0.12	30.5	6	3.45	400	0.100	/	/	/	0.00
		104	0.10-0.30	0.00	0.30	1.00	0.005	PP	0.11	30.5	6	3.45	400	0.100	/	/	/	10.60
		105	0.10-0.35	0.00	0.35	1.00	0.005	PP	0.10	30.5	6	3.45	400	0.100	/	/	/	14.80
		106	0.10-0.40	0.00	0.40	1.00	0.005	PP	0.10	30.5	6	3.45	400	0.100	/	/	/	22.60
		107	0.20-0.25	0.00	0.25	1.00	0.005	PP	0.23	30.5	6	3.45	400	0.100	/	/	/	0.00
		108	0.20-0.30	0.00	0.30	1.00	0.005	PP	0.22	30.5	6	3.45	400	0.100	/	/	/	5.80
		109	0.20-0.35	0.00	0.35	1.00	0.005	PP	0.21	30.5	6	3.45	400	0.100	/	/	/	14.30
		110	0.20-0.40	0.00	0.40	1.00	0.005	PP	0.20	30.5	6	3.45	400	0.100	/	/	/	18.70
		111	0.30-0.25	0.00	0.25	1.00	0.005	PP	0.35	30.5	6	3.45	400	0.100	/	/	/	0.00
		112	0.30-0..30	0.00	0.30	1.00	0.005	PP	0.33	30.5	6	3.45	400	0.100	/	/	/	5.20
		113	0.30-0.35	0.00	0.35	1.00	0.005	PP	0.31	30.5	6	3.45	400	0.100	/	/	/	11.80
		114	0.30-0.40	0.00	0.40	1.00	0.005	PP	0.30	30.5	6	3.45	400	0.100	/	/	/	18.10
		115	0.40-0.25	0.00	0.25	1.00	0.005	PP	0.46	30.5	6	3.45	400	0.100	/	/	/	0.00
		116	0.40-0.30	0.00	0.30	1.00	0.005	PP	0.44	30.5	6	3.45	400	0.100	/	/	/	1.00
		117	0.40-0.35	0.00	0.35	1.00	0.005	PP	0.42	30.5	6	3.45	400	0.100	/	/	/	11.40
		118	0.40-0.40	0.00	0.40	1.00	0.005	PP	0.40	30.5	6	3.45	400	0.100	/	/	/	14.60
2011	Leo Gu Li [77]	119	0.3-1.00	0.00	0.32	2.66	0.003	/	0.00	0	0	0	0	0.000	/	/	/	0.10
		120	0.3-1.25	0.00	0.40	2.66	0.003	/	0.00	0	0	0	0	0.000	/	/	/	4.20
		121	0.3-1.50	0.00	0.48	2.66	0.003	/	0.00	0	0	0	0	0.000	/	/	/	15.70
		122	0.4-1.00	0.00	0.32	1.99	0.003	/	0.00	0	0	0	0	0.000	/	/	/	11.60
		123	0.4-1.25	0.00	0.40	1.99	0.003	/	0.00	0	0	0	0	0.000	/	/	/	20.30
		124	0.4-1.50	0.00	0.48	1.99	0.003	/	0.00	0	0	0	0	0.000	/	/	/	21.80
		125	0.5-0.75	0.00	0.24	1.59	0.003	/	0.00	0	0	0	0	0.000	/	/	/	0.00

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		126	0.5-0.85	0.00	0.27	1.59	0.003	/	0.00	0	0	0	0	0.000	/	/	/	0.00
		127	0.5-1.00	0.00	0.32	1.59	0.003	/	0.00	0	0	0	0	0.000	/	/	/	19.80
		128	0.5-1.25	0.00	0.40	1.59	0.003	/	0.00	0	0	0	0	0.000	/	/	/	24.80
		129	0.5-1.50	0.00	0.48	1.59	0.003	/	0.00	0	0	0	0	0.000	/	/	/	25.90
		130	0.6-0.75	0.00	0.24	1.33	0.003	/	0.00	0	0	0	0	0.000	/	/	/	0.00
		131	0.6-0.85	0.00	0.27	1.33	0.003	/	0.00	0	0	0	0	0.000	/	/	/	6.40
		132	0.6-1.00	0.00	0.32	1.33	0.003	/	0.00	0	0	0	0	0.000	/	/	/	26.40
		133	0.6-1.25	0.00	0.40	1.33	0.003	/	0.00	0	0	0	0	0.000	/	/	/	27.60
		134	0.6-1.50	0.00	0.48	1.33	0.003	/	0.00	0	0	0	0	0.000	/	/	/	31.40
		135	0.7-0.75	0.00	0.24	1.14	0.003	/	0.00	0	0	0	0	0.000	/	/	/	0.40
		136	0.7-0.85	0.00	0.27	1.14	0.003	/	0.00	0	0	0	0	0.000	/	/	/	17.40
		137	0.7-1.00	0.00	0.32	1.14	0.003	/	0.00	0	0	0	0	0.000	/	/	/	28.00
		138	0.7-1.25	0.00	0.40	1.14	0.003	/	0.00	0	0	0	0	0.000	/	/	/	30.50
		139	0.7-1.50	0.00	0.48	1.14	0.003	/	0.00	0	0	0	0	0.000	/	/	/	32.20
		140	0.8-0.75	0.00	0.24	1.00	0.003	/	0.00	0	0	0	0	0.000	/	/	/	1.30
		141	0.8-0.85	0.00	0.27	1.00	0.003	/	0.00	0	0	0	0	0.000	/	/	/	19.70
		142	0.8-1.00	0.00	0.32	1.00	0.003	/	0.00	0	0	0	0	0.000	/	/	/	28.90
		143	0.8-1.25	0.00	0.40	1.00	0.003	/	0.00	0	0	0	0	0.000	/	/	/	31.70
		144	0.8-1.50	0.00	0.48	1.00	0.003	/	0.00	0	0	0	0	0.000	/	/	/	34.30
		145	0.9-0.75	0.00	0.24	0.89	0.003	/	0.00	0	0	0	0	0.000	/	/	/	11.60
		146	0.9-0.85	0.00	0.27	0.89	0.003	/	0.00	0	0	0	0	0.000	/	/	/	23.80
		147	0.9-1.00	0.00	0.32	0.89	0.003	/	0.00	0	0	0	0	0.000	/	/	/	28.00
		148	0.9-1.25	0.00	0.40	0.89	0.003	/	0.00	0	0	0	0	0.000	/	/	/	31.30
		149	0.9-1.50	0.00	0.48	0.89	0.003	/	0.00	0	0	0	0	0.000	/	/	/	28.30
2007	Shuxin Wang [2]	150	M41	0.10	0.25	0.64	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	5.48	1.87	/
		151	M42	0.20	0.24	0.64	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	5.60	3.36	/
		152	M43	0.80	0.24	0.65	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	4.72	4.81	/
		153	M44	1.00	0.24	0.65	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	5.56	9.88	/
		154	M45	1.20	0.24	0.64	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	4.86	11.17	/
		155	M46	1.50	0.24	0.65	0.030	PVA	2.00	39	12	25.8	1620	0.176	/	4.47	10.98	/
2007	En-Hua Yang [33]	156	1	1.20	0.26	0.36	0.005	PVA	2.00	39	8	42.8	1600	0.186	52.60	/	/	/
		157	2	1.60	0.27	0.37	0.005	PVA	2.00	39	8	42.8	1600	0.186	47.50	/	/	/
		158	3	2.00	0.26	0.37	0.004	PVA	2.00	39	8	42.8	1600	0.186	34.20	/	/	/

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	*Gt* (MJ/m3)	D_{spread} (cm)
		159	4	2.40	0.26	0.37	0.004	PVA	2.00	39	8	42.8	1600	0.186	38.40	/	/	/
		160	5	2.80	0.26	0.37	0.004	PVA	2.00	39	8	42.8	1600	0.186	35.20	/	/	/
		161	6	3.20	0.25	0.37	0.004	PVA	2.00	39	8	42.8	1600	0.186	26.70	/	/	/
		162	7	3.60	0.25	0.37	0.005	PVA	2.00	39	8	42.8	1600	0.186	23.90	/	/	/
		163	8	5.60	0.24	0.36	0.005	PVA	2.00	39	8	42.8	1600	0.186	21.40	/	/	/
2012	Ahmet Çavdar [25]	164	CM	0.00	0.50	3.00	0.000	/	0.00	0	0	0	0	0.000	61.73	/	/	/
		165	CF-0.5	0.00	0.50	3.00	0.000	CF	0.50	6.9	12	240	4200	1.719	52.92	/	/	/
		166	CF-1.0	0.00	0.50	3.00	0.000	CF	1.00	6.9	12	240	4200	1.719	50.43	/	/	/
		167	CF-1.5	0.00	0.50	3.00	0.000	CF	1.50	6.9	12	240	4200	1.719	50.40	/	/	/
		168	CF-2.0	0.00	0.50	3.00	0.000	CF	2.00	6.9	12	240	4200	1.719	50.28	/	/	/
		169	GF-0.5	0.00	0.50	3.00	0.000	GF	0.50	14	12	72	1700	0.620	50.94	/	/	/
		170	GF-1.0	0.00	0.50	3.00	0.000	GF	1.00	14	12	72	1700	0.620	48.38	/	/	/
		171	GF-1.5	0.00	0.50	3.00	0.000	GF	1.50	14	12	72	1700	0.620	41.34	/	/	/
		172	GF-2.0	0.00	0.50	3.00	0.000	GF	2.00	14	12	72	1700	0.620	33.21	/	/	/
		173	PP-0.5	0.00	0.50	3.00	0.000	PP	0.50	18	12	4	400	0.202	55.40	/	/	/
		174	PP-1.0	0.00	0.50	3.00	0.000	PP	1.00	18	12	4	400	0.202	49.94	/	/	/
		175	PP-1.5	0.00	0.50	3.00	0.000	PP	1.50	18	12	4	400	0.202	48.50	/	/	/
		176	PP-2.0	0.00	0.50	3.00	0.000	PP	2.00	18	12	4	400	0.202	45.55	/	/	/
		177	PVA-0.5	0.00	0.50	3.00	0.000	PVA	0.50	660	12	23	900	0.013	47.80	/	/	/
		178	PVA-1.0	0.00	0.50	3.00	0.000	PVA	1.00	660	12	23	900	0.013	39.19	/	/	/
		179	PVA-1.5	0.00	0.50	3.00	0.000	PVA	1.50	660	12	23	900	0.013	41.90	/	/	/
		180	PVA-2.0	0.00	0.50	3.00	0.000	PVA	2.00	660	12	23	900	0.013	46.99	/	/	/
2015	Shwan H. Said [36]	181	PVA1	0.25	0.37	0.64	0.003	PVA	1.00	38	8	42	1600	0.190	/	3.53	2.45	/
		182	PVA2	0.25	0.37	0.64	0.003	PVA	1.50	38	8	42	1600	0.190	/	3.32	2.69	/
		183	PVA3	0.25	0.37	0.64	0.003	PVA	2.00	38	8	42	1600	0.190	/	3.09	2.54	/
		184	PVA4	0.25	0.37	0.64	0.003	PVA	2.50	38	8	42	1600	0.190	/	4.02	3.48	/
		185	PVA5	0.25	0.37	0.64	0.003	PVA	3.00	38	8	42	1600	0.190	/	3.98	3.65	/
		186	PVA6	0.25	0.37	0.64	0.003	PVA	1.00	38	12	42	1600	0.210	/	4.04	4.60	/
		187	PVA7	0.25	0.37	0.64	0.003	PVA	1.50	38	12	42	1600	0.210	/	4.10	4.80	/
		188	PVA8	0.25	0.37	0.64	0.003	PVA	2.00	38	12	42	1600	0.210	/	4.09	5.17	/
		189	PVA9	0.25	0.37	0.64	0.003	PVA	2.50	38	12	42	1600	0.210	/	3.85	4.28	/
		190	PVA10	0.25	0.37	0.64	0.003	PVA	3.00	38	12	42	1600	0.210	/	4.37	6.30	/
		191	M19	2.40	0.28	0.36	0.002	PVA	1.00	39	12	42.8	1620	0.206	/	/	/	/

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	*Gt* (MJ/m3)	D_{spread} (cm)
2015	Zuanfeng Pan [61]	192	M20	2.40	0.28	0.36	0.003	PVA	1.60	39	12	42.8	1620	0.206	/	/	/	/
		193	M21	2.40	0.28	0.36	0.003	PVA	2.00	39	12	42.8	1620	0.206	/	/	/	/
2015	Mohamed A.A. Sherir [60]	194	F_1.2_SS	1.20	0.27	0.36	0.086	PVA	2.00	39	8	42.8	1620	0.186	61.00	/	/	53.50
		195	F_2.2_SS	2.20	0.27	0.36	0.066	PVA	2.00	39	8	42.8	1620	0.186	52.00	/	/	53.00
2015	Shwan H. Said [67]	196	PE1	0.25	0.37	0.64	0.003	PE	1.00	38	12	39	1950	0.205	/	3.24	6.18	/
		197	PE2	0.25	0.37	0.64	0.003	PE	1.50	38	12	39	1950	0.205	/	3.32	8.72	/
		198	PE3	0.25	0.37	0.64	0.003	PE	2.00	38	12	39	1950	0.205	/	4.57	12.94	/
		199	PE4	0.25	0.37	0.64	0.003	PE	2.50	38	12	39	1950	0.205	/	4.27	13.27	/
		200	PE5	0.25	0.37	0.64	0.003	PE	1.00	24	12	82	2700	0.393	/	4.79	14.06	/
		201	PE6	0.25	0.37	0.64	0.003	PE	1.50	24	12	82	2700	0.393	/	5.02	17.11	/
		202	PE7	0.25	0.37	0.64	0.003	PE	2.00	24	12	82	2700	0.393	/	5.91	25.38	/
		203	PE8	0.25	0.37	0.64	0.003	PE	2.50	24	12	82	2700	0.393	/	5.83	22.41	/
2016	Hezhi Liu [42]	204	N-ECC	2.20	0.25	0.36	0.004	PVA	2.00	39	12	42.8	1600	0.206	/	5.47	8.27	/
2017	Chao Wu [69]	205	ECC-23	2.20	0.25	0.36	0.004	PVA	2.00	39	12	42	1600	0.205	45.70	4.90	4.17	/
2017	Dan Meng [54]	206	ECC	1.20	0.30	0.36	0.010	PVA	2.20	39	12	42.8	1620	0.206	59.86	5.17	3.60	/
2019	Hui Ma [57]	207	ECC-1	1.20	0.26	0.36	0.006	PVA	2.00	39	12	42.8	1620	0.206	/	7.08	14.15	/
		208	ECC-2	2.20	0.25	0.36	0.004	PVA	2.00	39	12	42.8	1620	0.206	/	5.15	13.28	/
2019	Hao-Liang Wu [31]	209	Ottawa-ECC	2.20	0.25	0.38	0.008	PVA	2.00	39	8	42.8	1600	0.186	/	3.81	4.01	21.20
		210	Gabbro-ECC	2.20	0.25	0.38	0.008	PVA	2.00	39	8	42.8	1600	0.186	/	4.98	6.49	20.30
		211	MI-ECC	2.20	0.25	0.38	0.007	PVA	2.00	39	8	42.8	1600	0.186	/	4.15	2.46	19.60
		212	2NS-ECC	2.20	0.25	0.38	0.008	PVA	2.00	39	8	42.8	1600	0.186	/	3.38	3.06	20.00
2013	Mo Li [82]	213	ECC_0_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	40.13
		214	ECC_0.01_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	32.13
		215	ECC_0.015_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	30.10
		216	ECC_0.02_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	38.09
		217	ECC_0.025_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	34.08
		218	ECC_0.03_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	33.98
		219	ECC_0.04_M	1.20	0.30	0.36	0.000	/	0.00	0	0	0	0	0.000	/	/	/	32.03

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	Gt (MJ/m3)	D_{spread} (cm)
		220	ECC_0_M	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	3.72	0.27	39.02
		221	ECC_0.01_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	4.03	1.23	26.09
		222	ECC_0.015_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	4.46	2.54	23.13
		223	ECC_0.02_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	4.73	7.39	25.98
		224	ECC_0.025_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	4.59	6.98	23.13
		225	ECC_0.03_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	4.38	6.57	22.10
		226	ECC_0.04_F	1.20	0.30	0.36	0.000	PVA	2.00	39	12	42.8	1620	0.206	/	3.68	5.86	22.10
2011	Mustafa Sahmaran [30]	227	ECC1_F	1.20	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	62.50	5.14	7.02	/
		228	ECC2_F	2.20	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	54.10	4.82	7.28	/
		229	ECC1_M	1.20	0.27	0.36	0.002	/	0.00	0	0	0	0	0.000	60.30	/	/	/
		230	ECC2_M	2.20	0.27	0.36	0.002	/	0.00	0	0	0	0	0.000	52.40	/	/	/
2014	Burak Felekoglu [40]	231	P1-HF-WA	2.80	0.23	0.00	0.007	PP	2.00	12	10	6	850	0.317	/	2.30	1.51	17.29
		232	P1-LF-WA	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	2.41	3.65	15.45
		233	P1-HF-W	2.80	0.23	0.00	0.007	PP	2.00	12	10	6	850	0.317	/	2.49	3.46	17.29
		234	P1-LF-W	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	2.58	6.07	15.45
		235	P2-HF-A	2.80	0.23	0.00	0.007	PP	2.00	12	10	6	850	0.317	/	4.05	2.96	17.29
		236	P2-LF-A	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	4.29	2.81	15.45
		237	P2-HF-W	2.80	0.23	0.00	0.007	PP	2.00	12	10	6	850	0.317	/	3.79	5.65	16.25
		238	P2-LF-W	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	4.25	11.18	15.17
		239	P3-LF-A	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	3.64	5.74	16.25
		240	P3-LF-WA	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	3.81	7.86	15.17
		241	P3-LF-W	2.80	0.23	0.00	0.005	PP	2.00	12	10	6	850	0.317	/	3.64	11.40	17.00
2014	Ravi Ranade [41]	242	M45-ECC	1.21	0.26	0.36	0.002	PVA	2.00	39	12	42.8	1600	0.206	/	5.10	8.93	/
		243	HFA-ECC	2.80	0.26	0.37	0.002	PVA	2.00	39	12	42.8	1600	0.206	/	4.50	17.10	/
2014	Zhigang Zhang [48]	244	M1	1.20	0.25	0.36	0.014	PVA	2.00	39	12	42.8	1620	0.206	47.00	/	/	/
		245	M2	2.20	0.25	0.36	0.009	PVA	2.00	39	12	42.8	1620	0.206	36.00	/	/	/
		246	M3	4.00	0.25	0.36	0.006	PVA	2.00	39	12	42.8	1620	0.206	24.00	/	/	/
2009	Mustafa Şahmaran [28]	247	ECC-1	1.20	0.26	0.36	0.004	PVA	2.00	39	8	42.8	1620	0.186	50.20	4.96	6.70	/
		248	ECC-2	2.19	0.27	0.36	0.003	PVA	2.00	39	8	42.8	1620	0.186	36.30	4.35	7.63	/
2009	Mustafa Şahmaran	249	ECC1_0	1.20	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	62.50	5.13	5.36	/
		250	ECC2_0	2.19	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	54.10	4.59	6.86	/

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	Gt (MJ/m3)	D_{spread} (cm)
	[47]																	
2009	Mustafa Şahmaran [39]	251	SS_1.2_0.20	1.20	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	62.50	5.13	5.36	/
		252	SS_2.2_0.20	2.19	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	54.10	4.59	6.86	/
		253	SS_4.2_0.20	4.41	0.27	0.36	0.001	PVA	2.00	39	8	42.8	1620	0.186	36.80	3.57	5.73	/
2016	Saptarshi Sasmal [51]	254	C_0.5_0.3	0.00	0.30	0.50	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		255	C_0.5_0.35	0.00	0.35	0.50	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		256	C_0.5_0.4	0.00	0.40	0.50	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		257	C_0.6_0.3	0.00	0.30	0.60	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		258	C_0.6_0.35	0.00	0.35	0.60	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		259	C_0.6_0.4	0.00	0.40	0.60	0.000	PVA	0.00	0	0	0	0	0.000	/	/	/	/
		260	F_0.5_0.3	0.00	0.30	0.50	0.002	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		261	F_0.5_0.35	0.00	0.35	0.50	0.001	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		262	F_0.5_0.4	0.00	0.40	0.50	0.000	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		263	F_0.6_0.3	0.00	0.30	0.60	0.002	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		264	F_0.6_0.35	0.00	0.35	0.60	0.002	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		265	F_0.6_0.4	0.00	0.40	0.60	0.000	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		266	F_1V_8L	0.00	0.30	0.50	0.002	PVA	1.00	40	8	42.8	1560	0.182	/	/	/	/
		267	F_1V_12L	0.00	0.30	0.50	0.002	PVA	1.00	40	12	42.8	1560	0.202	/	/	/	/
		268	F_2V_8L	0.00	0.30	0.50	0.002	PVA	2.00	40	8	42.8	1560	0.182	/	/	/	/
		269	F_2V_12L	0.00	0.30	0.50	0.002	PVA	2.00	40	12	42.8	1560	0.202	/	/	/	/
2016	HR Pakravan [66]	270	PVA2%	1.20	0.25	0.36	0.011	PVA	2.00	38	8	42.8	1600	0.191	/	/	/	/
		271	PVA1.5%	1.20	0.25	0.36	0.011	PVA	1.50	38	8	42.8	1600	0.191	/	/	/	/
		272	PVA1.2%	1.20	0.25	0.36	0.011	PVA	1.20	38	8	42.8	1600	0.191	/	/	/	/
2014	Tahir Kemal Erdem [58]	273	ECC	1.20	0.27	0.36	0.002	PVA	2.00	39	8	42.8	1620	0.186	65.72	5.10	6.89	/
2018	Hanwen Deng [72]	274	ECC1	0.00	0.33	0.78	0.017	PVA	2.00	39	12	42.8	1620	0.206	45.57	5.51	13.56	/
		275	ECC2	0.00	0.33	0.78	0.017	PVA	2.00	39	12	22	1250	0.168	43.40	5.03	4.15	/
		276	ECC3	0.00	0.33	0.78	0.017	PE	0.50	24	7	116	2740	0.382	44.63	4.02	11.68	/
		277	ECC4	0.00	0.33	0.78	0.017	PE	0.80	24	7	116	2740	0.382	46.97	4.26	13.98	/
2018	Kwok L. Chung [32]	278	NE1	1.20	0.20	0.36	0.006	/	0.00	0	0	0	0	0.000	88.90	/	/	/
		279	NE2	1.20	0.26	0.36	0.006	/	0.00	0	0	0	0	0.000	64.10	/	/	/
		280	NE3	1.20	0.30	0.36	0.006	/	0.00	0	0	0	0	0.000	41.80	/	/	/

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	D_f(μm)	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	*Gt* (MJ/m3)	D_{spread} (cm)
2017	Hezhi Liu [29]	281	ECC	2.20	0.25	0.36	0.004	PVA	2.00	39	12	42	1600	0.205	41.26	5.02	10.54	/
2014	Kamile Tosun-Felekog˙lu [68]	282	ECC-I	1.20	0.26	0.36	0.008	PVA	2.00	39	12	42.8	1620	0.206	/	6.30	7.48	/
		283	ECC-II	1.20	0.26	0.36	0.005	PVA	2.00	39	12	42.8	1620	0.206	/	6.80	9.83	/
		284	ECC-I-M	1.20	0.26	0.36	0.008	/	0.00	0	0	0	0	0.000	/	/	/	/
		285	ECC-II-M	1.20	0.26	0.36	0.005	/	0.00	0	0	0	0	0.000	/	/	/	/
2012	Yu Zhu [71]	286	ECC70-0	2.33	0.25	0.36	0.012	PVA	2.00	40	8	42	1600	0.181	42.83	4.66	7.46	/
2012	Zhitao Chen [38]	287	1	1.00	0.25	0.36	0.014	PVA	2.00	40	8	42	1600	0.181	57.63	/	/	/
		288	2	1.51	0.25	0.36	0.013	PVA	2.00	40	8	42	1600	0.181	51.51	/	/	/
		289	3	2.33	0.25	0.36	0.012	PVA	2.00	40	8	42	1600	0.181	41.12	/	/	/
		290	4	3.99	0.25	0.36	0.010	PVA	2.00	40	8	42	1600	0.181	24.94	/	/	/
2012	Li-li Kan [50]	291	M45-ECC	1.22	0.27	0.37	0.007	PVA	1.00	39	12	42.8	1600	0.206	/	3.84	5.24	/
		292	HFA-ECC	2.75	0.27	0.37	0.003	PVA	1.00	39	12	42.8	1600	0.206	/	3.40	6.07	/
2021	Long Liang [62]	293	ECC-ref	0.80	0.22	0.30	0.004	PE	2.00	24	18	116	2900	0.485	60.00	9.71	53.30	/
2021	Yu Jiangtao [53]	294	SS-0.4	1.09	0.19	0.40	0.021	PE	2.00	24	18	116	2400	0.485	86.60	11.73	57.44	/
2024	Minjin Cai [49]	295	MA	1.50	0.20	0.30	0.008	PE	2.00	25	18	120	3000	0.472	80.61	10.90	46.33	18.90
		296	MB	1.50	0.20	0.30	0.008	PE	2.00	25	18	120	3000	0.472	83.43	13.61	95.29	19.00
		297	MC	1.50	0.20	0.30	0.008	PE	2.00	25	18	120	3000	0.472	85.72	14.49	107.24	19.20
2024	Liang Li [44]	298	E2	0.00	0.25	0.00	0.012	PE	2.00	39	12	210	2180	0.337	/	3.28	9.66	/
		299	S2	0.00	0.25	0.00	0.012	ST	2.00	262.5	12	210	3000	0.059	/	2.49	0.51	/
2022	Nuoyan Xu [63]	300	0%	0.50	0.35	0.20	0.000	PE	1.00	24	12	110	3000	0.431	/	/	/	19.80
2024	Hongxiang Gou [26]	301	E1	1.00	0.18	0.30	0.010	PE	1.20	40	12	38	1600	0.194	98.00	10.26	17.36	17.20
2022	Wen Zhou [43]	302	Mix-2	0.94	0.22	0.29	0.001	PE	1.00	24	12	116	3000	0.438	/	7.83	32.12	13.60
2023	WeiHsiu Hu [27]	303	OPC-2S00	1.33	0.28	0.30	0.000	PE	2.00	42	12	100.3	1550	0.251	44.30	4.48	20.27	/
		304	E1	1.00	0.34	0.33	0.006	PE	1.75	19	18	104	2974	0.581	31.10	5.00	/	/

Year	Researcher	No.	Speciment	*FA/C*	*W/B*	*S/B*	*SP/B*	Fiber Type	V_f(%)	$D_f(\mu m)$	L_f(mm)	E_f (GPa)	T_f (MPa)	I_f	σ_{cs} (MPa)	σ_u (MPa)	*Gt* (MJ/m3)	D_{spread} (cm)
2024	Lingfei Liu [65]	305	E2	1.00	0.34	0.33	0.006	PE	2.00	19	18	104	2974	0.581	33.50	5.50	/	/
		306	E3	1.00	0.34	0.33	0.006	PE	2.25	19	18	104	2974	0.581	34.60	6.60	/	/
		307	E4	1.00	0.34	0.33	0.006	PE	2.50	19	18	104	2974	0.581	31.80	4.60	/	/
2024	Yanlin Huo [34]	308	E0	0.00	0.20	0.40	0.010	PE	1.50	20	18	113	3800	0.569	108.60	9.15	47.98	/

Note: / denote the data not provided in the original paper or the value didn't exist.