

Supporting Information

Strong, machinable and insulating chitosan-urea aerogels: towards ambient pressure drying of biopolymer aerogel monoliths

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Table S11. Recent data from the biopolymer aerogel literature. Full citations in SI pdf file.

First author	Year	ρ (g/cm ³)	S_{BET} (m ² /g)	λ (mW/m.K)	Drying	Material
Guerrero-Alburquerque	2020	0.094	165	24.1	SCD	chitosan
		0.121	172	25.7	SCD	chitosan
		0.145	159	27.8	SCD	chitosan
		0.144	160	27.9	SCD	chitosan
		0.152	167	26.2	SCD	chitosan
		0.305	150	37.5	APD	chitosan
		0.361	127	62.5	APD	chitosan
		0.423	83	68.1	APD	chitosan
		0.278	134	41.6	APD	chitosan
		0.225	106	36.3	APD	chitosan
		0.292	210	44.5	APD 65 °C	chitosan
		0.304	174	55.6	APD 65 °C	chitosan
		0.180	228	37.0	APD 65 °C	chitosan
0.167	227	30.9	APD 65 °C	chitosan		
Zhou	2020	0.200	123	70.0	FD	Coaxial aerogel fiber nanocellulose
Wang	2020	0.009	22	18.0	FD	ZrP/RGO/CNF
Jin	2020	0.034	116		FD	
		0.036	116	33.2	FD	clay Palygorskite + alginate
		0.052	125	37.0	FD	clay Palygorskite + alginate
		0.087	125		FD	
Zhu	2019	0.030	4	21.0	FD	Glucmannan
		0.084	416	33.0	FD	Glucmannan + silica
Zhou	2019	0.005	103	43.0	FD	CNF
		0.003	227	41.0	FD	CNF/MOF
Zhang	2019	0.056	331	36.0	SCD	Cellulose diacetate
		0.082	356	34.6	SCD	Cellulose diacetate
		0.092	396	31.3	SCD	Cellulose diacetate
		0.098	465	33.5	SCD	Cellulose diacetate
		0.147	319	36.7	SCD	Cellulose diacetate
		0.199	297	43.2	SCD	Cellulose diacetate
		0.235	286	50.7	SCD	Cellulose diacetate
Gupta	2019	0.012	180	26.1	FD	CNF
		0.024	341	36.0	FD	CNF/Sepiolite clay
Song	2018	0.055	14	28.0	FD	CNF, lambda perpendicular
Smirnova (patent)	2018	0.028	479	22.0	SCD	Alginate
		0.066	544	21.6	SCD	Alginate/Starch
		0.058	435	20.4	SCD	Alginate/Starch
		0.062	456	19.4	SCD	Alginate/Lignin
Nesic	2018	0.110	461	22.0	SCD	Pectin
		0.140	336	24.0	SCD	Pectin-TiO ₂
		0.220	367	25.0	SCD	Pectin-TiO ₂
		0.240	339	25.0	SCD	Pectin-TiO ₂
Jiménez-Saelices	2018	0.012	64	22.8	FD	CNF
		0.014	26	21.3	FD	CNF
		0.020	22	18.6	FD	CNF
		0.024	21	21.8	FD	CNF
		0.029	14	22.7	FD	CNF
Gupta	2018	0.012	92	25.9	FD	CNF
Groult	2018	0.049	329	19.2	SCD	Pectin pH=1

		0.055	326	20.2	SCD	Pectin /Ca ²⁺ R=0,2 pH=1
		0.069	396	18.9	SCD	Pectin pH=1
		0.069	371	18.6	SCD	Pectin /Ca ²⁺ R=0,2 pH=1
		0.051	326	19.7	SCD	Pectin pH=1
		0.048	321	20.3	SCD	Pectin /Ca ²⁺ R=0,2 pH=1
		0.051	238	24.7	SCD	Pectin pH=1
		0.053	219	24.6	SCD	Pectin /Ca ²⁺ R=0,2 pH=1
		0.075	249	16.9	SCD	Pectin pH=1,5
		0.048	257	20.0	SCD	Pectin /Ca ²⁺ R=0,2 pH=1,5
		0.092	274	15.7	SCD	Pectin pH=2
		0.127	399	17.1	SCD	Pectin pH=2
		0.119	416	17.0	SCD	Pectin pH=2
		0.166	444	20.0	SCD	Pectin pH=2
		0.031	267	21.5	SCD	Pectin /Ca ²⁺ R=0,2 pH=2
		0.048	317	20.0	SCD	Pectin /Ca ²⁺ R=0,2 pH=2
		0.055	342	20.4	SCD	Pectin /Ca ²⁺ R=0,2 pH=2
		0.082	357	21.3	SCD	Pectin /Ca ²⁺ R=0,2 pH=2
		0.103	541	14.7	SCD	Pectin pH=3
		0.143	552	17.7	SCD	Pectin pH=3
		0.127	601	16.2	SCD	Pectin pH=3
		0.182	529	21.7	SCD	Pectin pH=3
		0.127	522	16.6	SCD	Pectin /Ca ²⁺ R=0,05 pH=3
		0.089	499	15.7	SCD	Pectin /Ca ²⁺ R=0,1 pH=3
		0.062	444	19.9	SCD	Pectin /Ca ²⁺ R=0,15 pH=3
		0.054	455	21.0	SCD	Pectin /Ca ²⁺ R=0,2 pH=3
Ahmad	2018	0.100	18	38.9	SCD	Alginate /PET
Plappert	2017	0.068	420	30.3	SCD	DCC (2,3-dicarboxyl cellulose), SBET estimated
		0.076	420	26.6	SCD	DCC (2,3-dicarboxyl cellulose), SBET estimated
		0.087	420	17.7	SCD	DCC (2,3-dicarboxyl cellulose), SBET estimated
		0.114	420	24.4	SCD	DCC (2,3-dicarboxyl cellulose), SBET estimated
Fan	2017	0.002	10	47.7	FD	CNF
		0.003	67	38.5	FD	CNF/ AIOOH
Takeshita	2015	0.042	545	22	SCD	Chitosan+Formaldehyde