

Laser Treated Wood for High Efficiency Solar Thermal Steam Generation

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Table S1. A comparison of the wood based solar-thermal steam generation system from the literatures.

Wood	Method	Solar intensity (kW/m ²)	Mass change (kg/m ² ·h)	Efficiency (%)	Ref.
Balsa wood	Assemble of carbon dots within wood microchannel	1	2.27	92.5	1
Basswood	Nanoparticles deposited on wood surface	10	11.8	85	2
Basswood	Carbonized wood with drilled channel-array	1	1.04	75.1	3
Nature wood	Drop casting of GO on the wood surface	1	1.64	91.8	4
Poplar/Pine/Cocobolo	Carbonized wood	1	< 1	< 90	5
Balsa wood	CNT-modified flexible wood membrane	10	11.22	81	6
Wood	Flame treated wood	1	-	72	7
Cunninghamia lanceolata	Carbonized wood	1	1.45	91.3	8
Basswood	Spray-coated with graphite	1	1.2	80	9
Natural Wood	Carbonized wood	1/10	1.08/12.26	74/89	10
Natural Wood	Alkali treatment	1	1.26	80.1	11

Paulownia wood	Laser treated wood surface	1	2.28	93.1	This work
Pines	Laser treated wood surface	1	1.97	80.3	
Toona sinensis (A. Juss.) Roem	Laser treated wood surface	1	2.01	82.0	
Ziziphus jujuba Mill	Laser treated wood surface	1	1.67	68.1	

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