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Pharmacological evaluation and kinetics of *in vitro* drug release efficacy of biofabricated silver nanoparticles using medicinally important *Justicia neesii* Ramamoorthy

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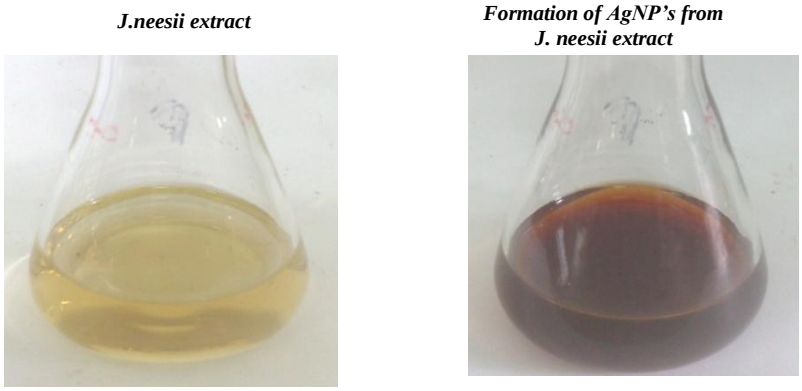
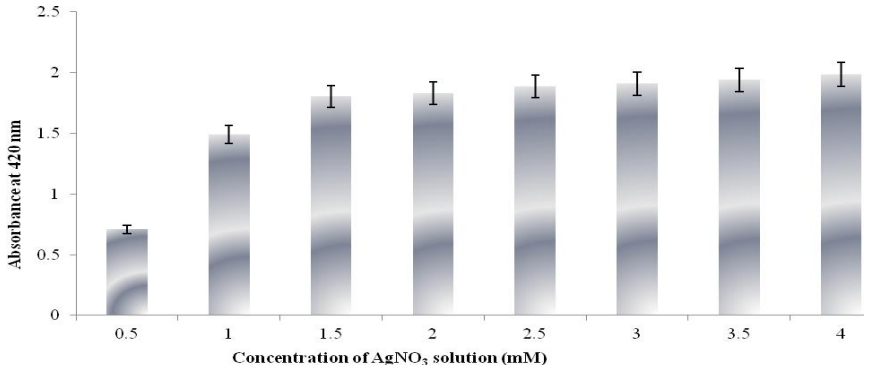
Supplementary Data

Suppl. Table S1 — Release kinetics of the AgNPs synthesized from *Justicia neesii* extract at pH 4.6 and pH 7.4

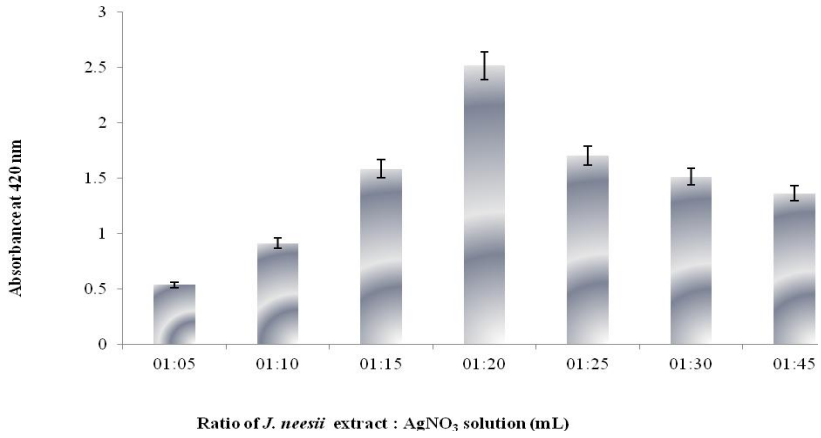
Time (h)	% drug released	% Drug unreleased	Log % Drug unreleased	√time	log t	log % drug released
pH 4.6						
0	0	100	2	0		
0.5	12.33	87.67	1.942	0.707	-0.301	1.090
1	23.42	76.58	1.884	1	0	1.369
1.5	28.85	71.15	1.852	1.224	0.176	1.460
2	31.36	68.64	1.836	1.414	0.301	1.496
3	38.42	61.58	1.789	1.732	0.477	1.584
4	42.51	57.49	1.761	2	0.602	1.628
5	51.26	48.74	1.687	2.236	0.698	1.709
6	62.43	37.57	1.574	2.449	0.778	1.795
7	65.21	34.79	1.541	2.645	0.845	1.814
8	78.72	21.28	1.327	2.828	0.903	1.896
9	80.91	19.09	1.280	3	0.954	1.908
10	83.28	16.72	1.223	3.162	1	1.920
11	88.01	11.99	1.078	3.316	1.041	1.944
12	92.27	7.73	0.888	3.464	1.079	1.965
At pH 7.4						
0	0	100	2	0		
0.5	1.89	98.11	1.991	0.707	-0.301	0.278
1	2.34	97.66	1.989	1	0	0.369
1.5	2.86	97.14	1.987	1.224	0.176	0.456
2	3.29	96.71	1.985	1.414	0.301	0.519
3	3.92	96.08	1.982	1.732	0.477	0.593
4	4.19	95.81	1.981	2	0.602	0.622
5	5.90	94.10	1.973	2.236	0.698	0.770
6	6.18	93.82	1.972	2.449	0.778	0.790
7	7.80	92.20	1.964	2.645	0.845	0.892
8	8.29	91.71	1.962	2.828	0.903	0.918
9	8.87	91.13	1.959	3	0.954	0.947
10	9.03	90.97	1.958	3.162	1	0.955
11	9.82	90.18	1.955	3.316	1.041	0.992
12	10.46	89.54	1.952	3.464	1.079	1.019



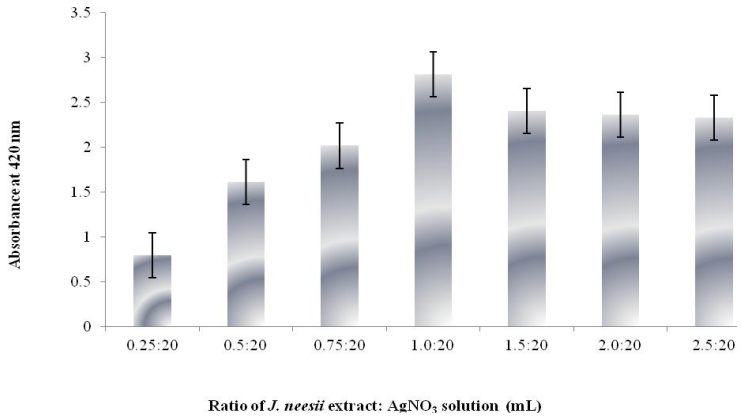
Suppl. Fig. S1 — Colour change in *Justicia neesii* extract due to AgNPs formation



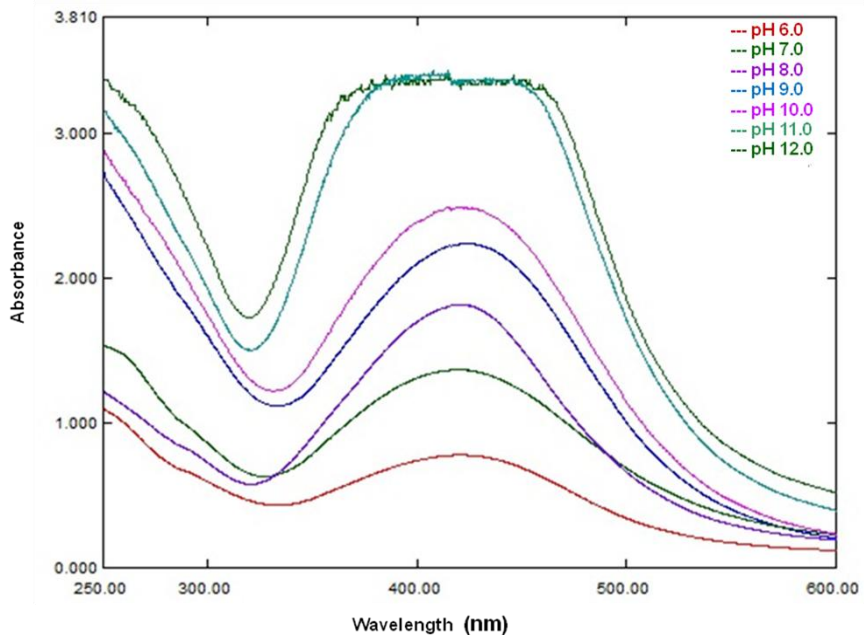
Suppl. Fig. S2 — Effect of different $AgNO_3$ concentrations on formation of AgNPs using *Justicia neesii* extract



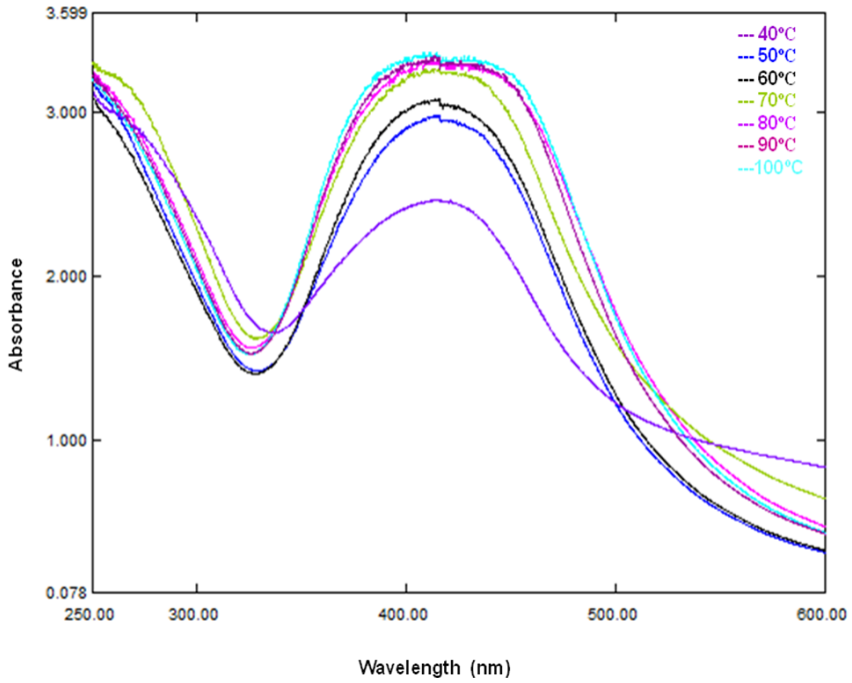
Suppl. Fig. S3 — Effect of different volumes of 1.0 mM $AgNO_3$ solution on formation of AgNPs using *Juscticia neesii* extract



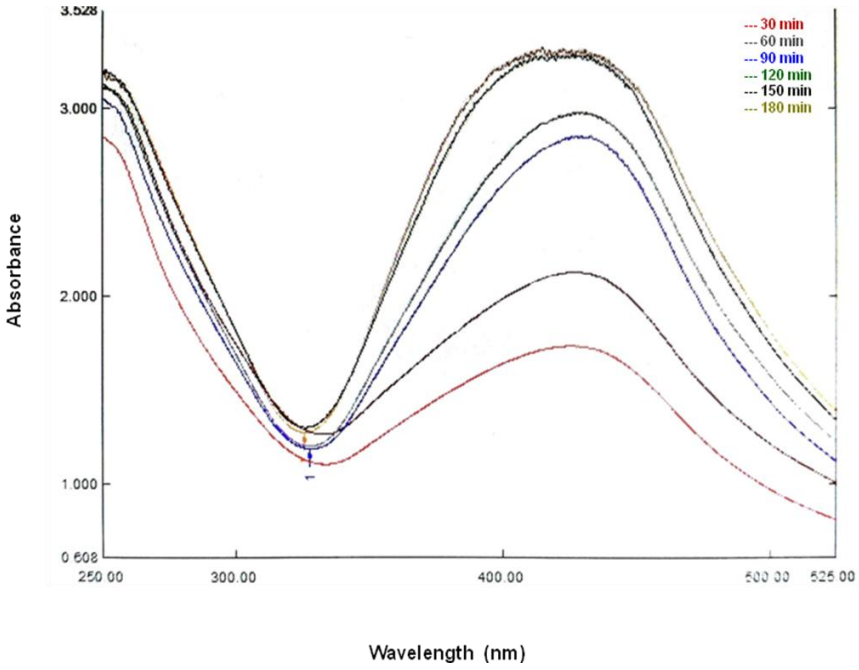
Suppl. Fig. S4 — Effect of different volumes of *Justicia neesii* extract on formation of AgNPs



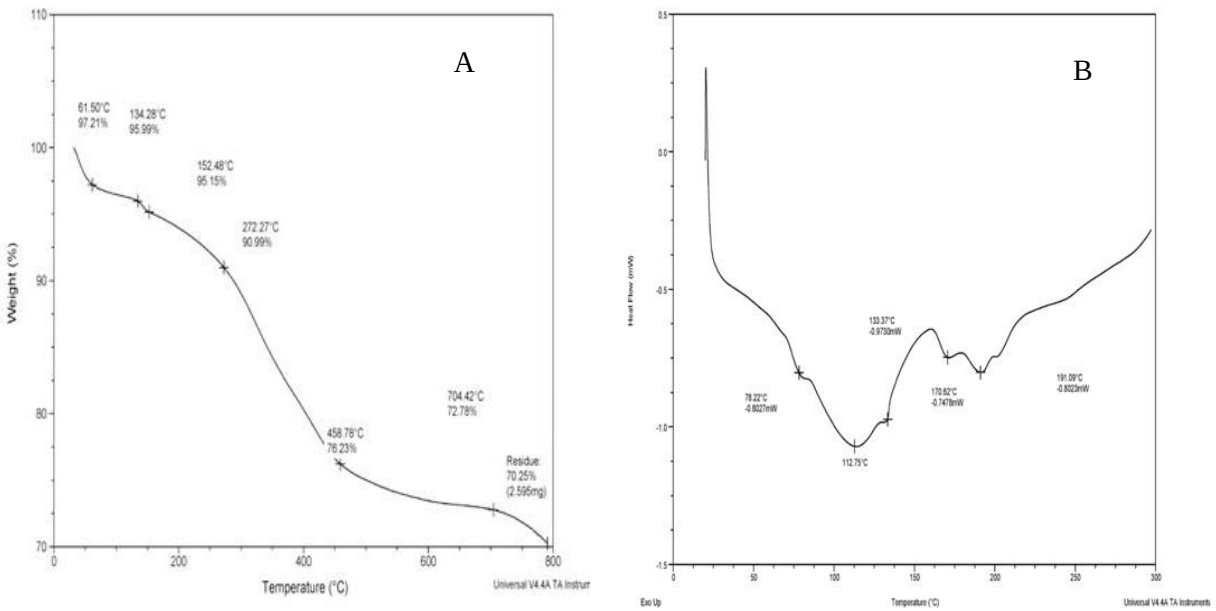
Suppl. Fig. S5 — Effect of different pH on formation of AgNPs from *Justicia neesii* extract



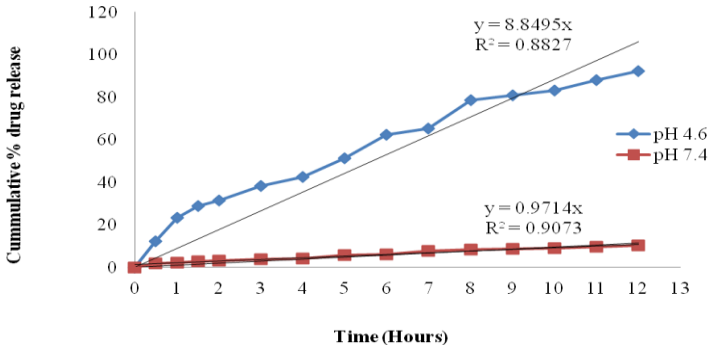
Suppl. Fig. S6 — Effect of different temperatures on formation of AgNPs from *Justicia neesii* extract



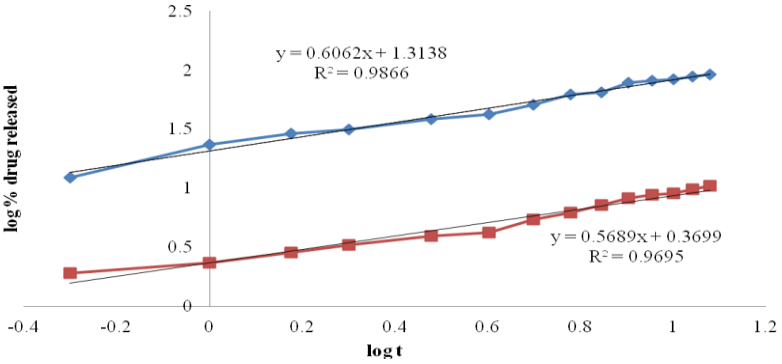
Suppl. Fig. S7 — Effect of incubation time on the synthesis of AgNPs from *Justicia neesii* extract



Suppl. Fig. S8 — (A) TGA; (B) and DSC curves of AgNPs synthesized from *Justicia neesii extract*



Suppl. Fig. S9 — Zero order plots of drug release kinetics loaded onto AgNPs synthesized from *Justicia neesii* extract at pH 4.6 and pH 7.4



Suppl. Fig. S10 — Peppa's plots of drug release kinetics loaded onto AgNPs synthesized from *Justicia neesii* extract at pH 4.6 and pH 7.4