

Biogenic Synthesis of Metallic Nanoparticles and Prospects Toward Green Chemistry

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ELECTRONIC SUPPLEMENTARY INFORMATION

Tables summarizing descriptions for the biogenic synthesis of silver, gold, palladium and platinum nanoparticles.

Silver

	Plant name	Extract	Size	Shape	Ref.
1	<i>Delphinium denudatum</i>	root extract	2.2 nm		35
2	<i>Meliadubia</i>	leaf extract	7.3 nm	Spherical	36
3	<i>Vitex negundo</i>	water extract	4-10 nm and 5-25 nm		37, 38
4	<i>Myrmecodia pendan</i> , <i>Jatropha curcas</i>	aqueous extract	10-20 nm		39, 40
5	<i>Ficus benghalensis</i>	leaf extract	16 nm		41
6	<i>Salicornia brachiata</i> , <i>Tribulus terrestris</i>	aqueous extract	16-28 nm	spherical, rod-like, prism, triangular, pentagonal and hexagonal	42, 43
7	<i>Ocimum tenuiflorum</i> , <i>Solanum tricobatum</i> , <i>Centella asiatica</i> , <i>Citrus sinensis</i>	plant extract	25 nm		46
8	<i>Ocimum tenuiflorum</i> , <i>Solanum tricobatum</i> , <i>Centella asiatica</i> , <i>Citrus sinensis</i>	powder	40-50 nm		47
9	<i>Artemisia annua</i>	leaf extract	30-50 nm	spherical shaped	48
10	<i>Ipomoea carnea</i>	leaf extract stem extract	20 to 40 nm 30-50 nm		49
11	<i>Salicornia brachiata</i>	aqueous extract	28-33 nm	spherical, rod-like, prism, triangular, pentagonal and hexagonal	50
12	Lingonberry and cranberry juices lemon juice	-	6 to 60 nm, below 50 nm	spherical and triangular shapes, spherical shaped	51, 52
13	<i>Brucea javanica</i> , <i>Hoveniadicis</i> and <i>Piper longum</i>	rinds extract	40-50 nm		53, 54, 55
14	<i>Gossypium hirsutum</i>	cotton extract	30 nm	Spherical	56

15	<i>Trianthemadecandra</i>	-	18–60 nm		57
16	<i>Elaeocarpus ganitrus</i> , <i>Terminalia arjuna</i> , <i>Pseudotsuga menzietii</i> , <i>Prosopis spicigera</i> , <i>Ficus religiosa</i> , <i>Ocimum sanctum</i> , <i>Curcuma longa</i> .	-	20-100 nm	different shapes	58
17	<i>Acacia auriculiformis</i>	Pods extract	20 to 150 nm	Spherical shaped	59
18	<i>Euphorbia prostrata</i>	leaf extracts	25–80 nm	Rod shaped	60
19	<i>Caesalpinia coriaria</i>	leaf extracts	78- 98 nm 40-50 nm	triangular, hexagonal and spherical shapes	61
20	<i>Alternanthera dentate</i> , <i>Artemisia nilagirica</i>	-	50-100 and 70–90 nm		62, 63
21	mangrove	plant extract	60-95 nm	spherical	64
22	<i>Eucalyptus chapmaniana</i> , <i>Psidium guajava</i>	leaf extracts	~60 nm	spherical	65, 66
23	<i>Manilkara zapota</i>	aqueous extract	70–140 nm	spherical and oval shaped	67
24	<i>Ficus racemosa</i>	bark aqueous extract	250 nm	cylindrical shape	68
25	<i>Pulicaria Glutinosa</i>	aqueous extract	40-60 nm	spherical	74

Gold

26	<i>Galaxaura elongate</i>		4 to 77 nm	rod-like, triangular and hexagonal	76
27	waste of mango	plant extract	6 and 18 nm		77
28	<i>Sesbania grandiflora</i>	leaf extract	7–34 nm	spherical	78
29	<i>Morinda citrifolia</i>	root extract	12 to 38 nm	spherical and triangular	79
30	grape seed, skin and stalk		20 nm		80
31	<i>Phoenix dactylifera</i>	aqueous extract	32-45 nm	spherical	81
32	<i>P. dactylifera</i>	plant extract			82
33	<i>Anacardium occidentale</i>	leaf extract	36 nm	hexagonal	83
34	<i>Gymnema sylvestre</i> , <i>Solanum nigrum</i>	leaf extract	~50 nm		84, 85
35	<i>Stachys lavandulifolia</i>		~50 nm		86

Platinum and Palladium

36	<i>Cacumen Platycladi</i>	plant extract	2.4±0.8 nm		87
37	<i>Anacardium occidentale</i>	leaf extract	2.5 – 4.5 nm	Spherical, irregular rod shaped	88
38	<i>Piper betle</i>	leaf extract	4±1 nm	spherical	89
39	<i>Annona squamosa</i>	peel extract	80 nm	spherical	90
40	<i>Terminalia chebula</i>	fruit extract		triangular and pentagonal	91
41	<i>Pulicaria Glutinosa</i>	-			92