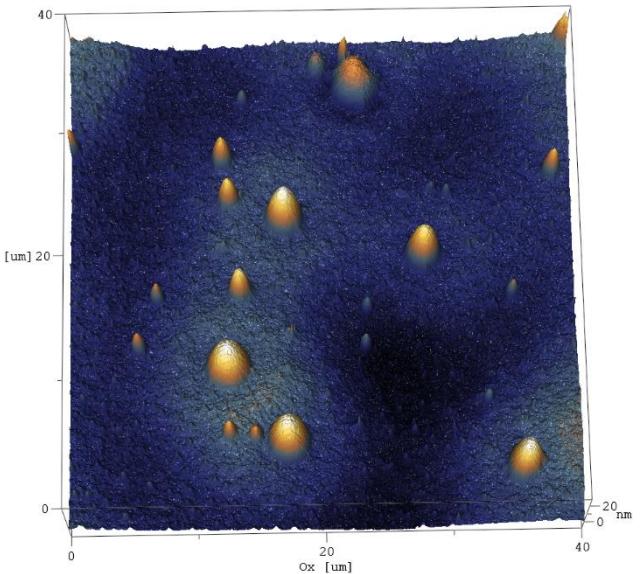
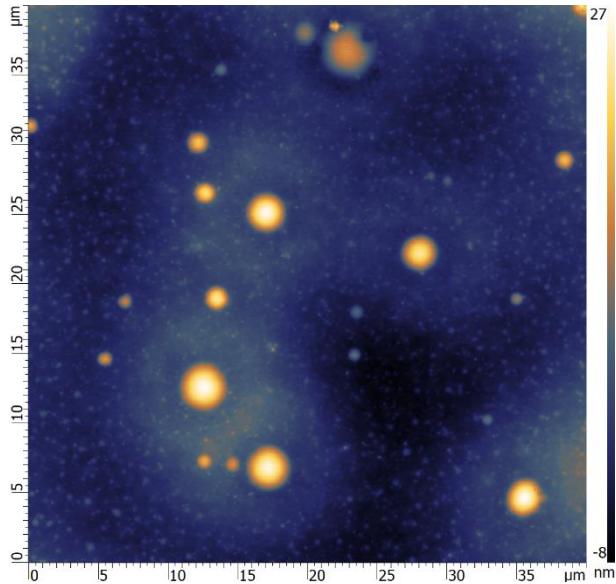


Element	Line	Mass%	Atom%
C	K	44.52±0.03	52.19±0.04
O	K	53.24±0.08	46.85±0.07
Na	K	0.11±0.01	0.07±0.00
Mg	K	0.10±0.00	0.06±0.00
Al	K	0.33±0.01	0.17±0.00
Si	K	0.14±0.00	0.07±0.00
P	K	0.15±0.00	0.07±0.00
S	K	0.16±0.00	0.07±0.00
Cl	K	0.25±0.00	0.10±0.00
K	K	0.77±0.01	0.28±0.00
Ca	K	0.23±0.00	0.08±0.00
Total		100.00	100.00

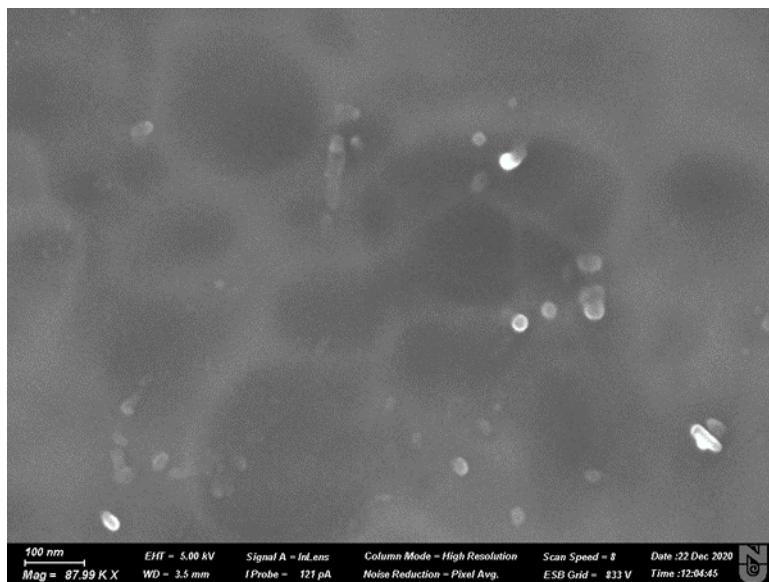
Map_001_wholespectrum Fitting ratio 0.0057

Fig. S2

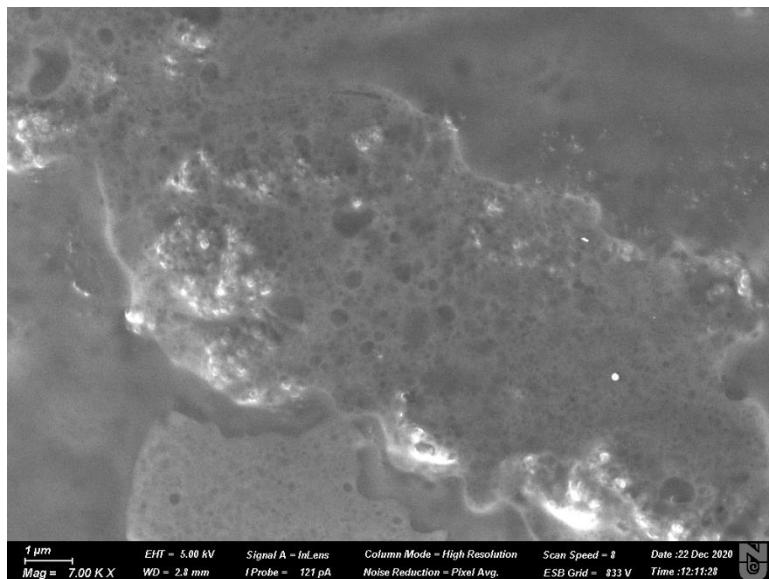


AFM images for fresh RP

Fig. S3

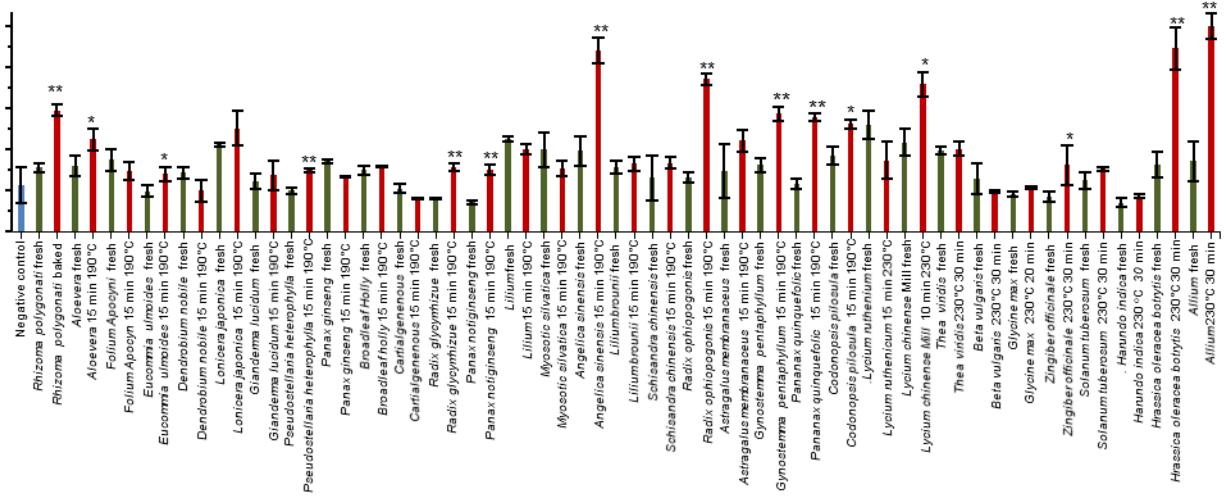


a. SEM image of RP nano



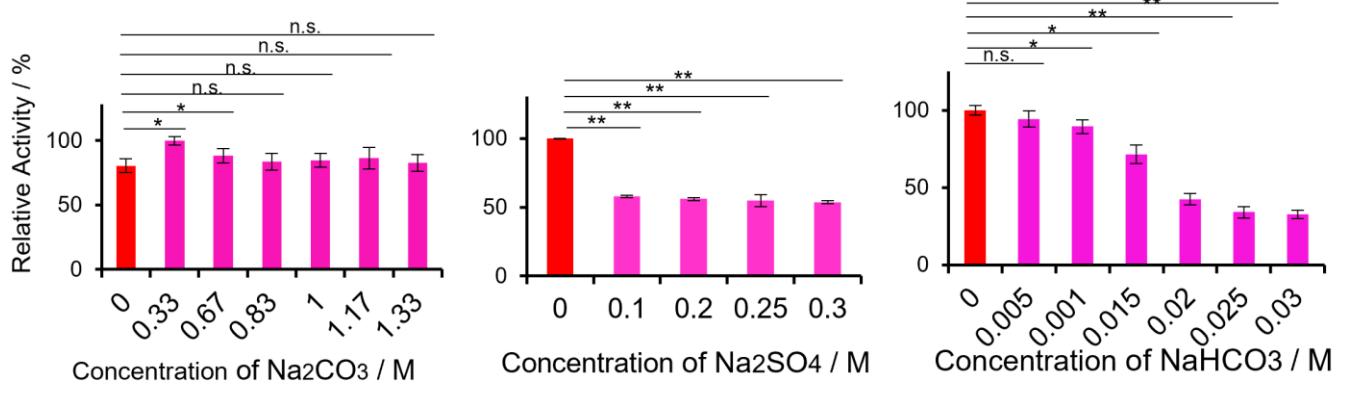
b. SEM image of RP micro

Relative activity / %



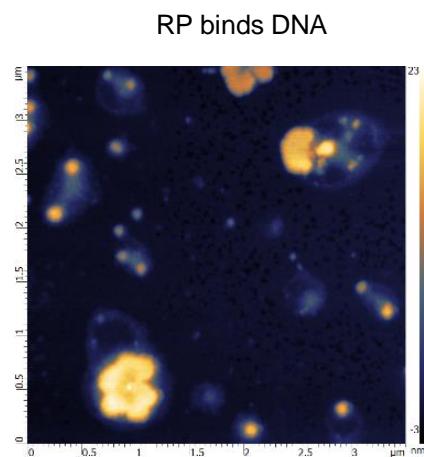
PL activity tests of 33 herbal species with NBT/BCIP substrate at pH 13 (the concentration of herbs: 2.5 mg/mL);

Fig. S5



Chemical effect on RP phosphatase activity

Fig. S6



Images of RP binds DNA, supplementary to
Fig. 6c.