Design, synthesis, and characterization of novel eco-friendly chitosan-$AgIO_3$ bionanocomposite and study its antibacterial activity

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Table S1. Width of inhibition zones for chitosan-$AgIO_3$ bionanocomposite against a) *Pseudomonas aeruginosa*; b) *Klebsiella pneumoniae;* c) *Staphylococcus saprophyticus;* d) *Escherichia coli; e*) *Staphylococcus aureus* bacteria compared with 0.001 g/ml penicillin for 24 h

Bacteria	Inhibition zone (diameter), mm Bionanocomposite (0.01 g)	Inhibition zone (diameter), mm Penicillin (0.001 g/ml)
Pseudomonas aeruginosa	4	0.5
Klebsiella pneumoniae	2	5
Staphylococcus saprophyticus	10	19
Escherichia coli	7	2
Staphylococcus aureus	7	17

Table S2. Width of inhibition zones for chitosan-$AgIO_3$ bionanocomposite against a) *Pseudomonas aeruginosa*; b) *Klebsiella pneumoniae;* c) *Staphylococcus saprophyticus;* d) *Escherichia coli; e*) *Staphylococcus aureus* bacteria compared with 0.001 g/ml silver sulfadiazine for 24 h

Bacteria	**Inhibition zone (diameter), mm** **Bionanocomposite (0.01 g)**	**Inhibition zone (diameter), mm** **Silver sulfadiazine (0.001 g/ml)**
Pseudomonas aeruginosa	5	2
Klebsiella pneumoniae	2	1.5
Staphylococcus saprophyticus	5	13
Escherichia coli	7	3
Staphylococcus aureus	5.5	14

Table S3. Width of inhibition zones for chitosan-$AgIO_3$ bionanocomposite against a) *Pseudomonas aeruginosa*; b) *Klebsiella pneumoniae;* c) *Staphylococcus saprophyticus;* d) *Escherichia coli; e*) *Staphylococcus aureus* bacteria compared with 0.01 g/ml penicillin for 24 h

Bacteria	Inhibition zone (diameter), mm Bionanocomposite (0.01 g)	Inhibition zone (diameter), mm penicillin (0.01 g/ml)
Pseudomonas aeruginosa	4	1.5
Klebsiella pneumoniae	3	8
Staphylococcus saprophyticus	6	21
Escherichia coli	6	8
Staphylococcus aureus	6	22

Table S4. Width of inhibition zones for chitosan-$AgIO_3$ bionanocomposite against a) *Pseudomonas aeruginosa*; b) *Klebsiella pneumoniae;* c) *Escherichia coli* bacteria compared with 0.01 g/ml silver sulfadiazine for 24 h

Bacteria	Inhibition zone (diameter), mm Bionanocomposite (0.01 g)	Inhibition zone (diameter), mm Silver sulfadiazine (0.01 g/ml)
Pseudomonas aeruginosa	4	12
Klebsiella pneumoniae	2	2
Escherichia coli	5	13

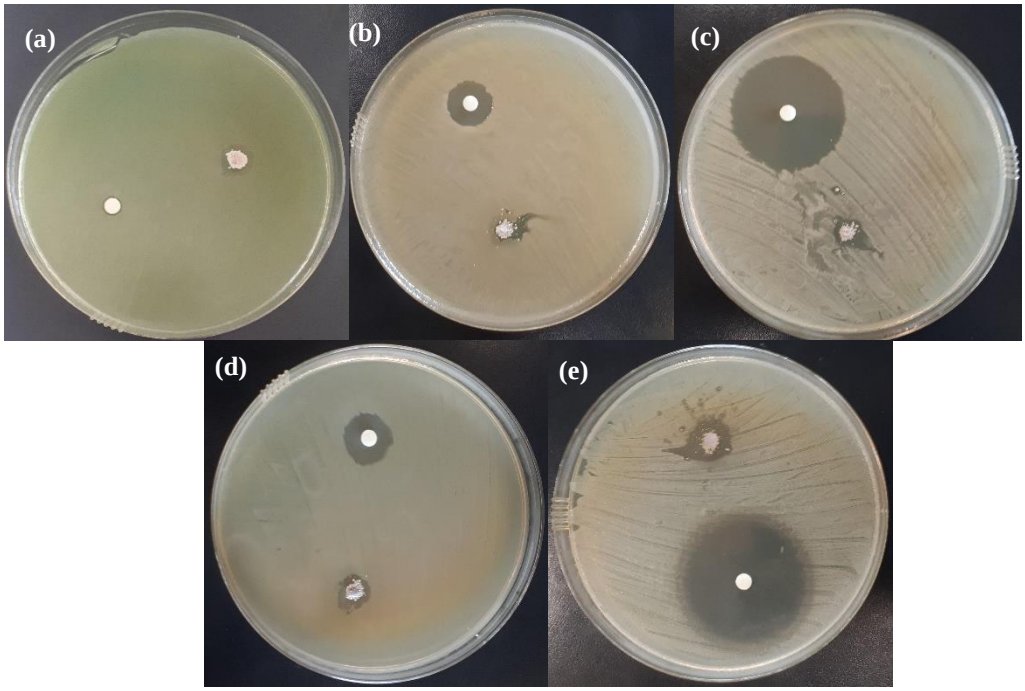

Figure S1. Inhibition zones of chitosan-$AgIO_3$ against a) *Pseudomonas aeruginosa;* b) *Klebsiella pneumoniae;* c) *Staphylococcus saprophyticus***;** d) *Escherichia coli;* e) *Staphylococcus aureus* bacteria for 24 h compared with 0.01 g/ml penicillin

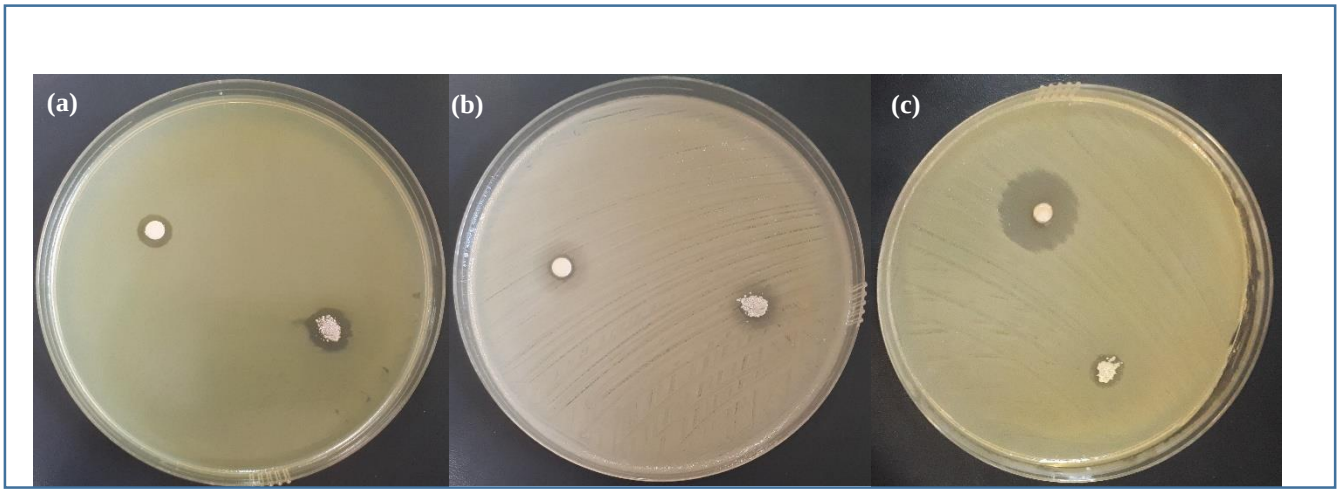

Figure S2. Inhibition zones of chitosan-$AgIO_3$ against a) *Pseudomonas aeruginosa;* b) *Klebsiella pneumoniae;* c) *Escherichia coli* bacteria for 24 h compared with 0.01 g/ml silver sulfadiazine