TABLE 1
List of a Few Fungi Synthesizing Silver NPs and Their Applications.

Fungus	Size of NPs (nm)	E/I	Application/Target Organism	References?
Aspergillus flavus	33.5	E	Effective against *P. vulgaris*, *E. coli*, *P. aeruginosa*, *S. aureus*, *A. niger*, *P. chrysogenum*, *A. alternata* and *F. culmorum*; HL-60 cancer cell line	[34]
Colletotrichum sp.	20–50		*E. coli*, *S. typhi*, *B. subtilis*, and *S. aureus*	[35]
Lecanicillium lecanii	45–100	E	*S. aureus* (ATCC 29213) and *E. coli* (ATCC 25922)	[36]
Nemania sp.	5–70	E	*B. subtillis*, *P. aeruginosa*, *E. coli*, *Staphylococcus* sp., and *S. typhi*	[37]
Phoma glomerata	60–80	E	*E. coli*, *P. aeruginosa* and *S. aureus*	[38]
Ganoderma enigmaticum	15–25		*Staphylococcus* (KUCC 7), *P. putida* (KUCCC 12), *M. luteus* (KUCCC 4) and *K. pneumonia* (MTCC 109), *B. subtilis*	[39]
Trametes ljubarskyi	15–25		*Staphylococcus* (KUCC 7), *P. putida* (KUCCC 12), *M. luteus* (KUCCC 4) and *K. pneumonia* (MTCC 109), *B. subtilis*	[39]
Penicillium sitalicum	14.5–23.3	E	*S. aureus*, *S. enterica*, *B. cereus*, and *E. coli*; anticancer properties against HEp-2 cancer cell line	[40]
Penicillium polonicum ARA 10	10–15	E	*Salmonella enterica* serovar Typhimurium	[41]
Sclerotinia sclerotiorum	<100	E	*E.coli* ATCC 25922 and *S. aureus* ATCC 2592	[42]
Macrophomina phaseolina	5–40	E	*MDR E. coli*, *E. coli (DH5á)*	[43]
Arthroderma fulvum	15.5±2.5	E	*Candida* sp., *Aspergillus* sp., and *Fusarium* sp.	[44]
Trichoderma harzianum	58.0±4.0	–	*E. coli*, *S. aureus*, and *C. albicans*; 3T3, HeLa, HaCat, and V79, A549 cell line	[45]
Trichoderma longibrachiatum	10	E	*F. verticillioides*, *F. moniliforme*, *P. brevicompactum*, *H. oryzae*, and *Pyricularia grisea*	[46]
Fusarium oxysporum	5 and 13	E	*E. coli* and *S. aureus*, antitumor	[47]
Alternaria sp	4–30	E	Methicillin-resistant *B. subtilis*, *S. aureus*, *E. coli*, and *S. marcescens*	[48]
Schizophyllum radiatum	10–40	E	*E. coli*, *K. pneumoniae*, *E. aerogenes*, *P. aeroginosa*, *S. aureus*, *S. paratyphi*, *Bsterothermophilus*, *B. subtilus*	[49]
Pleurotus ostreatus	<40	–	*B. subtilis*, *B. cereus*, *S. aureus*, *E. coli*, and *P. aeruginosa*	[50]
Candida utilis	20–80	E	*P. aeruginosa*, *S. aureus*, and *E. coli*	[51]

3.5. Other Metal and Metal Oxide Myconanoparticles and Their Applications

The fungal strains explored for the biosynthesis of various other NPs, apart from silver and gold, are listed in Table 3. They show enormous promise, for imaging and treatment of diseases, for their exemplary luminescence, emission bands, continuous excitation spectrum, and controllable function for targeting the tissues [102]. *Fusarium* sp. have been utilized for mycosynthesis of ZnO-NPs that are eco-friendly and compatible for medical and pharmaceutical applications [103]. The application of metal oxide NPs for the treatment of bacterial and fungal infections is summarized in Table 3.