Nombre del académico	GONZALO RODRIGO TORTELLA FUENTES
Carácter del vínculo (claustro, colaborador o visitante)	Claustro
Título profesional, institución, país	Ingeniero Forestal, Universidad de La Frontera, 2003, Chile
Grado académico máximo (especificar área disciplinar), institución, año de graduación y país[1]	Doctor en Ciencias de Recursos Naturales, , Universidad de La Frontera, 2008, Chile
Línea(s) de investigación	Microbiología medioambiental Biotecnología Biorremediación Bioprocesos ambientales (Nanotecnología y Biotecnología Ambiental).

Tesis de magíster dirigidas en los últimos 10 años (finalizadas)

Como guía de tesis

Año	Autor	Título de la Tesis	Nombre del programa	Institución
-	-	-	-	-

Como co-guía de tesis

Año	Autor	Título de la Tesis	Nombre del programa	Institución
2011	Sandra Fernández	Implementación de un lecho biológico para la degradación del insecticida clorpirifos usado en la producción hortofrutícola	Magíster en Ciencias de la Ingeniería, mención Biotecnología	Universidad de La Frontera

Tesis de doctorado dirigidas en los últimos 10 años (finalizadas) [2]

Como guía de tesis

Año	Autor	Título de la Tesis	Nombre del programa	Institución
-	-	-	-	-

Como co-guía de tesis

Año	Autor	Título de la Tesis	Nombre del programa	Institución
-	-	-	-	-

PRODUCTIVIDAD CIENTÍFICA EN LOS ÚLTIMOS 10 AÑOS

Listado de publicaciones. En caso de publicaciones con más de un autor, indicar en negrita el autor principal.

Publicaciones indexadas (identificar y agrupar por tipo de indexación: wos/ISI, SCIELO, LATINDEX, u otras –indicando cuales-):

N°	Autor(es)	Año	Título del artículo	Nombre revista	Estado	ISSN	Factor de impacto
ISI							
	A.B., J.Pieretti, B.de Melo, M.Horue, G.Tortella, G.Castro	2023	Pharmacological applications of nitric oxide-releasing biomaterials in human skin	International journal of pharmaceutics	Publicada	0378-5173	
	S.Cuozzo, A.de Moreno de Leblanc, J.Leblanc, N.Hoffmann, G.Tortella	2023	Streptomyces genus as a source of probiotics and its potential for its use in health	Microbiological research	Publicada	0944-5013	
	C.Garza, A.Juarez, S.GonzáleZ, M.Cabrera,	2023	ZNO nanoparticles as potential fertilizer and	Heliyon	Publicada	2405-8440	

[1] Si se estima necesario, indicar todos los grados académicos obtenidos o equivalentes.

[2] Marcar con negrilla las tesis dirigidas en el mismo programa

	G.Cadenas, A.Morales, L.Trejo, G.Tortella, A.Benavidez		biostimulant for lettuce				
	G.Tortella, O.Rubilar, J.Pieretti, P.Fincheira, B.de Melo Santana, M.Fernandez, A.Benavide-Mendoza, A.Seabra	2023	Nanoparticles as a promising strategy to mitigate biotic stress in agriculture	Antibiotics	Publicada	2079-6382	
	E.Hermosilla, M.Diaz, J.Vera, M.Contreras, K.Leal, R.Salazar, I.Barrientos, G.Tortella, O.Rubilar	2023	Synthesis of antimicrobial chitosan-silver nanoparticles mediated by reusable chitosan-fungal beads	International journal of molecular sciences	Publicada	1422-0067	
	N.Hoffmann, G.Tortella , E.Hermosilla, P. Fincheira, MC.Diez,, I.Lourenco, A.Barozzi, O.Rubilar	2022	Comparative toxicity assesment of eco friendly synthesized superparamagnetic iron oxide nanoparticles (spions) on plants and aquatic model organisms.	Minerals	Publicada	2017-163X	
	J.Padrao, Y.Ferreira, D.Mesquita, S.Cortez, N.Dias, M.Duarte, G.Tortella, J.Fernandes, M.Mota, A.Nicolau	2022	Negative impacts of cleaning agent deptal mcl on activated sludge wastewater treatment system	Science of the total environment	Publicada	0048-9697	
	J.Parada, J.Diaz, E.Hermosilla, J.Vera, G.Tortella, A.Seabra, A.Quiroz, E.Hormazabal, O.Rubilar	2022	Synthesis and antibacterial activity of manganese-ferrite/silver nanocomposite combined with two essential oils	Nanomaterials	Publicada	2079-4991	
	N.Hoffmann, P.Fincheira, G.Tortella, O.Rubilar	2022	The role of iron nanoparticles on anaerobic digestion: mechanisms, limitations, and pespectives	Environmental science and pollution research	Publicada	0994-1344	
	J.Medrano, A.Flores, E.Nava, I.Morales, G.Tortella, S.Solis, A.Benavides	2022	Reactive oxygen, nitrogen, and sulfur species (ronss) as a metabolic cluster for signaling and biostimulation of plants: an oveview	Plants-basel	Publicada	2223-7747	
	C.Garza, E.Olivares, S.Gonzalez, M.Cabrera, A.Juárez, J.González, G.Tortella, M.Valdés, A.Benavides	2022	Strawberry biostimulation: from mechanisms of action to plant growth and fruit quiality	Plants-basel	Publicada	2223-7747	
	E.Hermosilla, M.Diaz, J.Vera, A.Seabra, G.Tortella, J.Parada, O.Rubilar	2022	Molecular weight identification of compounds involved in the fungal synthesis	Antibiotics-basel	Publicada	2079-6382	

			of agnps: effect on antimicrobial and photocatalytic activity				
	P.Fincheira, O.Rubilar, G.Totella, C.Medina, A.B.Seabra, M.H.Nascimento, M.C.Diez, A.Quiroz	2021	Formulation of a controlled-release carrier for 2-ketones based on solid lipid nanopartickes to increase seddling growth in lactuca sativa and solanum lycopersicum	Journal of soil science and plant nutrition	Publicad	0718-9516	
1	P.Fincheira, Gonzalo Tortella, Amedea B. Seabra, Andrés Quiroz, María Cristina Diez, Olga Rubilar	2021	Nanotechnology Advances For Sustainable Agriculture: Current Knowledge And Prospects In Plant Growth Modulation And Nutrition	Planta	Publicada	0032-0935	4.116
2	H.Urrutia, G.Tortella, E. Sandoval, Sergio A. Cuozzo	2021	Extracellular Polymeric Substances (Eps) Produced By Streptomyces Sp. Biofilms: Chemical Composition And Anticancer Properties	Microbiological Research	Publicada	0944-5013	5.415
3	P.Duran, G.Tortella, M.Sadowski, S.Viscardi, P.Barra, M.Mora	2021	Engineering Multigenerational Host-Modulated Microbiota Against Soilborne Pathogens In Response To Global Climate Change	Biology-Basal	Publicada	2079-7737	5.079
4	M.Yukihiro, C. Neves, M.Trevisan, J.Claudio, **G.Tortella**, O.Rubilar, B.Lemos, A.Barozzi, T.Araujo	2021	Foliar Spraying Of Biogenic Cuo Nanoparticles Protects The Defence System And Photosynthetic Pigments Of Lettuce (Lactuca Sativa)	Journal of Cleaner Production	Publicada	0959-6526	9.297
5	Pieretti, J. C., Rubilar, O., Weller, R. B., **Tortella,** G. R., Seabra, A. B.	2021	Nitric oxide (NO) and nanoparticles - Potential small tools for the war against COVID-19 and other human coronavirus infections.	Virus research	Publicada	0168-1702	2.934
6	**Tortella, G.R.,** Pieretti, J.C., Rubilar, O., Fernandez-Baldo, M., Benavides- Mendoza, A., Diez, M.C., Seabra, A.B.	2021	Silver, copper and copper oxide nanoparticles in the fight against human viruses: progress and perspectives.	Critical Reviews in Biotechnology.	Publicadad	0738-8551	8.981
7	**Tortella, G.R***., Rubilar, O. Diez, M.C., Padrao,	2021	Advanced material against human (including covid-19)	Global Challenges	Publicada	2056-6646	4.306

	J., Zille, A., Pieretti, J.C., Seabra, A.B.		and plant viruses: nanoparticles as a feasible strategy.				
8	Parra B., **Tortella G.**, Dechesne A., Martinez M.	2021	Conjugal transfer of catabolic plasmids by damaged bacterial cells: rescuing genes for pesticide biodegradation	International biodeterioration & biodegradation	Publicado	0964-8305	4.320
9	Yukihiro M., Pelegrino M., Rebelo L., Moreira B., Mendes R., Fincheira P., Rubilar O., **Tortella G.**, Lemos B., Araujo de Jesus T., Barozzi Seabra A., Neves C.	2021	Comparison of foliar spray and soil irrigation of biogenic cuo nanoparticles (nps) on elemental uptake and accumulation in lettuce	Environmental Science and Pollution Research	Publicado	0944-1344	3.056
10	A.Juárez-Maldonado, **G.Tortella**, O.Rubilar, P.Fincheira, A.Benavides-Mendoza	2021	Biostimulation and toxicity: the magnitude of the impact of nanomaterials in microorganisms and plants	Journal of Advanced Research	Publicado	2090-1232	10.479
11	P.Fincheira, I.Jofré, **G.Tortella**, C.Medina, A.Quiroz, A. Seabra, M. Nascimento, M.Diez, O.Rubilar	2021	The prospection of plant response to 2-ketones released from nanostructured lipid carriers	Journal of Soil Science and Plant Nutrition	Publicado	0718-9516	3.771
12	**G.Tortella**, O.Rubilar, P.Fincheira, J.Pieretti, P.Duran, I.Lourenço, A.Seabra	2021	Bactericidal and virucidal activities of biogenic metal-based nanoparticles: advances and perspectives	Antibiotics	Publicado	2079-6382	0.960
13	M.Pelegrino, J.Pieretti, C.Neves Lange, Y.Marcio, B.Moreira, B.Lemos Batista, P.Fincheira, **G.Tortella**, O.Rubilar, A.Seabra	2021	Foliar spray application of cuo nanoparticles (nps) and s-nitrosoglutathione enhances productivity, physiological and biochemical parameters of lettuce plants	Journal of Chemical Technology and Biotechnology	Publicado	0268-2575	3.060
14	**G.Tortella**, A.Seabra, J.Padrao, R.Díaz-San Juan	2021	Mindfulness and other simple neuroscience-based proposals to promote the learning performance and mental health of students during the covid-19 pandemic	Brain Sciences	Publicado	2076-3425	3.394
15	E.Hermosilla, Amedea B. Seabra, M.Lourenço,	2021	Highly sensitive oxidation of mbth/dmab by	Colloids and Surfaces a: Physicochemical	Publicado	0927-7757	4.539

	F.Ferreira, **G.Tortella**, O.Rubilar		mnfe2o4 nanoparticles as a promising method for nanozyme-based sensor development	and Engineering Aspects			
16	M.Levio-Raiman, H.Schalchli, G.Briceño, C.Bornhardt, **G.Tortella**, O.Rubilar, M.Diez	2021	Performance of an optimized fixed-bed column packed with an organic biomixture to remove atrazine from aqueous solution	Environmental Technology & Innovation	Publicado	2352-1864	5.273
17	P.Fincheira, A.Quiroz, **G.Tortella**, M.C. Diez, O.Rubilar	2021	Current advances in plant-microbe communication via volatile organic compounds as an innovative strategy to improve plant growth	Microbiological Research	Publicado	0944-5013	5.415
18	C.Cisternas, **Tortella G.**, Seabra A., Pierett JC, K.Araya, Hermosilla E., Diez MC, O.Rubilar	2021	Development of a new biomimetic method for the synthesis of silver nanoparticles based on fungal metabolites: optimization and antibacterial activity	Journal of Chemical Technology and Biotechnology	Publicado	0268-2575	3.174
19	F.Ortega, M.Regiart, A.Rodriguez, D.de Miguel-Pérez, M.Serrano, J.Lorente, **G.Tortella**, O.Rubilar, K.Sapag, M.Bertotti, M.Fernndez-Baldo	2020	Sandwich-type electrochemical paper-based immunosensor for claudin 7 and cd81 dual determination on extracellular vesicles from breast cancer patients	Analytical Chemistry	Publicado	0003-2700	6.785
20	**G.Tortella**, S.Cuozzo, M.Diez, C.Rodriguez, P.Duran, M.Masis, J.Parada, O.Rubilar	2020	Pesticide dissipation capacity of an organic biomixture used in the agriculture exposed to copper oxychloride	Ecotoxicology and Environmental Safety	Publicado	0045-6535	6.291
21	J.Pieretti, O.Rubilar, R.Weller, **G.Tortella**, A.Seabra	2020	Nitric oxide (no) and nanoparticles? Potential small tools for the war against covid-19 and other human coronavirus infections	Virus Research	Publicado	0168-1702	2.934
22	**G.Tortella**, O.Rubilar, N.Duran, M.Diez, M.Martinez, J.Parada, A.Seabra	2020	Silver nanoparticles:toxicity in model organisms as an overview of its hazard for human health and the environment	Journal of Hazardous Materials	Publicado	0304-3894	10.588
23	**G.Tortella**, O.Rubilar, M.C.Diez, J.Padrao,	2020	Advanced material against human (including covid-19)	Global Challenges	Publicado	2056-6646	3.847

	A.Zille, J.Pieretti, A.Seabra		and plant viruses: nanoparticles as a feasible strategy				
24	P.Fincheira, A.Quiroz, C.Medina, **G.Tortella**, E.Hermosilla, M.C.Diez, O.Rubilar	2020	Plant growth induction by volatile organic compound released from solid lipid nanoparticles and nanostructured lipid carriers	Colloids and Surfaces a: Physicochemical and Engineering Aspects	Publicado	0927-7757	4.539
	W.Rolim, C.Lamilla, JC. Pieretti, MHM. Nascimento, F.Ferreira, G.Tortella, M.Diez, L.Barrientos, O.Rubilar, A.Seabra	2020	Antibacterial Activity and Cytotoxicity of Silver Chloride/Silver Nanocomposite Synthesized by a Bacterium Isolated from Antarctic Soil	Bionanoscience	Publicado	2191-1630	0.44
	W. Rolim, C.Lamilla, JC. Pieretti, M. Diaz, G. Tortella, M.Diez, L. Barrientos, A.Seabra, O. Rubilar	2019	Comparison of antibacterial and antibiofilm activities of biologically synthesized silver nanoparticles against several bacterial strains of medical interest	Energy ecology and enviroment	Publicado	2363-7692	0.47
25	**G.Tortella**, J.Padrao, S.Cortez, N.Dias, A.Nicolau, M.Mota	2019	Nitrifying soil bacterium nitrosomonas europaea: operational improvement of standard culture medium	Journal of Soil Science and Plant Nutrition	Publicado	0718-9508	3.771
26	**G.Tortella**, M.Navas, M.Parada, N.Duran, A.Barozzi, N.Hoffmann, O.Rubilar	2019	Synthesis of silver nanoparticles using extract of weeds and optimized by response surface methodology to the control of soil pathogenic bacteria ralstonia solanacearum	Journal of Soil Science and Plant Nutrition	Publicado	0718-9508	3.771
27	**G.Tortella**, O.Rubilar, M.Diez, M.Cea, S.Santana, C.Rodriguez, J.Parada	2019	Combined pollution of copper nanoparticles and atrazine in soil: effects on dissipation of the pesticide and on microbiological community profiles	Journal of Hazardous Materials	Publicado	0304-3894	10.588
28	**G.Tortella**, J.Parada, O.Rubilar, D.Sousa, M.Fernandez, M.Martinez	2019	Short term changes in the abundance of nitrifying microorganisms in a soil plant system simultaneously exposed to copper	Science of the Total Environment	Publicado	0048-9697	7.963

			nanoparticles and atrazine				
29	**G.Tortella**, O.Rubilar, M.Cea, C:Rodriguez-Rodriguez, A.Seguel, J.Parada	2019	Sorption parameters of carbendazim and iprodione in the presence of copper nanoparticles in two different soils	Journal of Soil Science and Plant Nutrition	Publicado	0718-9516	3.771
30	J.Pieretti, M.Pelegrino, M.Nascimento, **G.Tortella**, O.Rubilar, A.Seabra	2020	Small molecules for great solutions: can nitric oxide-releasing nanomaterials overcome drug resistance in chemotherapy?	Biochemical Pharmacology	Publicado	0006-2952	5.858
31	O.Rubilar, N.Manosalva, **G.Tortella**, M.Diez, H.Schalchli, A.Seabra, N.Durán	2019	Green synthesis of silver nanoparticles: efect of synthesis reaction parameters on antimicrobial activity	World Journal of Microbiology and Biotechnology	Publicado	0959-3993	3.312
32	**G.tortella**, M.Masis, V.Lizano, W.Beita, C.Rodriguez	2019	Removal of triazines, triazoles and organophophates in biomixturesand application of a biopurification system for the treatment oflaboratory wastewaters	Chemosphere	Publicado	0045-6535	7.086
33	Fincheira P., **Tortella G**., Duran N., Rubilar O., Seabra A.	2019	Current applications of nanotechnology to develop plant growth inducer agents as an innovation strategy	Critical Reviews in Biotechnology	Publicado	0738-8551	8.429
34	O.rubilar, f.ortega, s.piguillem, g.messina, g.tortella, m.jiménez, j.lorente, m.serrano, j.raba, **m.fernández**	2018	EGFR detection in extracellular vesicles of breast cancer patients through immunosensor based on silica-chitosan nanoplatform	Talanta	Publicado	0039-9140	4.244
35	**G.tortella**, o.rubilar, m.diez, m.cea, a.santana, c.rodriguez, j.parada	2018	Combined pollution of copper nanoparticles and atrazine in soil: effects on dissipation of the pesticide and on microbiological community profiles	Journal of hazardous materials	Publicado	0304-3894	6.434
36	**G.Tortella**, J.Parada, O.Rubilar, M.Fernandez, F.Bertolino, N.Duran, A.Seabra	2018	The nanotechnology among us: are metal and metal oxides nanoparticles a nano or mega risk for soil microbial communities?	CRITICAL REVIEWS IN BIOTECHNOLOGY	Publicado	0738-8551	5.239

37	G.Tortella, B.Parra, S.Cuozzo, **M.Martinez**	2018	Negative effect of copper nanoparticles on the conjugation frequency of conjugative catabolic plasmids.	ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY	Publicado	0147-6513	3.974
38	**Gabriela Briceño**., Karen Vergara., Heidi Schalchli., Graciela Palma., Gonzalo Tortella., María Soledad Fuentes., María Cristina Diez.	2017	Organophosphorus pesticide mixture removal from environmental matrices by a soil Streptomyces mixed culture.	Environmental Science and Pollution Research.	Publicada	0944-1344	4.089
39	P.Duran, **G.Tortella**, S.Viscardi, P.Barra, V.Carrion, M.Mora, M.Pozo	2018	Microbial Community Composition In Take-All Suppressive Soils. Frontiers In Microbiology	Frontiers In Microbiology	Publicada	1664-302X	5.857
40	S**. A. Cuozzo**, P. E. Sineli, J. Davila Costa & G. Tortella	2017	Streptomyces sp. is a powerful biotechnological tool for the biodegradation of HCH isomers: biochemical and molecular basis.	Critical Reviews in Biotechnology	Publicada	0738-8551	5.239
41	**Rodríguez-Rodríguez, C.E.** Castro-Gutierrez, V., Masís-Mora, M., Diez, M.C., Tortella, G.R.	2016	Aging of biomixtures: Effects on carbofuran removal and microbial community structure.	Chemosphere	Publicada	0045-6535	4.427
42	**Diez, M.C**. S. Elgueta, O. Rubilar, G. R. Tortella., H. SchalchliC. BornhardtF. Gallardo.	2017	Pesticide dissipation and microbial community changes in a biopurification system: influence of the rhizosphere.	Biodegradation	Publicada	0923-9820	2.410
	G.Tortella, H.Schalchli, O.Rubilar, L.Parra, E.Hormazabal, A.Quiroz	2016	Fungal volatiles: an environmentallu friendlytool to control pathogenic microorganisms in plants	Critical reviews in biotechnology	Publicada	0738-8551	
	G.Tortella, H.Schalchli, A.Mutis, C.Benimeli, G.Palma, G.Tortella, M.Diez	2016	Use of pure and mixed culture of diazinon.degrading streptomyces to remove other organophosphorus pesticides	International biodeterioration & biodegradatio	Publicada		

	G.Briceño, H.Schalchli, O.Rubilar, G.Tortella, A.Mutis, G.Palma, C.Benimeli, M.Diez	2016	Increased diazinon hydrolysis to 2-isopropyl-6-methyl-4-pyrimidinol in liquid medium by specific streptomyces mixed culture	Chemosphere	Publicada		
43	**Cuozzo SA**, Sineli PE, Tortella G, Dávila Costa JS, Benimeli CS,	2016	Evidence of α-, β- and γ- HCH mixture aerobic degradation by the native actinobacteria *Streptomyces* sp. M7.	World Journal Microbiology and Biotechnology	Publicada	0959-3993	2.100
44	**Parra, L**., A. Mutis, chacon, M., Lizama, C., Rojas, A. Catrileo., O. Rubilar., G. Tortellla, M:a. birkett and Quiroz, A.	2016	Horn fly larval survival in cattle dung is reduced by endophyte infection of tall fescue pasture	Pest Managememnt Science.	Publicada	1526-498X	3.249
45	**M.C. Diez**, H. Schalchli, S. Elgueta , E. Salgado , N. Millahueque , O. Rubilar, G.R. Tortella , G. Briceño.	2015	Rhizosphere effect on pesticide degradation in biobeds under different hydraulic loads.	Journal of Soil Science and Plant Nutrition	Publicada	0718-9516	2.116
46	**Briceño, G**., M.S. Fuentes, O. Rubilar, M. Jorquera, G. Tortella, G. Palma, M.J. Amoroso & M.C. Diez.	2015	Removal of insecticide diazinon from liquid media by free and immobilized *Streptomyces* sp. isolated from agricultural soil.	Journal of Basic Microbiology	Publicada	0233-111X	1.580
47	**Tortella, G.**, N. Durán, O. Rubilar, M. Parada & M.C. Diez.	2015	Are white-rot fungi a real biotechnological option for the improvement of environmental health?	Critical Reviews in Biotechnology	Publicada	0738-8551	5.239
48	**O. Rubilar**., Cuevas, R., N. Durán, M.C. Diez & G.R. Tortella	2015	Extracellular biosynthesis of copper and copper oxide nanoparticles by *Stereum hirsutum*, a native white rot fungus from Chilean forests.	Journal of Nanomaterials	Publicada	1687-4110	2.207
49	**Tortella, G.R.**, E. Salgado, S.A. Cuozzo, R. Mella-Herrera, L. Parra, M.C. Diez & O. Rubilar.	2014	Combined microbiological test to asses changes in an organic matrix used to avoid agricultural soil contamination, exposed to an insecticide.	Journal of soil Science and Plant Nutrition	Publicada	0718-9516	2.116
	P.Sineli, G.Tortella, J.Davila, C.Benimelli, S.Cuozzo	2014	Evidence of A-, B-, and Y-HCH mixture aerobic degradation	World journal of microbiology and biotechnology	Publicada	0959-3993	

			by the native actinobacteria streptomyces SP.M7				
50	Rubilar, O., M.C. Diez, G.R. Tortella, G. Briceño, P.D. Marcato & **N. Durán**.	2014	New strategies and challenges for nanobiotechnology in agriculture.	Journal of Biobased Materials and Bioenergy	Publicada	1556-6560	2.993
51	Schalchli, H., **G.R. Tortella**, O. Rubilar, L. Parra, E. Hormazabal & A. Quiroz.	2014	Fungal Volatiles: An Environmentally Friendly Tool to Control Pathogenic Microorganisms in Plants.	Critical Reviews in Biotechnology.	Publicada	0738-8551	5.239
	G.Briceño, M.Fuentes, O.Rubilar, M.Jorquera, G.Tortella, G.Palma, M. Amoroso, M.Diez	2013	Removal of the insecticide diazinon from liquid media by free and immobilized streptomyces sp.isolated from agricultural soil	Journal of basic microbiology	Publicada		
52	**Diez, M.C**., M. Levio, G. Briceño, O. Rubilar, G. Tortella & F. Gallardo.	2013	Biochar as a partial replacement of peat in pesticide-degrading biomixtures formulated with different soil types.	Journal of Biobased Materials and Bioenergy	Publicada	1556-6579	2.993
53	**Diez M.C**., G.R. Tortella, G. Briceño, M.d.P. Castillo, J. Díaz, G. Palma, C. Altamirano, C. Calderón & O. Rubilar.	2013	Influence of novel lignocellulosic residues in a biobed biopurification system on the degradation of pesticides applied in repeatedly high doses.	Electronic Journal of Biotechnology	Publicada	0717-3458	1.881
54	**Tortella, G.R.**, O. Rubilar, M. Cea, G. Briceño, A. Quiroz, M.C. Diez & L. Parra.	2013	Natural wastes rich in terpenes and their relevance in the matrix of an on-farm biopurification system for the biodegradation of atrazine.	International Biodeterioration and Biodegradation	Publicada	0964-8305	3.562
55	**Tortella, G.R.**, R.A. Mella-Herrera, D.Z. Sousa, O. Rubilar, G. Briceño, L. Parra & M.C. Diez.	2013	Carbendazim dissipation in the biomixture of on-farm biopurification systems and its effect on microbial communities.	Chemosphere	Publicada	0045-6535	4.427
56	**Tortella, G.R.**, R. Mella-Herrera, D.Z. Sousa, O. Rubilar, J.J. Acuña, G. Briceño & M.C. Diez.	2013	Atrazine dissipation and its impact on the microbial communities and community level physiological profiles	Journal of Hazardous Materials	Publicada	0304-3894	6.434

			in a microcosm simulating the biomixture of on-farm biopurification system.				
57	**Tortella, G.R.**, O. Rubilar, J. Stenström, M. Cea, G. Briceño, A. Quiroz, M.C. Diez & L. Parra.	2013	Using volatile organic compounds to enhance atrazine biodegradation in a biobed system.	Biodegradation	Publicada	0923-9820	2.410
58	**Rubilar, O**., M. Rai, G.R. Tortella, M.C. Diez, A. B. Seabra & N. Durán.	2013	Biogenic nanoparticles: copper, copper oxides, copper sulphides, complex copper nanostructures and their applications.	Biotechnology Letters	Publicada	0141-5492	1.846
59	Urrutia, C., O. Rubilar, G.R. Tortella & **M.C. Diez**.	2013	Degradation of pesticide mixture on modified matrix of a biopurification system with alternatives lignocellulosic wastes.	Chemosphere	Publicada	0045-6535	4.427
60	**Tortella, G.R.**, O. Rubilar, M.d.P. Castillo, M. Cea, R. Mella-Herrera & M.C. Diez.	2012	Chlorpyrifos degradation in a biomixture of biobed at different maturity stage.	Chemosphere	Publicada	0045-6535	4.427
61	**Rubilar, O**., G.R. Tortella, R. Cuevas, M. Cea, S. Rodríguez-Couto & M.C. Diez.	2012	Adsorptive removal of pentachlorophenol (PCP) by *Anthracophyllum discolor* in a fixed-bed column reactor.	Water, Air and Soil Pollution	Publicada	0049-6976	1.769
62	**Diez, M.C**., F. Gallardo, G. Tortella, O. Rubilar, R. Navia & C. Bornhardt.	2012	Chlorophenol degradation in soil columns inoculated with *Anthracophyllum discolor* immobilized on wheat grains.	Journal of Environmental Management	Publicada	0301-4797	4.005
63	**M.C. Diez**., Fernández-Alberti, S., O. Rubilar & G.R. Tortella	2012	Chlorpyrifos degradation in a biomix: effect of pre-incubation and water holding capacity.	Journal of Soil Science and Plant Nutrition	Publicada	0718-9516	2.116
64	**Gallardo, F**., M. Cea, G. Tortella & M.C. Diez.	2012	Effect of pulp mill sludge on soil characteristics microbial diversity and vegetal production of *Lolium perenne*.	Journal of Environmental Management	Publicada	0301-4797	4.005

65	**M.C. Diez**, Acevedo, F., L. Pizzul, M.d.P. Castillo, O. Rubilar, M.L. Lienqueo & **G. Tortella**.	2011	A practical culture technique for an enhanced production of manganese peroxidase by the Chilean white-rot fungus *Anthracophyllum discolor* Sp4.	Brazilian Archives of Biology and Technology	Publicada	1516-8913	0.676
66	**Rubilar, O**., G. Tortella, M. Cea, F. Acevedo, M. Bustamante, L. Gianfreda & M.C. Diez.	2011	Bioremediation of a Chilean Andisol contaminated with pentacholophenol (PCP) by solid substrate cultures of white-rot fungi.	Biodegradation	Publicada	0923-9820	2.410
67	**Cea, M.**, M. Jorquera, O. Rubilar, H. Langer, G. Tortella, M.L. Mora & M.C. Diez.	2010	Biorremediation of soil contaminated with pentachlorophenol by *Anthracophyllum discolor* and its effect on microbial community.	Journal of Hazardous Materials	Publicada	0304-3894	6.434
68	**Tortella, G.R.**, O. Rubilar, M. Cea, C. Wulff, O. Martínez & M.C. Diez.	2010	Biostimulation of agricultural biobeds with NPK fertilizer on chlorpyrifos degradation to avoid soil and water contamination.	Journal of Soil Science and Plant Nutrition	Publicada	0718-9516	2.116
69	**Rubilar, O**., S. Elgueta, G. Tortella & M.C. Diez.	2009	Pelletization of *Anthracophyllum discolor* pellets for water and soil treatment contaminated with organic pollutants.	Journal of Soil Science and Plant Nutrition	Publicada	0718-9516	2.116
Otros							
1	**Tortella, G.R.**, O. Rubilar, M. Cea, G. Briceño, A. Quiroz, M.C. Diez & L. Parra.	2012	Atrazine degradation in the biomixture of a biobed system biostimulated with terpenes.	New Biotechnology	Publicada	1871-6784	3.733
2	Rubilar, O., K. Romero, **G.R. Tortella** & M.C. Diez.	2012	Effect of dehydration of white-rot fungus on cell viability during storage	New Biotechnology	Publicada	1871-6784	3.733

Libros y capítulos de libro (agrupar por tipo de publicación):

N°	Autor(es)	Año	Título del capítulo y/o libro	Lugar[3]	Editorial	Estado
1	Briceño, G., **Tortella, G.,** Rubilar, O., Palma, G., Diez, M.C.	2014	Advances in Chile for the treatment of pesticides residues: Biobeds technology	Cham	Springer	Publicada
2	Diez, M.C., Palma G., Altamirano, C., Briceño, G., Calderón, C., Diaz, J., Rubilar, O**, Tortella, G.**	2013	Manual de construcción y operación de lechos biológicos	Temuco, Chile	Universidad de La Frontera	Publicada
3	Altamirano, C., Calderón, C., Diez, M.C., Díaz, J., Briceño, G., Gallardo, F., Palma, G., Rubilar, O., **Tortella, G**.	2012	Fichas Educativas. Conociendo los lechos biológicos.	Temuco, Chile	Universidad de La Frontera	Publicada
4	Sineli, P., Tortella, G. and Cuozzo S.Strategies	2017	Actinobacteria as bio-tools for removing and degrading α-, β- and γ-hexachlorocyclohexane.	Boca Raton, USA.	CRC Press	Publicada
5	Carlos E. Rodríguez-Rodríguez, Víctor Castro-Gutiérrez, Gonzalo Tortella.	2017	Mycoremediation: Fungal mediated processes for the elimination of organic pollutants.	Boca Raton, USA.	CRC Press	Publicada
6	Gonzalo Tortella Fuentes, Gabriela Briceño, Carlos E. Rodríguez-Rodríguez, Sergio Cuozzo, Olga Rubilar	2017	Pesticides in the Environment: Biobed Systems as an Innovative Biotechnological Tool to Minimize Pollution.	Boca Raton, USA.	CRC Press	Publicada
	P.Sineli, G.Tortella, S.Cuozzo	2018	Strategies for bioremediation of organic and inorganic pollutants , mycoremediation: fungal mediated processes for the elimination of organic pollutants		CRC Press	Publicada
	C.Rodriguez, V.Castro, G.Tortella	2018	Strategies for bioremediation of organic and inorganic pollutants ,		CRC Press	Publicada

[3] Lugar físico o virtual

			mycoremediation: fungal mediated processes for the elimination of organic pollutants			
	G.Tortella, G.Briceño, C.Rodriguez, S.Cuozzo, O.Rubilar	2018	Strategies for bioremediation of organic and inorganic pollutants , pesticides in the environment: biobed systems as an innovative biotechnological tool to minimize pollution		CRC Press	Publicada
	S.Piguillem, N.Hoffmann, M.Regiart, O.Rubilar, G.Tortella, J.Raba, M.Fernandez	2021	Biosensors in agriculture: recent trends and future perspectives , nanostructured platforms integrated to biosensors: recent applications in agriculture		Springer Cham	Publicada
	G.Tortella, O.Rubilar, M.Diez, S.Cuozzo, J.Pieretti, A.Seabra	2021	Green synthesis of silver nanomaterials , role of bacteria and actinobacteria in the biosynthesis of silver nanoparticles		Elsevier Inc	Publicada
	E.Andrada, S.Cuozzo, G.Tortella, O.Rubilar, M.Fernandez	2022	Zero-dimensional carbon nanomaterials fundamentals and applications, zero-dimensional carbon nanomaterials in agriculture: from biosensors to photosynthesis enhancement		IOP Publishing Ltd	Publicada

Otras publicaciones (por ejemplo, revistas con referato, obras u otras –indicando cuales-, agrupar por tipo de publicación):

N°	Autor(es)	Año	Título de la publicación	Lugar	Editorial	Estado	Otro aspecto pertinente
1	Díaz, J., G. Palma, **G. Tortella**, O. Rubilar & M.C. Diez.	2012	Lecho Biológico: Eficaz sistema para la degradación de residuos de plaguicidas.	Santiago, Chile	Red Agrícola.	Publicada	ISSN: 0718-0802
2	Palma, G., O. Rubilar, **G. Tortella**, G. Briceño, M.C. Diez & J. Díaz.	2011	Lechos biológicos: una tecnología para minorizar la contaminación durante la manipulación de plaguicidas.	Temuco, Chile	Nuestra Muestra.	Publicada	ISSN: 0719-403X
3	Díaz, J., G. Palma, **G. Tortella**, O. Rubilar, G. Briceño & M.C. Diez.	2011	Tecnología para evitar contaminación de residuos de plaguicidas.	Osorno, Chile	Revista Intercampo	Publicada	-
4	Díaz, J., G. Palma, **G.**	2011	Lechos Biológicos: Tratamiento de	Temuco, Chile	Revista Berries & Cherries	Publicada	-

	Tortella, O. Rubilar, G. Briceño & M.C. Diez.		residuos de plaguicidas en la fruticultura.				

Patentes:

N°	Inventor(es)	Nombre patente	Fecha de solicitud	Fecha de publicación	N° de registro	Estado
-	-	-	-	-	-	-

Listado de proyectos de investigación[4] en los últimos 10 años

Título	Fuente de financiamiento	Año de adjudicación	Período de ejecución	Rol en el proyecto (investigador responsable/director, co-investigador, etc.)
Combined impact of stressors on soil microbial comminuties, as a consequence of global climate change (drought, salinity and heavy metal accumulation) and the presence of metal nanoparticles and pesticides	FONDECYT	2023	2023-2027	Investigador responsable
Extreme microbiomes as an ecosystem service to sustainable agriculture under climate change scenarios. The next generation of bio-inoculants a la carte	PROYECTOS INVESTIGACIÓN ASOCIATIVA CONICYT	2022	2022-2025	Investigador responsable
Using the natural host-mediated microbiome selection to overcome soil-borne pathogens. Towards the new generation of bioinoculants	FONDECYT	2020	2020-2024	Co-investigador
Production of biogenic silver nanoparticles with antimicrobial activity in a fluidized bed reactor (fbr) coupled to a stirred tank reactor (str) operated with immobilized fungal biomass.	FONDECYT	2019	2019-2023	Co-investigador

[4] Se consideran proyectos adjudicados y/o en ejecución en el período solicitado.

	Network for pesticide risk reduction: new strategies and opportunities	PROYECTOS DE COOPERACIÓN INTERNACIONAL	2019	2019-2020	Participante
	Nanotechnology for the agriculture: new estrategies, opprtunities and their enironmental risk	PROYECTOS DE COOPERACIÓN INTERNACIONAL	2018	2018- 2019	Investigador responsable
	New technologies for environmental protection	PROYECTOS EXTERNOS DIUFRO	2016	2016-	Co-investigador
	Biopurification system for pesticide-containing wastewater treatment	FONDECYT	2016	2016-2020	Co-investigador
	Combined pollution of copper nanoparticles and pesticides in soil: study of its impact on ammonia-oxidizing bacteria, as an environmental risk assessment	FONDECYT	2016	2016-2019	Investigador responsable
	Biosynthesis of silver and copper nanoparticles with antimicrobial activity mediated by proteins of Chilean native white-rot fungi	FONDECYT	2013	2013-2017	Co-investigador
	Proyecto Formación de redes internacionales entre centros de investigación	CONICYT	2015	2015-2017	Co-investigador
	Asociación entre pre-tratamientos biológicos, químicos y térmicos de biomasa lignocelulósica para la producción de etanol de segunda generación	FAPERJ/ Universidad de La Frontera	2015	2015-2017	Co-investigador
	Biobeds technology for treatment of pesticide point source contamination-biostimulation for enhanced degradation	FONDECYT	2010	2010-2013	Investigador responsable
	Impact of pesticide application on	FONDECYT	2010	2010-2013	Investigador responsable

	bacterial communities and biological activity in the biobeds system applied in the agriculture				
	Manejo adecuado de residuos de plaguicidas en la produccion fruticola de la region de la araucania a traves de la implementacion y difusion de lechos biologicos	FONDEF	2009	2009-2011	Co-investigador
	Biobeds technology for treatment of pesticide point source contamination - biostimulation for enhanced degradation	FONDECYT	2008	2008-2011	Investiagador responsable
	Concurso Nacional de Apoyo a la Realización de Apropiación Social de la Ciencia y la Tecnología. La Ruta de los Plaguicidas	CONICYT	2012	2012-2014	Co-investigador
	Biotecnología para la preservación del medio ambiente de la contaminación por pesticidas	CONICYT	2008	2008-2010	Co-investigador
	Impact of metal nanoparticles on soil microbial communities	DIUFRO	2014	2014-2016	Investigador responsable
	Proyecto de Investigación Asociativa de Investigadores Jóvenes	PIA UFRO	2010	2010-2012	Investigador responsable
	Nanotechnology for the agriculture: new estrategies, opprtunities and their enironmental risk	PROYECTOS DE COOPERACIÓN INTERNACIONAL 2018	2018	2018-2021	Investigador responsable