Lucio Montanaro

List of Publications by Year
in descending order

108 papers	9,802 citations	66343 42 h-index	36028 97 g-index
108 all docs	108 docs citations	108 times ranked	11823 citing authors

#	Article	IF	Citations
1	Implant infections: adhesion, biofilm formation and immune evasion. Nature Reviews Microbiology, 2018, 16, 397-409.	28.6	1,342
2	A review of the biomaterials technologies for infection-resistant surfaces. Biomaterials, 2013, 34, 8533-8554.	11.4	1,111
3	The significance of infection related to orthopedic devices and issues of antibiotic resistance. Biomaterials, 2006, 27, 2331-2339.	11.4	921
4	Biofilm formation in Staphylococcus implant infections. A review of molecular mechanisms and implications for biofilm-resistant materials. Biomaterials, 2012, 33, 5967-5982.	11.4	874
5	Antibiotic-loaded biomaterials and the risks for the spread of antibiotic resistance following their prophylactic and therapeutic clinical use. Biomaterials, 2010, 31, 6363-6377.	11.4	342
6	Scenery ofStaphylococcusimplant infections in orthopedics. Future Microbiology, 2011, 6, 1329-1349.	2.0	322
7	Polysaccharide intercellular adhesin in biofilm: structural and regulatory aspects. Frontiers in Cellular and Infection Microbiology, 2015, 5, 7.	3.9	312
8	A review of the clinical implications of anti-infective biomaterials andÂinfection-resistant surfaces. Biomaterials, 2013, 34, 8018-8029.	11.4	281
9	Extracellular DNA in Biofilms. International Journal of Artificial Organs, 2011, 34, 824-831.	1.4	219
10	Antibiofilm activity of a monolayer of silver nanoparticles anchored to an amino-silanized glass surface. Biomaterials, 2014, 35, 1779-1788.	11.4	185
11	Detection of slime production by means of an optimised Congo red agar plate test based on a colourimetric scale in Staphylococcus epidermidis clinical isolates genotyped for ica locus. Biomaterials, 2002, 23, 4233-4239.	11.4	154
12	Biofilm-Based Implant Infections in Orthopaedics. Advances in Experimental Medicine and Biology, 2015, 830, 29-46.	1.6	134
13	Enterococcus spp. produces slime and survives in rat peritoneal macrophages. Medical Microbiology and Immunology, 2001, 190, 113-120.	4.8	133
14	Relationship between biofilm formation, the enterococcal surface protein (Esp) and gelatinase in clinical isolates ofEnterococcus faecalisandEnterococcus faecium. FEMS Microbiology Letters, 2006, 256, 145-150.	1.8	133
15	Evaluation of bacterial adhesion of Streptococcus mutans on dental restorative materials. Biomaterials, 2004, 25, 4457-4463.	11.4	131
16	Inhibition by ricin of protein synthesis in vitro: 60S ribosomal subunit as the target of the toxin (Short Communication). Biochemical Journal, 1973, 136, 813-815.	3.1	128
17	Inhibition by ricin of protein synthesis in vitro. Ribosomes as the target of the toxin. Biochemical Journal, 1973, 136, 677-683.	3.1	119
18	Antibiotic resistance in exopolysaccharide-forming Staphylococcus epidermidis clinical isolates from orthopaedic implant infections. Biomaterials, 2005, 26, 6530-6535.	11.4	117

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19	Cytokine release in mononuclear cells of patients with Coâ€“Cr hip prosthesis. Biomaterials, 1999, 20, 1079-1086.	11.4	111
20	Dynamics of the interaction between a fibronectin molecule and a living bacterium under mechanical force. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13292-13297.	7.1	103
21	Prevalence ofcna,fnbAandfnbBadhesin genes amongStaphylococcus aureusisolates from orthopedic infections associated to different types of implant. FEMS Microbiology Letters, 2005, 246, 81-86.	1.8	102
22	Detection of biofilm formation inStaphylococcus epidermidis from implant infections. Comparison of a PCR-method that recognizes the presence ofica genes with two classic phenotypic methods. Journal of Biomedical Materials Research - Part A, 2006, 76A, 425-430.	4.0	98
23	New Trends in Diagnosis and Control Strategies for Implant Infections. International Journal of Artificial Organs, 2011, 34, 727-736.	1.4	97
24	Advancements in molecular epidemiology of implant infections and future perspectives. Biomaterials, 2007, 28, 5155-5168.	11.4	95
25	Staphylococcus epidermidisâ€“fibronectin binding and its inhibition by heparin. Biomaterials, 2003, 24, 3013-3019.	11.4	87
26	Strong biofilm production, antibiotic multi-resistance and high gelE expression in epidemic clones of Enterococcus faecalis from orthopaedic implant infections. Biomaterials, 2008, 29, 580-586.	11.4	76
27	Presence and expression of collagen adhesin gene (cna) and slime production in Staphylococcus aureus strains from orthopaedic prosthesis infections. Biomaterials, 1999, 20, 1945-1949.	11.4	73
28	Effects on antibiotic resistance of Staphylococcus epidermidis following adhesion to polymethylmethacrylate and to silicone surfaces. Biomaterials, 2002, 23, 1495-1502.	11.4	73
29	Hydroxyapatite-coated orthopaedic screws as infection resistant materials: in vitro study. Biomaterials, 1999, 20, 323-327.	11.4	70
30	In vitro behaviour of bone marrow-derived mesenchymal cells cultured on fluorohydroxyapatite-coated substrata with different roughness. Biomaterials, 2003, 24, 587-596.	11.4	69
31	Emerging Pathogenetic Mechanisms of the Implant-Related Osteomyelitis by Staphylococcus Aureus. International Journal of Artificial Organs, 2011, 34, 781-788.	1.4	69
32	Toll-Like Receptors (TLRs) in Innate Immune Defense Against Staphylococcus Aureus. International Journal of Artificial Organs, 2011, 34, 799-810.	1.4	64
33	Search for the insertion element IS256 within the ica locus of Staphylococcus epidermidis clinical isolates collected from biomaterial-associated infections. Biomaterials, 2004, 25, 4117-4125.	11.4	63
34	Extracellular DNA (eDNA). A Major Ubiquitous Element of the Bacterial Biofilm Architecture. International Journal of Molecular Sciences, 2021, 22, 9100.	4.1	62
35	A multiplex PCR method for the detection of all five individual genes ofica locus inStaphylococcus epidermidis. A survey on 400 clinical isolates from prosthesis-associated infections. Journal of Biomedical Materials Research - Part A, 2005, 75A, 408-413.	4.0	59
36	Molecular epidemiology of Staphylococcus aureus from implant orthopaedic infections: Ribotypes, agr polymorphism, leukocidal toxins and antibiotic resistance. Biomaterials, 2008, 29, 4108-4116.	11.4	57

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37	Hijacking of immune defences by biofilms: a multifront strategy. Biofouling, 2019, 35, 1055-1074.	2.2	54
38	Evidence of a linkage between matrilin-1 gene (MATN1) and idiopathic scoliosis. Scoliosis, 2006, 1, 21.	0.4	53
39	The presence of both bone sialoprotein-binding protein gene and collagen adhesin gene as a typical virulence trait of the major epidemic cluster in isolates from orthopedic implant infections. Biomaterials, 2009, 30, 6621-6628.	11.4	52
40	Characterization of 26 Staphylococcus warneri isolates from orthopedic infections. International Journal of Artificial Organs, 2010, 33, 575-581.	1.4	52
41	In catheter infections byStaphylococcus epidermidis the intercellular adhesion (ica) locus is a molecular marker of the virulent slime-producing strains. Journal of Biomedical Materials Research Part B, 2002, 59, 557-562.	3.1	51
42	A Rapid PCR Method for the Detection of Slime-producing Strains of Staphylococcus epidermidis and S. aureus in Periprosthesis Infections. Diagnostic Molecular Pathology, 2001, 10, 130-137.	2.1	50
43	Inhibition of bacterial adherence to a high-water-content polymer by a water-soluble, nonsteroidal, anti-inflammatory drug. Journal of Biomedical Materials Research Part B, 1998, 42, 1-5.	3.1	44
44	Concise Survey of Staphylococcus Aureus Virulence Factors that Promote Adhesion and Damage to Peri-Implant Tissues. International Journal of Artificial Organs, 2011, 34, 771-780.	1.4	44
45	Detection of biofilm-forming strains of Staphylococcus epidermidis and S. aureus. Expert Review of Molecular Diagnostics, 2002, 2, 478-484.	3.1	43
46	Promising in vitro performances of a new nickel-free stainless steel. Journal of Materials Science: Materials in Medicine, 2006, 17, 267-275.	3.6	41
47	Presence of fibrinogen-binding adhesin gene in Staphylococcus epidermidis isolates from central venous catheters-associated and orthopaedic implant-associated infections. Biomaterials, 2004, 25, 4825-4829.	11.4	40
48	Streptococcus agalactiae Non-Pilus, Cell Wall-Anchored Proteins: Involvement in Colonization and Pathogenesis and Potential as Vaccine Candidates. Frontiers in Immunology, 2018, 9, 602.	4.8	39
49	Orthopedic implant infections: Incompetence of Staphylococcus epidermidis, Staphylococcus lugdunensis, and Enterococcus faecalis to invade osteoblasts. Journal of Biomedical Materials Research - Part A, 2016, 104, 788-801.	4.0	38
50	Shigaâ€like toxin I is a polynucleotide:adenosine glycosidase. Molecular Microbiology, 1998, 29, 661-662.	2.5	37
51	Differential requirement of ATP and extra-ribosomal proteins for ribosome inactivation by eight RNA N-glycosidases. Biochemical and Biophysical Research Communications, 1992, 182, 579-582.	2.1	31
52	The RNA-N-glycosidase activity of Shiga-like toxin I: Kinetic parameters of the native and activated toxin. Toxicon, 1997, 35, 1431-1437.	1.6	30
53	Staphylococcus Lugdunensis, An Aggressive Coagulase-Negative Pathogen not to be Underestimated. International Journal of Artificial Organs, 2012, 35, 742-753.	1.4	30
54	Colonization and Infection of Indwelling Medical Devices by Staphylococcus aureus with an Emphasis on Orthopedic Implants. International Journal of Molecular Sciences, 2022, 23, 5958.	4.1	30

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55	Occurrence of ica genes for slime synthesis in a collection of Staphylococcus epidermidis strains from orthopedic prosthesis infections. Acta Orthopaedica, 2003, 74, 617-621.	1.4	28
56	Antibiotic multiresistance strictly associated with IS256 andica genes inStaphylococcus epidermidis strains from implant orthopedic infections. Journal of Biomedical Materials Research - Part A, 2007, 83A, 813-818.	4.0	27
57	Interactions of Staphylococci with Osteoblasts and Phagocytes in the Pathogenesis of Implant-Associated Osteomyelitis. International Journal of Artificial Organs, 2012, 35, 713-726.	1.4	27
58	Shiga toxin 1: damage to DNA in vitro. Toxicon, 2001, 39, 341-348.	1.6	26
59	Exploring the anticancer effects of standardized extracts of poplar-type propolis: In vitro cytotoxicity toward cancer and normal cell lines. Biomedicine and Pharmacotherapy, 2021, 141, 111895.	5.6	24
60	Inhibition of protein synthesis by ricin: experiments with rat liver mitochondria and nuclei and with ribosomes from Escherichia coli. Biochemical Journal, 1974, 142, 695-697.	3.7	23
61	The role of Enterococcus faecalis in orthopaedic peri-implant infections demonstrated by automated ribotyping and cluster analysis. Biomaterials, 2007, 28, 3987-3995.	11.4	23
62	Cluster analysis of ribotyping profiles of Staphylococcus epidermidis isolates recovered from foreign bodyâ€associated orthopedic infections. Journal of Biomedical Materials Research - Part A, 2009, 88A, 664-672.	4.0	23
63	Internalization by Osteoblasts of Two Staphylococcus Aureus Clinical Isolates Differing in their Adhesin Gene Pattern. International Journal of Artificial Organs, 2011, 34, 789-798.	1.4	23
64	Bacterial adhesion to poly-(<scp>d</scp>,<scp>l</scp>)lactic acid blended with vitamin E: Toward gentle anti-infective biomaterials. Journal of Biomedical Materials Research - Part A, 2015, 103, 1447-1458.	4.0	23
65	Biofilm Extracellular-DNA in 55 Staphylococcus Epidermidis Clinical Isolates from Implant Infections. International Journal of Artificial Organs, 2011, 34, 840-846.	1.4	21
66	Molecular Characterization of a Prevalent Ribocluster of Methicillin-Sensitive Staphylococcus aureus from Orthopedic Implant Infections. Correspondence with MLST CC30. Frontiers in Cellular and Infection Microbiology, 2016, 6, 8.	3.9	21
67	Cu2+- and Ag+-complexes with a hyaluronane-based hydrogel. Journal of Materials Chemistry, 2002, 12, 3084-3092.	6.7	20
68	Prospecting Gene Therapy of Implant Infections. International Journal of Artificial Organs, 2009, 32, 689-695.	1.4	20
69	Tracing the origins of extracellular DNA in bacterial biofilms: story of death and predation to community benefit. Biofouling, 2021, 37, 1022-1039.	2.2	20
70	Surface Protein EF3314 Contributes to Virulence Properties ofEnterococcus faecalis. International Journal of Artificial Organs, 2009, 32, 611-620.	1.4	18
71	Serratiopeptidase reduces the invasion of osteoblasts by Staphylococcus aureus. International Journal of Immunopathology and Pharmacology, 2017, 30, 423-428.	2.1	16
72	Dye affinity chromatography of ricin subunits. Bioscience Reports, 1986, 6, 1035-1040.	2.4	15

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73	Differential up-regulation by tRNAs of ribosome-inactivating proteins. FEBS Letters, 1995, 373, 115-118.	2.8	15
74	Exopolysaccharide Production by Staphylococcus Epidermidis and its Relationship with Biofilm Extracellular DNA. International Journal of Artificial Organs, 2011, 34, 832-839.	1.4	15
75	Interaction of alpha-sarcin and gelonin with Cibacron blue. Bioscience Reports, 1986, 6, 901-908.	2.4	14
76	Various biofilm matrices of the emerging pathogen Staphylococcus lugdunensis: exopolysaccharides, proteins, eDNA and their correlation with biofilm mass. Biofouling, 2020, 36, 86-100.	2.2	13
77	An Overview of the Methodological Approach to the in Vitro Study of Anti-Infective Biomaterials. International Journal of Artificial Organs, 2012, 35, 800-816.	1.4	12
78	Detection of the Gâ†'T Polymorphism at the Sp1 Binding Site of the Collagen Type IÎ±1 Gene by a Novel Arms-PCR Method. Genetic Testing and Molecular Biomarkers, 2002, 6, 53-57.	1.7	11
79	Perspectives on DNA Vaccines. Targeting Staphylococcal Adhesins to Prevent Implant Infections. International Journal of Artificial Organs, 2009, 32, 635-641.	1.4	11
80	Description of a New Group of Variants of the Staphylococcus Aureus Elastin-Binding Protein that Lacks an Entire DNA Segment of 180 bp. International Journal of Artificial Organs, 2009, 32, 621-629.	1.4	11
81	Studying Bacterial Adhesion to Irregular or Porous Surfaces. , 0, , 331-343.		11
82	Uncompetitive inhibition by adenine of the RNA-N-glycosidase activity of ribosome-inactivating proteins. BBA - Proteins and Proteomics, 1998, 1384, 277-284.	2.1	10
83	Identification of the tRNAs which up-regulate agrostin, barley RIP and PAP-S, three ribosome-inactivating proteins of plant origin. FEBS Letters, 1998, 431, 259-262.	2.8	9
84	New Parameters to Quantitatively Express the Invasiveness of Bacterial Strains from Implant-Related Orthopaedic Infections into Osteoblast Cells. Materials, 2018, 11, 550.	2.9	9
85	Antibacterial Properties of a Novel Zirconium Phosphate-Glycinediphosphonate Loaded with Either Zinc or Silver. Materials, 2019, 12, 3184.	2.9	9
86	Cofactor requirement of ribosome-inactivating proteins from plants. Journal of Experimental Botany, 1997, 48, 1519-1523.	4.8	8
87	Polymorphisms of agr locus correspond to distinct genetic patterns of virulence in Staphylococcus aureus clinical isolates from orthopedic implant infections. Journal of Biomedical Materials Research - Part A, 2010, 94A, 825-832.	4.0	8
88	Current Methods for Molecular Epidemiology Studies of Implant Infections. International Journal of Artificial Organs, 2009, 32, 642-654.	1.4	7
89	Prevalence of genes for aminoglycosideâ€modifying enzymes in Staphylococcus epidermidis isolates from orthopedic postsurgical and implantâ€related infections. Journal of Biomedical Materials Research - Part A, 2009, 88A, 654-663.	4.0	7
90	Interaction of diphtheria toxin fragment A and of elongation factor 2 with Cibacron blue. Bioscience Reports, 1987, 7, 737-743.	2.4	6

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91	Alpha-sarcin impairs the N-glycosidase activity of ricin on ribosomes. Biochemical and Biophysical Research Communications, 1989, 160, 857-861.	2.1	6
92	Influence of polyethylene terephthalate on the release of growth factors by human endothelial cells. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 891-900.	3.5	6
93	Nucleotides U28-A42 and A37 in unmodified yeast tRNATrpas negative identity elements for bovine tryptophanyl-tRNA synthetase. FEBS Letters, 2001, 492, 238-241.	2.8	6
94	Panton-Valentine Leukocidin Gene Detected in a Staphylococcus Aureus Strain Isolated from a Knee Arthroprosthesis Infection. International Journal of Artificial Organs, 2009, 32, 630-634.	1.4	6
95	General Assembly, Treatment, Multidisciplinary Issues: Proceedings of International Consensus on Orthopedic Infections. Journal of Arthroplasty, 2019, 34, S239-S243.	3.1	6
96	Effect of temperature on haemagglutinating activity and on the conformation of leucoagglutinin, a lectin from Phaseolus vulgaris (red kidney bean). FEBS Letters, 1980, 120, 115-118.	2.8	5
97	Identity elements in bovine tRNATrp required for the specific stimulation of gelonin, a plant ribosome-inactivating protein. Rna, 1999, 5, 1357-1363.	3.5	5
98	Production of growth factors by in vitro cultured human endothelial cells after contact with carbon coated polyethylene terephthalate. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 989-997.	3.5	5
99	A survey of adenine and 4-aminopyrazolo[3,4-d]pyrimidine (4-APP) as inhibitors of ribosome-inactivating proteins (RIPs). Life Sciences, 2000, 68, 331-336.	4.3	5
100	Synthesis, Crystal Structure, and Antibacterial Properties of Silver-Functionalized Low-Dimensional Layered Zirconium Phosphonates. Inorganic Chemistry, 2022, 61, 2251-2264.	4.0	5
101	Partial purification of two proteins which sensitize ribosomes to gelonin: Sensitization is not linked to phosphorylation of ribosomal proteins. Toxicon, 1993, 31, 989-996.	1.6	4
102	In vitro effect of temperature on the conformational structure and collagen binding of SdrF, a Staphylococcus epidermidis adhesin. Applied Microbiology and Biotechnology, 2015, 99, 5593-5603.	3.6	4
103	[64] Fluorescence polarization of elongation factor 2. Methods in Enzymology, 1979, 60, 712-719.	1.0	3
104	Elongation factor 2 from Artemia salina embryos and its affinity for ribosomes. FEBS Journal, 1991, 200, 13-18.	0.2	3
105	Comparison of Automated Ribotyping, spa Typing, and MLST in 108 Clinical Isolates of Staphylococcus aureus from Orthopedic Infections. International Journal of Molecular Sciences, 2022, 23, 1660.	4.1	2
106	tRNATrp as cofactor of gelonin, a ribosome-inactivating protein with RNA-N-glycosidase activity features required for the cofactor activity. IUBMB Life, 1996, 40, 181-188.	3.4	1
107	Primer tRNATrp of RSV-transformed or RAV-1-infected cells up-regulates the antiribosomal activity of gelonin. Biochimie, 1998, 80, 575-578.	2.6	1
108	Implant Infections and Infection-Resistant Materials. , 2012, , 347-357.		0