Sara Ferraris

List of Publications by Year
in descending order

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102 papers	3,484 citations	159525 30 h-index	155592 55 g-index
108 all docs	108 docs citations	108 times ranked	4176 citing authors

#	Article	IF	Citations
1	Antibacterial titanium surfaces for medical implants. Materials Science and Engineering C, 2016, 61, 965-978.	3.8	331
2	A critical review of multifunctional titanium surfaces: New frontiers for improving osseointegration and host response, avoiding bacteria contamination. Acta Biomaterialia, 2018, 79, 1-22.	4.1	293
3	Antibiotic-Loaded Cement in Orthopedic Surgery: A Review. ISRN Orthopedics, 2011, 2011, 1-8.	0.7	149
4	How do wettability, zeta potential and hydroxylation degree affect the biological response of biomaterials?. Materials Science and Engineering C, 2017, 74, 542-555.	3.8	117
5	Bioactive materials: In vitro investigation of different mechanisms of hydroxyapatite precipitation. Acta Biomaterialia, 2020, 102, 468-480.	4.1	115
6	Surface potential and roughness controlled cell adhesion and collagen formation in electrospun PCL fibers for bone regeneration. Materials and Design, 2020, 194, 108915.	3.3	112
7	Antibacterial and bioactive nanostructured titanium surfaces for bone integration. Applied Surface Science, 2014, 311, 279-291.	3.1	91
8	Surface modification of Tiâ€“6Alâ€“4V alloy for biomineralization and specific biological response: Part I, inorganic modification. Journal of Materials Science: Materials in Medicine, 2011, 22, 533-545.	1.7	89
9	Biomaterials for orbital implants and ocular prostheses: Overview and future prospects. Acta Biomaterialia, 2014, 10, 1064-1087.	4.1	87
10	Zeta Potential Measurements on Solid Surfaces for in Vitro Biomaterials Testing: Surface Charge, Reactivity Upon Contact With Fluids and Protein Absorption. Frontiers in Bioengineering and Biotechnology, 2018, 6, 60.	2.0	86
11	Micro- and nano-textured, hydrophilic and bioactive titanium dental implants. Surface and Coatings Technology, 2015, 276, 374-383.	2.2	79
12	Alkaline phosphatase grafting on bioactive glasses and glass ceramics. Acta Biomaterialia, 2010, 6, 229-240.	4.1	74
13	Nanogrooves and keratin nanofibers on titanium surfaces aimed at driving gingival fibroblasts alignment and proliferation without increasing bacterial adhesion. Materials Science and Engineering C, 2017, 76, 1-12.	3.8	66
14	Cytocompatible and Anti-bacterial Adhesion Nanotextured Titanium Oxide Layer on Titanium Surfaces for Dental and Orthopedic Implants. Frontiers in Bioengineering and Biotechnology, 2019, 7, 103.	2.0	64
15	Antibacterial and Bioactive Coatings Based on Radio Frequency Co-Sputtering of Silver Nanocluster-Silica Coatings on PEEK/Bioactive Glass Layers Obtained by Electrophoretic Deposition. ACS Applied Materials & Interfaces, 2017, 9, 32489-32497.	4.0	58
16	Antibacterial, pro-angiogenic and pro-osteointegrative zein-bioactive glass/copper based coatings for implantable stainless steel aimed at bone healing. Bioactive Materials, 2021, 6, 1479-1490.	8.6	54
17	Bioactive glass coupling with natural polyphenols: Surface modification, bioactivity and anti-oxidant ability. Applied Surface Science, 2016, 367, 237-248.	3.1	53
18	Surface silver-doping of biocompatible glasses to induce antibacterial properties. Part II: plasma sprayed glass-coatings. Journal of Materials Science: Materials in Medicine, 2009, 20, 741-749.	1.7	52

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19	Silver nanoclusterâ€“silica composite coatings with antibacterial properties. Materials Chemistry and Physics, 2010, 120, 123-126.	2.0	50
20	In situ reduction of antibacterial silver ions to metallic silver nanoparticles on bioactive glasses functionalized with polyphenols. Applied Surface Science, 2017, 396, 461-470.	3.1	49
21	Antibacterial coating on polymer for space application. Materials Chemistry and Physics, 2012, 135, 714-722.	2.0	46
22	Functionalization and Surface Modifications of Bioactive Glasses (BGs): Tailoring of the Biological Response Working on the Outermost Surface Layer. Materials, 2019, 12, 3696.	1.3	45
23	Silver-doped keratin nanofibers preserve a titanium surface from biofilm contamination and favor soft-tissue healing. Journal of Materials Chemistry B, 2017, 5, 8366-8377.	2.9	39
24	Competitive Surface Colonization of Antibacterial and Bioactive Materials Doped with Strontium and/or Silver Ions. Nanomaterials, 2020, 10, 120.	1.9	38
25	Antibacterial silver nanocluster/silica composite coatings on stainless steel. Applied Surface Science, 2017, 396, 1546-1555.	3.1	34
26	Synthesis and characterisation of bioactive and antibacterial glassâ€“ceramic Part 1 â€“ Microstructure, properties and biological behaviour. Advances in Applied Ceramics, 2008, 107, 234-244.	0.6	33
27	Tumor targeting by lentiviral vectors combined with magnetic nanoparticles in mice. Acta Biomaterialia, 2017, 59, 303-316.	4.1	33
28	Surface modification of Ti-6Al-4ÂV alloy for biomineralization and specific biological response: part II, alkaline phosphatase grafting. Journal of Materials Science: Materials in Medicine, 2011, 22, 1835-1842.	1.7	32
29	The response of osteoblastic MC3T3-E1 cells to micro- and nano-textured, hydrophilic and bioactive titanium surfaces. Journal of Materials Science: Materials in Medicine, 2016, 27, 68.	1.7	32
30	Multifunctional commercially pure titanium for the improvement of bone integration: Multiscale topography, wettability, corrosion resistance and biological functionalization. Materials Science and Engineering C, 2016, 60, 384-393.	3.8	32
31	Chemical, Mechanical, and Antibacterial Properties of Silver Nanoclusterâ€“Silica Composite Coatings Obtained by Sputtering. Advanced Engineering Materials, 2010, 12, B276.	1.6	31
32	Studies on Cell Compatibility, Antibacterial Behavior, and Zeta Potential of Ag-Containing Polydopamine-Coated Bioactive Glass-Ceramic. Materials, 2019, 12, 500.	1.3	31
33	Surface functionalization of bioactive glasses with natural molecules of biological significance, Part I: Gallic acid as model molecule. Applied Surface Science, 2013, 287, 329-340.	3.1	29
34	Novel antibacterial ocular prostheses: Proof of concept and physico-chemical characterization. Materials Science and Engineering C, 2016, 60, 467-474.	3.8	29
35	Topographical and Biomechanical Guidance of Electrospun Fibers for Biomedical Applications. Polymers, 2020, 12, 2896.	2.0	29
36	Green Tea Polyphenols Coupled with a Bioactive Titanium Alloy Surface: In Vitro Characterization of Osteoinductive Behavior through a KUSA A1 Cell Study. International Journal of Molecular Sciences, 2018, 19, 2255.	1.8	28

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37	The mechanical and chemical stability of the interfaces in bioactive materials: The substrate-bioactive surface layer and hydroxyapatite-bioactive surface layer interfaces. Materials Science and Engineering C, 2020, 116, 111238.	3.8	27
38	Silver nanocluster-silica composite antibacterial coatings for materials to be used in mobile telephones. Applied Surface Science, 2014, 313, 107-115.	3.1	26
39	Gallic acid grafting to a ferrimagnetic bioactive glass-ceramic. Journal of Non-Crystalline Solids, 2016, 432, 167-175.	1.5	26
40	Bioactive glasses functionalized with polyphenols: in vitro interactions with healthy and cancerous osteoblast cells. Journal of Materials Science, 2017, 52, 9211-9223.	1.7	26
41	Surface reactivity and silanization ability of borosilicate and Mg-Sr-based bioactive glasses. Applied Surface Science, 2019, 475, 43-55.	3.1	26
42	Surface structuring by Electron Beam for improved soft tissues adhesion and reduced bacterial contamination on Ti-grade 2. Journal of Materials Processing Technology, 2019, 266, 518-529.	3.1	26
43	Surface functionalization of bioactive glasses with natural molecules of biological significance, part II: Grafting of polyphenols extracted from grape skin. Applied Surface Science, 2013, 287, 341-348.	3.1	25
44	Surface modification of titanium surfaces through a modified oxide layer and embedded silver nanoparticles: Effect of reducing/stabilizing agents on precipitation and properties of the nanoparticles. Surface and Coatings Technology, 2018, 344, 177-189.	2.2	25
45	Aligned keratin submicrometric-fibers for fibroblasts guidance onto nanogrooved titanium surfaces for transmucosal implants. Materials Letters, 2018, 229, 1-4.	1.3	24
46	Surface functionalization of Ag-nanoclustersâ€“silica composite films for biosensing. Materials Chemistry and Physics, 2011, 130, 1307-1316.	2.0	23
47	Biocompatibility versus peritoneal mesothelial cells of polypropylene prostheses for hernia repair, coated with a thin silica/silver layer. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1586-1593.	1.6	23
48	Effect of thermal treatments on sputtered silver nanocluster/silica composite coatings on soda-lime glasses: ionic exchange and antibacterial activity. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	22
49	Chemical, mechanical and antibacterial properties of silver nanocluster/silica composite coated textiles for safety systems and aerospace applications. Applied Surface Science, 2014, 317, 131-139.	3.1	22
50	Bioactive glass functionalized with alkaline phosphatase stimulates bone extracellular matrix deposition and calcification in vitro. Applied Surface Science, 2014, 313, 372-381.	3.1	22
51	Grafting of the peppermint essential oil to a chemically treated Ti6Al4V alloy to counteract the bacterial adhesion. Surface and Coatings Technology, 2019, 378, 125011.	2.2	22
52	Time-dependent effects on physicochemical and surface properties of PHBV fibers and films in relation to their interactions with fibroblasts. Applied Surface Science, 2021, 545, 148983.	3.1	21
53	Surface functionalization of Ti6Al4V with an extract of polyphenols from red grape pomace. Materials and Design, 2021, 206, 109776.	3.3	21
54	Synthesis and characterisation of bioactive and antibacterial glass-ceramic Part 2 â€“ plasma spray coatings on metallic substrates. Advances in Applied Ceramics, 2008, 107, 245-253.	0.6	19

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55	Innovative superparamagnetic iron-oxide nanoparticles coated with silica and conjugated with linoleic acid: Effect on tumor cell growth and viability. Materials Science and Engineering C, 2017, 76, 439-447.	3.8	18
56	Polypropylene prostheses coated with silver nanoclusters/silica coating obtained by sputtering: Biocompatibility and antibacterial properties. Surface and Coatings Technology, 2017, 319, 326-334.	2.2	18
57	Surface Functionalization of Bioactive Glasses with Polyphenols from Padina pavonica Algae and In Situ Reduction of Silver Ions: Physico-Chemical Characterization and Biological Response. Coatings, 2019, 9, 394.	1.2	17
58	Controlling porous titanium/soft tissue interactions with an innovative surface chemical treatment: Responses of macrophages and fibroblasts. Materials Science and Engineering C, 2020, 112, 110845.	3.8	17
59	Multifunctional stratified composite coatings by electrophoretic deposition and RF co-sputtering for orthopaedic implants. Journal of Materials Science, 2021, 56, 7920-7935.	1.7	17
60	Surface functionalization of 3D glassâ€“ceramic porous scaffolds for enhanced mineralization in vitro. Applied Surface Science, 2013, 271, 412-420.	3.1	16
61	Effects of sterilization and storage on the properties of ALP-grafted biomaterials for prosthetic and bone tissue engineering applications. Biomedical Materials (Bristol), 2012, 7, 054102.	1.7	15
62	Grafting of Gallic Acid onto a Bioactive Ti6Al4V Alloy: A Physico-Chemical Characterization. Coatings, 2019, 9, 302.	1.2	15
63	Polyphenols from Grape Pomace: Functionalization of Chitosan-Coated Hydroxyapatite for Modulated Swelling and Release of Polyphenols. Langmuir, 2021, 37, 14793-14804.	1.6	15
64	Surface Activation of a Ferrimagnetic Glassâ€“Ceramic for Antineoplastic Drugs Grafting. Advanced Engineering Materials, 2010, 12, B309.	1.6	14
65	In Vitro Comparison between Commercially and Manually Mixed Antibiotic-Loaded Bone Cements. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 166-174.	0.4	13
66	Surface functionalization of BioglassÂ® with alkaline phosphatase. Surface and Coatings Technology, 2015, 264, 132-139.	2.2	13
67	Electron Beam Structuring of Ti6Al4V: New Insights on the Metal Surface Properties Influencing the Bacterial Adhesion. Materials, 2020, 13, 409.	1.3	13
68	Grafting of gallic acid to metallic surfaces. Applied Surface Science, 2020, 511, 145615.	3.1	12
69	Surface modified Ti6Al4V for enhanced bone bonding ability â€“ Effects of silver and corrosivity at simulated physiological conditions from a corrosion and metal release perspective. Corrosion Science, 2020, 168, 108566.	3.0	12
70	Iodine-Loaded Calcium Titanate for Bone Repair with Sustainable Antibacterial Activity Prepared by Solution and Heat Treatment. Nanomaterials, 2021, 11, 2199.	1.9	12
71	Porous Titanium by Additive Manufacturing: A Focus on Surfaces for Bone Integration. Metals, 2021, 11, 1343.	1.0	12
72	MULTIFUNCTIONAL TITANIUM: SURFACE MODIFICATION PROCESS AND BIOLOGICAL RESPONSE. Journal of Mechanics in Medicine and Biology, 2015, 15, 1540001.	0.3	11

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73	Surface functionalization of phosphate-based bioactive glasses with 3-aminopropyltriethoxysilane (APTS). Biomedical Glasses, 2016, 2, .	2.4	11
74	Magnetite and silica-coated magnetite nanoparticles are highly biocompatible on endothelial cells in vitro. Biomedical Physics and Engineering Express, 2017, 3, 025015.	0.6	11
75	Antibacterial inorganic coatings on metallic surfaces for temporary fixation devices. Applied Surface Science, 2020, 508, 144707.	3.1	11
76	Al-Based Metal Foams (AMF) as Permanent Cores in Casting: State-of-the-Art and Future Perspectives. Metals, 2020, 10, 1592.	1.0	11
77	Antioxidant Activity of Silica-Based Bioactive Glasses. ACS Biomaterials Science and Engineering, 2021, 7, 2309-2316.	2.6	11
78	Surface functionalization of bioactive glasses and hydroxyapatite with polyphenols from organic red grape pomace. Journal of the American Ceramic Society, 2022, 105, 1697-1710.	1.9	11
79	Contact Guidance Effect and Prevention of Microfouling on a Beta Titanium Alloy Surface Structured by Electron-Beam Technology. Nanomaterials, 2021, 11, 1474.	1.9	11
80	Coupling of keratin with titanium: A physico-chemical characterization of functionalized or coated surfaces. Surface and Coatings Technology, 2020, 397, 126057.	2.2	10
81	Surface Modification of Bioresorbable Phosphate Glasses for Controlled Protein Adsorption. ACS Biomaterials Science and Engineering, 2021, 7, 4483-4493.	2.6	10
82	Surface Activation and Characterization of Aluminum Alloys for Brazing Optimization. Coatings, 2019, 9, 459.	1.2	8
83	In vitro comparison between commercially and manually mixed antibiotic-loaded bone cements. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 166-74.	0.4	8
84	Gallic acid grafting modulates the oxidative potential of ferrimagnetic bioactive glass-ceramic SC-45. Colloids and Surfaces B: Biointerfaces, 2016, 148, 592-599.	2.5	7
85	Synthesis and characterization of silicaâ€coated superparamagnetic iron oxide nanoparticles and interaction with pancreatic cancer cells. International Journal of Applied Ceramic Technology, 2018, 15, 947-960.	1.1	7
86	High Strain Rate Behavior of Aluminum Alloy for Sheet Metal Forming Processes. Metals, 2020, 10, 242.	1.0	7
87	Innovative Coatings Based on Peppermint Essential Oil on Titanium and Steel Substrates: Chemical and Mechanical Protection Ability. Materials, 2020, 13, 516.	1.3	7
88	The use of vitamin E as an anti-adhesive coating for cells and bacteria for temporary bone implants. Surface and Coatings Technology, 2022, 444, 128694.	2.2	7
89	Advanced characterization of albumin adsorption on a chemically treated surface for osseointegration: An innovative experimental approach. Materials and Design, 2022, 218, 110712.	3.3	6
90	Surface Functionalization of Biomaterials with Alkaline Phosphatase. Key Engineering Materials, 2007, 361-363, 593-596.	0.4	5

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91	The combined action of UV irradiation and chemical treatment on the titanium surface of dental implants. Applied Surface Science, 2015, 349, 599-608.	3.1	5
92	Silver Nanocluster/Silica Composite Coatings Obtained by Sputtering for Antibacterial Applications. Engineering Materials, 2013, , 225-247.	0.3	4
93	Chemical, physical, and mechanical characterization of chitosan coatings on a chemically pre-treated Ti6Al4V alloy. Surface and Coatings Technology, 2022, 441, 128571.	2.2	4
94	Friction, mechanical and ageing properties of surface modified materials for space debris capture. Advances in Space Research, 2016, 57, 1177-1188.	1.2	3
95	Smart and composite inorganic coatings obtained by sputtering. , 2016, , 33-60.		2
96	Metal nanoscale systems functionalized with organic compounds. , 2020, , 407-436.		2
97	Surface Functionalization of a Silica-Based Bioactive Glass with Compounds from Rosa canina Bud Extracts. ACS Biomaterials Science and Engineering, 2021, 7, 96-104.	2.6	2
98	Al-Based Foams as Permanent Cores in Al Castings: Effect of Surface Skin Thickness and Composition on Infiltration and Core-Shell Bonding. Metals, 2021, 11, 1715.	1.0	2
99	Aluminum Foams as Permanent Cores in Casting. Materials Proceedings, 2021, 3, 3.	0.2	1
100	Natural Coatings on Titanium Surfaces to Improve Their Biological Response. , 0, , .		0
101	Ab initio calculations of the structural and dynamical properties of copper pyrophosphate. , 2020, 4, .		0
102	Coâ€Casting of Al and Alâ€Foams. Advanced Engineering Materials, 0, , 2200116.	1.6	0