Enrica VernÃ©

List of Publications by Year
in descending order

123 papers	4,290 citations	94269 37 h-index	133063 59 g-index
131 all docs	131 docs citations	131 times ranked	4041 citing authors

#	Article	IF	Citations
1	A unified in vitro evaluation for apatite-forming ability of bioactive glasses and their variants. Journal of Materials Science: Materials in Medicine, 2015, 26, 115.	1.7	275
2	Bioactive Glasses: From Parent 45S5 Composition to Scaffold-Assisted Tissue-Healing Therapies. Journal of Functional Biomaterials, 2018, 9, 24.	1.8	202
3	Antibiotic-Loaded Cement in Orthopedic Surgery: A Review. ISRN Orthopedics, 2011, 2011, 1-8.	0.7	149
4	Bioactive solâ€gel glasses: Processing, properties, and applications. International Journal of Applied Ceramic Technology, 2018, 15, 841-860.	1.1	124
5	High strength bioactive glass-ceramic scaffolds for bone regeneration. Journal of Materials Science: Materials in Medicine, 2009, 20, 643-653.	1.7	107
6	In vitro study of manganese-doped bioactive glasses for bone regeneration. Materials Science and Engineering C, 2014, 38, 107-118.	3.8	105
7	Processing methods for making porous bioactive glassâ€based scaffoldsâ€"A stateâ€ofâ€theâ€art review. International Journal of Applied Ceramic Technology, 2019, 16, 1762-1796.	1.1	93
8	Hydroxyapatite for Biomedical Applications: A Short Overview. Ceramics, 2021, 4, 542-563.	1.0	88
9	Biomaterials for orbital implants and ocular prostheses: Overview and future prospects. Acta Biomaterialia, 2014, 10, 1064-1087.	4.1	87
10	Optimization of composition, structure and mechanical strength of bioactive 3-D glass-ceramic scaffolds for bone substitution. Journal of Biomaterials Applications, 2013, 27, 872-890.	1.2	86
11	Glass-ceramics for cancer treatment: So close, or yet so far?. Acta Biomaterialia, 2019, 83, 55-70.	4.1	85
12	Biocompatible glassâ€"ceramic materials for bone substitution. Journal of Materials Science: Materials in Medicine, 2008, 19, 471-478.	1.7	81
13	Micro-CT studies on 3-D bioactive glassâ€"ceramic scaffolds for bone regeneration. Acta Biomaterialia, 2009, 5, 1328-1337.	4.1	79
14	Glass-based coatings on biomedical implants: a state-of-the-art review. Biomedical Glasses, 2017, 3, 1-17.	2.4	76
15	Alkaline phosphatase grafting on bioactive glasses and glass ceramics. Acta Biomaterialia, 2010, 6, 229-240.	4.1	74
16	3-D high-strength glassâ€"ceramic scaffolds containing fluoroapatite for load-bearing bone portions replacement. Materials Science and Engineering C, 2009, 29, 2055-2062.	3.8	73
17	PMMA-Based Bone Cements and the Problem of Joint Arthroplasty Infections: Status and New Perspectives. Materials, 2019, 12, 4002.	1.3	62
18	Electrophoretic Deposition of Chitosan/45S5 Bioactive Glass Composite Coatings Doped with Zn and Sr. Frontiers in Bioengineering and Biotechnology, 2015, 3, 159.	2.0	59

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19	Bioactive glass-derived trabecular coating: a smart solution for enhancing osteointegration of prosthetic elements. Journal of Materials Science: Materials in Medicine, 2012, 23, 2369-2380.	1.7	57
20	Comparison between Bioactive Sol-Gel and Melt-Derived Glasses/Glass-Ceramics Based on the Multicomponent SiO2â€“P2O5â€“CaOâ€“MgOâ€“Na2Oâ€“K2O System. Materials, 2020, 13, 540.	1.3	57
21	Pores occlusion in MCM-41 spheres immersed in SBF and the effect on ibuprofen delivery kinetics: A quantitative model. Chemical Engineering Journal, 2010, 156, 184-192.	6.6	55
22	Surface properties and cell response of low metal ion release Ti-6Al-7Nb alloy after multi-step chemical and thermal treatments. Biomaterials, 2005, 26, 1219-1229.	5.7	54
23	Digital light processing stereolithography of hydroxyapatite scaffolds with boneâ€like architecture, permeability, and mechanical properties. Journal of the American Ceramic Society, 2022, 105, 1648-1657.	1.9	54
24	Bioactive glass coupling with natural polyphenols: Surface modification, bioactivity and anti-oxidant ability. Applied Surface Science, 2016, 367, 237-248.	3.1	53
25	Silver nanoclusterâ€“silica composite coatings with antibacterial properties. Materials Chemistry and Physics, 2010, 120, 123-126.	2.0	50
26	Foam-like scaffolds for bone tissue engineering based on a novel couple of silicate-phosphate specular glasses: synthesis and properties. Journal of Materials Science: Materials in Medicine, 2009, 20, 2197-2205.	1.7	48
27	Fe-doped bioactive glass-derived scaffolds produced by sol-gel foaming. Materials Letters, 2019, 235, 207-211.	1.3	47
28	Glassâ€“ceramic scaffolds containing silica mesophases for bone grafting and drug delivery. Journal of Materials Science: Materials in Medicine, 2009, 20, 809-820.	1.7	46
29	Antibacterial coating on polymer for space application. Materials Chemistry and Physics, 2012, 135, 714-722.	2.0	46
30	Fe-Doped Sol-Gel Glasses and Glass-Ceramics for Magnetic Hyperthermia. Materials, 2018, 11, 173.	1.3	45
31	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
32	Mesoporous Bioactive Glass as a Multifunctional System for Bone Regeneration and Controlled Drug Release. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 12-21.	0.7	42
33	Composite bone cements loaded with a bioactive and ferrimagnetic glass-ceramic: Leaching, bioactivity and cytocompatibility. Materials Science and Engineering C, 2015, 53, 95-103.	3.8	42
34	Composite Films of Gelatin and Hydroxyapatite/Bioactive Glass for Tissue-Engineering Applications. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1207-1226.	1.9	41
35	Feasibility, tailoring and properties of polyurethane/bioactive glass composite scaffolds for tissue engineering. Journal of Materials Science: Materials in Medicine, 2009, 20, 2189-2195.	1.7	40
36	A Guided Walk through the World of Mesoporous Bioactive Glasses (MBGs): Fundamentals, Processing, and Applications. Nanomaterials, 2020, 10, 2571.	1.9	40

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37	Antibiotic-free composite bone cements with antibacterial and bioactive properties. A preliminary study. Materials Science and Engineering C, 2014, 43, 65-75.	3.8	39
38	Robocasting of SiO2-Based Bioactive Glass Scaffolds with Porosity Gradient for Bone Regeneration and Potential Load-Bearing Applications. Materials, 2019, 12, 2691.	1.3	39
39	Copper-Doped Bioactive Glass as Filler for PMMA-Based Bone Cements: Morphological, Mechanical, Reactivity, and Preliminary Antibacterial Characterization. Materials, 2018, 11, 961.	1.3	38
40	Competitive Surface Colonization of Antibacterial and Bioactive Materials Doped with Strontium and/or Silver Ions. Nanomaterials, 2020, 10, 120.	1.9	38
41	Resorbable Glassâ€"Ceramic Phosphate-based Scaffolds for Bone Tissue Engineering: Synthesis, Properties, and<i>In vitro</i>Effects on Human Marrow Stromal Cells. Journal of Biomaterials Applications, 2011, 26, 465-489.	1.2	34
42	Bread-Derived Bioactive Porous Scaffolds: An Innovative and Sustainable Approach to Bone Tissue Engineering. Molecules, 2019, 24, 2954.	1.7	34
43	Feasibility and Tailoring of Bioactive Glass-ceramic Scaffolds with Gradient of Porosity for Bone Grafting. Journal of Biomaterials Applications, 2010, 24, 693-712.	1.2	33
44	Cell Penetrating Peptide Adsorption on Magnetite and Silica Surfaces: A Computational Investigation. Journal of Physical Chemistry B, 2015, 119, 8239-8246.	1.2	33
45	Tumor targeting by lentiviral vectors combined with magnetic nanoparticles in mice. Acta Biomaterialia, 2017, 59, 303-316.	4.1	33
46	Robocasting of Bioactive SiO₂-P₂O₅-CaO-MgO-Na₂O-K₂O Glass Scaffolds. Journal of Healthcare Engineering, 2019, 2019, 1-12.	1.1	32
47	Chemical, Mechanical, and Antibacterial Properties of Silver Nanoclusterâ€"Silica Composite Coatings Obtained by Sputtering. Advanced Engineering Materials, 2010, 12, B276.	1.6	31
48	Antibacterial and bioactive composite bone cements containing surface silver-doped glass particles. Biomedical Materials (Bristol), 2015, 10, 055014.	1.7	31
49	In vitro biocompatibility of a ferrimagnetic glass-ceramic for hyperthermia application. Materials Science and Engineering C, 2017, 73, 778-787.	3.8	31
50	Production and Characterization of Glass-Ceramic Materials for Potential Use in Dental Applications: Thermal and Mechanical Properties, Microstructure, and In Vitro Bioactivity. Applied Sciences (Switzerland), 2017, 7, 1330.	1.3	31
51	Composite bone cements loaded with a bioactive and ferrimagnetic glass-ceramic. Part I: Morphological, mechanical and calorimetric characterization. Journal of Biomaterials Applications, 2014, 29, 254-267.	1.2	30
52	Bioactive and Antibacterial Glass Powders Doped with Copper by Ion-Exchange in Aqueous Solutions. Materials, 2016, 9, 405.	1.3	30
53	Antibacterial Bioglassâ€Derived Scaffolds: Innovative Synthesis Approach and Characterization. International Journal of Applied Glass Science, 2016, 7, 238-247.	1.0	30
54	Antibiotic-loaded acrylic bone cements: An in vitro study on the release mechanism and its efficacy. Materials Science and Engineering C, 2013, 33, 3025-3032.	3.8	29

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55	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
56	Novel resorbable glass-ceramic scaffolds for hard tissue engineering: From the parent phosphate glass to its bone-like macroporous derivatives. Journal of Biomaterials Applications, 2014, 28, 1287-1303.	1.2	29
57	Novel antibacterial ocular prostheses: Proof of concept and physico-chemical characterization. Materials Science and Engineering C, 2016, 60, 467-474.	3.8	29
58	Foam Replica Method in the Manufacturing of Bioactive Glass Scaffolds: Out-of-Date Technology or Still Underexploited Potential?. Materials, 2021, 14, 2795.	1.3	29
59	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
60	Dolomite-Foamed Bioactive Silicate Scaffolds for Bone Tissue Repair. Materials, 2020, 13, 628.	1.3	27
61	Gallic acid grafting to a ferrimagnetic bioactive glass-ceramic. Journal of Non-Crystalline Solids, 2016, 432, 167-175.	1.5	26
62	Tumor Targeting by Monoclonal Antibody Functionalized Magnetic Nanoparticles. Nanomaterials, 2019, 9, 1575.	1.9	26
63	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
64	<i>In situ</i> Raman study to monitor bioactive glasses reactivity. Journal of Raman Spectroscopy, 2008, 39, 260-264.	1.2	24
65	Bioactive Glasses with Low Ca/P Ratio and Enhanced Bioactivity. Materials, 2016, 9, 226.	1.3	24
66	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
67	Reductant-free synthesis of magnetoplasmonic iron oxide-gold nanoparticles. Ceramics International, 2017, 43, 15258-15265.	2.3	21
68	Comprehensive assessment of bioactive glass and glass-ceramic scaffold permeability: experimental measurements by pressure wave drop, modelling and computed tomography-based analysis. Acta Biomaterialia, 2021, 119, 405-418.	4.1	21
69	Shock Waves Induce Activity of Human Osteoblast-Like Cells in Bioactive Scaffolds. Journal of Trauma, 2010, 68, 1439-1444.	2.3	20
70	On the mechanism of apatite-induced precipitation on 45S5 glass pellets coated with a natural-derived polymer. Applied Surface Science, 2015, 353, 137-149.	3.1	20
71	Composites bone cements with different viscosities loaded with a bioactive and antibacterial glass. Journal of Materials Science, 2017, 52, 5133-5146.	1.7	19
72	Biocompatibility and Antibacterial Effect of Silver Doped 3D-Glass-Ceramic Scaffolds for Bone Grafting. Journal of Biomaterials Applications, 2011, 25, 595-617.	1.2	18

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73	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
74	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
75	Antibiotic loading on bioactive glasses and glass-ceramics: An approach to surface modification. Journal of Biomaterials Applications, 2013, 28, 308-319.	1.2	17
76	Electrospun Filaments Embedding Bioactive Glass Particles with Ion Release and Enhanced Mineralization. Nanomaterials, 2019, 9, 182.	1.9	17
77	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
78	Tellurium: A new active element for innovative multifunctional bioactive glasses. Materials Science and Engineering C, 2021, 123, 111957.	3.8	17
79	Surface functionalization of 3D glassâ€"ceramic porous scaffolds for enhanced mineralization in vitro. Applied Surface Science, 2013, 271, 412-420.	3.1	16
80	Crystallization behavior of SiO2â€"P2O5â€"CaOâ€"MgOâ€"Na2Oâ€"K2O bioactive glass powder. Biomedical Glasses, 2019, 5, 46-52.	2.4	16
81	Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting. Biomedical Glasses, 2019, 5, 140-147.	2.4	16
82	Bioactivity of degradable polymer sutures coated with bioactive glass. Journal of Materials Science: Materials in Medicine, 2004, 15, 893-899.	1.7	15
83	Monodisperse Mesoporous Silica Spheres Inside a Bioactive Macroporous Glassâ€"Ceramic Scaffold. Advanced Engineering Materials, 2010, 12, B256.	1.6	15
84	Surface Activation of a Ferrimagnetic Glassâ€"Ceramic for Antineoplastic Drugs Grafting. Advanced Engineering Materials, 2010, 12, B309.	1.6	14
85	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
86	Composite bone cements for hyperthermia: modeling and characterization of magnetic, calorimetric and in vitro heating properties. Ceramics International, 2017, 43, 4831-4840.	2.3	13
87	PPARs are mediators of anti-cancer properties of superparamagnetic iron oxide nanoparticles (SPIONs) functionalized with conjugated linoleic acid. Chemico-Biological Interactions, 2018, 292, 9-14.	1.7	13
88	Bioactive glass and glassâ€ceramic orbital implants. International Journal of Applied Ceramic Technology, 2019, 16, 1850-1863.	1.1	12
89	High-reliability data processing and calculation of microstructural parameters in hydroxyapatite scaffolds produced by vat photopolymerization. Journal of the European Ceramic Society, 2022, 42, 6206-6212.	2.8	12
90	Development and Characterization of PEEK/B₂O₃-Doped 45S5 Bioactive Glass Composite Coatings Obtained by Electrophoretic Deposition. Key Engineering Materials, 0, 654, 165-169.	0.4	11

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91	Surface functionalization of phosphate-based bioactive glasses with 3-aminopropyltriethoxysilane (APTS). Biomedical Glasses, 2016, 2, .	2.4	11
92	Multifunctional ferrimagnetic glassâ€“ceramic for the treatment of bone tumor and associated complications. Journal of Materials Science, 2017, 52, 9192-9201.	1.7	11
93	Magnetite and silica-coated magnetite nanoparticles are highly biocompatible on endothelial cells <i>in vitro</i>. Biomedical Physics and Engineering Express, 2017, 3, 025015.	0.6	11
94	In situ chemical and physical reduction of copper on bioactive glass surface. Applied Surface Science, 2019, 495, 143559.	3.1	11
95	Antioxidant Activity of Silica-Based Bioactive Glasses. ACS Biomaterials Science and Engineering, 2021, 7, 2309-2316.	2.6	11
96	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
97	In Vivo Evaluation of 3D-Printed Silica-Based Bioactive Glass Scaffolds for Bone Regeneration. Journal of Functional Biomaterials, 2022, 13, 74.	1.8	11
98	Bioactive superparamagnetic nanoparticles for multifunctional composite bone cements. Ceramics International, 2019, 45, 14533-14545.	2.3	10
99	Sintering Behavior of a Six-Oxide Silicate Bioactive Glass for Scaffold Manufacturing. Applied Sciences (Switzerland), 2020, 10, 8279.	1.3	10
100	Biomedical Radioactive Glasses for Brachytherapy. Materials, 2021, 14, 1131.	1.3	10
101	Surface Modification of Bioresorbable Phosphate Glasses for Controlled Protein Adsorption. ACS Biomaterials Science and Engineering, 2021, 7, 4483-4493.	2.6	10
102	Foam-Replicated Diopside/Fluorapatite/Wollastonite-Based Glassâ€“Ceramic Scaffolds. Ceramics, 2022, 5, 120-130.	1.0	9
103	Synthesis and characterization of magnetic and antibacterial nanoparticles as filler in acrylic cements for bone cancer and comorbidities therapy. Ceramics International, 2021, 47, 17633-17643.	2.3	8
104	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
105	Magnetotransport properties of a percolating network of magnetite crystals embedded in a glass-ceramic matrix. Journal of Applied Physics, 2009, 105, 083911.	1.1	7
106	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
107	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
108	Bioactive sol-gel glass-coated wood-derived biocarbon scaffolds. Materials Letters, 2018, 232, 14-17.	1.3	7

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109	Biological Evaluation of a New Sodium-Potassium Silico-Phosphate Glass for Bone Regeneration: In Vitro and In Vivo Studies. Materials, 2021, 14, 4546.	1.3	7
110	Antibacterial and Bioactive Composite Bone Cements. Current Materials Science, 2020, 12, 144-153.	0.2	7
111	Preparation and investigation of a glass in the system Al2O3â€“SiO2â€“CaO for dental applications. Materials Letters, 2006, 60, 3045-3047.	1.3	5
112	Melt-derived copper-doped ferrimagnetic glass-ceramic for tumor treatment. Ceramics International, 2021, 47, 31749-31755.	2.3	3
113	Magnetoâ€plasmonic heterodimers: Evaluation of different synthesis approaches. Journal of the American Ceramic Society, 2022, 105, 1276.	1.9	3
114	Glass-Ceramic Scaffolds and Shock Waves Effect on Cells Migration. Key Engineering Materials, 2008, 361-363, 233-236.	0.4	2
115	Surface Functionalization of a Silica-Based Bioactive Glass with Compounds from <i>Rosa canina</i> Bud Extracts. ACS Biomaterials Science and Engineering, 2021, 7, 96-104.	2.6	2
116	<i>In situ</i> reduction of Ag on magnetic nanoparticles with gallic acid: effect of the synthesis parameters on morphology. Nanomedicine, 2022, 17, 499-511.	1.7	2
117	Multifunctional Bioactive Glasses and Glass-Ceramics: Beyond â€˜Traditionalâ€™ Bioactivity. , 2019, , 35-67.		1
118	Chapter 9. Surface Functionalization of Bioactive Glasses: Reactive Groups, Biomolecules and Drugs on Bioactive Surfaces for Smart and Functional Biomaterials. RSC Smart Materials, 0, , 221-235.	0.1	1
119	Glass-Ceramic Matrix/ZrO2 Particle Biocomposites. , 2005, , 146-151.		0
120	Materials for Healthcare Applications Symposium, EUROMAT 2011 (Montpellier, France, 12â€“15 September) Tj ETQq0 0 0 rgBT /Overlo	1.7	0
121	Guest editorsâ€™ preface. Journal of Materials Science, 2017, 52, 8691-8694.	1.7	0
122	Natural Coatings on Titanium Surfaces to Improve Their Biological Response. , 0, , .		0
123	Surface Functionalization of Bioactive and Ferrimagnetic Glass-Ceramics (SC45) with Gallic Acid and Folic Acid. , 2013, , .		0