Matteo Berni

List of Publications by Year
in descending order

31 papers	456 citations	623734 14 h-index	713466 21 g-index
32 all docs	32 docs citations	32 times ranked	648 citing authors

#	Article	IF	Citations
1	Strontium doped calcium phosphate coatings on poly(etheretherketone) (PEEK) by pulsed electron deposition. Surface and Coatings Technology, 2017, 319, 191-199.	4.8	38
2	Tribological characterization of zirconia coatings deposited on Ti6Al4V components for orthopedic applications. Materials Science and Engineering C, 2016, 62, 643-655.	7.3	35
3	Fabrication and characterization of biomimetic hydroxyapatite thin films for bone implants by direct ablation of a biogenic source. Materials Science and Engineering C, 2019, 99, 853-862.	7.3	32
4	Composite Scaffolds for Bone Tissue Regeneration Based on PCL and Mg-Containing Bioactive Glasses. Biology, 2021, 10, 398.	2.8	30
5	Nanodecoration of electrospun polymeric fibers with nanostructured silver coatings by ionized jet deposition for antibacterial tissues. Materials Science and Engineering C, 2020, 113, 110998.	7.3	28
6	A comparative study of the growth dynamics of zirconia thin films deposited by ionized jet deposition onto different substrates. Surface and Coatings Technology, 2018, 337, 306-312.	4.8	27
7	Pulsed Electron Deposition of nanostructured bioactive glass coatings for biomedical applications. Ceramics International, 2017, 43, 15862-15867.	4.8	26
8	Surface morphology, tribological properties and in vitro biocompatibility of nanostructured zirconia thin films. Journal of Materials Science: Materials in Medicine, 2016, 27, 96.	3.6	24
9	Cartilage mechanical tests: Evolution of current standards for cartilage repair and tissue engineering. A literature review. Clinical Biomechanics, 2019, 68, 58-72.	1.2	23
10	Nanostructured Ag thin films deposited by pulsed electron ablation. Applied Surface Science, 2019, 475, 917-925.	6.1	21
11	Plasma-assisted deposition of bone apatite-like thin films from natural apatite. Materials Letters, 2017, 199, 32-36.	2.6	18
12	Osteogenic Differentiation of hDPSCs on Biogenic Bone Apatite Thin Films. Stem Cells International, 2017, 2017, 1-10.	2.5	17
13	Evaluation of cartilage biomechanics and knee joint microenvironment after different cell-based treatments in a sheep model of early osteoarthritis. International Orthopaedics, 2021, 45, 427-435.	1.9	16
14	CERAMIC THIN FILMS REALIZED BY MEANS OF PULSED PLASMA DEPOSITION TECHNIQUE: APPLICATIONS FOR ORTHOPEDICS. Journal of Mechanics in Medicine and Biology, 2015, 15, 1540002.	0.7	14
15	Design of a novel procedure for the optimization of the mechanical performances of 3D printed scaffolds for bone tissue engineering combining CAD, Taguchi method and FEA. Medical Engineering and Physics, 2019, 69, 92-99.	1.7	14
16	Optimizing thickness of ceramic coatings on plastic components for orthopedic applications: A finite element analysis. Materials Science and Engineering C, 2016, 58, 381-388.	7.3	13
17	Nanoindentation: An advanced procedure to investigate osteochondral engineered tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 96, 79-87.	3.1	12
18	The Human Meniscus Behaves as a Functionally Graded Fractional Porous Medium under Confined Compression Conditions. Applied Sciences (Switzerland), 2021, 11, 9405.	2.5	11

#	Article	IF	Citations
19	Monitoring morphological and chemical properties during silver solid-state dewetting. Applied Surface Science, 2019, 498, 143890.	6.1	9
20	How preconditioning and pretensioning of grafts used in ACLigaments surgical reconstruction are influenced by their mechanical time-dependent characteristics: Can we optimize their initial loading state?. Clinical Biomechanics, 2021, 83, 105294.	1.2	6
21	Effects of working gas pressure on zirconium dioxide thin film prepared by pulsed plasma deposition: roughness, wettability, friction and wear characteristics. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 72, 200-208.	3.1	5
22	Integration of micro-CT and uniaxial loading to analyse the evolution of 3D microstructure under increasing strain: application to the Anterior Cruciate Ligament. Materials Today: Proceedings, 2019, 7, 501-507.	1.8	5
23	Extra-Corporeal Membrane Oxygenation Cadaver Donors: What about Tissues Used as Allografts?. Membranes, 2021, 11, 545.	3.0	5
24	Anisotropy and inhomogeneity of permeability and fibrous network response in the pars intermedia of the human lateral meniscus. Acta Biomaterialia, 2021, 135, 393-402.	8.3	5
25	Roughness conformality during thin films deposition onto rough substrates: A quantitative study. Thin Solid Films, 2020, 709, 138258.	1.8	3
26	Impact of Surface Functionalization by Nanostructured Silver Thin Films on Thermoplastic Central Venous Catheters: Mechanical, Microscopical and Thermal Analyses. Coatings, 2020, 10, 1034.	2.6	3
27	A Comprehensive Framework to Evaluate the Effects of Anterior Cruciate Ligament Injury and Reconstruction on Graft and Cartilage Status through the Analysis of MRI T2 Relaxation Time and Knee Laxity: A Pilot Study. Life, 2021, 11, 1383.	2.4	3
28	Ultrathin hydroxyapatite coating on pure magnesium substrate prepared by pulsed electron ablation technique. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 1794-1801.	1.5	2
29	How cartilage status can be related to joint loads in anterior cruciate ligament reconstruction: a preliminary analysis including MRI t2 mapping and joint biomechanics. Journal of Biological Regulators and Homeostatic Agents, 2018, 32, 35-40.	0.7	2
30	Nano-mechanical investigation of engineered bone tissue and of the osteochondral interface. Materials Today: Proceedings, 2019, 7, 516-521.	1.8	1
31	Monitoring Knee Biomechanics in Patients Undergoing Anterior Cruciate Ligament Reconstruction: How Joint Loading Affects Cartilage Quality. Materials Today: Proceedings, 2019, 7, 522-528.	1.8	0