

# Laura Treccani

## List of Publications by Year in descending order

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62  
papers

2,009  
citations

218592

26  
h-index

254106

43  
g-index

62  
all docs

62  
docs citations

62  
times ranked

3061  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functionalized ceramics for biomedical, biotechnological and environmental applications. <i>Acta Biomaterialia</i> , 2013, 9, 7115-7150.	4.1	226
2	The nacre protein perlucin nucleates growth of calcium carbonate crystals. <i>Journal of Microscopy</i> , 2003, 212, 280-291.	0.8	158
3	Perlwapin, an Abalone Nacre Protein with Three Four-Disulfide Core (Whey Acidic Protein) Domains, Inhibits the Growth of Calcium Carbonate Crystals. <i>Biophysical Journal</i> , 2006, 91, 2601-2608.	0.2	110
4	Protein adsorption on colloidal alumina particles functionalized with amino, carboxyl, sulfonate and phosphate groups. <i>Acta Biomaterialia</i> , 2012, 8, 1221-1229.	4.1	104
5	Perlinhibin, a Cysteine-, Histidine-, and Arginine-Rich Miniprotein from Abalone ( <i>Haliotis laevigata</i> ) Nacre, Inhibits In Vitro Calcium Carbonate Crystallization. <i>Biophysical Journal</i> , 2007, 93, 1246-1254.	0.2	69
6	Enhancing Cellular Uptake and Doxorubicin Delivery of Mesoporous Silica Nanoparticles via Surface Functionalization: Effects of Serum. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26880-26891.	4.0	69
7	Mechanical evaluation of calcium-zirconium-silicate (baghdadite) obtained by a direct solid-state synthesis route. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 34, 294-301.	1.5	66
8	Highly Efficient Enzyme-Functionalized Porous Zirconia Microtubes for Bacteria Filtration. <i>Environmental Science &amp; Technology</i> , 2012, 46, 8739-8747.	4.6	63
9	Development and characterisation of functionalised ceramic microtubes for bacteria filtration. <i>Journal of Membrane Science</i> , 2010, 365, 447-455.	4.1	60
10	Modulation of Silica Nanoparticle Uptake into Human Osteoblast Cells by Variation of the Ratio of Amino and Sulfonate Surface Groups: Effects of Serum. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13821-13833.	4.0	60
11	Mixed zirconia calcium phosphate coatings for dental implants: Tailoring coating stability and bioactivity potential. <i>Materials Science and Engineering C</i> , 2015, 48, 337-346.	3.8	54
12	Orientation of human osteoblasts on hydroxyapatite-based microchannels. <i>Acta Biomaterialia</i> , 2012, 8, 394-403.	4.1	51
13	Co-delivery of cisplatin and doxorubicin from calcium phosphate beads/matrix scaffolds for osteosarcoma therapy. <i>Materials Science and Engineering C</i> , 2017, 77, 427-435.	3.8	42
14	Micromachining of ceramic surfaces: Hydroxyapatite and zirconia. <i>Journal of Materials Processing Technology</i> , 2012, 212, 614-624.	3.1	36
15	Controlling Mixed-Protein Adsorption Layers on Colloidal Alumina Particles by Tailoring Carboxyl and Hydroxyl Surface Group Densities. <i>Langmuir</i> , 2013, 29, 12502-12510.	1.6	34
16	Novel akermanite-based bioceramics from preceramic polymers and oxide fillers. <i>Ceramics International</i> , 2014, 40, 1029-1035.	2.3	34
17	A New Porous Hybrid Material Derived From Silica Fume and Alginate for Sustainable Pollutants Reduction. <i>Frontiers in Chemistry</i> , 2018, 6, 60.	1.8	34
18	Porous wollastonite-hydroxyapatite bioceramics from a preceramic polymer and micro- or nano-sized fillers. <i>Journal of the European Ceramic Society</i> , 2012, 32, 399-408.	2.8	33

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19	Effective Bacterial Inactivation and Removal of Copper by Porous Ceramics with High Surface Area. <i>Environmental Science &amp; Technology</i> , 2013, 47, 1065-1072.	4.6	32
20	Controlling proteinâ€“particle adsorption by surface tailoring colloidal alumina particles with sulfonate groups. <i>Acta Biomaterialia</i> , 2013, 9, 5780-5787.	4.1	31
21	Abalone nacre insoluble matrix induces growth of flat and oriented aragonite crystals. <i>Biochemical and Biophysical Research Communications</i> , 2006, 344, 45-49.	1.0	29
22	Adsorption and Orientation of the Physiological Extracellular Peptide Glutathione Disulfide on Surface Functionalized Colloidal Alumina Particles. <i>Journal of the American Chemical Society</i> , 2013, 135, 6307-6316.	6.6	29
23	Comparison of micropatterning methods for ceramic surfaces. <i>Journal of the European Ceramic Society</i> , 2011, 31, 2809-2817.	2.8	28
24	The role of surface functionalization of colloidal alumina particles on their controlled interactions with viruses. <i>Biomaterials</i> , 2013, 34, 4203-4213.	5.7	28
25	Characterization of Wet Powder-Sprayed Zirconia/Calcium Phosphate Coating for Dental Implants. <i>Clinical Implant Dentistry and Related Research</i> , 2015, 17, 186-198.	1.6	28
26	Synthesis and mechanical evaluation of Sr-doped calcium-zirconium-silicate (baghdadite) and its impact on osteoblast cell proliferation and ALP activity. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 055013.	1.7	27
27	Utilizing the protein corona around silica nanoparticles for dual drug loading and release. <i>Nanoscale</i> , 2015, 7, 16251-16265.	2.8	27
28	A critical study: Assessment of the effect of silica particles from 15 to 500Ånm on bacterial viability. <i>Environmental Pollution</i> , 2013, 176, 292-299.	3.7	24
29	Osteoblast viability on hydroxyapatite with well-adjusted submicron and micron surface roughness as monitored by the proliferation reagent WST-1. <i>Journal of Biomaterials Applications</i> , 2013, 27, 791-800.	1.2	23
30	Magnesium-containing mixed coatings on zirconia for dental implants: mechanical characterization and inÂvitro behavior. <i>Journal of Biomaterials Applications</i> , 2015, 30, 104-118.	1.2	22
31	Gel Casting of Freeâ€“Shapeable Ceramic Membranes with Adjustable Pore Size for Ultraâ€“and Microfiltration. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1393-1401.	1.9	21
32	Enzyme-assisted calcium phosphate biomineralization on an inert alumina surface. <i>Acta Biomaterialia</i> , 2015, 13, 335-343.	4.1	20
33	Antibacterial and Abrasionâ€“Resistant Alumina Micropatterns. <i>Advanced Engineering Materials</i> , 2009, 11, B61.	1.6	19
34	A comparative study of three different synthesis routes for hydrophilic fluorophore-doped silica nanoparticles. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	0.8	19
35	Adsorption and Reduction of Glutathione Disulfide on Î±-Al <sub>2</sub> O <sub>3</sub> Nanoparticles: Experiments and Modeling. <i>Langmuir</i> , 2011, 27, 9449-9457.	1.6	18
36	Enhanced cell adhesion on bioinert ceramics mediated by the osteogenic cell membrane enzyme alkaline phosphatase. <i>Materials Science and Engineering C</i> , 2016, 69, 184-194.	3.8	18

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37	Multi-loaded ceramic beads/matrix scaffolds obtained by combining ionotropic and freeze gelation for sustained and tuneable vancomycin release. <i>Materials Science and Engineering C</i> , 2016, 67, 542-553.	3.8	18
38	Fluorescence labeling of colloidal core-shell particles with defined isoelectric points for in vitro studies. <i>Acta Biomaterialia</i> , 2012, 8, 720-727.	4.1	17
39	Versatile Crack-Free Ceramic Micropatterns Made by a Modified Molding Technique. <i>Journal of the American Ceramic Society</i> , 2010, 93, 2574-2578.	1.9	16
40	A novel one-pot process for near-net-shape fabrication of open-porous resorbable hydroxyapatite/protein composites and in vivo assessment. <i>Materials Science and Engineering C</i> , 2014, 42, 137-145.	3.8	16
41	Amino acid-catalyzed seed regrowth synthesis of photostable high fluorescent silica nanoparticles with tunable sizes for intracellular studies. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	0.8	16
42	Ceramic Microbeads as Adsorbents for Purification Technologies with High Specific Surface Area, Adjustable Pore Size, and Morphology Obtained by Ionotropic Gelation. <i>Journal of the American Ceramic Society</i> , 2012, 95, 907-914.	1.9	15
43	Micromolding of Calcium Carbonate Using a Bio-Inspired, Coacervation-Mediated Process. <i>Journal of the American Ceramic Society</i> , 2013, 96, 736-742.	1.9	15
44	Antibacterial active open-porous hydroxyapatite/lysozyme scaffolds suitable as bone graft and depot for localised drug delivery. <i>Journal of Biomaterials Applications</i> , 2017, 31, 1123-1134.	1.2	15
45	Dual fluorophore doped silica nanoparticles for cellular localization studies in multiple stained cells. <i>Acta Biomaterialia</i> , 2015, 14, 208-216.	4.1	14
46	Physisorption of enzymatically active chymotrypsin on titania colloidal particles. <i>Journal of Colloid and Interface Science</i> , 2015, 455, 236-244.	5.0	13
47	Physisorption of $\Gamma$ -chymotrypsin on SiO <sub>2</sub> and TiO <sub>2</sub> : A comparative study via experiments and molecular dynamics simulations. <i>Biointerphases</i> , 2016, 11, 011007.	0.6	12
48	Towards the synthesis of hydroxyapatite/protein scaffolds with controlled porosities: Bulk and interfacial shear rheology of a hydroxyapatite suspension with protein additives. <i>Journal of Colloid and Interface Science</i> , 2013, 407, 529-535.	5.0	10
49	Porous ceramic monoliths assembled from microbeads with high specific surface area for effective biocatalysis. <i>RSC Advances</i> , 2013, 3, 13381.	1.7	10
50	The role of ligands on protein retention in adsorption chromatography: A surface energetics approach. <i>Journal of Separation Science</i> , 2014, 37, 618-624.	1.3	10
51	Selective covalent immobilization of ferritin on alumina. <i>Biointerphases</i> , 2014, 9, 031018.	0.6	9
52	A mild one-pot process for synthesising hydroxyapatite/biomolecule bone scaffolds for sustained and controlled antibiotic release. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 015013.	1.7	9
53	Gel casting of large area micro- and sub-micropatterned thin ceramic tapes. <i>Ceramics International</i> , 2016, 42, 5036-5044.	2.3	9
54	Physicochemical properties and biodegradability of organically functionalized colloidal silica particles in aqueous environment. <i>Chemosphere</i> , 2014, 99, 96-101.	4.2	7

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55	Assessment of the Proteolytic Activity of $\hat{\pm}$ -Chymotrypsin Immobilized on Colloidal Particles by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry. <i>Analytical Letters</i> , 2015, 48, 424-441.	1.0	6
56	Rapid Sintering of Porous Monoliths Assembled from Microbeads with High Specific Surface Area and Multimodal Porosity. <i>Advanced Engineering Materials</i> , 2014, 16, 151-155.	1.6	5
57	Effect of silica on porosity, strength, and toughness of pressureless sintered calcium phosphate-zirconia bioceramics. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 045020.	1.7	5
58	Anchoring of Iron Oxyhydroxide Clusters at H and L Ferritin Subunits. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 483-490.	2.6	5
59	Aluminium acetate as alternative cross-linker for temperature controlled gel-casting and joining of ceramics. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1241-1251.	2.8	4
60	Interaction of the Physiological Tripeptide Glutathione with Colloidal Alumina Particles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 23136-23142.	1.5	3
61	New Sustainable Hybrid Porous Materials for Air Particulate Matter Trapping. <i>Materials Science Forum</i> , 2018, 941, 2237-2242.	0.3	3
62	Mineralization of iron oxide by ferritin homopolymers immobilized on $\text{SiO}_2$ nanoparticles. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 2019, 8, 16-27.	0.7	1