

# Flavia Bollino

## List of Publications by Year in descending order

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62  
papers

2,388  
citations

172207

29  
h-index

205818

48  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2708  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Influence of chemical treatments on mechanical properties of hemp fiber reinforced composites. Composites Part B: Engineering, 2018, 133, 210-217.  | 5.9 | 331       |
| 2  | Silica/quercetin sol-gel hybrids as antioxidant dental implant materials. Science and Technology of Advanced Materials, 2015, 16, 035001.   | 2.8 | 146       |
| 3  | Inorganic polymers from alkali activation of metakaolin: Effect of setting and curing on structure. Journal of Solid State Chemistry, 2013, 200, 341-348.   | 1.4 | 98        |
| 4  | Influence of the polymer amount on bioactivity and biocompatibility of SiO <sub>2</sub> /PEG hybrid materials synthesized by sol-gel technique. Materials Science and Engineering C, 2015, 48, 548-555.   | 3.8 | 98        |
| 5  | Corrosion behavior and mechanical properties of bioactive sol-gel coatings on titanium implants. Materials Science and Engineering C, 2014, 43, 375-382.  | 3.8 | 80        |
| 6  | Characterization and biological properties of TiO <sub>2</sub> /PCL hybrid layers prepared via sol-gel dip coating for surface modification of titanium implants. Journal of Non-Crystalline Solids, 2015, 415, 9-15.                                   | 1.5 | 76        |
| 7  | Zirconia/Hydroxyapatite Composites Synthesized Via Sol-Gel: Influence of Hydroxyapatite Content and Heating on Their Biological Properties. Materials, 2017, 10, 757.   | 1.3 | 72        |
| 8  | Geopolymer/PEG Hybrid Materials Synthesis and Investigation of the Polymer Influence on Microstructure and Mechanical Behavior. Materials Research, 2015, 18, 698-705.  | 0.6 | 71        |
| 9  | Modification of Ti6Al4V implant surfaces by biocompatible TiO <sub>2</sub> /PCL hybrid layers prepared via sol-gel dip coating: Structural characterization, mechanical and corrosion behavior. Materials Science and Engineering C, 2017, 74, 501-507. | 3.8 | 71        |
| 10 | Sol-gel synthesis of SiO <sub>2</sub> -CaO-P <sub>2</sub> O <sub>5</sub> glasses: Influence of the heat treatment on their bioactivity and biocompatibility. Ceramics International, 2015, 41, 12578-12588.   | 2.3 | 64        |
| 11 | Investigation of the sample preparation and curing treatment effects on mechanical properties and bioactivity of silica rich metakaolin geopolymer. Materials Science and Engineering C, 2014, 36, 20-24.   | 3.8 | 62        |
| 12 | Influence of PCL on mechanical properties and bioactivity of ZrO <sub>2</sub> -based hybrid coatings synthesized by sol-gel dip coating technique. Materials Science and Engineering C, 2014, 39, 344-351.  | 3.8 | 62        |
| 13 | Silica-polyethylene glycol hybrids synthesized by sol-gel: Biocompatibility improvement of titanium implants by coating. Materials Science and Engineering C, 2015, 55, 118-125.  | 3.8 | 59        |
| 14 | Investigation on bioactivity, biocompatibility, thermal behavior and antibacterial properties of calcium silicate glass coatings containing Ag. Journal of Non-Crystalline Solids, 2015, 422, 16-22.  | 1.5 | 58        |
| 15 | Biological response of human mesenchymal stromal cells to titanium grade 4 implants coated with PCL/ZrO <sub>2</sub> hybrid materials synthesized by sol-gel route: in vitro evaluation. Materials Science and Engineering C, 2014, 45, 395-401.        | 3.8 | 55        |
| 16 | TiO <sub>2</sub> /PCL hybrid materials synthesized via sol-gel technique for biomedical applications. Materials Science and Engineering C, 2015, 47, 135-141.   | 3.8 | 55        |
| 17 | Advanced composites for hard-tissue engineering based on PCL/organic-inorganic hybrid fillers: From the design of 2D substrates to 3D rapid prototyped scaffolds. Polymer Composites, 2013, 34, 1413-1417.  | 2.3 | 49        |
| 18 | Biological evaluation of zirconia/PEG hybrid materials synthesized via sol-gel technique. Materials Science and Engineering C, 2014, 40, 253-259.   | 3.8 | 47        |

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|----|---|-----|-----------|
| 19 | Synthesis of SiO <sub>2</sub> and CaO rich calcium silicate systems via sol-gel process: Bioactivity, biocompatibility, and drug delivery tests. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 3087-3092.                         | 2.1 | 46        |
| 20 | Preparation, characterization, and biological properties of organic-inorganic nanocomposite coatings on titanium substrates prepared by sol-gel. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 392-399.                           | 2.1 | 46        |
| 21 | Structure and magnetic properties of SiO <sub>2</sub> /PCL novel sol-gel organic-inorganic hybrid materials. <i>Journal of Solid State Chemistry</i> , 2013, 203, 92-99.  | 1.4 | 44        |
| 22 | Sol-gel synthesis and characterization of SiO <sub>2</sub> /PCL hybrid materials containing quercetin as new materials for antioxidant implants. <i>Materials Science and Engineering C</i> , 2016, 58, 945-952.  | 3.8 | 44        |
| 23 | Geopolymers: An option for the valorization of incinerator bottom ash derived end of waste. <i>Ceramics International</i> , 2015, 41, 2116-2123.  | 2.3 | 42        |
| 24 | Surface Modifications for Implants Lifetime extension: An Overview of Sol-Gel Coatings. <i>Coatings</i> , 2020, 10, 589.  | 1.2 | 38        |
| 25 | Biocompatibility improvement of titanium implants by coating with hybrid materials synthesized by sol-gel technique. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, n/a-n/a.   | 2.1 | 35        |
| 26 | Coatings of titanium substrates with xCaO·(1-x)SiO <sub>2</sub> sol-gel materials: characterization, bioactivity and biocompatibility evaluation. <i>Materials Science and Engineering C</i> , 2016, 58, 846-851.   | 3.8 | 32        |
| 27 | Synthesis of SiO <sub>2</sub> system via sol-gel process: Biocompatibility tests with a fibroblast strain and release kinetics. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 1677-1680.  | 2.1 | 31        |
| 28 | Pure Al <sub>2</sub> O <sub>3</sub> ·2SiO <sub>2</sub> synthesized via a sol-gel technique as a raw material to replace metakaolin: Chemical and structural characterization and thermal behavior. <i>Ceramics International</i> , 2016, 42, 16303-16309. | 2.3 | 31        |
| 29 | Anti-inflammatory entrapment in polycaprolactone/silica hybrid material prepared by sol-gel route, characterization, bioactivity and in vitro release behavior. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2013, 11, 172-179.      | 0.7 | 25        |
| 30 | Synthesis of zirconia/polyethylene glycol hybrid materials by sol-gel processing and connections between structure and release kinetic of indomethacin. <i>Drug Delivery</i> , 2014, 21, 595-604.   | 2.5 | 24        |
| 31 | Sol-gel hybrid materials for aerospace applications: Chemical characterization and comparative investigation of the magnetic properties. <i>Acta Astronautica</i> , 2015, 117, 153-162.   | 1.7 | 24        |
| 32 | A metabolic profiling approach to an Italian sage leaf extract (SoA541) defines its antioxidant and anti-acetylcholinesterase properties. <i>Journal of Functional Foods</i> , 2017, 29, 1-9.   | 1.6 | 24        |
| 33 | Morphological and thermal characterization of zirconia/hydroxyapatite composites prepared via sol-gel for biomedical applications. <i>Ceramics International</i> , 2019, 45, 2835-2845.   | 2.3 | 23        |
| 34 | Modulation of indomethacin release from ZrO <sub>2</sub> /PCL hybrid multilayers synthesized via sol-gel dip coating. <i>Journal of Drug Delivery Science and Technology</i> , 2015, 26, 10-16.   | 1.4 | 22        |
| 35 | ZrO <sub>2</sub> /PEG hybrid nanocomposites synthesized via sol-gel: Characterization and evaluation of the magnetic properties. <i>Journal of Non-Crystalline Solids</i> , 2015, 413, 1-7.   | 1.5 | 22        |
| 36 | Al <sub>2</sub> O <sub>3</sub> ·2SiO <sub>2</sub> powders synthesized via sol-gel as pure raw material in geopolymer preparation. <i>Journal of the American Ceramic Society</i> , 2017, 100, 1919-1927.  | 1.9 | 22        |

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|----|--|-----|-----------|
| 37 | Thermal behavior and dehydration kinetic study of SiO <sub>2</sub> /PEG hybrid gel glasses. Polymer Engineering and Science, 2017, 57, 606-612.  | 1.5 | 22        |
| 38 | Surface modifications of titanium implants by coating with bioactive and biocompatible poly (̑-caprolactone)/SiO <sub>2</sub> hybrids synthesized via sol-gel. Arabian Journal of Chemistry, 2018, 11, 1126-1133.  | 2.3 | 22        |
| 39 | Synthesis, thermal behavior and physicochemical characterization of ZrO <sub>2</sub> /PEG inorganic/organic hybrid materials via sol-gel technique. Journal of Thermal Analysis and Calorimetry, 2017, 130, 535-540.   | 2.0 | 21        |
| 40 | Release Kinetics of Anti-inflammatory Drug, and Characterization and Bioactivity of SiO <sub>2</sub> +PCL Hybrid Material Synthesized by Sol-gel Processing. Journal of Applied Biomaterials and Functional Materials, 2014, 12, 218-227.                            | 0.7 | 17        |
| 41 | Entrapping quercetin in silica/polyethylene glycol hybrid materials: Chemical characterization and biocompatibility. Materials Science and Engineering C, 2016, 68, 205-212.   | 3.8 | 17        |
| 42 | Preparation of 0.7SiO <sub>2</sub> ·0.3CaO/PCL hybrid layers via sol-gel dip coating for the surface modification of titanium implants: characterization, bioactivity and biocompatibility evaluation. Journal of Sol-Gel Science and Technology, 2015, 76, 241-250. | 1.1 | 15        |
| 43 | PEG-based organic-inorganic hybrid coatings prepared by the sol-gel dip-coating process for biomedical applications. Polymer Engineering and Science, 2017, 57, 478-484.   | 1.5 | 15        |
| 44 | Chemical analysis and anti-proliferative activity of Campania Thymus Vulgaris essential oil. Journal of Essential Oil Research, 2017, 29, 461-470.   | 1.3 | 14        |
| 45 | Poly(̑-Caprolactone) Reinforced with Sol-Gel Synthesized Organic-Inorganic Hybrid Fillers as Composite Substrates for Tissue Engineering. Journal of Applied Biomaterials and Biomechanics, 2010, 8, 146-152.  | 0.4 | 13        |
| 46 | Response of SAOS-2 cells to simulated microgravity and effect of biocompatible sol-gel hybrid coatings. Acta Astronautica, 2016, 122, 237-242.   | 1.7 | 10        |
| 47 | Chemical and Biological Characterization of Geopolymers for Potential Application as Hard Tissue Prostheses. Advances in Science and Technology, 0, , .  | 0.2 | 7         |
| 48 | Mechanical Characterization of Hybrid (Organic-Inorganic) Geopolymers. Key Engineering Materials, 0, 569-570, 119-125.   | 0.4 | 7         |
| 49 | TiO <sub>2</sub> /PCL Hybrid Layers Prepared via Sol-Gel Dip Coating for the Surface Modification of Titanium Implants: Characterization and Bioactivity Evaluation. Applied Mechanics and Materials, 0, 760, 353-358.   | 0.2 | 6         |
| 50 | Thermal Behavior and Structural Study of SiO <sub>2</sub> /Poly(̑-caprolactone) Hybrids Synthesized via Sol-Gel Method. Materials, 2018, 11, 275.  | 1.3 | 6         |
| 51 | PCL loaded with sol-gel synthesized organic-inorganic hybrid fillers: From the analysis of 2D substrates to the design of 3D rapid prototyped composite scaffolds for tissue engineering. , 2012, , .  |     | 4         |
| 52 | Organic Inorganic Hybrid Materials Synthesized via Sol-gel for Controlled Drug Delivery. Macromolecular Symposia, 2020, 389, 1900059.  | 0.4 | 4         |
| 53 | Influence of the drying treatment on the performance of V-Nb mixed oxides catalysts synthesised via sol-gel. Journal of Non-Crystalline Solids, 2013, 380, 1-5.  | 1.5 | 3         |
| 54 | Sol-gel synthesis and characterization of SiO <sub>2</sub> /PEG hybrid materials containing quercetin as implants with antioxidant properties. AIP Conference Proceedings, 2016, , .   | 0.3 | 1         |

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|----|--|-----|-----------|
| 55 | Surface Modification of Implants by Sol-Gel Coating Technology: Advantages and Applications. , 2020, , .   |     | 1         |
| 56 | Bioactive Titania-Based Organic-Inorganic Hybrids Synthesized via Sol-Gel. Macromolecular Symposia, 2020, 389, 1900058.  | 0.4 | 1         |
| 57 | Improvement of the titanium implant biological properties by coating with poly ( $\mu$ -caprolactone)-based hybrid nanocomposites synthesized via sol-gel. AIP Conference Proceedings, 2016, , . | 0.3 | 0         |
| 58 | Sol-gel silica-based nanocomposites containing a high PEG amount: Chemical characterization and study of biological properties. AIP Conference Proceedings, 2016, , .                            | 0.3 | 0         |
| 59 | Magnetic properties of sol-gel hybrid materials for aerospace field. AIP Conference Proceedings, 2018, , .   | 0.3 | 0         |
| 60 | Preparation of sol-gel organic-inorganic hybrid coatings for controlled drug release. AIP Conference Proceedings, 2018, , .  | 0.3 | 0         |
| 61 | Preparation, microstructure and mechanical properties of geopolymer composites. AIP Conference Proceedings, 2018, , .  | 0.3 | 0         |
| 62 | New Strategies for the Development of Multifunctional Suture Threads. Macromolecular Symposia, 2021, 396, 2000315.   | 0.4 | 0         |