# Giuseppe Battaglia

List of Publications by Year
in descending order



| 128 | 9,976 | 28242 | 36008 |
|---|---|---|---|
| papers | citations | 55 h-index | 97 g-index |

| 163 | 163 | 163 | 11869 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Endocytosis at the nanoscale. Chemical Society Reviews, 2012, 41, 2718. | 18.7 | 786 |
| 2 | Mechanistic Insights for Block Copolymer Morphologies: How Do Worms Form Vesicles?. Journal of the American Chemical Society, 2011, 133, 16581-16587. | 6.6 | 708 |
| 3 | A ruthenium(II) polypyridyl complex for direct imaging of DNA structure in living cells. Nature Chemistry, 2009, 1, 662-667. | 6.6 | 436 |
| 4 | Block copolymer nanostructures. Nano Today, 2008, 3, 38-46. | 6.2 | 383 |
| 5 | Polymersomes: nature inspired nanometer sized compartments. Journal of Materials Chemistry, 2009, 19, 3576. | 6.7 | 382 |
| 6 | Bilayers and Interdigitation in Block Copolymer Vesicles. Journal of the American Chemical Society, 2005, 127, 8757-8764. | 6.6 | 288 |
| 7 | Synthetic Bioâ€nanoreactor: Mechanical and Chemical Control of Polymersome Membrane Permeability. Angewandte Chemie - International Edition, 2012, 51, 4448-4451. | 7.2 | 246 |
| 8 | Controlling Cellular Uptake by Surface Chemistry, Size, and Surface Topology at the Nanoscale. Small, 2009, 5, 2424-2432. | 5.2 | 220 |
| 9 | Chemotactic synthetic vesicles: Design and applications in blood-brain barrier crossing. Science Advances, 2017, 3, e1700362. | 4.7 | 215 |
| 10 | Templated formation of giant polymer vesicles with controlled size distributions. Nature Materials, 2009, 8, 507-511. | 13.3 | 197 |
| 11 | Facile Synthesis of Methacrylic ABC Triblock Copolymer Vesicles by RAFT Aqueous Dispersion Polymerization. Macromolecules, 2012, 45, 5081-5090. | 2.2 | 181 |
| 12 | Exploiting Endocytosis for Nanomedicines. Cold Spring Harbor Perspectives in Biology, 2013, 5, a016980-a016980. | 2.3 | 173 |
| 13 | Purification of Nanoparticles by Size and Shape. Scientific Reports, 2016, 6, 27494. | 1.6 | 169 |
| 14 | 3D surface topology guides stem cell adhesion and differentiation. Biomaterials, 2015, 52, 140-147. | 5.7 | 165 |
| 15 | Non-cytotoxic polymer vesicles for rapid and efficient intracellular delivery. Faraday Discussions, 2008, 139, 143. | 1.6 | 162 |
| 16 | Controlling Polymersome Surface Topology at the Nanoscale by Membrane Confined Polymer/Polymer Phase Separation. ACS Nano, 2011, 5, 1775-1784. | 7.3 | 154 |
| 17 | The evolution of vesicles from bulk lamellarÂgels. Nature Materials, 2005, 4, 869-876. | 13.3 | 138 |
| 18 | iRGD peptide conjugation potentiates intraperitoneal tumor delivery of paclitaxel with polymersomes. Biomaterials, 2016, 104, 247-257. | 5.7 | 123 |

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|---|---|---|---|
| 19 | Polymersome-Mediated Delivery of Combination Anticancer Therapy to Head and Neck Cancer Cells: 2D and 3D in Vitro Evaluation. Molecular Pharmaceutics, 2014, 11, 1176-1188. | 2.3 | 122 |
| 20 | Targeting the endoplasmic reticulum with a membrane-interactive luminescent ruthenium(ii) polypyridyl complex. Chemical Science, 2013, 4, 4512. | 3.7 | 120 |
| 21 | Nile Blue-Based Nanosized pH Sensors for Simultaneous Far-Red and Near-Infrared Live Bioimaging. Journal of the American Chemical Society, 2013, 135, 14863-14870. | 6.6 | 119 |
| 22 | Novel aspects of encapsulation and delivery using polymersomes. Current Opinion in Pharmacology, 2014, 18, 104-111. | 1.7 | 114 |
| 23 | LRP-1-mediated intracellular antibody delivery to the Central Nervous System. Scientific Reports, 2015, 5, 11990. | 1.6 | 113 |
| 24 | Pathways of Polymeric Vesicle Formation. Journal of Physical Chemistry B, 2006, 110, 10272-10279. | 1.2 | 105 |
| 25 | Transdermal drug delivery: from micro to nano. Nanoscale, 2012, 4, 1881. | 2.8 | 105 |
| 26 | Effect of pH and Temperature on PMPCâ€“PDPA Copolymer Self-Assembly. Macromolecules, 2013, 46, 1400-1407. | 2.2 | 104 |
| 27 | Polymeric Vesicle Permeability:Â A Facile Chemical Assay. Langmuir, 2006, 22, 4910-4913. | 1.6 | 101 |
| 28 | Encapsulation of Biomacromolecules within Polymersomes by Electroporation. Angewandte Chemie - International Edition, 2012, 51, 11122-11125. | 7.2 | 101 |
| 29 | Modelling the Transport of Nanoparticles under Blood Flow using an Agent-based Approach. Scientific Reports, 2015, 5, 10649. | 1.6 | 101 |
| 30 | Efficient Encapsulation of Plasmid DNA in pHâ€Sensitive PMPCâ€“PDPA Polymersomes: Study of the Effect of PDPA Block Length on Copolymerâ€“DNA Binding Affinity. Macromolecular Bioscience, 2010, 10, 513-530. | 2.1 | 99 |
| 31 | How Does Cross-Linking Affect the Stability of Block Copolymer Vesicles in the Presence of Surfactant?. Langmuir, 2012, 28, 1196-1205. | 1.6 | 92 |
| 32 | Biomimetic Hybrid Nanocontainers with Selective Permeability. Angewandte Chemie - International Edition, 2016, 55, 11106-11109. | 7.2 | 92 |
| 33 | pH-Sensitive Tubular Polymersomes: Formation and Applications in Cellular Delivery. ACS Nano, 2014, 8, 4650-4661. | 7.3 | 91 |
| 34 | Tailoring Macromolecular Expression at Polymersome Surfaces. Advanced Functional Materials, 2009, 19, 2906-2914. | 7.8 | 88 |
| 35 | Ruthenium(II) Metalloâ€intercalators: DNA Imaging and Cytotoxicity. ChemBioChem, 2011, 12, 877-880. | 1.3 | 88 |
| 36 | Conformation of Poly(methacrylic acid) Chains in Dilute Aqueous Solution. Macromolecules, 2008, 41, 2203-2211. | 2.2 | 85 |

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| 37 | Enhanced drug delivery to melanoma cells using PMPC-PDPA polymersomes. Cancer Letters, 2013, 334, 328-337. | 3.2 | 81 |
| 38 | Optimised and Rapid Pre-clinical Screening in the SOD1G93A Transgenic Mouse Model of Amyotrophic Lateral Sclerosis (ALS). PLoS ONE, 2011, 6, e23244. | 1.1 | 80 |
| 39 | Enhanced Fluorescence Imaging of Live Cells by Effective Cytosolic Delivery of Probes. PLoS ONE, 2010, 5, e10459. | 1.1 | 80 |
| 40 | Stimuli-responsive polymeric prodrug-based nanomedicine delivering nifuroxazide and doxorubicin against primary breast cancer and pulmonary metastasis. Journal of Controlled Release, 2020, 318, 124-135. | 4.8 | 79 |
| 41 | Localization matters: a nuclear targeting two-photon absorption iridium complex in photodynamic therapy. Chemical Communications, 2017, 53, 3303-3306. | 2.2 | 77 |
| 42 | pH controlled assembly of a polybutadieneâ€“poly(methacrylic acid) copolymer in water: packing considerations and kinetic limitations. Soft Matter, 2009, 5, 1674. | 1.2 | 72 |
| 43 | The effect of interactions on the cellular uptake of nanoparticles. Physical Biology, 2011, 8, 046002. | 0.8 | 70 |
| 44 | Polymersomeâ€mediated intracellular delivery of antibiotics to treat Porphyromonas gingivalis â€infected oral epithelial cells. FASEB Journal, 2013, 27, 4455-4465. | 0.2 | 70 |
| 45 | Paclitaxel-Loaded Polymersomes for Enhanced Intraperitoneal Chemotherapy. Molecular Cancer Therapeutics, 2016, 15, 670-679. | 1.9 | 68 |
| 46 | Fully synthetic polymer vesicles for intracellular delivery of antibodies in live cells. FASEB Journal, 2013, 27, 98-108. | 0.2 | 67 |
| 47 | 3D Surface Functionalization of Emulsion-Templated Polymeric Foams. Macromolecules, 2014, 47, 7091-7098. | 2.2 | 67 |
| 48 | Diffusion Studies of Nanometer Polymersomes Across Tissue Engineered Human Oral Mucosa. Pharmaceutical Research, 2009, 26, 1718-1728. | 1.7 | 66 |
| 49 | Cell Instructive Microporous Scaffolds through Interface Engineering. Journal of the American Chemical Society, 2012, 134, 20103-20109. | 6.6 | 66 |
| 50 | Polymersomes and their applications in cancer delivery and therapy. Nanomedicine, 2015, 10, 2757-2780. | 1.7 | 65 |
| 51 | Biocompatible pH-responsive nanoparticles with a core-anchored multilayer shell of triblock copolymers for enhanced cancer therapy. Journal of Materials Chemistry B, 2017, 5, 4421-4425. | 2.9 | 64 |
| 52 | Polymersome production on a microfluidic platform using pH sensitive block copolymers. Lab on A Chip, 2010, 10, 1922. | 3.1 | 62 |
| 53 | Self-Assembly of Amphiphilic Block Copolypeptoids â€“ Micelles, Worms and Polymersomes. Scientific Reports, 2016, 6, 33491. | 1.6 | 61 |
| 54 | Effect of Amphiphile Size on the Transformation from a Lyotropic Gel to a Vesicular Dispersion. Macromolecules, 2006, 39, 798-805. | 2.2 | 59 |

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| 55 | Polymersomes: A Synthetic Biological Approach to Encapsulation and Delivery. Advances in Polymer Science, 2010, , 115-154. | 0.4 | 57 |
| 56 | Molecular engineering of polymersome surface topology. Science Advances, 2016, 2, e1500948. | 4.7 | 56 |
| 57 | Internalization and biodistribution of polymersomes into oral squamous cell carcinoma cells in vitro and in vivo. Nanomedicine, 2010, 5, 1025-1036. | 1.7 | 49 |
| 58 | Thiol-Functionalized Block Copolymer Vesicles. ACS Macro Letters, 2012, 1, 1041-1045. | 2.3 | 47 |
| 59 | Polymersomes Eradicating Intracellular Bacteria. ACS Nano, 2020, 14, 8287-8298. | 7.3 | 47 |
| 60 | Neuron-Like Tubular Membranes Made of Diblock Copolymer Amphiphiles. Angewandte Chemie - International Edition, 2006, 45, 2052-2056. | 7.2 | 46 |
| 61 | Controlling Surface Topology and Functionality of Electrospun Fibers on the Nanoscale using Amphiphilic Block Copolymers To Direct Mesenchymal Progenitor Cell Adhesion. Biomacromolecules, 2015, 16, 66-75. | 2.6 | 46 |
| 62 | A Selfâ€Assembled Metallomacrocycle Singlet Oxygen Sensitizer for Photodynamic Therapy. Chemistry - A European Journal, 2016, 22, 5996-6000. | 1.7 | 42 |
| 63 | Polymersomes hydrophilic brush scaling relations. Soft Matter, 2009, 5, 3607. | 1.2 | 41 |
| 64 | On the shuttling across the blood-brain barrier via tubule formation: Mechanism and cargo avidity bias. Science Advances, 2020, 6, . | 4.7 | 41 |
| 65 | Synthesis of well-defined glycopolymers and some studies of their aqueous solution behaviour. Faraday Discussions, 2008, 139, 359. | 1.6 | 39 |
| 66 | Nanoscopic mechanical anisotropy in hydrogel surfaces. Soft Matter, 2010, 6, 4466. | 1.2 | 39 |
| 67 | Pericytes from Mesenchymal Stem Cells as a model for the blood-brain barrier. Scientific Reports, 2017, 7, 39676. | 1.6 | 39 |
| 68 | Live Cell Luminescence Imaging As a Function of Delivery Mechanism. ChemBioChem, 2011, 12, 548-551. | 1.3 | 38 |
| 69 | Facile synthesis of thiol-functionalized amphiphilic polylactideâ€“methacrylic diblock copolymers. Polymer Chemistry, 2014, 5, 1405-1417. | 1.9 | 38 |
| 70 | Live cell imaging of membrane / cytoskeleton interactions and membrane topology. Scientific Reports, 2014, 4, 6056. | 1.6 | 37 |
| 71 | Polypyrrole and polyaniline nanocomposites with high photothermal conversion efficiency. Soft Matter, 2020, 16, 4569-4573. | 1.2 | 37 |
| 72 | Controlling Fusion and Aggregation in Polymersome Dispersions. Macromolecular Rapid Communications, 2008, 29, 1855-1860. | 2.0 | 36 |

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| 73 | Lamellarsomes: metastable polymeric multilamellar aggregates. Soft Matter, 2007, 3, 470-475. | 1.2 | 35 |
| 74 | Stability of polymersomes prepared by size exclusion chromatography and extrusion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 739-746. | 2.3 | 35 |
| 75 | Thermosensitive nanocomposite gel for intra-tumoral two-photon photodynamic therapy. Journal of Controlled Release, 2019, 298, 99-109. | 4.8 | 35 |
| 76 | Molecular bionics â€“ engineering biomaterials at the molecular level using biological principles. Biomaterials, 2019, 192, 26-50. | 5.7 | 35 |
| 77 | Cellular Interactions with Photo-Cross-Linked and pH-Sensitive Polymersomes: Biocompatibility and Uptake Studies. Biomacromolecules, 2012, 13, 4188-4195. | 2.6 | 33 |
| 78 | Designing peptide nanoparticles for efficient brain delivery. Advanced Drug Delivery Reviews, 2020, 160, 52-77. | 6.6 | 33 |
| 79 | Combinatorial entropy behaviour leads to range selective binding in ligand-receptor interactions. Nature Communications, 2020, 11, 4836. | 5.8 | 33 |
| 80 | The Development and Characterization of an Organotypic Tissue-Engineered Human Esophageal Mucosal Model. Tissue Engineering - Part A, 2010, 16, 1053-1064. | 1.6 | 30 |
| 81 | Bottom-Up Evolution of Vesicles from Disks to High-Genus Polymersomes. IScience, 2018, 7, 132-144. | 1.9 | 29 |
| 82 | Inherently fluorescent polyaniline nanoparticles in a dynamic landscape. Reactive and Functional Polymers, 2012, 72, 185-197. | 2.0 | 28 |
| 83 | Synthesis of an Amphiphilic Miktoarm Star Terpolymer for Self-Assembly into Patchy Polymersomes. ACS Macro Letters, 2016, 5, 351-354. | 2.3 | 27 |
| 84 | Targeting Neutrophilic Inflammation Using Polymersome-Mediated Cellular Delivery. Journal of Immunology, 2017, 198, 3596-3604. | 0.4 | 27 |
| 85 | Nanoscale detection of metal-labeled copolymers in patchy polymersomes. Polymer Chemistry, 2015, 6, 2065-2068. | 1.9 | 26 |
| 86 | Wet Nanoscale Imaging and Testing of Polymersomes. Small, 2011, 7, 2010-2015. | 5.2 | 25 |
| 87 | Real-time imaging of polymersome nanoparticles in zebrafish embryos engrafted with melanoma cancer cells: Localization, toxicity and treatment analysis. EBioMedicine, 2020, 58, 102902. | 2.7 | 25 |
| 88 | On the design of precision nanomedicines. Science Advances, 2020, 6, eaat0919. | 4.7 | 24 |
| 89 | Macrophage Targeting pH Responsive Polymersomes for Glucocorticoid Therapy. Pharmaceutics, 2019, 11, 614. | 2.0 | 22 |
| 90 | Diffusioosmotic and convective flows induced by a nonelectrolyte concentration gradient. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25263-25271. | 3.3 | 22 |

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| 91 | Translocation of flexible polymersomes across pores at the nanoscale. Biomaterials Science, 2014, 2, 680-692. | 2.6 | 20 |
| 92 | Metabolically Active, Fully Hydrolysable Polymersomes. Angewandte Chemie - International Edition, 2019, 58, 4581-4586. | 7.2 | 20 |
| 93 | A Cyclometalated Iridium (III) Complex as a Microtubule Probe for Correlative Superâ€Resolution Fluorescence and Electron Microscopy. Advanced Materials, 2020, 32, e2003901. | 11.1 | 20 |
| 94 | Inspired by nature: fundamentals in nanotechnology design to overcome biological barriers. Therapeutic Delivery, 2013, 4, 27-43. | 1.2 | 19 |
| 95 | Comparison of metal free polymerâ€“dye conjugation strategies in protic solvents. Polymer Chemistry, 2016, 7, 3046-3055. | 1.9 | 19 |
| 96 | Zn<sup>II</sup> Complexes for Bioimaging and Correlated Applications. Chemistry - an Asian Journal, 2019, 14, 509-526. | 1.7 | 19 |
| 97 | E-beam irradiation and UV photocrosslinking of microemulsion-laden poly(N-vinyl-2-pyrrolidone) hydrogels for â€œin situâ€•encapsulation of volatile hydrophobic compounds. Polymer Chemistry, 2011, 2, 192-202. | 1.9 | 18 |
| 98 | In situ formation of magnetopolymersomes via electroporation for MRI. Scientific Reports, 2015, 5, 14311. | 1.6 | 18 |
| 99 | LRP-1 functionalized polymersomes enhance the efficacy of carnosine in experimental stroke. Scientific Reports, 2020, 10, 699. | 1.6 | 18 |
| 100 | NF-ÎºB hijacking theranostic Pt(II) complex in cancer therapy. Theranostics, 2019, 9, 2158-2166. | 4.6 | 17 |
| 101 | One-Pot Synthesis of Oxidation-Sensitive Supramolecular Gels and Vesicles. Biomacromolecules, 2021, 22, 5052-5064. | 2.6 | 16 |
| 102 | <scp>l</scp>-Asparaginase Encapsulation into Asymmetric Permeable Polymersomes. ACS Macro Letters, 2020, 9, 1471-1477. | 2.3 | 15 |
| 103 | Biomimetic Hybrid Nanocontainers with Selective Permeability. Angewandte Chemie, 2016, 128, 11272-11275. | 1.6 | 14 |
| 104 | Homopolymer Induced Aggregation of Poly(ethylene oxide)<sub>n</sub>-b-poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 1.6 | 13 |
| 105 | The Role of BAR Proteins and the Glycocalyx in Brain Endothelium Transcytosis. Cells, 2020, 9, 2685. | 1.8 | 10 |
| 106 | Helium ion microscopy based wall thickness and surface roughness analysis of polymer foams obtained from high internal phase emulsion. Ultramicroscopy, 2014, 139, 13-19. | 0.8 | 9 |
| 107 | Prostate cancer cell-specific BikDDA delivery by targeted polymersomes. Applied Nanoscience (Switzerland), 2020, 10, 3389-3401. | 1.6 | 9 |
| 108 | Polymersomes-Mediated Delivery of Fluorescent Probes for Targeted and Long-Term Imaging in Live Cell Microscopy. Methods in Molecular Biology, 2013, 991, 343-351. | 0.4 | 8 |

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| 109 | Combinatorial Intracellular Delivery Screening of Anticancer Drugs. Molecular Pharmaceutics, 2020, 17, 4709-4714. | 2.3 | 8 |
| 110 | Amphiphilic Histidine-Based Oligopeptides Exhibit pH-Reversible Fibril Formation. ACS Macro Letters, 2021, 10, 984-989. | 2.3 | 8 |
| 111 | A micro-incubator for cell and tissue imaging. BioTechniques, 2010, 48, 135-138. | 0.8 | 7 |
| 112 | Tuning cell behavior with nanoparticle shape. PLoS ONE, 2020, 15, e0240197. | 1.1 | 7 |
| 113 | Tracking Nanoparticles in Three-Dimensional Tissue-Engineered Models Using Confocal Laser Scanning Microscopy. Methods in Molecular Biology, 2011, 695, 41-51. | 0.4 | 6 |
| 114 | Cellular delivery of antibodies: effective targeted subcellular imaging and new therapeutic tool. Nature Precedings, 0, , . | 0.1 | 5 |
| 115 | Separating Extreme pH Gradients Using Amphiphilic Copolymer Membranes. ChemPhysChem, 2018, 19, 1987-1989. | 1.0 | 4 |
| 116 | Radiation synthesis of polyaspartamide functionalised hydrogels for sustained release of fragrances. Colloid and Polymer Science, 2005, 284, 151-159. | 1.0 | 3 |
| 117 | The Big Question. World Policy Journal, 2011, 28, 3-7. | 0.2 | 3 |
| 118 | Metabolically Active, Fully Hydrolysable Polymersomes. Angewandte Chemie, 2019, 131, 4629-4634. | 1.6 | 3 |
| 119 | ERÎ±-independent NRF2-mediated immunoregulatory activity of tamoxifen. Biomedicine and Pharmacotherapy, 2021, 144, 112274. | 2.5 | 3 |
| 120 | Syndapin-2 mediated transcytosis of amyloid-Î² across the bloodâ€“brain barrier. Brain Communications, 2022, 4, fcac039. | 1.5 | 3 |
| 121 | A Multiscale Study of Phosphorylcholine Driven Cellular Phenotypic Targeting. ACS Central Science, 2022, 8, 891-904. | 5.3 | 3 |
| 122 | The development of anisotropic behaviours of 3T3 fibroblasts on microgrooved patterns. European Physical Journal E, 2011, 34, 23. | 0.7 | 1 |
| 123 | Novel Class of Probes for Multimodal Microscopy of Cells. Microscopy and Microanalysis, 2020, 26, 1596-1597. | 0.2 | 1 |
| 124 | Surface Chemistry of Protein Adhesion Domains on Diblock Copolymer Films Characterized by Chemical Force Spectroscopy Mapping Technique. Biophysical Journal, 2012, 102, 178a. | 0.2 | 0 |
| 125 | Abstract 3279: Effects of the isoforms of the angiogenic growth factor VEGF on neo-vascularization and tumor response to the tyrosine kinase inhibitor cediranib. , 2011, , . | | 0 |
| 126 | Polymersomes-mediated siRNA delivery for states of hormone excess. Endocrine Abstracts, 0, , 1-1. | 0.0 | 0 |

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| 127 | Directing Stem Cell Fate in 3D Through Cell Inert and Adhesive Diblock Copolymer Domains. , 2013, , . | | 0 |
| 128 | Targeting Macrophages and Synoviocytes Intracellular Milieu to Augment Antiâ€Inflammatory Drug Potency. Advanced Therapeutics, 2022, 5, . | 1.6 | 0 |