

Aitziber Cortajarena

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|--------------------|-------------------------|----------------|-----------------|
| 110 papers | 2,812 citations | 31 h-index | 48 g-index |
| 117 ext. papers | 3,296 ext. citations | 7.3 avg, IF | 5.35 L-index |

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 110 | Efficient treatment of breast cancer xenografts with multifunctionalized iron oxide nanoparticles combining magnetic hyperthermia and anti-cancer drug delivery. <i>Breast Cancer Research</i> , 2015 , 17, 66 | 8.3 | 183 |
| 109 | Detection of amyloid fibrils in Parkinson's disease using plasmonic chirality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3225-3230 | 11.5 | 124 |
| 108 | A new folding paradigm for repeat proteins. <i>Journal of the American Chemical Society</i> , 2005 , 127, 10188-90 | 10.4 | 122 |
| 107 | Singlet oxygen generation by the genetically encoded tag miniSOG. <i>Journal of the American Chemical Society</i> , 2013 , 135, 9564-7 | 16.4 | 107 |
| 106 | Ligand binding by repeat proteins: natural and designed. <i>Current Opinion in Structural Biology</i> , 2008 , 18, 507-15 | 8.1 | 96 |
| 105 | Designed TPR modules as novel anticancer agents. <i>ACS Chemical Biology</i> , 2008 , 3, 161-6 | 4.9 | 87 |
| 104 | Ligand binding by TPR domains. <i>Protein Science</i> , 2006 , 15, 1193-8 | 6.3 | 84 |
| 103 | Structure and stability of designed TPR protein superhelices: unusual crystal packing and implications for natural TPR proteins. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2007 , 63, 800-11 | | 83 |
| 102 | Multifunctionalized iron oxide nanoparticles for selective drug delivery to CD44-positive cancer cells. <i>Nanotechnology</i> , 2016 , 27, 065103 | 3.4 | 82 |
| 101 | Engineering Iron Oxide Nanoparticles for Clinical Settings. <i>Nanobiomedicine</i> , 2014 , 1, 2 | 4.8 | 76 |
| 100 | Antibacterial Activity of DNA-Stabilized Silver Nanoclusters Tuned by Oligonucleotide Sequence. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 10147-54 | 9.5 | 71 |
| 99 | Glycophorin as a receptor for Escherichia coli alpha-hemolysin in erythrocytes. <i>Journal of Biological Chemistry</i> , 2001 , 276, 12513-9 | 5.4 | 65 |
| 98 | Protein design to understand peptide ligand recognition by tetratricopeptide repeat proteins. <i>Protein Engineering, Design and Selection</i> , 2004 , 17, 399-409 | 1.9 | 63 |
| 97 | Multifunctionalized iron oxide nanoparticles for selective targeting of pancreatic cancer cells. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017 , 1861, 1597-1605 | 4 | 50 |
| 96 | Functionalized magnetic nanowires for chemical and magneto-mechanical induction of cancer cell death. <i>Scientific Reports</i> , 2016 , 6, 35786 | 4.9 | 47 |
| 95 | Multifunctionalization of magnetic nanoparticles for controlled drug release: a general approach. <i>European Journal of Medicinal Chemistry</i> , 2014 , 82, 355-62 | 6.8 | 45 |
| 94 | A Simple Approach to Design Proteins for the Sustainable Synthesis of Metal Nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 6214-6219 | 16.4 | 43 |

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|----|---|------|----|
| 93 | Bioorthogonal Catalytic Activation of Platinum and Ruthenium Anticancer Complexes by FAD and Flavoproteins. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3143-3147 | 16.4 | 43 |
| 92 | Honeycomb patterned surfaces functionalized with polypeptide sequences for recognition and selective bacterial adhesion. <i>Biomaterials</i> , 2013 , 34, 1453-60 | 15.6 | 42 |
| 91 | Screening libraries to identify proteins with desired binding activities using a split-GFP reassembly assay. <i>ACS Chemical Biology</i> , 2010 , 5, 553-62 | 4.9 | 42 |
| 90 | Designed proteins to modulate cellular networks. <i>ACS Chemical Biology</i> , 2010 , 5, 545-52 | 4.9 | 41 |
| 89 | Modulating repeat protein stability: the effect of individual helix stability on the collective behavior of the ensemble. <i>Protein Science</i> , 2011 , 20, 1042-7 | 6.3 | 40 |
| 88 | Consensus design as a tool for engineering repeat proteins. <i>Methods in Molecular Biology</i> , 2006 , 340, 151-70 | 1.4 | 40 |
| 87 | A receptor-binding region in Escherichia coli alpha-haemolysin. <i>Journal of Biological Chemistry</i> , 2003 , 278, 19159-63 | 5.4 | 40 |
| 86 | Extracellular heat shock protein 90 binding to TGF β receptor I participates in TGF β -mediated collagen production in myocardial fibroblasts. <i>Cellular Signalling</i> , 2016 , 28, 1563-79 | 4.9 | 39 |
| 85 | Crystal structure of a designed tetratricopeptide repeat module in complex with its peptide ligand. <i>FEBS Journal</i> , 2010 , 277, 1058-66 | 5.7 | 39 |
| 84 | Calorimetric study of a series of designed repeat proteins: modular structure and modular folding. <i>Protein Science</i> , 2011 , 20, 336-40 | 6.3 | 35 |
| 83 | BSA-coated magnetic nanoparticles for improved therapeutic properties. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 6239-6247 | 7.3 | 34 |
| 82 | Non-random-coil behavior as a consequence of extensive PPII structure in the denatured state. <i>Journal of Molecular Biology</i> , 2008 , 382, 203-12 | 6.5 | 34 |
| 81 | Designed Modular Proteins as Scaffolds To Stabilize Fluorescent Nanoclusters. <i>Biomacromolecules</i> , 2015 , 16, 3836-44 | 6.9 | 33 |
| 80 | Nanostructured functional films from engineered repeat proteins. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20130051 | 4.1 | 32 |
| 79 | Mapping the energy landscape of repeat proteins using NMR-detected hydrogen exchange. <i>Journal of Molecular Biology</i> , 2008 , 379, 617-26 | 6.5 | 30 |
| 78 | White-emitting Protein-Metal Nanocluster Phosphors for Highly Performing Biohybrid Light-Emitting Diodes. <i>Nano Letters</i> , 2020 , 20, 2710-2716 | 11.5 | 27 |
| 77 | Membrane insertion of Escherichia coli alpha-hemolysin is independent from membrane lysis. <i>Journal of Biological Chemistry</i> , 2006 , 281, 5461-7 | 5.4 | 27 |
| 76 | Controlled nanometric fibers of self-assembled designed protein scaffolds. <i>Nanoscale</i> , 2014 , 6, 10982-8 | 7.7 | 25 |

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| 75 | Toward Bioelectronic Nanomaterials: Photoconductivity in Protein-Borphyrin Hybrids Wrapped around SWCNT. <i>Advanced Functional Materials</i> , 2018 , 28, 1704031 | 15.6 | 23 |
| 74 | Repeat protein scaffolds: ordering photo- and electroactive molecules in solution and solid state. <i>Chemical Science</i> , 2016 , 7, 4842-4847 | 9.4 | 23 |
| 73 | The phenotype of target pancreatic cancer cells influences cell death by magnetic hyperthermia with nanoparticles carrying gemcitabine and the pseudo-peptide NucAnt. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019 , 20, 101983 | 6 | 22 |
| 72 | Assessing the potential of photosensitizing flavoproteins as tags for correlative microscopy. <i>Chemical Communications</i> , 2016 , 52, 8405-8 | 5.8 | 22 |
| 71 | Antimicrobial 3D Porous Scaffolds Prepared by Additive Manufacturing and Breath Figures. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 37454-37462 | 9.5 | 22 |
| 70 | Highly Efficient Antibacterial Surfaces Based on Bacterial/Cell Size Selective Microporous Supports. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 44270-44280 | 9.5 | 22 |
| 69 | Preparation of Biodegradable Cationic Polycarbonates and Hydrogels through the Direct Polymerization of Quaternized Cyclic Carbonates. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1567-1575 | 5.5 | 21 |
| 68 | Smart pH-Responsive Antimicrobial Hydrogel Scaffolds Prepared by Additive Manufacturing.. <i>ACS Applied Bio Materials</i> , 2018 , 1, 1337-1347 | 4.1 | 21 |
| 67 | Repeat motions and backbone flexibility in designed proteins with different numbers of identical consensus tetratricopeptide repeats. <i>Biochemistry</i> , 2006 , 45, 12175-83 | 3.2 | 20 |
| 66 | Iron Oxide Nanoparticles as Carriers for DOX and Magnetic Hyperthermia after Intratumoral Application into Breast Cancer in Mice: Impact and Future Perspectives. <i>Nanomaterials</i> , 2020 , 10, | 5.4 | 19 |
| 65 | Iron-Based Core-Shell Nanowires for Combinatorial Drug Delivery and Photothermal and Magnetic Therapy. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 43976-43988 | 9.5 | 19 |
| 64 | Formation of multigradient porous surfaces for selective bacterial entrapment. <i>Biomacromolecules</i> , 2014 , 15, 3338-48 | 6.9 | 19 |
| 63 | Poly(ethylene oxide) functionalized polyimide-based microporous films to prevent bacterial adhesion. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 9716-24 | 9.5 | 18 |
| 62 | Site-specific protein double labeling by expressed protein ligation: applications to repeat proteins. <i>Organic and Biomolecular Chemistry</i> , 2012 , 10, 273-80 | 3.9 | 18 |
| 61 | Flavin Bioorthogonal Photocatalysis Toward Platinum Substrates. <i>ACS Catalysis</i> , 2020 , 10, 187-196 | 13.1 | 17 |
| 60 | Bioorthogonal Catalytic Activation of Platinum and Ruthenium Anticancer Complexes by FAD and Flavoproteins. <i>Angewandte Chemie</i> , 2018 , 130, 3197-3201 | 3.6 | 16 |
| 59 | Interdomain Ca(2+) effects in Escherichia coli alpha-haemolysin: Ca(2+) binding to the C-terminal domain stabilizes both C- and N-terminal domains. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010 , 1798, 1225-33 | 3.8 | 16 |
| 58 | Long-living and highly efficient bio-hybrid light-emitting diodes with zero-thermal-quenching biophosphors. <i>Nature Communications</i> , 2020 , 11, 879 | 17.4 | 16 |

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| 57 | Elucidation of the Physicochemical Properties Ruling the Colloidal Stability of Iron Oxide Nanoparticles under Physiological Conditions. <i>ChemNanoMat</i> , 2017 , 3, 183-189 | 3.5 | 15 |
| 56 | Probing the Molecular Origin of Native-State Flexibility in Repeat Proteins. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10367-73 | 16.4 | 13 |
| 55 | Magnetic core-shell nanowires as MRI contrast agents for cell tracking. <i>Journal of Nanobiotechnology</i> , 2020 , 18, 42 | 9.4 | 13 |
| 54 | Fabrication of biocompatible and efficient antimicrobial porous polymer surfaces by the Breath Figures approach. <i>Journal of Colloid and Interface Science</i> , 2018 , 513, 820-830 | 9.3 | 13 |
| 53 | Assembly of designed protein scaffolds into monolayers for nanoparticle patterning. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016 , 141, 93-101 | 6 | 13 |
| 52 | Proteins are Solitary! Pathways of Protein Folding and Aggregation in Protein Mixtures. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 4800-4804 | 6.4 | 13 |
| 51 | Biogenic fluorescent protein silk fibroin phosphors for high performing light-emitting diodes. <i>Materials Horizons</i> , 2020 , 7, 1790-1800 | 14.4 | 13 |
| 50 | Designed Repeat Proteins as Building Blocks for Nanofabrication. <i>Advances in Experimental Medicine and Biology</i> , 2016 , 940, 61-81 | 3.6 | 13 |
| 49 | Hydrogels with Modulated Ionic Load for Mammalian Cell Harvesting with Reduced Bacterial Adhesion. <i>Biomacromolecules</i> , 2017 , 18, 1521-1531 | 6.9 | 12 |
| 48 | Biomolecular templating of functional hybrid nanostructures using repeat protein scaffolds. <i>Biochemical Society Transactions</i> , 2015 , 43, 825-31 | 5.1 | 12 |
| 47 | Patterning of individual Staphylococcus aureus bacteria onto photogenerated polymeric surface structures. <i>Polymer Chemistry</i> , 2015 , 6, 2677-2684 | 4.9 | 12 |
| 46 | His-859 is an essential residue for the activity and pH dependence of Escherichia coli RTX toxin alpha-hemolysin. <i>Journal of Biological Chemistry</i> , 2002 , 277, 23223-9 | 5.4 | 12 |
| 45 | Engineered protein-based functional nanopatterned materials for bio-optical devices. <i>Nanoscale Advances</i> , 2019 , 1, 3980-3991 | 5.1 | 11 |
| 44 | Fabrication of Functional Wrinkled Interfaces from Polymer Blends: Role of the Surface Functionality on the Bacterial Adhesion. <i>Polymers</i> , 2014 , 6, 2845-2861 | 4.5 | 11 |
| 43 | Protein-based functional hybrid bionanomaterials by bottom-up approaches. <i>Current Opinion in Structural Biology</i> , 2020 , 63, 74-81 | 8.1 | 10 |
| 42 | Sensors Based on Metal Nanoclusters Stabilized on Designed Proteins. <i>Biosensors</i> , 2018 , 8, | 5.9 | 10 |
| 41 | Repeat proteins as versatile scaffolds for arrays of redox-active FeS clusters. <i>Chemical Communications</i> , 2019 , 55, 3319-3322 | 5.8 | 9 |
| 40 | Cancer Nano-Immunotherapy from the Injection to the Target: The Role of Protein Corona. <i>International Journal of Molecular Sciences</i> , 2020 , 21, | 6.3 | 8 |

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| 39 | Self-assembly of repeat proteins: Concepts and design of new interfaces. <i>Journal of Structural Biology</i> , 2018 , 201, 118-129 | 3.4 | 8 |
| 38 | An experimental and computational framework for engineering multifunctional nanoparticles: designing selective anticancer therapies. <i>Nanoscale</i> , 2017 , 9, 13760-13771 | 7.7 | 8 |
| 37 | Protein-directed crystalline 2D fullerene assemblies. <i>Nanoscale</i> , 2020 , 12, 3614-3622 | 7.7 | 8 |
| 36 | 3D-Printed Bioplastics with Shape-Memory Behavior Based on Native Bovine Serum Albumin. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 19193-19199 | 9.5 | 8 |
| 35 | Mechanical performance of gelatin fiber mesh scaffolds reinforced with nano-hydroxyapatite under bone damage mechanisms. <i>Materials Today Communications</i> , 2019 , 19, 140-147 | 2.5 | 8 |
| 34 | Engineering multifunctional metal/protein hybrid nanomaterials as tools for therapeutic intervention and high-sensitivity detection. <i>Chemical Science</i> , 2020 , 12, 2480-2487 | 9.4 | 8 |
| 33 | Biocatalytic Protein-Based Materials for Integration into Energy Devices. <i>ChemBioChem</i> , 2019 , 20, 1977-1985 | 3.8 | 7 |
| 32 | Protein Design for the Synthesis and Stabilization of Highly Fluorescent Quantum Dots. <i>Chemistry of Materials</i> , 2020 , 32, 5729-5738 | 9.6 | 7 |
| 31 | Deciphering Limitations to Meet Highly Stable Bio-Hybrid Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2019 , 29, 1904356 | 15.6 | 7 |
| 30 | Comparison of the backbone dynamics of a natural and a consensus designed 3-TPR domain. <i>Journal of Biomolecular NMR</i> , 2008 , 41, 169-78 | 3 | 7 |
| 29 | Toward supramolecular nanozymes for the photocatalytic activation of Pt(IV) anticancer prodrugs. <i>Chemical Communications</i> , 2020 , 56, 10461-10464 | 5.8 | 7 |
| 28 | Sample preparation strategies for efficient correlation of 3D SIM and soft X-ray tomography data at cryogenic temperatures. <i>Nature Protocols</i> , 2021 , 16, 2851-2885 | 18.8 | 7 |
| 27 | Reduction of cardiac TGF β -mediated profibrotic events by inhibition of Hsp90 with engineered protein. <i>Journal of Molecular and Cellular Cardiology</i> , 2018 , 123, 75-87 | 5.8 | 7 |
| 26 | Tailored Functionalized Magnetic Nanoparticles to Target Breast Cancer Cells Including Cancer Stem-Like Cells. <i>Cancers</i> , 2020 , 12, | 6.6 | 6 |
| 25 | Asp-863 is a key residue for calcium-dependent activity of Escherichia coli RTX toxin alpha-haemolysin. <i>FEBS Letters</i> , 2003 , 546, 271-5 | 3.8 | 6 |
| 24 | Discovering Biomolecules with Activity: Designed Repeat Proteins as Biocatalysts for (3 + 2) Cycloadditions. <i>Journal of the American Chemical Society</i> , 2020 , 142, 762-776 | 16.4 | 6 |
| 23 | Biomarker sensing platforms based on fluorescent metal nanoclusters. <i>Nanoscale Advances</i> , 2021 , 3, 1331-1341 | 5.1 | 6 |
| 22 | A Versatile Approach for the Assembly of Highly Tunable Biocatalytic Thin Films. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900598 | 4.6 | 5 |

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| 21 | Versatile functional microstructured polystyrene-based platforms for protein patterning and recognition. <i>Biomacromolecules</i> , 2013 , 14, 3147-54 | 6.9 | 5 |
| 20 | Fluorescent Flavoprotein Heterodimers: Combining Photostability with Singlet Oxygen Generation. <i>ChemPhotoChem</i> , 2018 , 2, 571-574 | 3.3 | 4 |
| 19 | Study of Co-phthalocyanine films by surface plasmon resonance spectroscopy. <i>Journal of Applied Physics</i> , 2014 , 115, 103106 | 2.5 | 3 |
| 18 | Intraparticle Kinetics Unveil Crowding and Enzyme Distribution Effects on the Performance of Cofactor-Dependent Heterogeneous Biocatalysts.. <i>ACS Catalysis</i> , 2021 , 11, 15051-15067 | 13.1 | 3 |
| 17 | Tuning the Optical Properties of Au Nanoclusters by Designed Proteins. <i>Advanced Optical Materials</i> , 2018 , 6, 1801332 | 13.2 | 3 |
| 16 | Boosting the Photoluminescent Properties of Protein-Stabilized Gold Nanoclusters through Protein Engineering. <i>Nano Letters</i> , 2021 , 21, 9347-9353 | 11.5 | 3 |
| 15 | Enhancing the Photocatalytic Conversion of Pt(IV) Substrates by Flavoprotein Engineering. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 4504-4508 | 6.4 | 3 |
| 14 | Charge-Induced Shifts in Chiral Surface Plasmon Modes in Gold Nanorod Assemblies. <i>Particle and Particle Systems Characterization</i> , 2019 , 36, 1800368 | 3.1 | 3 |
| 13 | Fluorescent proteins as singlet oxygen photosensitizers: mechanistic studies in photodynamic inactivation of bacteria 2013 , | | 2 |
| 12 | Correlative 3D cryo X-ray imaging reveals intracellular location and effect of designed antifibrotic protein-nanomaterial hybrids.. <i>Chemical Science</i> , 2021 , 12, 15090-15103 | 9.4 | 2 |
| 11 | Protein Design for Nanostructural Engineering: General Aspects. <i>Advances in Experimental Medicine and Biology</i> , 2016 , 940, 1-5 | 3.6 | 2 |
| 10 | Protein Design for Nanostructural Engineering: Concluding Remarks and Future Directions. <i>Advances in Experimental Medicine and Biology</i> , 2016 , 940, 281-284 | 3.6 | 2 |
| 9 | Engineering conductive protein films through nanoscale self-assembly and gold nanoparticles doping. <i>Nanoscale</i> , 2021 , 13, 6772-6779 | 7.7 | 2 |
| 8 | Immobilization Screening and Characterization of an Alcohol Dehydrogenase and its Application to the Multi-Enzymatic Selective Oxidation of 1,-Omega-Diols. <i>Frontiers in Catalysis</i> , 2021 , 1, | | 2 |
| 7 | Designing Artificial Fluorescent Proteins: Squaraine-LmrR Biophosphors for High Performance Deep-Red Biohybrid Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2011 , 21, 11381 | 15.6 | 1 |
| 6 | Immobilization of Enzymes in Protein Films. <i>Methods in Molecular Biology</i> , 2020 , 2100, 211-226 | 1.4 | 1 |
| 5 | Selective Biorecognition on Polymer Surfaces: Remarks and Future Trends 2015 , 387-389 | | 1 |
| 4 | A Simple Approach to Design Proteins for the Sustainable Synthesis of Metal Nanoclusters. <i>Angewandte Chemie</i> , 2019 , 131, 6280-6285 | 3.6 | 0 |

- 3 Protein-based (bio)materials: a way toward high-performance graphene enzymatic biosensors.
Journal of Materials Chemistry C, **2022**, 10, 5466-5473 7.1 0
- 2 3.12 The Folding of Repeat Proteins **2012**, 267-289
- 1 Biorecognition Molecules: Types and Molecular Basis and Development of Specificity **2015**, 45-63