

# Carles Mas-Moruno

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

3,445  
citations

172207

29  
h-index

143772

57  
g-index

70  
all docs

70  
docs citations

70  
times ranked

4853  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cilengitide: The First Anti-Angiogenic Small Molecule Drug Candidate. Design, Synthesis and Clinical Evaluation. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2010, 10, 753-768.	0.9	539
2	A Comprehensive Evaluation of the Activity and Selectivity Profile of Ligands for RGD-binding Integrins. <i>Scientific Reports</i> , 2017, 7, 39805.	1.6	425
3	Tumor Targeting via Integrin Ligands. <i>Frontiers in Oncology</i> , 2013, 3, 222.	1.3	195
4	Multifunctional Coatings and Nanotopographies: Toward Cell Instructive and Antibacterial Implants. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801103.	3.9	172
5	Covalent immobilization of hLf1-11 peptide on a titanium surface reduces bacterial adhesion and biofilm formation. <i>Acta Biomaterialia</i> , 2014, 10, 3522-3534.	4.1	125
6	Antibacterial Properties of hLf1-11 Peptide onto Titanium Surfaces: A Comparison Study Between Silanization and Surface Initiated Polymerization. <i>Biomacromolecules</i> , 2015, 16, 483-496.	2.6	110
7	Introducing Lasso Peptides as Molecular Scaffolds for Drug Design: Engineering of an Integrin Antagonist. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8714-8717.	7.2	108
8	Integrin-Selective Peptidomimetics for Surface Coating. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7048-7067.	7.2	99
9	Mimicking bone extracellular matrix: Integrin-binding peptidomimetics enhance osteoblast-like cells adhesion, proliferation, and differentiation on titanium. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 128, 191-200.	2.5	82
10	Functionalizing Integrin-Selective Integrin Antagonists for Surface Coating: A Method To Discriminate Integrin Subtypes In Vitro. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 1572-1575.	7.2	80
11	Regenerating Bone via Multifunctional Coatings: The Blending of Cell Integration and Bacterial Inhibition Properties on the Surface of Biomaterials. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 21618-21630.	4.0	77
12	Conformational Control of Integrin Subtype Selectivity in isoDGR Peptide Motifs: A Biological Switch. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9278-9281.	7.2	76
13	Novel Peptide-Based Platform for the Dual Presentation of Biologically Active Peptide Motifs on Biomaterials. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 6525-6536.	4.0	73
14	Biselectivity of isoDGR Peptides for Fibronectin Binding Integrin Subtypes $\alpha_5\beta_1$ and $\alpha_6\beta_1$ : Conformational Control through Flanking Amino Acids. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 1509-1519.	2.9	67
15	Solid-phase-assisted synthesis of targeting peptide-PEG-oligo(ethane amino)amides for receptor-mediated gene delivery. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 3258.	1.5	65
16	Impedimetric antimicrobial peptide-based sensor for the early detection of periodontopathogenic bacteria. <i>Biosensors and Bioelectronics</i> , 2016, 86, 377-385.	5.3	62
17	Antimicrobial Peptides: Powerful Biorecognition Elements to Detect Bacteria in Biosensing Technologies. <i>Molecules</i> , 2018, 23, 1683.	1.7	61
18	Behavior of primary human osteoblasts on trimmed and sandblasted Ti6Al4V surfaces functionalized with integrin $\alpha_5\beta_1$ -selective cyclic RGD peptides. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 87-97.	2.1	55

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19	Increasing $\alpha$ 2 Selectivity of the Anti-angiogenic Drug Cilengitide by N-Methylation. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9496-9500.	7.2	54
20	A Molecular Toolkit for the Functionalization of Titanium-Based Biomaterials That Selectively Control Integrin-Mediated Cell Adhesion. <i>Chemistry - A European Journal</i> , 2013, 19, 9218-9223.	1.7	53
21	Surface guidance of stem cell behavior: Chemically tailored co-presentation of integrin-binding peptides stimulates osteogenic differentiation in vitro and bone formation in vivo. <i>Acta Biomaterialia</i> , 2016, 43, 269-281.	4.1	51
22	Biofunctional polyethylene glycol coatings on titanium: An in vitro-based comparison of functionalization methods. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 152, 367-375.	2.5	50
23	All-in-one trifunctional strategy: A cell adhesive, bacteriostatic and bactericidal coating for titanium implants. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 169, 30-40.	2.5	48
24	Functionalization of CoCr surfaces with cell adhesive peptides to promote HUVECs adhesion and proliferation. <i>Applied Surface Science</i> , 2017, 393, 82-92.	3.1	42
25	Cyclic Aza-peptide Integrin Ligand Synthesis and Biological Activity. <i>Journal of Organic Chemistry</i> , 2012, 77, 5271-5278.	1.7	41
26	Biofunctionalization strategies on tantalum-based materials for osseointegrative applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2015, 26, 109.	1.7	39
27	Pharmacophoric Modifications Lead to Superpotent $\alpha$ 2 Integrin Ligands with Suppressed $\alpha$ 1 Activity. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 3410-3417.	2.9	35
28	Customized Interface Biofunctionalization of Decellularized Extracellular Matrix: Toward Enhanced Endothelialization. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 496-508.	1.1	31
29	Tuning Mesenchymal Stem Cell Response onto Titanium-Niobium-Hafnium Alloy by Recombinant Fibronectin Fragments. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2517-2525.	4.0	30
30	Towards the cell-instructive bactericidal substrate: exploring the combination of nanotopographical features and integrin selective synthetic ligands. <i>Scientific Reports</i> , 2017, 7, 16363.	1.6	28
31	Installing Multifunctionality on Titanium with RGD-Decorated Polyurethane-Polyurea Roxithromycin Loaded Nanoparticles: Toward New Osseointegrative Therapies. <i>Advanced Healthcare Materials</i> , 2015, 4, 1956-1960.	3.9	27
32	A Dual Molecular Biointerface Combining RGD and KRSR Sequences Improves Osteoblastic Functions by Synergizing Integrin and Cell-Membrane Proteoglycan Binding. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1429.	1.8	27
33	New trends in the development of multifunctional peptides to functionalize biomaterials. <i>Journal of Peptide Science</i> , 2022, 28, e3335.	0.8	24
34	Two Different Strategies to Enhance Osseointegration in Porous Titanium: Inorganic Thermo-Chemical Treatment Versus Organic Coating by Peptide Adsorption. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2574.	1.8	21
35	Smallest Peptoids with Antiproliferative Activity on Human Neoplastic Cells. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 2443-2449.	2.9	19
36	Polymer-free immobilization of a cyclic RGD peptide on a nitinol stent promotes integrin-dependent endothelial coverage of strut surfaces. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2012, 100B, 637-645.	1.6	19

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37	Cell adhesive peptides functionalized on CoCr alloy stimulate endothelialization and prevent thrombogenesis and restenosis. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 973-983.	2.1	18
38	Evolution of microstructure and residual stresses in gradually ground/polished 3Y-TZP. <i>Journal of the European Ceramic Society</i> , 2020, 40, 1582-1591.	2.8	17
39	Polyethylene Glycol Pulsed Electrodeposition for the Development of Antifouling Coatings on Titanium. <i>Coatings</i> , 2020, 10, 456.	1.2	17
40	Design of a minimized cyclic tetrapeptide that neutralizes bacterial endotoxins. <i>Journal of Peptide Science</i> , 2006, 12, 491-496.	0.8	16
41	Surface functionalization of biomaterials for bone tissue regeneration and repair. , 2018, , 73-100.		16
42	An Engineered Biomimetic Peptide Regulates Cell Behavior by Synergistic Integrin and Growth Factor Signaling. <i>Advanced Healthcare Materials</i> , 2021, 10, 2001757.	3.9	16
43	Peptidic biofunctionalization of laser patterned dental zirconia: A biochemical-topographical approach. <i>Materials Science and Engineering C</i> , 2021, 125, 112096.	3.8	16
44	The Impact of Amino Acid Side Chain Mutations in Conformational Design of Peptides and Proteins. <i>Chemistry - A European Journal</i> , 2010, 16, 5385-5390.	1.7	15
45	Integrin-selektive Peptidmimetika für die Oberflächenbeschichtung. <i>Angewandte Chemie</i> , 2016, 128, 7162-7183.	1.6	15
46	Nanostructure Formation Enhances the Activity of LPS-Neutralizing Peptides. <i>ChemMedChem</i> , 2008, 3, 1748-1755.	1.6	13
47	Bioactive compounds immobilized on Ti and TiNbHf: AFM-based investigations of biofunctionalization efficiency and cell adhesion. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 136, 704-711.	2.5	13
48	Control of stem cell response and bone growth on biomaterials by fully non-peptidic integrin selective ligands. <i>Biomaterials Science</i> , 2019, 7, 1281-1285.	2.6	13
49	On-Growth and In-Growth Osseointegration Enhancement in PM Porous Ti-Scaffolds by Two Different Bioactivation Strategies: Alkali Thermochemical Treatment and RGD Peptide Coating. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1750.	1.8	10
50	Influence of grinding/polishing on the mechanical, phase stability and cell adhesion properties of yttria-stabilized zirconia. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4304-4314.	2.8	9
51	Chemically Diverse Multifunctional Peptide Platforms with Antimicrobial and Cell Adhesive Properties. <i>ChemBioChem</i> , 2021, 22, 839-844.	1.3	9
52	The Integrin Ligand (RGDf(NMe)Nal) Reduces Neointimal Hyperplasia in a Polymer-Free Drug-Eluting Stent System. <i>ChemMedChem</i> , 2014, 9, 1413-1418.	1.6	8
53	A versatile click chemistry-based approach for functionalizing biomaterials of diverse nature with bioactive peptides. <i>Chemical Communications</i> , 2021, 57, 982-985.	2.2	7
54	Effectiveness of Direct Laser Interference Patterning and Peptide Immobilization on Endothelial Cell Migration for Cardio-Vascular Applications: An In Vitro Study. <i>Nanomaterials</i> , 2022, 12, 1217.	1.9	6

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55	Design and facile solidâ€phase synthesis of peptideâ€based LPSâ€inhibitors containing PEGâ€like functionalities. <i>Biopolymers</i> , 2009, 92, 508-517.	1.2	4
56	Blocking methods to prevent non-specific adhesion of mesenchymal stem cells to titanium and evaluate the efficiency of surface functionalization: albumin vs poly(ethylene glycol) coating. <i>BiomecÃ¡nica</i> , 0, , .	0.1	4
57	Tiratricol Neutralizes Bacterial Endotoxins and Reduces Lipopolysaccharideâ€induced TNFâ€± Production in the Cell. <i>Chemical Biology and Drug Design</i> , 2008, 72, 320-328.	1.5	3
58	Trivalent PEGylated Platform for the Conjugation of Bioactive Compounds. <i>Bioconjugate Chemistry</i> , 2011, 22, 2172-2178.	1.8	1
59	Biomimetic Peptides: An Engineered Biomimetic Peptide Regulates Cell Behavior by Synergistic Integrin and Growth Factor Signaling ( <i>Adv. Healthcare Mater.</i> 7/2021). <i>Advanced Healthcare Materials</i> , 2021, 10, 2170032.	3.9	0
60	FuncionalizaciÃ³n de superficies anti-fouling sobre titanio para mejora de sus propiedades. <i>TecnologÃ­a, Ciencia Y EducaciÃ³n</i> , 0, , 83-93.	0.0	0
61	Editorial: â€œPeptides in biomaterials science: New trends and applicationsâ€ Journal of Peptide Science, 2021, 28, e3379.	0.8	0