

Alessandra Tolomelli

List of Publications by Year in descending order

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papers

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186265

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all docs

133
docs citations

133
times ranked

2244
citing authors

#	ARTICLE	IF	CITATIONS
1	Peptides and Peptidomimetics in Medicine, Surgery and Biotechnology. <i>Current Medicinal Chemistry</i> , 2006, 13, 2449-2466.	2.4	148
2	A Straightforward Method for the Synthesis of Alkylidene and Arylidene Malonates Through Proline-Catalyzed Knoevenagel Condensation. <i>Synthetic Communications</i> , 2003, 33, 1587-1594.	2.1	88
3	Green Solvent Mixtures for Solid-Phase Peptide Synthesis: A Dimethylformamide-Free Highly Efficient Synthesis of Pharmaceutical-Grade Peptides. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 12867-12877.	6.7	69
4	A Stereoselective Synthesis of (2R,3S)-N-Benzoylphenylisoserine Methyl Ester. <i>Journal of Organic Chemistry</i> , 1998, 63, 2351-2353.	3.2	66
5	Therapeutic Peptides Targeting PPI in Clinical Development: Overview, Mechanism of Action and Perspectives. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 697586.	3.5	64
6	Sustainability in peptide chemistry: current synthesis and purification technologies and future challenges. <i>Green Chemistry</i> , 2022, 24, 975-1020.	9.0	57
7	Recent Advances in the Investigation of the Bioactive Conformation of Peptides Active at the μ -opioid Receptor. Conformational Analysis of Endomorphins. <i>Current Topics in Medicinal Chemistry</i> , 2004, 4, 105-121.	2.1	53
8	Unusual Amino Acids: Synthesis and Introduction into Naturally Occurring Peptides and Biologically Active Analogues. <i>Mini-Reviews in Medicinal Chemistry</i> , 2006, 6, 293-304.	2.4	51
9	Enzymatic Resolution of α -Alkyl β -Amino Acids Using Immobilized Penicillin G Acylase. <i>Journal of Organic Chemistry</i> , 1996, 61, 8651-8654.	3.2	48
10	Synthesis and Evaluation of the Affinity toward μ -Opioid Receptors of Atypical, Lipophilic Ligands Based on the Sequence $[-Tyr-Pro-Trp-Phe-Gly-]$. <i>Journal of Medicinal Chemistry</i> , 2004, 47, 5198-5203.	6.4	47
11	Novel Ligands Targeting $\alpha_4\beta_1$ Integrin: Therapeutic Applications and Perspectives. <i>Frontiers in Chemistry</i> , 2019, 7, 489.	3.6	46
12	Stability against enzymatic hydrolysis of endomorphin-1 analogues containing β -proline. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 1498-1502.	2.8	41
13	Ring expansion of N-acyl aziridine-2-imides to oxazoline-4-imides, useful precursors of pure β -Hydroxy α -aminoacids. <i>Tetrahedron Letters</i> , 1997, 38, 6953-6956.	1.4	40
14	Highly Diastereoselective Allylic Azide Formation and Isomerization. Synthesis of 3-(α -Amino)- β -lactams. <i>Organic Letters</i> , 2005, 7, 533-536.	4.6	40
15	Targeting integrins $\alpha_3\beta_3$ and $\alpha_5\beta_1$ with new β -lactam derivatives. <i>European Journal of Medicinal Chemistry</i> , 2014, 83, 284-293.	5.5	40
16	Two-dimensional UV spectroscopy: a new insight into the structure and dynamics of biomolecules. <i>Chemical Science</i> , 2019, 10, 9907-9921.	7.4	40
17	Conjugate addition of hydroxylamino derivatives to alkylidene malonates in the presence of chiral Lewis acids. <i>Tetrahedron: Asymmetry</i> , 2001, 12, 2395-2398.	1.8	37
18	Antinociception by a peripherally administered novel endomorphin-1 analogue containing β -proline. <i>European Journal of Pharmacology</i> , 2003, 469, 89-95.	3.5	37

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19	Synthesis of Dehydro- β -amino esters via Highly Regioselective Amination of Allylic Carbonates. <i>Organic Letters</i> , 2008, 10, 2425-2428.	4.6	36
20	A Practical Method for the Synthesis of β -Amino α -Hydroxy Acids. Synthesis of Enantiomerically Pure Hydroxyaspartic Acid and Isoserine. <i>Synlett</i> , 1999, 1999, 1727-1730.	1.8	34
21	Peripheral antinociceptive effects of the cyclic endomorphin-1 analog c[YpwFG] in a mouse visceral pain model. <i>Peptides</i> , 2010, 31, 2135-2140.	2.4	34
22	Molecular Docking of Opiates and Opioid Peptides, a Tool for the Design of Selective Agonists and Antagonists, and for the Investigation of Atypical Ligand-Receptor Interactions. <i>Current Medicinal Chemistry</i> , 2012, 19, 1587-1601.	2.4	31
23	Synthesis of Aziridine-2,2-dicarboxylates via 1,4-Addition of N,O-(Bis(trimethylsilyl)hydroxylamine) to α,β -Unsaturated Malonates. <i>Journal of Organic Chemistry</i> , 2001, 66, 8657-8660.	3.2	29
24	Investigation of the interaction between the atypical agonist c[YpwFG] and MOR. <i>FEBS Journal</i> , 2008, 275, 2315-2337.	4.7	29
25	Antiangiogenic Effect of Dual/Selective $\alpha^5\beta^1/\alpha^v\beta^3$ Integrin Antagonists Designed on Partially Modified Retro-Inverso Cyclotetrapeptide Mimetics. <i>Journal of Medicinal Chemistry</i> , 2010, 53, 106-118.	6.4	29
26	Can Integrin Agonists Have Cards to Play against Cancer? A Literature Survey of Small Molecules Integrin Activators. <i>Cancers</i> , 2017, 9, 78.	3.7	29
27	Asymmetric synthesis of 5-isopropyl-oxazoline-4-imide as syn-hydroxyleucine precursor. <i>Tetrahedron: Asymmetry</i> , 2001, 12, 563-569.	1.8	28
28	Controlled Solid Phase Peptide Bond Formation Using N-Carboxyanhydrides and PEG Resins in Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 566-569.	6.7	28
29	Spectroscopic fingerprints of DNA/RNA pyrimidine nucleobases in third-order nonlinear electronic spectra. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	28
30	A New Diastereoselective Synthesis of anti- α -Alkyl α -Hydroxy β -Amino Acids. <i>European Journal of Organic Chemistry</i> , 1999, 1999, 155-161.	2.4	27
31	Inhibition of cancer cell adhesion by heterochiral Pro-containing RGD mimetics. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 2329-2333.	2.2	27
32	Integrin Ligands with $\alpha\beta$ -Hybrid Peptide Structure: Design, Bioactivity, and Conformational Aspects. <i>Medicinal Research Reviews</i> , 2016, 36, 389-424.	10.5	27
33	NMR Investigations on Boron Complexes in the Conjugate Addition on α,β -Unsaturated Imides. <i>Organic Letters</i> , 2001, 3, 1165-1167.	4.6	26
34	Microwave-assisted ring expansion of N-acetyl β -unsubstituted aziridine in the presence of Lewis acids. <i>Tetrahedron</i> , 2001, 57, 2807-2812.	1.9	26
35	Fast Heck-Cassar-Sonogashira (HCS) Reactions in Green Solvents. <i>Organic Letters</i> , 2020, 22, 3969-3973.	4.6	26
36	A New Selective Synthesis of the Ile- <i>allo</i> -Thr-Gly Tripeptide Fragment of Lysobactin. <i>Organic Letters</i> , 2000, 2, 1105-1107.	4.6	25

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37	The Inverse Type II Turn on <sc>D</sc> Trp-Phe, a Pharmacophoric Motif for MOR Agonists. ChemMedChem, 2011, 6, 1640-1653.	3.2	25
38	Diastereoselective synthesis of 3- α -unsubstituted N-BOC-aziridine from a readily available chiral 1,2-unsaturated imide. Tetrahedron, 1998, 54, 8217-8222.	1.9	23
39	Expedient synthesis of pseudo-Pro-containing peptides: towards constrained peptidomimetics and foldamers. Organic and Biomolecular Chemistry, 2012, 10, 2307.	2.8	23
40	Synthesis of optically pure threonine-containing dipeptides by regio- and stereo-controlled ring expansion of aziridine-2-imide derivatives. Chemical Communications, 1999, , 167-168.	4.1	22
41	Development of Isoxazoline-Containing Peptidomimetics as Dual α - β and α - γ Integrin Ligands. ChemMedChem, 2011, 6, 2264-2272.	3.2	22
42	Formation of Aziridine-2-amides through 5-Halo-6-methylperhydropyrimidin-4-ones. A Route to Enantiopure- and d-Threonine and allo-Threonine. Journal of Organic Chemistry, 1998, 63, 3458-3462.	3.2	21
43	Asymmetric synthesis of syn hydroxyphenylalanine via aziridine ring expansion to an oxazoline. Tetrahedron Letters, 1999, 40, 8261-8264.	1.4	21
44	Enantioselective synthesis of aziridine 2,2-dicarboxylates. Part I: Copper(II)-bisoxazoline complex-catalysed Michael reaction on alkylidene malonates. Tetrahedron: Asymmetry, 2002, 13, 1407-1410.	1.8	21
45	Dehydro- β -proline Containing α - β Integrin Antagonists: Stereochemical Recognition in Ligand-Receptor Interplay. ACS Medicinal Chemistry Letters, 2015, 6, 701-706.	2.8	21
46	Steps towards sustainable solid phase peptide synthesis: use and recovery of <i>N</i> -octyl pyrrolidone. Green Chemistry, 2021, 23, 4095-4106.	9.0	21
47	Palladium Catalyst Recycling for Heck-Cassar-Sonogashira Cross-Coupling Reactions in Green Solvent/Base Blend. ChemSusChem, 2021, 14, 2591-2600.	6.8	21
48	α -Bromo- β , γ -unsaturated ketenes for the synthesis of α -benzylamino- β , γ -unsaturated acids. Tetrahedron: Asymmetry, 2004, 15, 593-601.	1.8	20
49	Synthesis and biological evaluation of non-peptide α - β integrin dual antagonists containing 5,6-dihydropyridin-2-one scaffolds. Bioorganic and Medicinal Chemistry, 2007, 15, 7380-7390.	3.0	20
50	Synthesis and biological evaluation of unprecedented classes of spiro- β -lactams and azido- β -lactams as acyl-CoA:cholesterol acyltransferase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 1946-1950.	2.2	20
51	New isoxazolidinone and 3,4-dehydro- β -proline derivatives as antibacterial agents and MAO-inhibitors: A complex balance between two activities. European Journal of Medicinal Chemistry, 2016, 124, 906-919.	5.5	20
52	Asymmetric 1,4 addition of Grignard reagents to chiral α , β -unsaturated esters in the presence of Lewis acids. Tetrahedron, 1999, 55, 6231-6242.	1.9	19
53	A Microwave-Enhanced, Lewis Acid-Catalyzed Synthesis of 1,3-Dioxolanes and Oxazolines from Epoxides. Advanced Synthesis and Catalysis, 2007, 349, 1256-1264.	4.3	19
54	Modulation of α - β - and α - γ -integrin-mediated adhesion by dehydro- β -amino acids containing peptidomimetics. European Journal of Medicinal Chemistry, 2013, 66, 258-268.	5.5	19

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55	An improved microwave assisted protocol for Yonemitsu-type trimolecular condensation. <i>Tetrahedron</i> , 2014, 70, 6781-6788.	1.9	19
56	Synthesis of the Phenylserine ^α -Leucine Dipeptide Fragment Present in the Antibiotic Lysobactin from an Aziridine-2-imide Precursor. <i>European Journal of Organic Chemistry</i> , 2000, 2000, 2489-2494.	2.4	18
57	Stable and Biocompatible Monodispersion of C ₆₀ in Water by Peptides. <i>Bioconjugate Chemistry</i> , 2019, 30, 808-814.	3.6	18
58	Integrin-mediated adhesive properties of neutrophils are reduced by hyperbaric oxygen therapy in patients with chronic non-healing wound. <i>PLoS ONE</i> , 2020, 15, e0237746.	2.5	18
59	Synthesis of Four-Membered Ring Spiro- β -lactams by Epoxide Ring-Opening. <i>European Journal of Organic Chemistry</i> , 2007, 2007, 3199-3205.	2.4	17
60	Opioid Activity Profiles of Oversimplified Peptides Lacking in the Protonable N-Terminus. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 10292-10296.	6.4	17
61	A translation of the twelve principles of green chemistry to guide the development of cross-coupling reactions. <i>Catalysis Today</i> , 2022, 397-399, 265-271.	4.4	17
62	Synthesis of enantiomerically pure syn and anti β -hydroxy β -amino acids through diastereoselective hydroxylation of perhydropyrimidin-4-ones. <i>Tetrahedron</i> , 1995, 51, 11831-11840.	1.9	16
63	Dipeptides containing D-serine or D-isoserine from the same (R)-aziridine-2-imide by a simple reversal of the synthetic procedure. <i>Tetrahedron</i> , 1999, 55, 15151-15158.	1.9	16
64	Practical synthesis of 3-bromo-5,6-dihydropyridin-2-ones via β,γ -unsaturated α -bromo-ketene/imine cycloaddition. <i>Tetrahedron</i> , 2004, 60, 5031-5040.	1.9	16
65	Convenient Synthesis of the Antibiotic Linezolid via an Oxazolidinone Intermediate Derived from the Chiral Building Block Isoserine. <i>European Journal of Organic Chemistry</i> , 2014, 2014, 7614-7620.	2.4	16
66	Synthesis and assay of retro- β 1 integrin-targeting motifs. <i>European Journal of Medicinal Chemistry</i> , 2014, 73, 225-232.	5.5	16
67	Synthesis and Biological Evaluation of Azido- and Aziridino-hydroxyl- β -lactams through Stereo- and Regioselective Epoxide Ring Opening. <i>Journal of Organic Chemistry</i> , 2006, 71, 9229-9232.	3.2	15
68	Replacing piperidine in solid phase peptide synthesis: effective Fmoc removal by alternative bases. <i>Green Chemistry</i> , 2021, 23, 8096-8107.	9.0	15
69	Synthesis and Conformational Analysis of Cyclotetrapeptide Mimetic β -turn Templates and Validation as 3D Scaffolds. <i>ChemMedChem</i> , 2009, 4, 517-523.	3.2	13
70	Topological Exploration of Cyclic Endomorphin-1 Analogues, Structurally Defined Models for Investigating the Bioactive Conformation of MOR Agonists. <i>Protein and Peptide Letters</i> , 2007, 14, 51-56.	0.9	12
71	Lewis Acid Induced Highly Regioselective Synthesis of a New Class of Substituted Isoxazolidines. <i>Synlett</i> , 2008, 2008, 2605-2608.	1.8	12
72	A Nonclassical Stereoselective Semi-Synthesis of Drospirenone via Cross-Metathesis Reaction. <i>Synthesis</i> , 2008, 2008, 3801-3804.	2.3	12

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73	A convenient synthesis of functionalized isoxazolines and related 5-hydroxyisoxazolidine-4-carboxylates. <i>Tetrahedron</i> , 2009, 65, 2478-2483.	1.9	12
74	A simple route towards peptide analogues containing substituted (S)- or (R)-tryptophans. <i>Tetrahedron Letters</i> , 2010, 51, 2576-2579.	1.4	12
75	Enantioselective synthesis of aziridine 2,2-dicarboxylates. Part II: Determination of the absolute configuration. <i>Tetrahedron: Asymmetry</i> , 2002, 13, 1411-1415.	1.8	11
76	Enzymatic resolution of ethyl 3-hydroxy-2-(1- α -substituted-methylidene)-butyrate by <i>Pseudomonas cepacia</i> lipase catalyzed acetylation. <i>Tetrahedron: Asymmetry</i> , 2007, 18, 2227-2232.	1.8	11
77	Synthesis of Ethyl 5-Hydroxyisoxazolidine-4-carboxylates via Michael Addition/Intramolecular Hemiketalisation. <i>European Journal of Organic Chemistry</i> , 2008, 2008, 6119-6127.	2.4	11
78	In-peptide synthesis of di-oxazolidinone and dehydroamino acid α -oxazolidinone motifs as β -turn inducers. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 4316.	2.8	11
79	Dehydro- β -amino Acid Containing Peptides as Promising Sequences for Drug Development. <i>European Journal of Organic Chemistry</i> , 2009, 2009, 5991-5997.	2.4	10
80	Highly Regio- and Diastereoselective Palladium-Catalyzed Allylic Substitution. Synthesis of 3-(2-Aminobutylidene)-4-arylazetid-2-ones. <i>Advanced Synthesis and Catalysis</i> , 2005, 347, 833-838.	4.3	9
81	Cyclotetrapeptide Mimics Based on a 13-Membered, Partially Modified Retro-Inverso Structure. <i>European Journal of Organic Chemistry</i> , 2008, 2008, 729-735.	2.4	9
82	A straightforward route to enantiopure 2-substituted-3,4-dehydro- β -proline via ring closing metathesis. <i>Amino Acids</i> , 2011, 41, 575-586.	2.7	9
83	Synthesis of Constrained Peptidomimetics Containing 2-Oxo-1,3-oxazolidine-4-carboxylic Acids. <i>European Journal of Organic Chemistry</i> , 2011, 2011, n/a-n/a.	2.4	8
84	Synthesis of Enantiopure Isosteres of Amino Acids Containing a Quaternary Stereocenter: Experimental and Computational Evaluation of a Novel Class of Atropisomers. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 6524-6536.	2.4	8
85	Introduction of hydroxyl- or keto- functionalities in azetid-2-ones side chain via allylic bromide rearrangement, followed by supported reagent substitution. <i>Arkivoc</i> , 2005, 2005, 136-152.	0.5	8
86	Conformational analysis and μ -opioid receptor affinity of short peptides, endomorphin models in a low polarity solvent. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 3010-3014.	2.8	7
87	Synthesis of enantiomerically pure β -integrin ligands based on a 5,6-dihydropyridin-2-one scaffold. <i>Tetrahedron: Asymmetry</i> , 2006, 17, 167-170.	1.8	7
88	Synthesis of chiral non-racemic intermediates and Arg-Gly-Asp mimetics by CalB-catalyzed resolution. <i>Tetrahedron: Asymmetry</i> , 2010, 21, 96-102.	1.8	7
89	Novel insights into the chemistry of an old medicine: A general degradative pathway for penicillins from a piperacillin/tazobactam stability study. <i>European Journal of Pharmaceutical Sciences</i> , 2019, 136, 104957.	4.0	7
90	A Review of Strategies for the Development of Alkyl Prolines in Drug Discovery. <i>Current Bioactive Compounds</i> , 2016, 12, 146-160.	0.5	7

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91	Exploring the reactivity of alkylidene malonamides: synthesis of polyfunctionalized isoxazolidinones, aziridines and oxazolines.. <i>Arkivoc</i> , 2012, 2012, 196-209.	0.5	7
92	Cyclopeptide Analogs for Generating New Molecular and 3D Diversity. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2009, 12, 929-939.	1.1	6
93	Fluorene benzothiadiazole co-oligomer based aqueous self-assembled nanoparticles. <i>RSC Advances</i> , 2020, 10, 444-450.	3.6	6
94	Aziridines and Oxazolines: Valuable Intermediates in the Synthesis of Unusual Amino Acids. <i>ChemInform</i> , 2004, 35, no.	0.0	5
95	The Cycloaddition Reaction Between α -Bromo Vinylketenes and Imines: A Combined Experimental and Theoretical Study. <i>Advanced Synthesis and Catalysis</i> , 2008, 350, 2261-2273.	4.3	5
96	One-Pot Two-Step Microwave-Assisted Synthesis of Alkylidene Acetoacetamido Esters, Useful Intermediates for α -Dehydropeptides. <i>European Journal of Organic Chemistry</i> , 2016, 2016, 3217-3222.	2.4	5
97	Highly stable atropisomers by electrophilic amination of a chiral α -lactam within the synthesis of an elusive conformationally restricted analogue of α -methylhomoserine. <i>Amino Acids</i> , 2016, 48, 461-478.	2.7	5
98	Lipase-mediated kinetic resolution of allylic(hydroxymethyl)methylenecyclopentane building blocks. <i>Tetrahedron: Asymmetry</i> , 2000, 11, 1289-1294.	1.8	4
99	Highly regio- and stereoselective palladium-catalyzed allylic carbonate amination. A practical route to dehydro- α -amino esters. <i>Tetrahedron</i> , 2010, 66, 4994-4999.	1.9	4
100	Synthesis of α/β dipeptides containing linear or cyclic α -dehydro- α -amino acids as scaffolds for bioactive compounds. <i>Amino Acids</i> , 2019, 51, 1475-1483.	2.7	4
101	Side chain effect in the modulation of α/β integrin activity via clickable isoxazoline-RGD-mimetics: development of molecular delivery systems. <i>Scientific Reports</i> , 2020, 10, 7410.	3.3	4
102	Ampicillin sodium: Isolation, identification and synthesis of the last unknown impurity after 60 years of clinical use. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2020, 191, 113584.	2.8	2
103	Modulation of α/β - and α/γ -integrin-mediated adhesion by dehydro- α -amino acids containing peptidomimetics. , 2013, 66, 258-258.		1
104	Practical Synthesis of 3-Bromo-5,6-dihydropyridin-2-ones via α,β -Unsaturated α -Bromo-ketene/imine Cycloaddition.. <i>ChemInform</i> , 2004, 35, no.	0.0	0
105	Highly Diastereoselective Allylic Azide Formation and Isomerization. Synthesis of 3-(α -Amino)- α -lactams.. <i>ChemInform</i> , 2005, 36, no.	0.0	0
106	Zinc Metal-Promoted Nucleophilic Addition of Azetidin-2-ones to Aldehydes and Nitriles. <i>Synthesis</i> , 2005, 2005, 61-70.	2.3	0
107	An Investigation of the Reactivity of MCPBA and α -Bromoalkenes under α -Traditional or Microwave-Assisted Conditions: Selective Formation of α -Epoxides or Allylic Bromides. <i>Synlett</i> , 2005, 2005, 2204-2208.	1.8	0
108	A Novel Family of Minimal PMRI Cyclic Peptides as Versatile Scaffolds for Generating New Molecular Topology. <i>Medicinal Chemistry</i> , 2006, 2, 395-400.	1.5	0

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109	Asymmetric Synthesis of Three- and Four-Membered Ring Heterocycles. , 0, , 1-50.		0