Ana JesÃºs Arrieta

List of Publications by Year
in descending order

69 papers	2,793 citations	126907 33 h-index	182427 51 g-index
79 all docs	79 docs citations	79 times ranked	2262 citing authors

#	Article	IF	Citations
1	The Mechanism of the Keteneâˆ’Imine (Staudinger) Reaction in Its Centennial: Still an Unsolved Problem?. Accounts of Chemical Research, 2008, 41, 925-936.	15.6	188
2	Catalytic and Solvent Effects on the Cycloaddition Reaction between Ketenes and Carbonyl Compounds To Form 2-Oxetanones. Journal of the American Chemical Society, 1994, 116, 9613-9619.	13.7	113
3	Origins of the Loss of Concertedness in Pericyclic Reactions:Â Theoretical Prediction and Direct Observation of Stepwise Mechanisms in [3 + 2] Thermal Cycloadditions. Journal of the American Chemical Society, 2000, 122, 6078-6092.	13.7	107
4	Chiral Control in the Staudinger Reaction between Ketenes and Imines. A Theoretical SCF-MO Study on Asymmetric Torquoselectivity. Journal of the American Chemical Society, 1994, 116, 2085-2093.	13.7	104
5	Origins of the Stereodivergent Outcome in the Staudinger Reaction between Acyl Chlorides and Imines. Journal of Organic Chemistry, 1998, 63, 5869-5876.	3.2	104
6	Stereocontrolled Synthesis of Highly Substituted Proline Esters via [3 + 2] Cycloaddition between N-Metalated Azomethine Ylides and Nitroalkenes. Origins of the Metal Effect on the Stereochemical Outcome. Journal of Organic Chemistry, 1998, 63, 1795-1805.	3.2	104
7	Highly stereoselective synthesis of Î±-hydroxy Î²-amino acids through Î²-lactams: application to the synthesis of the taxol and bestatin side chains and related systems.. Tetrahedron Letters, 1990, 31, 6429-6432.	1.4	91
8	Solvent-Free Thermal and Microwave-Assisted [3 + 2] Cycloadditions between Stabilized Azomethine Ylides and Nitrostyrenes. An Experimental and Theoretical Study. Journal of Organic Chemistry, 2007, 72, 4313-4322.	3.2	85
9	Efficient tautomerization hydrazone-azomethine imine under microwave irradiation. Synthesis of [4,3â€²] and [5,3â€²]bipyrazoles. Tetrahedron, 1998, 54, 13167-13180.	1.9	75
10	A Theoreticalâˆ’Experimental Approach to the Mechanism of the Photocarbonylation of Chromium(0) (Fischer)âˆ’Carbene Complexes and Their Reaction with Imines. Journal of the American Chemical Society, 2000, 122, 11509-11510.	13.7	69
11	On the Stereochemical Outcome of the Catalyzed and Uncatalyzed Cycloaddition Reaction between Activated Ketenes and Aldehydes to form cis- and trans-2-Oxetanones. An ab Initio Study. Journal of the American Chemical Society, 1995, 117, 12314-12321.	13.7	68
12	Direct Evaluation of Secondary Orbital Interactions in the Dielsâˆ’Alder Reaction between Cyclopentadiene and Maleic Anhydride. Journal of Organic Chemistry, 2001, 66, 6178-6180.	3.2	68
13	Tandem [8 + 2] Cycloadditionâˆ’[2 + 6 + 2] Dehydrogenation Reactions Involving Imidazo[1,2-<i>a</i>]pyridines and Imidazo[1,2-<i>a</i>]pyrimidines. Journal of Organic Chemistry, 2010, 75, 2776-2784.	3.2	66
14	Application of Stereocontrolled Stepwise [3+2] Cycloadditions to the Preparation of Inhibitors of Î±4Î²1-Integrin-Mediated Hepatic Melanoma Metastasis. Angewandte Chemie - International Edition, 2005, 44, 2903-2907.	13.8	63
15	Application of 1,3â€Dipolar Reactions between Azomethine Ylides and Alkenes to the Synthesis of Catalysts and Biologically Active Compounds. European Journal of Organic Chemistry, 2018, 2018, 5889-5904.	2.4	61
16	Structure and Conformations of Heteroatom-Substituted Free Carbenes and Their Group 6 Transition Metal Analogues. Organometallics, 2004, 23, 1065-1071.	2.3	53
17	Lewis Acid Activated Azaâ€Dielsâ€“Alder Reaction of <i>N</i>â€(3â€Pyridyl)aldimines: An Experimental and Computational Study. European Journal of Organic Chemistry, 2010, 2010, 2091-2099.	2.4	51
18	Reagents and synthetic methods. Part 67. Preparation of 4-unsubstituted .beta.-lactams from 4-acetoxyazetidin-2-ones. A formal approach to monobactams and nocardicins. Journal of Organic Chemistry, 1988, 53, 3784-3791.	3.2	46

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19	Solvent and Substituent Effects in the Periselectivity of the Staudinger Reaction between Ketenes and Î±,Î²-Unsaturated Imines. A Theoretical and Experimental Study. Journal of Organic Chemistry, 1996, 61, 3070-3079.	3.2	46
20	The Reformatskii type reaction of Gilman and Speeter in the preparation of valuable .beta.-lactams in carbapenem synthesis: scope and synthetic utility. Journal of Organic Chemistry, 1989, 54, 5736-5745.	3.2	45
21	Enhancement of Fluorescence in Thin-Layer Chromatography Induced by the Interaction betweenn-Alkanes and an Organic Cation. Analytical Chemistry, 2000, 72, 1759-1766.	6.5	45
22	On the Stereodivergent Behavior Observed in the Staudinger Reaction between Methoxyketene and (E)-N-Benzylidenearyl Amines. Angewandte Chemie - International Edition, 2007, 46, 3028-3032.	13.8	44
23	Surpassing Torquoelectronic Effects in Conrotatory Ring Closures: Origins of Stereocontrol in Intramolecular Ketenimine-Imine [2+2] Cycloadditions. Chemistry - A European Journal, 1999, 5, 1106-1117.	3.3	43
24	On the Mechanism of Conversion ofN-Acyl-4-acyloxy-Î²-lactams into 2-Substituted 1,3-Oxazin-6-ones. Can a Low-Barrier Transition State Be Antiaromatic?. Journal of Organic Chemistry, 2001, 66, 8470-8477.	3.2	42
25	Regiochemistry of the microwave-assisted reaction between aromatic amines and Î±-bromoketones to yield substituted 1H-indoles. Organic and Biomolecular Chemistry, 2008, 6, 1763.	2.8	40
26	Highly Efficient Induction of Chirality in Intramolecular [2 + 2] Cycloadditions between Ketenimines and Imines. Journal of Organic Chemistry, 2000, 65, 3633-3643.	3.2	39
27	Formation of Î³-Oxoacids and 1<i>H</i>-Pyrrol-2(5<i>H</i>)-ones from Î±,Î²-Unsaturated Ketones and Ethyl Nitroacetate. Journal of Organic Chemistry, 2010, 75, 7435-7438.	3.2	39
28	<i>Trans</i>-Stereoselectivity in the Reaction between Homophthalic Anhydride and Imines. Organic Letters, 2008, 10, 4759-4762.	4.6	38
29	New Insights on the Origins of the Stereocontrol of the Staudinger Reaction:Â [2 + 2] Cycloaddition between Ketenes andN-Silylimines. Journal of Organic Chemistry, 2000, 65, 8458-8464.	3.2	37
30	Light-Induced Aminocarbene to Imine Dyotropic Rearrangement in a Chromium(0) Center:â€‰ An Unprecedented Reaction Pathway. Journal of the American Chemical Society, 2003, 125, 9572-9573.	13.7	37
31	New Stereoselective Intramolecular [2 + 2] Cycloadditions between Ketenimines and Imines on anortho-Benzylic Scaffold:Â 1,4-Asymmetric Induction. Journal of Organic Chemistry, 2000, 65, 7512-7515.	3.2	35
32	Ab Initio Models for the Nitroaldol (Henry) Reaction. Chemistry - A European Journal, 1997, 3, 20-28.	3.3	34
33	Syntheses of Î²-lactams from acetic acids and imines induced by phenyl dichlorophosphate reagent. Tetrahedron, 1985, 41, 1703-1712.	1.9	33
34	Competitive Mechanisms and Origins of Stereocontrol in the [2 + 2] Thermal Cycloaddition between Imines and Keteniminium Cations. A Complementary Entry to 2-Azetidinones (Î²-Lactams) and Related Compounds. Journal of Organic Chemistry, 1999, 64, 1831-1842.	3.2	33
35	Organocatalysts Derived from Unnatural Î±â€Amino Acids: Scope and Applications. Chemistry - an Asian Journal, 2019, 14, 44-66.	3.3	32
36	Role of the isomerization pathways in the Staudinger reaction. A theoretical study on the interaction between activated ketenes and imidates. Tetrahedron Letters, 1994, 35, 4465-4468.	1.4	31

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37	Diastereoselective Synthesis of Cycloalkylamines by Samarium Diiodide-Promoted Cyclizations of Î±-Amino Radicals Derived from Î±-Benzotriazolylalkenylamines. Journal of Organic Chemistry, 1997, 62, 1125-1135.	3.2	31
38	Berberine Cation:â€‰ A Fluorescent Chemosensor for Alkanes and Other Low-Polarity Compounds. An Explanation of This Phenomenon. Organic Letters, 2000, 2, 2311-2313.	4.6	30
39	Theoretical Study on the Mechanism of the [2 + 1] Thermal Cycloaddition between Alkenes and Stable Singlet (Phosphino)(silyl)carbenes. Journal of Organic Chemistry, 2007, 72, 357-366.	3.2	29
40	Structural and Solvent Effects on the Mechanism of the Thermal Decarboxylation of 2-Oxetanones. A Limiting Case between Concerted and Stepwise Pathways in Pericyclic Reactions. Journal of the American Chemical Society, 1997, 119, 816-825.	13.7	28
41	Stereoselectivity, Different Oxidation States, and Multiple Spin States in the Cyclopropanation of Olefins Catalyzed by Feâ€"Porphyrin Complexes. ACS Catalysis, 2018, 8, 11140-11153.	11.2	27
42	[4+3] versus [4+2] Mechanisms in the Dimerization of 2-Boryl-1,3-butadienes. A Theoretical and Experimental Study. Journal of Organic Chemistry, 2002, 67, 9153-9161.	3.2	26
43	Substituent Effects in Eight-Electron Electrocyclic Reactions. Journal of Organic Chemistry, 2005, 70, 1035-1041.	3.2	26
44	Reagents and synthetic methods. Part 58. Synthesis of Î²-lactams from acetic acids and imines promoted by Vilsmeier type reagents. Journal of the Chemical Society Perkin Transactions 1, 1987, , 845-850.	0.9	25
45	An ab initio study on the mechanism of the alkeneâ€"isocyanate cycloaddition reaction to form Î²-lactams. Journal of the Chemical Society Chemical Communications, 1993, , 1450-1452.	2.0	25
46	Solvent Effects on the Conformer Distribution of 2-Methoxypropanal and Chloroacetaldehyde. A Model Case for the Conformational Analysis in Solution of Chiral Aldehydes Including Polar Groups. Journal of Organic Chemistry, 1997, 62, 6485-6492.	3.2	25
47	Stereoselective Coupling of <i>N</i>-<i>tert</i>-Butanesulfinyl Aldimines and Î²-Keto Acids: Access to Î²-Amino Ketones. Journal of Organic Chemistry, 2017, 82, 7481-7491.	3.2	23
48	Mechanism of DNA Methylation: The Double Role of DNA as a Substrate and as a Cofactor. Journal of Molecular Biology, 2010, 400, 632-644.	4.2	22
49	Origins of Stereocontrol in the [2 + 2] Cycloaddition between Achiral Ketenes and Chiral Î±-Alkoxy Aldehydes. A Pericyclic Alternative to the Aldol Reaction. Journal of Organic Chemistry, 1998, 63, 5216-5227.	3.2	21
50	Computational Studies on the Synthesis of Î²-Lactams via [2+2] Thermal Cycloadditions. Topics in Heterocyclic Chemistry, 2010, , 313-347.	0.2	21
51	Stereoselective conjugate addition of carbon nucleophiles to chiral (E)-nitroalkenes bearing a Î³-stereocenter. Origins of the observed anti selectivity. Tetrahedron Letters, 1996, 37, 3055-3058.	1.4	19
52	Cyclic Electron Delocalization in Pericyclic Reactions. Current Organic Chemistry, 2011, 15, 3594-3608.	1.6	18
53	An extension of barret's procedure for the preparation of potentially valuable carbapenem intermediates. Tetrahedron Letters, 1988, 29, 3129-3132.	1.4	17
54	Synthesis of Chromen[4,3â€‹<i>b</i>]pyrrolidines by Intramolecular 1,3â€Dipolar Cycloadditions of Azomethine Ylides: An Experimental and Computational Assessment of the Origin of Stereocontrol. European Journal of Organic Chemistry, 2015, 2015, 4689-4698.	2.4	17

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55	Cyclopropanation reactions catalysed by dendrimers possessing one metalloporphyrin active site at the core: linear and sigmoidal kinetic behaviour for different dendrimer generations. Tetrahedron, 2016, 72, 1120-1131.	1.9	14
56	Twoâ€State Reactivity of Histone Demethylases Containing Jumonjiâ€C Active Sites: Different Mechanisms for Different Methylation Degrees. Chemistry - A European Journal, 2017, 23, 137-148.	3.3	13
57	Transition structures for the reformatsky reaction. A theoretical (MNDO-PM3) study.. Tetrahedron Letters, 1993, 34, 6111-6114.	1.4	12
58	Loss of aromaticity and Ï€-electron delocalization in the first step of the electrophilic aromatic nitration of benzene, phenol and benzonitrile. Computational and Theoretical Chemistry, 2007, 811, 19-26.	1.5	12
59	Theoretical and experimental studies on the periselectivity of the cycloaddition reaction between activated ketenes and conjugated imines. Tetrahedron Letters, 1994, 35, 7825-7828.	1.4	12
60	Enhancing stereochemical diversity by means of microwave irradiation in the absence of solvent: Synthesis of highly substituted nitroproline esters via 1,3-dipolar reactions. Molecular Diversity, 2003, 7, 175-180.	3.9	11
61	Selective synthesis of trisubstituted pyrroles through the reactions of alkynyl Fischer carbene complexes with oxazolones. Organic and Biomolecular Chemistry, 2020, 18, 538-550.	2.8	11
62	Computational Chemistry; A Useful Tool for the Chemical Synthesis of Complex Molecules, Heterocycles and Catalysts. Synlett, 2013, 24, 535-549.	1.8	10
63	A convenient synthetic approach to alpha-amino-beta-lactam synthesis promoted by phenyl dichlorophosphate reagent. Tetrahedron Letters, 1984, 25, 3905-3908.	1.4	9
64	Theoretical and experimental studies on the periselectivity of the cycloaddition reaction between activated ketenes and conjugated imines. Tetrahedron Letters, 1994, 35, 7825-7828.	1.4	8
65	Negishi coupling reactions with [¹¹C]CH₃I: a versatile method for efficient ¹¹Câ€“C bond formation. Chemical Communications, 2018, 54, 4398-4401.	4.1	8
66	Density Functional Theory Study on the Demethylation Reaction between Methylamine, Dimethylamine, Trimethylamine, and Tamoxifen Catalyzed by a Fe(IV)â€“Oxo Porphyrin Complex. Journal of Physical Chemistry A, 2018, 122, 1658-1671.	2.5	8
67	Organocatalyzed Transient Dienamine-Mediated Diels-Alder Reactions between Î±,Î²-Unsaturated Ketones and Alkenes. Letters in Organic Chemistry, 2018, 15, 394-403.	0.5	4
68	Nature of Alkaliâ€•and Coinageâ€Metal Bonds versus Hydrogen Bonds. Chemistry - an Asian Journal, 2021, 16, 315-321.	3.3	3
69	(2S*,3R*,4S*,5R*)-3-(S*-1-Benzyloxyethyl)-4-methyl-4-nitro-5-phenylproline methyl ester. Acta Crystallographica Section E: Structure Reports Online, 2001, 57, o1123-o1125.	0.2	2