T V Rajanbabu

List of Publications by Year
in descending order

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82	6,432	38742 50	66911 78
papers	citations	h-index	g-index

92	92	92	3381
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catalytic Enantioselective Hydrovinylation of Trialkylsilyloxy and Acetoxy-1,3-Dienes: Cationic Co(I) Complexes for the Synthesis of Chiral Enolate Surrogates and Their Applications for Synthesis of Ketones and Cross-Coupling Reagents in High Enantiomeric Purity. ACS Catalysis, 2022, 12, 5094-5111.	11.2	7
2	Activator-free single-component Co(<scp>i</scp>)-catalysts for regio- and enantioselective heterodimerization and hydroacylation reactions of 1,3-dienes. New reduction procedures for synthesis of [L]Co(<scp>i</scp>)-complexes and comparison to in situ generated catalysts. Dalton Transactions, 2022, 51, 10148-10159.	3.3	5
3	Î³ Câ€“H Functionalization of Amines via Triple H-Atom Transfer of a Vinyl Sulfonyl Radical Chaperone. Journal of the American Chemical Society, 2022, 144, 13366-13373.	13.7	15
4	Four Mechanistic Mysteries: The Benefits of Writing a Critical Review. Angewandte Chemie - International Edition, 2021, 60, 2194-2201.	13.8	19
5	Four Mechanistic Mysteries: The Benefits of Writing a Critical Review. Angewandte Chemie, 2021, 133, 2222-2229.	2.0	8
6	Cationic Co(I) Catalysts for Regiodivergent Hydroalkenylation of 1,6-Enynes: An Uncommon cis-Î²-Câ€“H Activation Leads to Z-Selective Coupling of Acrylates. ACS Catalysis, 2021, 11, 9605-9617.	11.2	32
7	Î±- and Î²-Functionalized Ketones from 1,3-Dienes and Aldehydes: Control of Regio- and Enantioselectivity in Hydroacylation of 1,3-Dienes. Journal of the American Chemical Society, 2021, 143, 12825-12835.	13.7	30
8	A New Paradigm in Enantioselective Cobalt Catalysis: Cationic Cobalt(I) Catalysts for Heterodimerization, Cycloaddition, and Hydrofunctionalization Reactions of Olefins. Accounts of Chemical Research, 2021, 54, 4545-4564.	15.6	44
9	Mechanism of Cobalt-Catalyzed Heterodimerization of Acrylates and 1,3-Dienes. A Potential Role of Cationic Cobalt(I) Intermediates. ACS Catalysis, 2020, 10, 4337-4348.	11.2	20
10	The reaction of Î²,Î³â^'epoxy alcohols with titanium(III) reagents. A proposed role for intramolecular hydrogen bonding. Tetrahedron, 2019, 75, 130662.	1.9	15
11	Catalytic Enantioselective Synthesis of Cyclobutenes from Alkynes and Alkenyl Derivatives. Journal of the American Chemical Society, 2019, 141, 15367-15377.	13.7	83
12	Cationic Co(I)-Intermediates for Hydrofunctionalization Reactions: Regio- and Enantioselective Cobalt-Catalyzed 1,2-Hydroboration of 1,3-Dienes. Journal of the American Chemical Society, 2019, 141, 7365-7375.	13.7	65
13	Demystifying Cp₂Ti(H)Cl and Its Enigmatic Role in the Reactions of Epoxides with Cp₂TiCl. Organometallics, 2018, 37, 4801-4809.	2.3	32
14	Tandem catalysis for asymmetric coupling of ethylene and enynes to functionalized cyclobutanes. Science, 2018, 361, 68-72.	12.6	100
15	Broadly Applicable Stereoselective Syntheses of Serrulatane, Amphilectane Diterpenes, and Their Diastereoisomeric Congeners Using Asymmetric Hydrovinylation for Absolute Stereochemical Control. Journal of the American Chemical Society, 2018, 140, 9868-9881.	13.7	20
16	Control of Selectivity through Synergy between Catalysts, Silanes, and Reaction Conditions in Cobalt-Catalyzed Hydrosilylation of Dienes and Terminal Alkenes. ACS Catalysis, 2017, 7, 2275-2283.	11.2	90
17	Examining the Scope and Thermodynamics of Assembly in Nesting Complexes Comprising Molecular Baskets and TPA Ligands. Organic Letters, 2017, 19, 4932-4935.	4.6	10
18	Catalytic Enantioselective Hetero-dimerization of Acrylates and 1,3-Dienes. Journal of the American Chemical Society, 2017, 139, 18034-18043.	13.7	96

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19	Selective Cobalt-Catalyzed Reduction of Terminal Alkenes and Alkynes Using (EtO)2Si(Me)H as a Stoichiometric Reductant. ACS Catalysis, 2016, 6, 6318-6323.	11.2	58
20	Russian Nesting Doll Complexes of Molecular Baskets and Zinc Containing TPA Ligands. Journal of the American Chemical Society, 2016, 138, 8253-8258.	13.7	31
21	Cobalt-catalysed asymmetric hydrovinylation of 1,3-dienes. Chemical Science, 2015, 6, 3994-4008.	7.4	55
22	Asymmetric Catalysis with Ethylene. Synthesis of Functionalized Chiral Enolates. Journal of the American Chemical Society, 2015, 137, 14268-14271.	13.7	48
23	Bimetallic catalysis in the highly enantioselective ringâ€“opening reactions of aziridines. Chemical Science, 2014, 5, 1102-1117.	7.4	68
24	Triarylphosphine Ligands with Hemilabile Alkoxy Groups: Ligands for Nickel(II)â€Catalyzed Olefin Dimerization Reactions. Hydrovinylation of Vinylarenes, 1,3â€Đienes, and Cycloisomerization of 1,6â€Đienes. Advanced Synthesis and Catalysis, 2014, 356, 2281-2292.	4.3	33
25	Conformation and reactivity in dibenzocyclooctadienes (DBCOD). A general approach to the total synthesis of fully substituted DBCOD lignans via borostannylative cyclization of Î±,Ï‰-diynes. Chemical Science, 2013, 4, 3979.	7.4	10
26	Highly Efficient Catalytic Dimerization of Styrenes via Cationic Palladium(II) Complexes. Advanced Synthesis and Catalysis, 2013, 355, 3633-3638.	4.3	20
27	On the stereochemistry of acetylide additions to highly functionalized biphenylcarbaldehydes and multi-component cyclization of 1,n-diynes. Syntheses of dibenzocyclooctadiene lignans. Chemical Science, 2012, 3, 1221.	7.4	15
28	Asymmetric Hydrovinylation of 1-Vinylcycloalkenes. Reagent Control of Regio- and Stereoselectivity. Journal of the American Chemical Society, 2012, 134, 6556-6559.	13.7	78
29	Asymmetric Hydrovinylation of Vinylindoles. A Facile Route to Cyclopenta[g]indole Natural Products (+)-cis-Trikentrin A and (+)-cis-Trikentrin B. Journal of the American Chemical Society, 2012, 134, 5496-5499.	13.7	56
30	Ethylene in Organic Synthesis. Repetitive Hydrovinylation of Alkenes for Highly Enantioselective Syntheses of Pseudopterosins. Journal of the American Chemical Society, 2011, 133, 5776-5779.	13.7	60
31	Low pressure vinylation of aryl and vinyl halides via Heckâ€“Mizoroki reactions using ethylene. Tetrahedron, 2010, 66, 1102-1110.	1.9	33
32	Asymmetric Hydrovinylation of Unactivated Linear 1,3-Dienes. Journal of the American Chemical Society, 2010, 132, 3295-3297.	13.7	134
33	Stereoselective Cyclization of Functionalized 1,n-Diynes Mediated by [Xâ^'Y] Reagents [Xâ^'Y = R₃Siâ^'SnRâ€²₃ or (R₂N)₂Bâ^'SnRâ€²₃]: Synthesis and Properties of Atropisomeric 1,3-Dienes. Journal of the American Chemical Society, 2010, 132, 13078-13087.	13.7	45
34	Mechanism and Stereoselection in a Y-Catalyzed Transacylation Reaction. A Computational Modeling Study. Journal of Organic Chemistry, 2010, 75, 2369-2381.	3.2	6
35	Reactivity and Selectivity in Hydrovinylation of Strained Alkenes. Journal of Organic Chemistry, 2010, 75, 7636-7643.	3.2	34
36	Tunable Phosphoramidite Ligands for Asymmetric Hydrovinylation: Ligands par excellence for Generation of All-Carbon Quaternary Centers. Synthesis, 2009, 2009, 2089-2100.	2.3	15

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37	In Pursuit of an Ideal Carbon-Carbon Bond-Forming Reaction: Development and Applications of the Hydrovinylation of Olefins. Synlett, 2009, 2009, 853-885.	1.8	112
38	Enantioselective Desymmetrization of mesoâ€Aziridines with TMSN₃ or TMSCN Catalyzed by Discrete Yttrium Complexes. Angewandte Chemie - International Edition, 2009, 48, 1126-1129.	13.8	110
39	Catalytic Asymmetric Synthesis Using Feedstocks: An Enantioselective Route to 2-Arylpropionic Acids and 1-Arylethyl Amines via Hydrovinylation of Vinyl Arenes. Journal of Organic Chemistry, 2009, 74, 3066-3072.	3.2	50
40	A Theoretical Investigation of the Ni(II)-Catalyzed Hydrovinylation of Styrene. Organometallics, 2009, 28, 3552-3566.	2.3	47
41	Regiodivergent Ring Opening of Chiral Aziridines. Science, 2009, 326, 1662-1662.	12.6	120
42	Facile Pd(II)- and Ni(II)-Catalyzed Isomerization of Terminal Alkenes into 2-Alkenes. Journal of Organic Chemistry, 2009, 74, 4565-4572.	3.2	107
43	Ligand Tuning in Asymmetric Hydrovinylation of 1,3-Dienes: A Stereoselective Route to Either Steroid-C₂₀ (S) or -C₂₀ (R) Derivatives. Journal of the American Chemical Society, 2008, 130, 9000-9005.	13.7	79
44	Efficient, Selective, and Green:â€‰ Catalyst Tuning for Highly Enantioselective Reactions of Ethylene. Organic Letters, 2008, 10, 1657-1659.	4.6	72
45	(R)-3-METHYL-3-PHENYL-1-PENTENE VIA CATALYTIC ASYMMETRIC HYDROVINYLATION. Organic Syntheses, 2008, 85, 248.	1.0	27
46	(R)-2,2'-BINAPHTHOYL-(S,S)-DI(1-PHENYLETHYL) AMINOPHOSPHINE. SCALABLE PROTOCOLS FOR THE SYNTHESES OF PHOSPHORAMIDITE (FERINGA) LIGANDS. Organic Syntheses, 2008, 85, 238-247.	1.0	9
47	Syntheses and Applications of 2-Phosphino-2â€˜-alkoxy-1,1â€˜-binaphthyl Ligands. Development of a Working Model for Asymmetric Induction in Hydrovinylation Reactions. Journal of Organic Chemistry, 2007, 72, 2357-2363.	3.2	48
48	Exceptionally Active Yttriumâ€˜Salen Complexes for the Catalyzed Ring Opening of Epoxides by TMSCN and TMSN3. Journal of Organic Chemistry, 2007, 72, 8648-8655.	3.2	44
49	Nickel(0)-Catalyzed Asymmetric Hydrocyanation of 1,3-Dienes. Organic Letters, 2006, 8, 4657-4659.	4.6	107
50	All-Carbon Quaternary Centers via Catalytic Asymmetric Hydrovinylation. New Approaches to the Exocyclic Side Chain Stereochemistry Problem. Journal of the American Chemical Society, 2006, 128, 5620-5621.	13.7	91
51	Hydrovinylation of 1,3-Dienes:Â A New Protocol, an Asymmetric Variation, and a Potential Solution to the Exocyclic Side Chain Stereochemistry Problem. Journal of the American Chemical Society, 2006, 128, 54-55.	13.7	96
52	Heterodimerization of Olefins. Part 1. Hydrovinylation Reactions of Olefins that Are Amenable to Asymmetric Catalysis.. ChemInform, 2004, 35, no.	0.0	0
53	Fine-Tuning Monophosphine Ligands for Enhanced Enantioselectivity. Influence of Chiral Hemilabile Pendant Groups. Organic Letters, 2004, 6, 1515-1517.	4.6	66
54	Chiral Benzyl Centers through Asymmetric Catalysis. A Three-Step Synthesis of (R)-(â€˜)-Î±-Curcumene via Asymmetric Hydrovinylation. Organic Letters, 2004, 6, 3159-3161.	4.6	61

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55	Hydrovinylation of Norbornene. Ligand-Dependent Selectivity and Asymmetric Variations. Organic Letters, 2003, 5, 4345-4348.	4.6	74
56	Axial Chirality in 1,4-Disubstituted (ZZ)-1,3-Dienes. Surprisingly Low Energies of Activation for the Enantiomerization in Synthetically Useful Fluxional Molecules. Journal of the American Chemical Society, 2003, 125, 15402-15410.	13.7	38
57	Heterodimerization of Olefins. 1. Hydrovinylation Reactions of Olefins That Are Amenable to Asymmetric Catalysis. Journal of Organic Chemistry, 2003, 68, 8431-8446.	3.2	90
58	Asymmetric Hydrovinylation Reaction. Chemical Reviews, 2003, 103, 2845-2860.	47.7	268
59	Tunable Ligands for Asymmetric Catalysis:â€‰ Readily Available Carbohydrate-Derived Diarylphosphinites Induce High Selectivity in the Hydrovinylation of Styrene Derivatives. Journal of the American Chemical Society, 2002, 124, 734-735.	13.7	104
60	Ligand-Assisted Rate Acceleration in Transacylation by a Yttriumâ€'Salen Complex. Demonstration of a Conceptually New Strategy for Metal-Catalyzed Kinetic Resolution of Alcohols. Organic Letters, 2002, 4, 1607-1610.	4.6	70
61	Synthesis, Characterization, and Applicability of Neutral Polyhydroxy Phospholane Derivatives and Their Rhodium(I) Complexes for Reactions in Organic and Aqueous Media. Journal of the American Chemical Society, 2001, 123, 10207-10213.	13.7	64
62	Ligand Substituent Effects on Asymmetric Induction. Effect of Structural Variations of the DIOP Ligand on the Rh-Catalyzed Asymmetric Hydrogenation of Enamides. Organic Letters, 2000, 2, 4137-4140.	4.6	60
63	Metal-Catalyzed Acyl Transfer Reactions of Enol Esters:â€‰ Role of Y5(OiPr)13O and (thd)2Y(OiPr) as Transesterification Catalysts. Organic Letters, 2000, 2, 997-1000.	4.6	74
64	Ligand Tuning in Asymmetric Catalysis:â€‰ Mono- and Bis-Phospholanes for a Prototypical Pd-Catalyzed Asymmetric Allylation Reaction. Organic Letters, 2000, 2, 199-202.	4.6	67
65	First Chelated ChiralN-HeterocyclicBis-Carbene Complexes. Organic Letters, 2000, 2, 1125-1128.	4.6	185
66	Highly Flexible Synthetic Routes to Functionalized Phospholanes from Carbohydrates. Journal of Organic Chemistry, 2000, 65, 900-906.	3.2	80
67	Hydrovinylation and Related Reactions: New Protocols and Control Elements in Search of Greater Synthetic Efficiency and Selectivity. Chemistry - A European Journal, 1999, 5, 1963-1968.	3.3	67
68	Synergistic Effects of Hemilabile Coordination and Counterions in Homogeneous Catalysis:â€‰ New Tunable Monophosphine Ligands for Hydrovinylation Reactions. Journal of the American Chemical Society, 1999, 121, 9899-9900.	13.7	130
69	Substituent Effects of Ligands on Asymmetric Induction in a Prototypical Palladium-Catalyzed Allylation Reaction:Â Making Both Enantiomers of a Product in High Optical Purity Using the Same Source of Chirality. Journal of Organic Chemistry, 1999, 64, 7601-7611.	3.2	90
70	Water-Soluble Organometallic Catalysts from Carbohydrates. 1. Diphosphiniteâ€'Rh Complexes. Organic Letters, 1999, 1, 1229-1232.	4.6	54
71	Electronic Effects in Asymmetric Catalysis:Â Structural Studies of Precatalysts and Intermediates in Rh-Catalyzed Hydrogenation of Dimethyl Itaconate and Acetamidocinnamic Acid Derivatives UsingC2-Symmetric Diarylphosphinite Ligands. Journal of Organic Chemistry, 1999, 64, 3429-3447.	3.2	91
72	The Hydrovinylation Reaction:Â A New Highly Selective Protocol Amenable to Asymmetric Catalysis. Journal of the American Chemical Society, 1998, 120, 459-460.	13.7	142

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73	Catalyzed Cyclization of Î±,Ï‰-Dienes:Â A Versatile Protocol for the Synthesis of Functionalized Carbocyclic and Heterocyclic Compounds. Journal of the American Chemical Society, 1998, 120, 8007-8008.	13.7	107
74	Role of Electronic Asymmetry in the Design of New Ligands:Â The Asymmetric Hydrocyanation Reaction. Journal of the American Chemical Society, 1996, 118, 6325-6326.	13.7	153
75	Selective Generation of Free Radicals from Epoxides Using a Transition-Metal Radical. A Powerful New Tool for Organic Synthesis. Journal of the American Chemical Society, 1994, 116, 986-997.	13.7	474
76	Ligand Electronic Effects in Asymmetric Catalysis: Enhanced Enantioselectivity in the Asymmetric Hydrocyanation of Vinylarenes. Journal of the American Chemical Society, 1994, 116, 9869-9882.	13.7	283
77	Electronic effects in asymmetric catalysis: Enantioselective carbon-carbon bond forming processes. Pure and Applied Chemistry, 1994, 66, 1535-1542.	1.9	61
78	Stereochemistry of intramolecular free-radical cyclization reactions. Accounts of Chemical Research, 1991, 24, 139-145.	15.6	253
79	Stereochemical control in hex-5-enyl radical cyclizations: from carbohydrates to carbocycles. 3. Journal of the American Chemical Society, 1989, 111, 1759-1769.	13.7	112
80	Transition-metal-centered radicals in organic synthesis. Titanium(III)-induced cyclization of epoxy olefins. Journal of the American Chemical Society, 1988, 110, 8561-8562.	13.7	325
81	From carbohydrates to carbocycles. 2. A free radical route to Corey lactone and other prostanoid intermediates. Journal of Organic Chemistry, 1988, 53, 4522-4530.	3.2	62
82	Nucleophilic addition of silyl enol ethers to aromatic nitro compounds: scope and mechanism of reaction. Journal of the American Chemical Society, 1985, 107, 5473-5483.	13.7	67