Neil K Garg

List of Publications by Year
in descending order

139 papers	11,554 citations	27035 58 h-index	33145 104 g-index
162 all docs	162 docs citations	162 times ranked	7165 citing authors

#	Article	IF	Citations
1	Catalysis in Modern Drug Discovery: Insights from a Graduate Student-Taught Undergraduate Course. Journal of Chemical Education, 2022, 99, 1296-1303.	1.1	4
2	Ï€-Extension of heterocycles <i>via</i> a Pd-catalyzed heterocyclic aryne annulation: Ï€-extended donors for TADF emitters. Chemical Science, 2022, 13, 5884-5892.	3.7	7
3	Advancing global chemical education through interactive teaching tools. Chemical Science, 2022, 13, 5790-5796.	3.7	8
4	Reductive Arylation of Amides via a Nickelâ€Catalyzed Suzukiâ€“Miyauraâ€Coupling and Transferâ€Hydrogenation Cascade. Angewandte Chemie - International Edition, 2021, 60, 2472-2477.	7.2	21
5	Reductive Arylation of Amides via a Nickelâ€Catalyzed Suzukiâ€“Miyauraâ€Coupling and Transferâ€Hydrogenation Cascade. Angewandte Chemie, 2021, 133, 2502-2507.	1.6	5
6	Taming Radical Pairs in the Crystalline Solid State: Discovery and Total Synthesis of Psychotriadine. Journal of the American Chemical Society, 2021, 143, 4043-4054.	6.6	24
7	Total Synthesis of (âˆ’)-Strictosidine and Interception of Aryne Natural Product Derivatives â€œStrictosidyneâ€•and â€œStrictosamidyneâ€•. Journal of the American Chemical Society, 2021, 143, 7471-7479.	6.6	19
8	Origins of <i>Endo</i> Selectivity in Dielsâ€“Alder Reactions of Cyclic Allene Dienophiles. Angewandte Chemie - International Edition, 2021, 60, 14989-14997.	7.2	24
9	Origins of Endo Selectivity in Dielsâ€“Alder Reactions of Cyclic Allene Dienophiles. Angewandte Chemie, 2021, 133, 15116-15124.	1.6	3
10	Leveraging Fleeting Strained Intermediates to Access Complex Scaffolds. Jacs Au, 2021, 1, 897-912.	3.6	37
11	Palladium-Catalyzed Annulations of Strained Cyclic Allenes. Journal of the American Chemical Society, 2021, 143, 9338-9342.	6.6	21
12	A platform for on-the-complex annulation reactions with transient aryne intermediates. Nature Communications, 2021, 12, 3706.	5.8	5
13	Cycloaddition Cascades of Strained Alkynes and Oxadiazinones. Angewandte Chemie, 2021, 133, 18349-18356.	1.6	4
14	Cell-Free Total Biosynthesis of Plant Terpene Natural Products Using an Orthogonal Cofactor Regeneration System. ACS Catalysis, 2021, 11, 9898-9903.	5.5	16
15	Cycloaddition Cascades of Strained Alkynes and Oxadiazinones. Angewandte Chemie - International Edition, 2021, 60, 18201-18208.	7.2	15
16	Interception of 1,2-cyclohexadiene with TEMPO radical. Tetrahedron Letters, 2021, 87, 153539.	0.7	6
17	Ni-Catalyzed Suzukiâ€“Miyaura Cross-Coupling of Aliphatic Amides on the Benchtop. Organic Letters, 2020, 22, 1-5.	2.4	41
18	From glovebox to benchtop. Nature Catalysis, 2020, 3, 2-3.	16.1	3

#	Article	IF	Citations
19	An enzymatic Alder-ene reaction. Nature, 2020, 586, 64-69.	13.7	41
20	Cyanoamidine Cyclization Approach to Remdesivirâ€™s Nucleobase. Organic Letters, 2020, 22, 8430-8435.	2.4	19
21	Activation of Câ€“O and Câ€“N Bonds Using Non-Precious-Metal Catalysis. ACS Catalysis, 2020, 10, 12109-12126.	5.5	104
22	Silyl Tosylate Precursors to Cyclohexyne, 1,2-Cyclohexadiene, and 1,2-Cycloheptadiene. Organic Letters, 2020, 22, 4500-4504.	2.4	19
23	Discovery and Total Synthesis of a Bis(cyclotryptamine) Alkaloid Bearing the Elusive Piperidinoindoline Scaffold. Journal of the American Chemical Society, 2020, 142, 11685-11690.	6.6	24
24	Nickel-Catalyzed Conversion of Amides to Carboxylic Acids. Organic Letters, 2020, 22, 2833-2837.	2.4	21
25	Treating a Global Health Crisis with a Dose of Synthetic Chemistry. ACS Central Science, 2020, 6, 1017-1030.	5.3	25
26	Safety Assessment of Benzyne Generation from a Silyl Triflate Precursor. Organic Letters, 2020, 22, 1665-1669.	2.4	15
27	Dual Neutral Sphingomyelinase-2/Acetylcholinesterase Inhibitors for the Treatment of Alzheimerâ€™s Disease. ACS Chemical Biology, 2020, 15, 1671-1684.	1.6	17
28	Evaluation of the photodecarbonylation of crystalline ketones for the installation of reverse prenyl groups on the pyrrolidinoindoline scaffold. Tetrahedron, 2020, 76, 131181.	1.0	3
29	Electrochemical Oxidation of Î”⁹-Tetrahydrocannabinol: A Simple Strategy for Marijuana Detection. Organic Letters, 2020, 22, 3951-3955.	2.4	15
30	Intercepting fleeting cyclic allenes with asymmetric nickel catalysis. Nature, 2020, 586, 242-247.	13.7	37
31	Chemoenzymatic conversion of amides to enantioenriched alcohols in aqueous medium. Communications Chemistry, 2019, 2, .	2.0	43
32	Base-Mediated Meerweinâ€“Ponndorfâ€“Verley Reduction of Aromatic and Heterocyclic Ketones. Organic Letters, 2019, 21, 6447-6451.	2.4	17
33	Total Synthesis as a Vehicle for Collaboration. Journal of the American Chemical Society, 2019, 141, 12423-12443.	6.6	13
34	How organic chemistry became one of UCLA's most popular classes. Journal of Biological Chemistry, 2019, 294, 17678-17683.	1.6	15
35	Cyclic Alkyne Approach to Heteroatomâ€Containing Polycyclic Aromatic Hydrocarbon Scaffolds. Angewandte Chemie - International Edition, 2019, 58, 9419-9424.	7.2	36
36	Cyclic Alkyne Approach to Heteroatomâ€Containing Polycyclic Aromatic Hydrocarbon Scaffolds. Angewandte Chemie, 2019, 131, 9519-9524.	1.6	9

#	Article	IF	Citations
37	Breaking Amide Câ€"N Bonds in an Undergraduate Organic Chemistry Laboratory. Journal of Chemical Education, 2019, 96, 776-780.	1.1	10
38	Concise Approach to Cyclohexyne and 1,2-Cyclohexadiene Precursors. Journal of Organic Chemistry, 2019, 84, 3652-3655.	1.7	12
39	Cycloadditions of Oxacyclic Allenes and a Catalytic Asymmetric Entryway to Enantioenriched Cyclic Allenes. Angewandte Chemie, 2019, 131, 5709-5713.	1.6	2
40	Cycloadditions of Oxacyclic Allenes and a Catalytic Asymmetric Entryway to Enantioenriched Cyclic Allenes. Angewandte Chemie - International Edition, 2019, 58, 5653-5657.	7.2	38
41	From heavy water to heavy aldehydes. Nature Catalysis, 2019, 2, 1058-1059.	16.1	7
42	Synthesis of fused indolines by interrupted Fischer indolization in a microfluidic reactor. Tetrahedron Letters, 2019, 60, 322-326.	0.7	3
43	How Organic Chemistry Became One of UCLA's Most Popular Classes. FASEB Journal, 2019, 33, 101.1.	0.2	1
44	Enantioselective Total Syntheses of Methanoquinolizidine-Containing Akuammiline Alkaloids and Related Studies. Journal of the American Chemical Society, 2018, 140, 6483-6492.	6.6	44
45	Shining a light on amine synthesis. Nature Catalysis, 2018, 1, 97-98.	16.1	4
46	Nickel-Catalyzed Suzukiâ€"Miyaura Coupling of Aliphatic Amides. ACS Catalysis, 2018, 8, 1003-1008.	5.5	88
47	Arynes and Cyclic Alkynes as Synthetic Building Blocks for Stereodefined Quaternary Centers. Journal of the American Chemical Society, 2018, 140, 7605-7610.	6.6	40
48	Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. ACS Central Science, 2018, 4, 1727-1741.	5.3	32
49	Empowering Students to Innovate: Engagement in Organic Chemistry Teaching. Angewandte Chemie - International Edition, 2018, 57, 15612-15613.	7.2	4
50	Engagierte Lehre in der organischen Chemie: Ermutigt die Studenten zu Innovationen. Angewandte Chemie, 2018, 130, 15838-15839.	1.6	0
51	Computationally Assisted Mechanistic Investigation and Development of Pd-Catalyzed Asymmetric Suzukiâ€"Miyaura and Negishi Cross-Coupling Reactions for Tetra-<i>ortho</i>-Substituted Biaryl Synthesis. ACS Catalysis, 2018, 8, 10190-10209.	5.5	70
52	Smart access to 3D structures. Nature Reviews Chemistry, 2018, 2, 95-96.	13.8	5
53	Synthesis of 8-Hydroxygeraniol. Journal of Organic Chemistry, 2018, 83, 11323-11326.	1.7	9
54	Dielsâ€"Alder cycloadditions of strained azacyclic allenes. Nature Chemistry, 2018, 10, 953-960.	6.6	66

#	Article	IF	Citations
55	Breaking Amides using Nickel Catalysis. ACS Catalysis, 2017, 7, 1413-1423.	5.5	378
56	Enzyme-Catalyzed Intramolecular Enantioselective Hydroalkoxylation. Journal of the American Chemical Society, 2017, 139, 3639-3642.	6.6	20
57	Organic chemistry can sizzle. Nature Reviews Chemistry, 2017, 1, .	13.8	2
58	Mizorokiâ€“Heck Cyclizations of Amide Derivatives for the Introduction of Quaternary Centers. Angewandte Chemie - International Edition, 2017, 56, 6567-6571.	7.2	86
59	Mizorokiâ€“Heck Cyclizations of Amide Derivatives for the Introduction of Quaternary Centers. Angewandte Chemie, 2017, 129, 6667-6671.	1.6	21
60	Total synthesis of (â€“)-tubingensin B enabled by the strategic use of an aryne cyclization. Nature Chemistry, 2017, 9, 944-949.	6.6	54
61	Kinetic Modeling of the Nickel-Catalyzed Esterification of Amides. ACS Catalysis, 2017, 7, 4381-4385.	5.5	64
62	Enantioselective Nickel-Catalyzed Mizorokiâ€“Heck Cyclizations To Generate Quaternary Stereocenters. Organic Letters, 2017, 19, 3338-3341.	2.4	54
63	Collaborative Biosynthesis of Maleimide- and Succinimide-Containing Natural Products by Fungal Polyketide Megasynthases. Journal of the American Chemical Society, 2017, 139, 5317-5320.	6.6	59
64	Nickel-Catalyzed Reduction of Secondary and Tertiary Amides. Organic Letters, 2017, 19, 1910-1913.	2.4	74
65	Expanding the ROMP Toolbox: Synthesis of Air-Stable Benzonorbornadiene Polymers by Aryne Chemistry. Macromolecules, 2017, 50, 580-586.	2.2	23
66	Understanding and Interrupting the Fischer Azaindolization Reaction. Journal of the American Chemical Society, 2017, 139, 14833-14836.	6.6	19
67	Engineering the biocatalytic selectivity of iridoid production in Saccharomyces cerevisiae. Metabolic Engineering, 2017, 44, 117-125.	3.6	37
68	Spectroscopy 101: A Practical Introduction to Spectroscopy and Analysis for Undergraduate Organic Chemistry Laboratories. Journal of Chemical Education, 2017, 94, 1584-1586.	1.1	9
69	Nickel-catalyzed transamidation of aliphatic amide derivatives. Chemical Science, 2017, 8, 6433-6438.	3.7	135
70	Conjugated Trimeric Scaffolds Accessible from Indolyne Cyclotrimerizations: Synthesis, Structures, and Electronic Properties. Journal of the American Chemical Society, 2017, 139, 10447-10455.	6.6	47
71	Indole diterpenoid natural products as the inspiration for new synthetic methods and strategies. Chemical Science, 2017, 8, 5836-5844.	3.7	89
72	Nickelâ€Catalyzed Activation of Acyl Câ^'O Bonds of Methyl Esters. Angewandte Chemie - International Edition, 2016, 55, 2810-2814.	7.2	142

#	Article	IF	Citations
73	Pardon the Interruption: A Modification of Fischerâ€™s Venerable ÂReaction for the Synthesis of Heterocycles and Natural Products. Synlett, 2016, 28, 1-11.	1.0	13
74	Nickelâ€Catalyzed Esterification of Aliphatic Amides. Angewandte Chemie, 2016, 128, 15353-15356.	1.6	34
75	Nickel-Catalyzed Alkylation of Amide Derivatives. ACS Catalysis, 2016, 6, 3176-3179.	5.5	142
76	Construction of Quaternary Stereocenters by Nickelâ€Catalyzed Heck Cyclization Reactions. Angewandte Chemie - International Edition, 2016, 55, 11921-11924.	7.2	58
77	Construction of Quaternary Stereocenters by Nickelâ€Catalyzed Heck Cyclization Reactions. Angewandte Chemie, 2016, 128, 12100-12103.	1.6	18
78	Quantification of the Electrophilicity of Benzyne and Related Intermediates. Journal of the American Chemical Society, 2016, 138, 10402-10405.	6.6	47
79	Benchtop Delivery of Ni(cod)₂ using Paraffin Capsules. Organic Letters, 2016, 18, 3934-3936.	2.4	118
80	A two-step approach to achieve secondary amide transamidation enabled by nickel catalysis. Nature Communications, 2016, 7, 11554.	5.8	213
81	Nickelâ€Catalyzed Esterification of Aliphatic Amides. Angewandte Chemie - International Edition, 2016, 55, 15129-15132.	7.2	155
82	Nickelâ€Catalyzed Activation of Acyl Câˆ’O Bonds of Methyl Esters. Angewandte Chemie, 2016, 128, 2860-2864.	1.6	36
83	Enantioselective Total Syntheses of Akuammiline Alkaloids (+)-Strictamine, (âˆ’)-2(<i>S</i>)-Cathafoline, and (âˆ’)-Aspidophylline A. Journal of the American Chemical Society, 2016, 138, 1162-1165.	6.6	101
84	Expanding the Strained Alkyne Toolbox: Generation and Utility of Oxygen-Containing Strained Alkynes. Journal of the American Chemical Society, 2016, 138, 4948-4954.	6.6	80
85	Synthetic studies pertaining to the 2,3-pyridyne and 4,5-pyrimidyne. Tetrahedron, 2016, 72, 3629-3634.	1.0	31
86	Nitrone Cycloadditions of 1,2-Cyclohexadiene. Journal of the American Chemical Society, 2016, 138, 2512-2515.	6.6	86
87	P450-Mediated Coupling of Indole Fragments To Forge Communesin and Unnatural Isomers. Journal of the American Chemical Society, 2016, 138, 4002-4005.	6.6	51
88	Nickel-catalysed Suzukiâ€“Miyaura coupling of amides. Nature Chemistry, 2016, 8, 75-79.	6.6	343
89	Cascade Reactions: A Driving Force in Akuammiline Alkaloid Total Synthesis. Angewandte Chemie - International Edition, 2015, 54, 400-412.	7.2	114
90	Elucidation of the Concise Biosynthetic Pathway of the Communesin Indole Alkaloids. Angewandte Chemie - International Edition, 2015, 54, 3004-3007.	7.2	94

#	Article	IF	Citations
91	Computational predictions of substituted benzyne and indolyne regioselectivities. Tetrahedron Letters, 2015, 56, 3511-3514.	0.7	66
92	Elucidation of the Concise Biosynthetic Pathway of the Communesin Indole Alkaloids. Angewandte Chemie, 2015, 127, 3047-3050.	1.6	18
93	Fischer Indolizations as a Strategic Platform for the Total Synthesis of Picrinine. Journal of Organic Chemistry, 2015, 80, 8954-8967.	1.7	53
94	Conversion of amides to esters by the nickel-catalysed activation of amide Câ€"N bonds. Nature, 2015, 524, 79-83.	13.7	479
95	Generation and Regioselective Trapping of a 3,4-Piperidyne for the Synthesis of Functionalized Heterocycles. Journal of the American Chemical Society, 2015, 137, 4082-4085.	6.6	64
96	Synthetic chemistry fuels interdisciplinary approaches to the production of artemisinin. Natural Product Reports, 2015, 32, 359-366.	5.2	48
97	Pyridynes and indolynes as building blocks for functionalized heterocycles and natural products. Chemical Communications, 2015, 51, 34-45.	2.2	218
98	Nickel-Catalyzed Suzukiâ€"Miyaura Cross-Coupling in a Green Alcohol Solvent for an Undergraduate Organic Chemistry Laboratory. Journal of Chemical Education, 2015, 92, 571-574.	1.1	30
99	Total syntheses of indolactam alkaloids (âˆ')-indolactam V, (âˆ')-pendolmycin, (âˆ')-lyngbyatoxin A, and (âˆ')-teleocidin A-2. Chemical Science, 2014, 5, 2184.	3.7	60
100	Total Synthesis of (âˆ')-<i>N</i>-Methylwelwitindolinone B Isothiocyanate via a Chlorinative Oxabicycle Ring-Opening Strategy. Journal of the American Chemical Society, 2014, 136, 14710-14713.	6.6	46
101	The Role of Aryne Distortions, Steric Effects, and Charges in Regioselectivities of Aryne Reactions. Journal of the American Chemical Society, 2014, 136, 15798-15805.	6.6	267
102	Cycloadditions of Cyclohexynes and Cyclopentyne. Journal of the American Chemical Society, 2014, 136, 14706-14709.	6.6	79
103	Enabling the Use of Heterocyclic Arynes in Chemical Synthesis. Journal of Organic Chemistry, 2014, 79, 846-851.	1.7	89
104	Nickel-Catalyzed Amination of Aryl Chlorides and Sulfamates in 2-Methyl-THF. ACS Catalysis, 2014, 4, 3289-3293.	5.5	70
105	Concise Enantiospecific Total Synthesis of Tubingensin A. Journal of the American Chemical Society, 2014, 136, 3036-3039.	6.6	63
106	Total Synthesis of the Akuammiline Alkaloid Picrinine. Journal of the American Chemical Society, 2014, 136, 4504-4507.	6.6	100
107	Nickel-Catalyzed Suzukiâ€"Miyaura Couplings in Green Solvents. Organic Letters, 2013, 15, 3950-3953.	2.4	127
108	Enantiospecific Total Synthesis of <i>N</i>â€Methylwelwitindolinoneâ€…D Isonitrile. Angewandte Chemie - International Edition, 2013, 52, 12422-12425.	7.2	44

#	Article	IF	Citations
109	Regioselective reactions of 3,4-pyridynes enabled by the aryne distortion model. Nature Chemistry, 2013, 5, 54-60.	6.6	188
110	Ni- and Fe-Catalyzed Cross-Coupling Reactions of Phenol Derivatives. Organic Process Research and Development, 2013, 17, 29-39.	1.3	300
111	Steric Effects Compete with Aryne Distortion To Control Regioselectivities of Nucleophilic Additions to 3-Silylarynes. Journal of the American Chemical Society, 2012, 134, 13966-13969.	6.6	139
112	Synthesis of (+)-Phenserine Using an Interrupted Fischer Indolization Reaction. Journal of Organic Chemistry, 2012, 77, 725-728.	1.7	47
113	Identification and Characterization of the Chaetoviridin and Chaetomugilin Gene Cluster in Chaetomium globosum Reveal Dual Functions of an Iterative Highly-Reducing Polyketide Synthase. Journal of the American Chemical Society, 2012, 134, 17900-17903.	6.6	93
114	Interrupted Fischer Indolization Approach toward the Communesin Alkaloids and Perophoramidine. Organic Letters, 2012, 14, 4556-4559.	2.4	45
115	Cine Substitution of Arenes Using the Aryl Carbamate as a Removable Directing Group. Organic Letters, 2012, 14, 2918-2921.	2.4	59
116	Total Synthesis of Oxidized Welwitindolinones and (âˆ’)-<i>N</i>-Methylwelwitindolinone C Isonitrile. Journal of the American Chemical Society, 2012, 134, 1396-1399.	6.6	161
117	Iron-Catalyzed Alkylations of Aryl Sulfamates and Carbamates. Organic Letters, 2012, 14, 3796-3799.	2.4	107
118	Nickel-Catalyzed Amination of Aryl Sulfamates and Carbamates Using an Air-Stable Precatalyst. Organic Letters, 2012, 14, 4182-4185.	2.4	128
119	Total Syntheses of the Elusive Welwitindolinones with Bicyclo[4.3.1] Cores. Angewandte Chemie - International Edition, 2012, 51, 3758-3765.	7.2	73
120	An Efficient Computational Model to Predict the Synthetic Utility of Heterocyclic Arynes. Angewandte Chemie - International Edition, 2012, 51, 2758-2762.	7.2	96
121	Nickel-Catalyzed Cross-Couplings Involving Carbonâˆ’Oxygen Bonds. Chemical Reviews, 2011, 111, 1346-1416.	23.0	1,212
122	Nickel-catalyzed amination of aryl carbamates and sequential site-selective cross-couplings. Chemical Science, 2011, 2, 1766.	3.7	148
123	Total Synthesis of (âˆ’)-<i>N</i>-Methylwelwitindolinone C Isothiocyanate. Journal of the American Chemical Society, 2011, 133, 15797-15799.	6.6	133
124	Total Synthesis of (Â±)-Aspidophylline A. Journal of the American Chemical Society, 2011, 133, 8877-8879.	6.6	150
125	Why Do Some Fischer Indolizations Fail?. Journal of the American Chemical Society, 2011, 133, 5752-5755.	6.6	54
126	Suzukiâˆ’Miyaura Cross-Coupling of Aryl Carbamates and Sulfamates: Experimental and Computational Studies. Journal of the American Chemical Society, 2011, 133, 6352-6363.	6.6	285

#	Article	IF	Citations
127	Overturning Indolyne Regioselectivities and Synthesis of Indolactam V. Journal of the American Chemical Society, 2011, 133, 3832-3835.	6.6	139
128	Nickelâ€Catalyzed Amination of Aryl Sulfamates. Angewandte Chemie - International Edition, 2011, 50, 2171-2173.	7.2	143
129	Understanding and Modulating Indolyne Regioselectivities. Synlett, 2011, 2011, 2599-2604.	1.0	22
130	Indolyne and Aryne Distortions and Nucleophilic Regioselectivites. Journal of the American Chemical Society, 2010, 132, 1267-1269.	6.6	225
131	Exploration of the interrupted Fischer indolization reaction. Tetrahedron, 2010, 66, 4687-4695.	1.0	99
132	Synthetic Studies Inspired by Vinigrol. Chemistry - A European Journal, 2010, 16, 8586-8595.	1.7	30
133	Indolyne Experimental and Computational Studies: Synthetic Applications and Origins of Selectivities of Nucleophilic Additions. Journal of the American Chemical Society, 2010, 132, 17933-17944.	6.6	215
134	Concise Synthesis of the Bicyclic Scaffold of<i>N</i>-Methylwelwitindolinone C Isothiocyanate via an Indolyne Cyclization. Organic Letters, 2009, 11, 2349-2351.	2.4	69
135	An Interrupted Fischer Indolization Approach toward Fused Indoline-Containing Natural Products. Organic Letters, 2009, 11, 3458-3461.	2.4	125
136	Suzukiâˆ’Miyaura Coupling of Aryl Carbamates, Carbonates, and Sulfamates. Journal of the American Chemical Society, 2009, 131, 17748-17749.	6.6	299
137	Indolynes as Electrophilic Indole Surrogates: Fundamental Reactivity and Synthetic Applications. Organic Letters, 2009, 11, 1007-1010.	2.4	87
138	Cross-Coupling Reactions of Aryl Pivalates with Boronic Acids. Journal of the American Chemical Society, 2008, 130, 14422-14423.	6.6	355
139	Gaming stereochemistry. Nature Reviews Chemistry, 0, , .	13.8	1