Neil K Garg

List of Publications by Year
in descending order

139 papers	11,554 citations	23567 58 h-index	29157 104 g-index
162 all docs	162 docs citations	162 times ranked	6574 citing authors

#	Article	IF	Citations
1	Nickel-Catalyzed Cross-Couplings Involving Carbonâˆ'Oxygen Bonds. Chemical Reviews, 2011, 111, 1346-1416.	47.7	1,212
2	Conversion of amides to esters by the nickel-catalysed activation of amide Câ€"N bonds. Nature, 2015, 524, 79-83.	27.8	479
3	Breaking Amides using Nickel Catalysis. ACS Catalysis, 2017, 7, 1413-1423.	11.2	378
4	Cross-Coupling Reactions of Aryl Pivalates with Boronic Acids. Journal of the American Chemical Society, 2008, 130, 14422-14423.	13.7	355
5	Nickel-catalysed Suzukiâ€"Miyaura coupling of amides. Nature Chemistry, 2016, 8, 75-79.	13.6	343
6	Ni- and Fe-Catalyzed Cross-Coupling Reactions of Phenol Derivatives. Organic Process Research and Development, 2013, 17, 29-39.	2.7	300
7	Suzukiâˆ'Miyaura Coupling of Aryl Carbamates, Carbonates, and Sulfamates. Journal of the American Chemical Society, 2009, 131, 17748-17749.	13.7	299
8	Suzukiâˆ'Miyaura Cross-Coupling of Aryl Carbamates and Sulfamates: Experimental and Computational Studies. Journal of the American Chemical Society, 2011, 133, 6352-6363.	13.7	285
9	The Role of Aryne Distortions, Steric Effects, and Charges in Regioselectivities of Aryne Reactions. Journal of the American Chemical Society, 2014, 136, 15798-15805.	13.7	267
10	Indolyne and Aryne Distortions and Nucleophilic Regioselectivites. Journal of the American Chemical Society, 2010, 132, 1267-1269.	13.7	225
11	Pyridynes and indolynes as building blocks for functionalized heterocycles and natural products. Chemical Communications, 2015, 51, 34-45.	4.1	218
12	Indolyne Experimental and Computational Studies: Synthetic Applications and Origins of Selectivities of Nucleophilic Additions. Journal of the American Chemical Society, 2010, 132, 17933-17944.	13.7	215
13	A two-step approach to achieve secondary amide transamidation enabled by nickel catalysis. Nature Communications, 2016, 7, 11554.	12.8	213
14	Regioselective reactions of 3,4-pyridynes enabled by the aryne distortion model. Nature Chemistry, 2013, 5, 54-60.	13.6	188
15	Total Synthesis of Oxidized Welwitindolinones and (âˆ')-<i>N</i>-Methylwelwitindolinone C Isonitrile. Journal of the American Chemical Society, 2012, 134, 1396-1399.	13.7	161
16	Nickelâ€Catalyzed Esterification of Aliphatic Amides. Angewandte Chemie - International Edition, 2016, 55, 15129-15132.	13.8	155
17	Total Synthesis of (Â±)-Aspidophylline A. Journal of the American Chemical Society, 2011, 133, 8877-8879.	13.7	150
18	Nickel-catalyzed amination of aryl carbamates and sequential site-selective cross-couplings. Chemical Science, 2011, 2, 1766.	7.4	148

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19	Nickelâ€Catalyzed Amination of Aryl Sulfamates. Angewandte Chemie - International Edition, 2011, 50, 2171-2173.	13.8	143
20	Nickelâ€Catalyzed Activation of Acyl Câˆ'O Bonds of Methyl Esters. Angewandte Chemie - International Edition, 2016, 55, 2810-2814.	13.8	142
21	Nickel-Catalyzed Alkylation of Amide Derivatives. ACS Catalysis, 2016, 6, 3176-3179.	11.2	142
22	Overturning Indolyne Regioselectivities and Synthesis of Indolactam V. Journal of the American Chemical Society, 2011, 133, 3832-3835.	13.7	139
23	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.	13.7	139
24	Nickel-catalyzed transamidation of aliphatic amide derivatives. Chemical Science, 2017, 8, 6433-6438.	7.4	135
25	Total Synthesis of (âˆ')-<i>N</i>-Methylwelwitindolinone C Isothiocyanate. Journal of the American Chemical Society, 2011, 133, 15797-15799.	13.7	133
26	Nickel-Catalyzed Amination of Aryl Sulfamates and Carbamates Using an Air-Stable Precatalyst. Organic Letters, 2012, 14, 4182-4185.	4.6	128
27	Nickel-Catalyzed Suzukiâ€"Miyaura Couplings in Green Solvents. Organic Letters, 2013, 15, 3950-3953.	4.6	127
28	An Interrupted Fischer Indolization Approach toward Fused Indoline-Containing Natural Products. Organic Letters, 2009, 11, 3458-3461.	4.6	125
29	Benchtop Delivery of Ni(cod)₂ using Paraffin Capsules. Organic Letters, 2016, 18, 3934-3936.	4.6	118
30	Cascade Reactions: A Driving Force in Akuammiline Alkaloid Total Synthesis. Angewandte Chemie - International Edition, 2015, 54, 400-412.	13.8	114
31	Iron-Catalyzed Alkylations of Aryl Sulfamates and Carbamates. Organic Letters, 2012, 14, 3796-3799.	4.6	107
32	Activation of Câ€"O and Câ€"N Bonds Using Non-Precious-Metal Catalysis. ACS Catalysis, 2020, 10, 12109-12126.	11.2	104
33	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.	13.7	101
34	Total Synthesis of the Akuammiline Alkaloid Picrinine. Journal of the American Chemical Society, 2014, 136, 4504-4507.	13.7	100
35	Exploration of the interrupted Fischer indolization reaction. Tetrahedron, 2010, 66, 4687-4695.	1.9	99
36	An Efficient Computational Model to Predict the Synthetic Utility of Heterocyclic Arynes. Angewandte Chemie - International Edition, 2012, 51, 2758-2762.	13.8	96

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37	Elucidation of the Concise Biosynthetic Pathway of the Communesin Indole Alkaloids. Angewandte Chemie - International Edition, 2015, 54, 3004-3007.	13.8	94
38	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.	13.7	93
39	Enabling the Use of Heterocyclic Arynes in Chemical Synthesis. Journal of Organic Chemistry, 2014, 79, 846-851.	3.2	89
40	Indole diterpenoid natural products as the inspiration for new synthetic methods and strategies. Chemical Science, 2017, 8, 5836-5844.	7.4	89
41	Nickel-Catalyzed Suzukiâ€“Miyaura Coupling of Aliphatic Amides. ACS Catalysis, 2018, 8, 1003-1008.	11.2	88
42	Indolynes as Electrophilic Indole Surrogates: Fundamental Reactivity and Synthetic Applications. Organic Letters, 2009, 11, 1007-1010.	4.6	87
43	Nitrone Cycloadditions of 1,2-Cyclohexadiene. Journal of the American Chemical Society, 2016, 138, 2512-2515.	13.7	86
44	Mizorokiâ€“Heck Cyclizations of Amide Derivatives for the Introduction of Quaternary Centers. Angewandte Chemie - International Edition, 2017, 56, 6567-6571.	13.8	86
45	Expanding the Strained Alkyne Toolbox: Generation and Utility of Oxygen-Containing Strained Alkynes. Journal of the American Chemical Society, 2016, 138, 4948-4954.	13.7	80
46	Cycloadditions of Cyclohexynes and Cyclopentyne. Journal of the American Chemical Society, 2014, 136, 14706-14709.	13.7	79
47	Nickel-Catalyzed Reduction of Secondary and Tertiary Amides. Organic Letters, 2017, 19, 1910-1913.	4.6	74
48	Total Syntheses of the Elusive Welwitindolinones with Bicyclo[4.3.1] Cores. Angewandte Chemie - International Edition, 2012, 51, 3758-3765.	13.8	73
49	Nickel-Catalyzed Amination of Aryl Chlorides and Sulfamates in 2-Methyl-THF. ACS Catalysis, 2014, 4, 3289-3293.	11.2	70
50	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.	11.2	70
51	Concise Synthesis of the Bicyclic Scaffold of<i>N</i>-Methylwelwitindolinone C Isothiocyanate via an Indolyne Cyclization. Organic Letters, 2009, 11, 2349-2351.	4.6	69
52	Computational predictions of substituted benzyne and indolyne regioselectivities. Tetrahedron Letters, 2015, 56, 3511-3514.	1.4	66
53	Dielsâ€“Alder cycloadditions of strained azacyclic allenes. Nature Chemistry, 2018, 10, 953-960.	13.6	66
54	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.	13.7	64

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55	Kinetic Modeling of the Nickel-Catalyzed Esterification of Amides. ACS Catalysis, 2017, 7, 4381-4385.	11.2	64
56	Concise Enantiospecific Total Synthesis of Tubingensin A. Journal of the American Chemical Society, 2014, 136, 3036-3039.	13.7	63
57	Total syntheses of indolactam alkaloids (â^')-indolactam V, (â^')-pendolmycin, (â^')-lyngbyatoxin A, and (â^')-teleocidin A-2. Chemical Science, 2014, 5, 2184.	7.4	60
58	Cine Substitution of Arenes Using the Aryl Carbamate as a Removable Directing Group. Organic Letters, 2012, 14, 2918-2921.	4.6	59
59	Collaborative Biosynthesis of Maleimide- and Succinimide-Containing Natural Products by Fungal Polyketide Megasynthases. Journal of the American Chemical Society, 2017, 139, 5317-5320.	13.7	59
60	Construction of Quaternary Stereocenters by Nickelâ€Catalyzed Heck Cyclization Reactions. Angewandte Chemie - International Edition, 2016, 55, 11921-11924.	13.8	58
61	Why Do Some Fischer Indolizations Fail?. Journal of the American Chemical Society, 2011, 133, 5752-5755.	13.7	54
62	Total synthesis of (â€")-tubingensin B enabled by the strategic use of an aryne cyclization. Nature Chemistry, 2017, 9, 944-949.	13.6	54
63	Enantioselective Nickel-Catalyzed Mizorokiâ€"Heck Cyclizations To Generate Quaternary Stereocenters. Organic Letters, 2017, 19, 3338-3341.	4.6	54
64	Fischer Indolizations as a Strategic Platform for the Total Synthesis of Picrinine. Journal of Organic Chemistry, 2015, 80, 8954-8967.	3.2	53
65	P450-Mediated Coupling of Indole Fragments To Forge Communesin and Unnatural Isomers. Journal of the American Chemical Society, 2016, 138, 4002-4005.	13.7	51
66	Synthetic chemistry fuels interdisciplinary approaches to the production of artemisinin. Natural Product Reports, 2015, 32, 359-366.	10.3	48
67	Synthesis of (+)-Phenserine Using an Interrupted Fischer Indolization Reaction. Journal of Organic Chemistry, 2012, 77, 725-728.	3.2	47
68	Quantification of the Electrophilicity of Benzyne and Related Intermediates. Journal of the American Chemical Society, 2016, 138, 10402-10405.	13.7	47
69	Conjugated Trimeric Scaffolds Accessible from Indolyne Cyclotrimerizations: Synthesis, Structures, and Electronic Properties. Journal of the American Chemical Society, 2017, 139, 10447-10455.	13.7	47
70	Total Synthesis of (â^')-<i>N</i>-Methylwelwitindolinone B Isothiocyanate via a Chlorinative Oxabicycle Ring-Opening Strategy. Journal of the American Chemical Society, 2014, 136, 14710-14713.	13.7	46
71	Interrupted Fischer Indolization Approach toward the Communesin Alkaloids and Perophoramidine. Organic Letters, 2012, 14, 4556-4559.	4.6	45
72	Enantiospecific Total Synthesis of <i>N</i>â€Methylwelwitindolinoneâ€…D Isonitrile. Angewandte Chemie - International Edition, 2013, 52, 12422-12425.	13.8	44

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73	Enantioselective Total Syntheses of Methanoquinolizidine-Containing Akuammiline Alkaloids and Related Studies. Journal of the American Chemical Society, 2018, 140, 6483-6492.	13.7	44
74	Chemoenzymatic conversion of amides to enantioenriched alcohols in aqueous medium. Communications Chemistry, 2019, 2, .	4.5	43
75	Ni-Catalyzed Suzukiâ€“Miyaura Cross-Coupling of Aliphatic Amides on the Benchtop. Organic Letters, 2020, 22, 1-5.	4.6	41
76	An enzymatic Alder-ene reaction. Nature, 2020, 586, 64-69.	27.8	41
77	Arynes and Cyclic Alkynes as Synthetic Building Blocks for Stereodefined Quaternary Centers. Journal of the American Chemical Society, 2018, 140, 7605-7610.	13.7	40
78	Cycloadditions of Oxacyclic Allenes and a Catalytic Asymmetric Entryway to Enantioenriched Cyclic Allenes. Angewandte Chemie - International Edition, 2019, 58, 5653-5657.	13.8	38
79	Engineering the biocatalytic selectivity of iridoid production in Saccharomyces cerevisiae. Metabolic Engineering, 2017, 44, 117-125.	7.0	37
80	Leveraging Fleeting Strained Intermediates to Access Complex Scaffolds. Jacs Au, 2021, 1, 897-912.	7.9	37
81	Intercepting fleeting cyclic allenes with asymmetric nickel catalysis. Nature, 2020, 586, 242-247.	27.8	37
82	Nickelâ€Catalyzed Activation of Acyl Câ'O Bonds of Methyl Esters. Angewandte Chemie, 2016, 128, 2860-2864.	2.0	36
83	Cyclic Alkyne Approach to Heteroatomâ€Containing Polycyclic Aromatic Hydrocarbon Scaffolds. Angewandte Chemie - International Edition, 2019, 58, 9419-9424.	13.8	36
84	Nickelâ€Catalyzed Esterification of Aliphatic Amides. Angewandte Chemie, 2016, 128, 15353-15356.	2.0	34
85	Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. ACS Central Science, 2018, 4, 1727-1741.	11.3	32
86	Synthetic studies pertaining to the 2,3-pyridyne and 4,5-pyrimidyne. Tetrahedron, 2016, 72, 3629-3634.	1.9	31
87	Synthetic Studies Inspired by Vinigrol. Chemistry - A European Journal, 2010, 16, 8586-8595.	3.3	30
88	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.	2.3	30
89	Treating a Global Health Crisis with a Dose of Synthetic Chemistry. ACS Central Science, 2020, 6, 1017-1030.	11.3	25
90	Discovery and Total Synthesis of a Bis(cyclotryptamine) Alkaloid Bearing the Elusive Piperidinoindoline Scaffold. Journal of the American Chemical Society, 2020, 142, 11685-11690.	13.7	24

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91	Taming Radical Pairs in the Crystalline Solid State: Discovery and Total Synthesis of Psychotriadine. Journal of the American Chemical Society, 2021, 143, 4043-4054.	13.7	24
92	Origins of <i>Endo</i> Selectivity in Dielsâ€“Alder Reactions of Cyclic Allene Dienophiles. Angewandte Chemie - International Edition, 2021, 60, 14989-14997.	13.8	24
93	Expanding the ROMP Toolbox: Synthesis of Air-Stable Benzonorbornadiene Polymers by Aryne Chemistry. Macromolecules, 2017, 50, 580-586.	4.8	23
94	Understanding and Modulating Indolyne Regioselectivities. Synlett, 2011, 2011, 2599-2604.	1.8	22
95	Mizorokiâ€“Heck Cyclizations of Amide Derivatives for the Introduction of Quaternary Centers. Angewandte Chemie, 2017, 129, 6667-6671.	2.0	21
96	Nickel-Catalyzed Conversion of Amides to Carboxylic Acids. Organic Letters, 2020, 22, 2833-2837.	4.6	21
97	Reductive Arylation of Amides via a Nickelâ€Catalyzed Suzukiâ€“Miyauraâ€Coupling and Transferâ€Hydrogenation Cascade. Angewandte Chemie - International Edition, 2021, 60, 2472-2477.	13.8	21
98	Palladium-Catalyzed Annulations of Strained Cyclic Allenes. Journal of the American Chemical Society, 2021, 143, 9338-9342.	13.7	21
99	Enzyme-Catalyzed Intramolecular Enantioselective Hydroalkoxylation. Journal of the American Chemical Society, 2017, 139, 3639-3642.	13.7	20
100	Understanding and Interrupting the Fischer Azaindolization Reaction. Journal of the American Chemical Society, 2017, 139, 14833-14836.	13.7	19
101	Cyanoamidine Cyclization Approach to Remdesivirâ€™s Nucleobase. Organic Letters, 2020, 22, 8430-8435.	4.6	19
102	Silyl Tosylate Precursors to Cyclohexyne, 1,2-Cyclohexadiene, and 1,2-Cycloheptadiene. Organic Letters, 2020, 22, 4500-4504.	4.6	19
103	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.	13.7	19
104	Elucidation of the Concise Biosynthetic Pathway of the Communesin Indole Alkaloids. Angewandte Chemie, 2015, 127, 3047-3050.	2.0	18
105	Construction of Quaternary Stereocenters by Nickelâ€Catalyzed Heck Cyclization Reactions. Angewandte Chemie, 2016, 128, 12100-12103.	2.0	18
106	Base-Mediated Meerweinâ€“Ponndorfâ€“Verley Reduction of Aromatic and Heterocyclic Ketones. Organic Letters, 2019, 21, 6447-6451.	4.6	17
107	Dual Neutral Sphingomyelinase-2/Acetylcholinesterase Inhibitors for the Treatment of Alzheimerâ€™s Disease. ACS Chemical Biology, 2020, 15, 1671-1684.	3.4	17
108	Cell-Free Total Biosynthesis of Plant Terpene Natural Products Using an Orthogonal Cofactor Regeneration System. ACS Catalysis, 2021, 11, 9898-9903.	11.2	16

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109	How organic chemistry became one of UCLA's most popular classes. Journal of Biological Chemistry, 2019, 294, 17678-17683.	3.4	15
110	Safety Assessment of Benzyne Generation from a Silyl Triflate Precursor. Organic Letters, 2020, 22, 1665-1669.	4.6	15
111	Electrochemical Oxidation of Î”⁹-Tetrahydrocannabinol: A Simple Strategy for Marijuana Detection. Organic Letters, 2020, 22, 3951-3955.	4.6	15
112	Cycloaddition Cascades of Strained Alkynes and Oxadiazinones. Angewandte Chemie - International Edition, 2021, 60, 18201-18208.	13.8	15
113	Pardon the Interruption: A Modification of Fischerâ€™s Venerable ÂReaction for the Synthesis of Heterocycles and Natural Products. Synlett, 2016, 28, 1-11.	1.8	13
114	Total Synthesis as a Vehicle for Collaboration. Journal of the American Chemical Society, 2019, 141, 12423-12443.	13.7	13
115	Concise Approach to Cyclohexyne and 1,2-Cyclohexadiene Precursors. Journal of Organic Chemistry, 2019, 84, 3652-3655.	3.2	12
116	Breaking Amide Câ€“N Bonds in an Undergraduate Organic Chemistry Laboratory. Journal of Chemical Education, 2019, 96, 776-780.	2.3	10
117	Spectroscopy 101: A Practical Introduction to Spectroscopy and Analysis for Undergraduate Organic Chemistry Laboratories. Journal of Chemical Education, 2017, 94, 1584-1586.	2.3	9
118	Synthesis of 8-Hydroxygeraniol. Journal of Organic Chemistry, 2018, 83, 11323-11326.	3.2	9
119	Cyclic Alkyne Approach to Heteroatomâ€Containing Polycyclic Aromatic Hydrocarbon Scaffolds. Angewandte Chemie, 2019, 131, 9519-9524.	2.0	9
120	Advancing global chemical education through interactive teaching tools. Chemical Science, 2022, 13, 5790-5796.	7.4	8
121	From heavy water to heavy aldehydes. Nature Catalysis, 2019, 2, 1058-1059.	34.4	7
122	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.	7.4	7
123	Interception of 1,2-cyclohexadiene with TEMPO radical. Tetrahedron Letters, 2021, 87, 153539.	1.4	6
124	Smart access to 3D structures. Nature Reviews Chemistry, 2018, 2, 95-96.	30.2	5
125	Reductive Arylation of Amides via a Nickelâ€Catalyzed Suzukiâ€“Miyauraâ€Coupling and Transferâ€Hydrogenation Cascade. Angewandte Chemie, 2021, 133, 2502-2507.	2.0	5
126	A platform for on-the-complex annulation reactions with transient aryne intermediates. Nature Communications, 2021, 12, 3706.	12.8	5

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127	Shining a light on amine synthesis. Nature Catalysis, 2018, 1, 97-98.	34.4	4
128	Empowering Students to Innovate: Engagement in Organic Chemistry Teaching. Angewandte Chemie - International Edition, 2018, 57, 15612-15613.	13.8	4
129	Cycloaddition Cascades of Strained Alkynes and Oxadiazinones. Angewandte Chemie, 2021, 133, 18349-18356.	2.0	4
130	Catalysis in Modern Drug Discovery: Insights from a Graduate Student-Taught Undergraduate Course. Journal of Chemical Education, 2022, 99, 1296-1303.	2.3	4
131	Synthesis of fused indolines by interrupted Fischer indolization in a microfluidic reactor. Tetrahedron Letters, 2019, 60, 322-326.	1.4	3
132	From glovebox to benchtop. Nature Catalysis, 2020, 3, 2-3.	34.4	3
133	Evaluation of the photodecarbonylation of crystalline ketones for the installation of reverse prenyl groups on the pyrrolidinoindoline scaffold. Tetrahedron, 2020, 76, 131181.	1.9	3
134	Origins of Endo Selectivity in Dielsâ€“Alder Reactions of Cyclic Allene Dienophiles. Angewandte Chemie, 2021, 133, 15116-15124.	2.0	3
135	Organic chemistry can sizzle. Nature Reviews Chemistry, 2017, 1, .	30.2	2
136	Cycloadditions of Oxacyclic Allenes and a Catalytic Asymmetric Entryway to Enantioenriched Cyclic Allenes. Angewandte Chemie, 2019, 131, 5709-5713.	2.0	2
137	How Organic Chemistry Became One of UCLA's Most Popular Classes. FASEB Journal, 2019, 33, 101.1.	0.5	1
138	Gaming stereochemistry. Nature Reviews Chemistry, 0, , .	30.2	1
139	Engagierte Lehre in der organischen Chemie: Ermutigt die Studenten zu Innovationen. Angewandte Chemie, 2018, 130, 15838-15839.	2.0	0