Liangbing Gan

List of Publications by Year
in descending order

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104	2,764	186265	214800
papers	citations	28 h-index	47 g-index

120	120	120	1707
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fullerenes as atert-Butylperoxy Radical Trap, Metal Catalyzed Reaction oftert-Butyl Hydroperoxide with Fullerenes, and Formation of the First Fullerene Mixed Peroxides C60(O)(OOtBu)4and C70(OOtBu)10. Journal of the American Chemical Society, 2002, 124, 13384-13385.	13.7	186
2	Synthesis of Fullerene Amino Acid Derivatives by Direct Interaction of Amino Acid Ester with C60. Journal of Organic Chemistry, 1996, 61, 1954-1961.	3.2	129
3	Synthesis of [59]Fullerenones through Peroxide-Mediated Stepwise Cleavage of Fullerene Skeleton Bonds and X-ray Structures of Their Water-Encapsulated Open-Cage Complexes. Journal of the American Chemical Society, 2007, 129, 16149-16162.	13.7	114
4	Fabrication of Lowâ€Dimension Nanostructures Based on Organic Conjugated Molecules. Advanced Materials, 2008, 20, 2918-2925.	21.0	102
5	Salts of C₆₀(OH)₈ Electrodeposited onto a Glassy Carbon Electrode: Surprising Catalytic Performance in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2013, 52, 10867-10870.	13.8	98
6	Preparation of Openâ€Cage Fullerenes and Incorporation of Small Molecules Through Their Orifices. Advanced Materials, 2010, 22, 1498-1507.	21.0	86
7	Synthesis of Pyrrolidine Ring-Fused Fullerene Multicarboxylates by Photoreaction. Journal of Organic Chemistry, 1998, 63, 4240-4247.	3.2	83
8	Switchable Openâ€Cage Fullerene for Water Encapsulation. Angewandte Chemie - International Edition, 2010, 49, 9935-9938.	13.8	77
9	Facile Synthesis of Isomerically Pure Fullerenols and Formation of Spherical Aggregates from C₆₀(OH)₈. Angewandte Chemie - International Edition, 2010, 49, 5293-5295.	13.8	75
10	Selective Preparation of Oxygen-Rich [60]Fullerene Derivatives by Stepwise Addition of tert-Butylperoxy Radical and Further Functionalization of the Fullerene Mixed Peroxides. Journal of Organic Chemistry, 2004, 69, 2442-2453.	3.2	70
11	Regiochemistry of [70]Fullerene:Â Preparation of C70(OOtBu)n(n= 2, 4, 6, 8, 10) through Both Equatorial and Cyclopentadienyl Addition Modes. Journal of Organic Chemistry, 2005, 70, 2060-2066.	3.2	68
12	Openâ€cage fullerenes as tailorâ€made container for a single water molecule. Journal of Physical Organic Chemistry, 2013, 26, 766-772.	1.9	66
13	Molecular Containers Derived from [60]Fullerene through Peroxide Chemistry. Accounts of Chemical Research, 2019, 52, 1793-1801.	15.6	57
14	Preparation of Azafullerene Derivatives from Fullerene-Mixed Peroxides and Single Crystal X-ray Structures of Azafulleroid and Azafullerene. Journal of the American Chemical Society, 2008, 130, 12614-12615.	13.7	51
15	Preparation of Fullerendione through Oxidation of Vicinal Fullerendiol and Intramolecular Coupling of the Dione To Form Hemiketal/Ketal Moieties. Organic Letters, 2006, 8, 277-279.	4.6	47
16	Oxygenâ€Delivery Materials: Synthesis of an Openâ€Cage Fullerene Derivative Suitable for Encapsulation of H₂O₂ and O₂. Angewandte Chemie - International Edition, 2018, 57, 14144-14148.	13.8	46
17	Preparation of [5,6]- and [6,6]-Oxahomofullerene Derivatives and Their Interconversion by Lewis Acid Assisted Reactions of Fullerene Mixed Peroxides. Chemistry - A European Journal, 2005, 11, 5449-5456.	3.3	45
18	Iodo-Controlled Selective Formation of Pyrrolidino[60]fullerene and Aziridino[60]fullerene from the Reaction between C60and Amino Acid Esters. Journal of Organic Chemistry, 2004, 69, 5800-5802.	3.2	44

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19	Efficient Cage-Opening Cascade Process for the Preparation of Water-Encapsulated [60]Fullerene Derivatives. Organic Letters, 2009, 11, 2772-2774.	4.6	44
20	Fullerene Doping: Preparation of Azafullerene C₅₉NH and Oxafulleroids C₅₉O₃ and C₆₀O₄. Angewandte Chemie - International Edition, 2012, 51, 6163-6166.	13.8	39
21	Punching a Carbon Atom of C₆₀ into its Own Cavity to Form an Endohedral Complex CO@C₅₉O₆ under Mild Conditions. Chemistry - A European Journal, 2013, 19, 16545-16549.	3.3	35
22	Peroxideâ€Mediated Selective Cleavage of [60]Fullerene Skeleton Bonds: Towards the Synthesis of Openâ€Cage Fulleroid <scp>C</scp>₅₅<scp>O</scp>₅. Chemical Record, 2015, 15, 189-198.	5.8	34
23	Amination of [60]Fullerene by Ammonia and by Primary and Secondary Aliphatic Aminesâ€"Preparation of Amino[60]fullerene Peroxides. Chemistry - A European Journal, 2007, 13, 1129-1141.	3.3	33
24	Reactivity of Fullerene Epoxide:â€‰ Preparation of Fullerene-Fused Thiirane, Tetrahydrothiazolidin-2-one, and 1,3-Dioxolane. Journal of Organic Chemistry, 2008, 73, 2518-2526.	3.2	32
25	Heating a bowl of single-molecule-soup: structure and desorption energetics of water-encapsulated open-cage [60] fullerenoid anions in the gas-phase. Physical Chemistry Chemical Physics, 2011, 13, 9818.	2.8	31
26	Synthesis of C₇₀â€Based Fluorophores through Sequential Functionalization to Form Isomerically Pure Multiadducts. Angewandte Chemie - International Edition, 2017, 56, 2403-2407.	13.8	31
27	Concise Synthesis of Openâ€Cage Fullerenes for Oxygen Delivery. Angewandte Chemie - International Edition, 2019, 58, 17690-17694.	13.8	31
28	Molecular containers with a dynamic orifice: open-cage fullerenes capable of encapsulating either H2O or H2under mild conditions. Chemical Science, 2013, 4, 814-818.	7.4	29
29	Synthesis of an Azahomoazafullerene C₅₉N(NH)R and Gasâ€Phase Formation of the Diazafullerene C₅₈N₂. Angewandte Chemie - International Edition, 2013, 52, 5037-5040.	13.8	29
30	Synthesis of C60(O)3: An Open-Cage Fullerene with a Ketolactone Moiety on the Orifice. Journal of Organic Chemistry, 2013, 78, 1157-1162.	3.2	28
31	Fulleneâ€Based Macroâ€Heterocycle Prepared through Selective Incorporation of Threeâ€…N and Two Oâ€…Atoms into C₆₀. Angewandte Chemie - International Edition, 2016, 55, 14590-14594.	13.8	27
32	Lewis Acid Promoted Preparation of Isomerically Pure Fullerenols from Fullerene Peroxides C60(OOt-Bu)6 and C60(O)(OOt-Bu)6. Journal of Organic Chemistry, 2006, 71, 4374-4382.	3.2	26
33	A Novel [2 + 3] Cycloaddition Reaction:â€‰ Singlet Oxygen Mediated Formation of 1,3-Dipole from Iminodiacetic Acid Dimethyl Ester and Its Addition to Maleimides. Journal of Organic Chemistry, 2001, 66, 6369-6374.	3.2	25
34	From Fullerene-Mixed Peroxide to Open-Cage Oxafulleroid C59(O)3(OH)2(OOtBu)2Embedded with Furan and Lactone Motifs. Organic Letters, 2007, 9, 1741-1743.	4.6	25
35	Controlled Synthesis of Nitrogen-Doped Graphene on Ruthenium from Azafullerene. Nano Letters, 2017, 17, 2887-2894.	9.1	25
36	Synthesis of C₇₀â€Based Fluorophores through Sequential Functionalization to Form Isomerically Pure Multiadducts. Angewandte Chemie, 2017, 129, 2443-2447.	2.0	25

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37	N-Fluorobenzenesulfonimide Based Functionalization of C₆₀. Organic Letters, 2015, 17, 524-527.	4.6	24
38	Acylation of 2,5-Dimethoxycarbonyl[60]fulleropyrrolidine and Synthesis of Its Multifullerene Derivatives. Journal of Organic Chemistry, 2002, 67, 883-891.	3.2	22
39	Construction of diads and triads copolymer systems containing perylene, porphyrin, and/or fullerene blocks. Journal of Polymer Science Part A, 2006, 44, 5863-5874.	2.3	22
40	Head-to-Tail and Back-to-Back Dimerization of an Open-Cage Fullerene Derivative through Ï€â€“Ï€ Interaction-Based Self-Assembly. Organic Letters, 2012, 14, 4002-4005.	4.6	22
41	Selective Multiamination of C₇₀ Leading to Curved Ï€â€…Systems with 60, 58, 56, and 50 Ï€â€…Electrons. Angewandte Chemie - International Edition, 2016, 55, 2483-2487.	13.8	22
42	Microcavity Effect from a Novel Terbium Complex Langmuir-Blodgett Film. Advanced Materials, 1999, 11, 627-629.	21.0	21
43	Selective Addition of Secondary Amines to C₆₀: Formation of Penta- and Hexaamino[60]fullerenes. Journal of Organic Chemistry, 2014, 79, 8912-8916.	3.2	21
44	Fullerene-Sensitized [2 + 3] Cycloaddition between Maleimides and Iminodiacetic Ester:â€‰ Formation of Pyrrolidine Derivatives. Organic Letters, 2000, 2, 667-669.	4.6	20
45	Fullerene peroxides. Comptes Rendus Chimie, 2006, 9, 1001-1004.	0.5	20
46	[60]FullereneâBased Macrocycle Ligands. Chemistry - A European Journal, 2017, 23, 10485-10490.	3.3	20
47	Towards the Rational Synthesis of Norfullerenes. Controlled Deletion of One Carbon Atom from C60 and Preparation of 2,5,9-Trioxo-1-nor(C60-Ih)[5,6]fullerene C59(O)3 Derivatives. Organic Letters, 2008, 10, 2003-2006.	4.6	19
48	Near-Infrared Absorbing Compounds Based on Ï€-Extended Tetrathiafulvalene Open-Cage Fullerenes. Journal of Organic Chemistry, 2014, 79, 2156-2162.	3.2	19
49	Synthesis of Metal Complexes with an OpenâCage Fullerene as the Ligand. Chemistry - A European Journal, 2018, 24, 451-457.	3.3	19
50	Synthesis of an open-cage fullerene-based unidirectional H-bonding network and its coordination with titanium. Organic Chemistry Frontiers, 2019, 6, 1397-1402.	4.5	18
51	Carving two adjacent holes on [60]fullerene through two consecutive epoxide to diol to dione transformations. Chemical Communications, 2010, 46, 8365.	4.1	17
52	Synthesis of 18-Membered Open-Cage Fullerenes through Controlled Stepwise Fullerene Skeleton Bond Cleavage Processes and Substituent-Mediated Tuning of the Redox Potential of Open-Cage Fullerenes. Journal of Organic Chemistry, 2011, 76, 10148-10153.	3.2	17
53	Synthesis of a green [60]fullerene derivative through cage-opening reactions. Chemical Communications, 2012, 48, 2531.	4.1	16
54	Selective Synthesis of Fullerenol Derivatives with Terminal Alkyne and Crown Ether Addends. Journal of Organic Chemistry, 2012, 77, 2456-2462.	3.2	16

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55	Release of the Water Molecule Encapsulated Inside an Openâ€Cage Fullerene through Hydrogen Bonding Mediated by Hydrogen Fluoride. Chemistry - A European Journal, 2015, 21, 13539-13543.	3.3	16
56	Preparation of Azafullerene C₅₉NR₅ and Fullerene Derivative C₆₀NAr₅ with a Pyridine Moiety on the Cage Skeleton. Organic Letters, 2016, 18, 2236-2239.	4.6	16
57	Fullerene peroxides in cage-opening reactions. Pure and Applied Chemistry, 2006, 78, 841-845.	1.9	15
58	Synthesis of Fullerene Oxides Containing Both 6,6-Closed Epoxide and 5,6-Open Ether Moieties through Thermolysis of Fullerene Peroxides. Journal of Organic Chemistry, 2009, 74, 3528-3531.	3.2	15
59	Oxygenâ€Delivery Materials: Synthesis of an Openâ€Cage Fullerene Derivative Suitable for Encapsulation of H₂O₂ and O₂. Angewandte Chemie, 2018, 130, 14340-14344.	2.0	15
60	Assembly of Janus fullerenol: a novel approach to prepare rich carbon structures. Journal of Materials Chemistry, 2011, 21, 14864.	6.7	13
61	Open-cage fullerene with a stopper acts as a molecular vial for a single water molecule. Organic Chemistry Frontiers, 2015, 2, 1500-1504.	4.5	12
62	Concise Synthesis of Openâ€Cage Fullerenes for Oxygen Delivery. Angewandte Chemie, 2019, 131, 17854-17858.	2.0	12
63	Efficient conversion of bromofullerene to alkoxyfullerenes through either homolytic or heterolytic cleavage of C60â€“Br bond. Tetrahedron, 2007, 63, 9120-9123.	1.9	11
64	Preparation of fullerenol, fullerenone, and aminofullerene derivatives through selective cleavage of fullerene Câ€“H, Câ€“C, Câ€“N, and Câ€“O bonds in fullerene-mixed peroxide derivatives. Tetrahedron, 2008, 64, 11394-11403.	1.9	11
65	Switched role of fullerene in the Dielsâ€“Alder reaction: facile addition of dienophiles to the conjugated fullerenediene moiety. Chemical Communications, 2008, , 401-403.	4.1	11
66	Synthesis and Reactivity of 2H-Pyran Moiety in [60]Fullerene Cage Skeleton. Journal of Organic Chemistry, 2010, 75, 4567-4573.	3.2	11
67	A green fullerene derivative as a fluoride ion sensor. Organic Chemistry Frontiers, 2014, 1, 652.	4.5	11
68	Boomerang-Type Substitution Reaction: Reactivity of Fullerene Epoxides and a Halofullerenol. Chemistry - an Asian Journal, 2007, 2, 290-300.	3.3	10
69	Bromination-Mediated Regioselective Preparation of Cyclopentadienyl-Type [60]Fullerene Derivatives with Alkoxy, Peroxy, and Bromo or Hydro Addends. Journal of Organic Chemistry, 2011, 76, 1735-1741.	3.2	10
70	Preparation of Ketolactone and Bislactone [60]Fullerene Derivatives and Their Conversion into Openâ€Cage Fullerenes with a 12â€•or 15â€Membered Orifice. European Journal of Organic Chemistry, 2011, 2011, 5366-5373.	2.4	9
71	Fullereneâ€Based Macroâ€Heterocycle Prepared through Selective Incorporation of Threeâ€…N and Two Oâ€…Atoms into C₆₀. Angewandte Chemie, 2016, 128, 14810-14814.	2.0	9
72	Fullerenyl azide: synthesis and reactivity. Tetrahedron Letters, 2010, 51, 415-417.	1.4	8

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73	Preparation of a 12-Membered Open-Cage Fullerendione through Silane/Borane-Promoted Formation of Ketal Moieties and Oxidation of a Vicinal Fullerendiol. Journal of Organic Chemistry, 2011, 76, 6743-6748.	3.2	8
74	Synthesis of decahydropyrrolo[2,1,5-cd]indolizine derivatives through RuCl3/AgOTf induced alkeneâ€“alkene and alkeneâ€“arene double cycloisomerizations. Tetrahedron, 2012, 68, 152-158.	1.9	8
75	Regioselective Polyamination of Gd@C2v(9)-C82 and Non-High Performance Liquid Chromatography Rapid Separation of Gd@C82(morpholine)7. Chemistry of Materials, 2018, 30, 64-68.	6.7	8
76	Synthesis of Pentapyrazolyl, Pentapyrrolyl, and Pentaanilino C60 Derivatives. Synthesis, 2018, 50, 4283-4289.	2.3	8
77	Selective Addition of Palladium on the Rim of Open-Cage Fullerenes To Form Mononuclear and Dinuclear Complexes. Organometallics, 2019, 38, 3139-3143.	2.3	8
78	Regioselective Dielsâ€“Alder Reactions Directed by Carbonyl Groups on the Rim of Openâ€Cage Fullerene Derivatives. European Journal of Organic Chemistry, 2013, 2013, 7272-7276.	2.4	7
79	Synthesis of C58 Open-Cage Fullerene Derivatives. Synlett, 2016, 27, 2123-2127.	1.8	7
80	Nitrogen-Doped Graphene on Copper: Edge-Guided Doping Process and Doping-Induced Variation of Local Work Function. Journal of Physical Chemistry C, 2019, 123, 8802-8812.	3.1	7
81	Microelectrode Voltammetry for the Study of Pyrrolidinofullerenes. Electroanalysis, 1999, 11, 238-242.	2.9	6
82	Controlled regio- and chemoselective addition of isothiocyanate to the dione moiety of a cage-opened fullerene-mixed peroxide derivative. Chemical Communications, 2008, , 1980.	4.1	6
83	Selective Multiamination of C₇₀ Leading to Curved Ï€â€…Systems with 60, 58, 56, and 50 Ï€â€…Electrons. Angewandte Chemie, 2016, 128, 2529-2533.	2.0	6
84	The Chemistry of Fullereneâ€Mixed Peroxides. Chinese Journal of Chemistry, 2018, 36, 991-994.	4.9	6
85	The Chemistry of Openâ€cage Fullerene, Hydroxylamine Mediated Holeâ€closing and â€opening Reactions. Chinese Journal of Chemistry, 2010, 28, 1673-1677.	4.9	5
86	Synthesis and reactivity of tetraalkoxyl[60]fullerene epoxides, C₆₀(O)(OR)₄. Canadian Journal of Chemistry, 2017, 95, 292-297.	1.1	5
87	Preparation of Ï€-extended fullerene derivatives through addition of phenylenediamine to open-cage fullerene derivatives. Organic Chemistry Frontiers, 2022, 9, 320-328.	4.5	5
88	Synthesis of fullerene multiadducts with mixed oxygen and nitrogen addends including five secondary amino groups. Tetrahedron Letters, 2011, 52, 5805-5807.	1.4	4
89	Facile preparation of fullerenyl boronic esters. Tetrahedron, 2012, 68, 5193-5196.	1.9	4
90	Hydrolysisâ€Initiated Domino Process on the Rim of Openâ€Cage C₆₀ Derivatives Including Decarbonylation and Double Dehydration. ChemPlusChem, 2017, 82, 1002-1005.	2.8	4

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91	Cyclic Voltammetry Study of the C60-EDTA Derivative Films. Electroanalysis, 1999, 11, 582-585.	2.9	3
92	Synthesis of Open-cage Fullerenes with 4-Alkynylphenyl Groups on the Rim of the Orifice. Fullerenes Nanotubes and Carbon Nanostructures, 2014, 22, 54-60.	2.1	3
93	Synthesis and Chemical Reactivity of Tetrahydro[60]fullerene Epoxides with Both Amino and Aryl Addends. Journal of Organic Chemistry, 2015, 80, 3957-3964.	3.2	3
94	Synthesis of Openâ€Cage Fullerenes with Pyrrole, Pyrrolone, Pyridinone, Iminofuran, and Pyranone Fragments Embedded on the Rim of the Orifice. European Journal of Organic Chemistry, 0, , .	2.4	3
95	Aniline Induced Domino Ring Contraction Process on the Rim of an Openâ€Cage Fullerene with Carbonyl, Imino and lactone Moieties. Chinese Journal of Chemistry, 2014, 32, 819-821.	4.9	2
96	Synthesis of Isomerically Pure Multiâ€aniline C60 Adducts with Cyclopentadienyl Addition Pattern. European Journal of Organic Chemistry, 2016, 2016, 3070-3075.	2.4	2
97	Synthesis of Openâ€Cage [60]Fullerenes with Five Carbonyl Groups on the Rim of the 15â€Membered Orifice. ChemPlusChem, 2019, 84, 608-612.	2.8	1
98	Selective Nitration of Openâ€Cage [60]Fullerene Derivatives by Ponzio Reaction. European Journal of Organic Chemistry, 2021, 2021, 4288-4292.	2.4	1
99	Mass spectroscopic characterization of yttrium-containing metallofullerene YC82 using resonant laser ablation. AIP Conference Proceedings, 1995, , .	0.4	0
100	Front Cover: Synthesis of Isomerically Pure Multi-aniline C60Adducts with Cyclopentadienyl Addition Pattern (Eur. J. Org. Chem. 18/2016). European Journal of Organic Chemistry, 2016, 2016, 3013-3013.	2.4	0
101	InnenrÃ¼cktitelbild: Fullereneâ€Based Macroâ€Heterocycle Prepared through Selective Incorporation of Threeâ€…N and Two Oâ€…Atoms into C₆₀ (Angew. Chem. 47/2016). Angewandte Chemie, 2016, 128, 15095-15095.	2.0	0
102	Synthesis of homoazafullerene [C₅₉N(CH₂)]R and azahomoazafullerene [C₅₉N(NH)]R. Organic Chemistry Frontiers, 2017, 4, 750-754.	4.5	0
103	Frontispiece: [60]Fullereneâ€Based Macrocycle Ligands. Chemistry - A European Journal, 2017, 23, .	3.3	0
104	Synthesis of Open-Cage Fullerenes with a Long Tail. Organic Materials, 2020, 02, 282-287.	2.0	0