Steven Stevenson

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8893042/publications.pdf

Version: 2024-02-01

100	5,178	87888 38	82547 72
papers	citations	h-index	g-index

107	107	107	1594
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Small-bandgap endohedral metallofullerenes in high yield and purity. Nature, 1999, 401, 55-57.	27.8	912
2	A stable non-classical metallofullerene family. Nature, 2000, 408, 427-428.	27.8	379
3	Isolation and Structural Characterization of the Endohedral Fullerene Sc3N@C78. Angewandte Chemie - International Edition, 2001, 40, 1223-1225.	13.8	232
4	A Distorted Tetrahedral Metal Oxide Cluster inside an Icosahedral Carbon Cage. Synthesis, Isolation, and Structural Characterization of Sc₄(Î¼₃-O)₂@I_h-C₈₀. Journal of the American Chemical Society, 2008, 130, 11844-11845.	13.7	219
5	Isolation and Crystallographic Characterization of ErSc2N@C80:Â an Endohedral Fullerene Which Crystallizes with Remarkable Internal Order. Journal of the American Chemical Society, 2000, 122, 12220-12226.	13.7	184
6	Sc3N@C68: Folded Pentalene Coordination in an Endohedral Fullerene that Does Not Obey the Isolated Pentagon Rule. Angewandte Chemie - International Edition, 2003, 42, 900-903.	13.8	173
7	Trimetallic Nitride Template Endohedral Metallofullerenes: Discovery, Structural Characterization, Reactivity, and Applications. Accounts of Chemical Research, 2013, 46, 1548-1557.	15.6	155
8	Pyramidalization of Gd3N inside a C80 cage. The synthesis and structure of Gd3N@C80. Chemical Communications, 2004, , 2814.	4.1	126
9	A seven atom cluster in a carbon cage, the crystallographically determined structure of Sc₄(Î¼₃-O)₃@I_h-C₈₀. Chemical Communications, 2010, 46, 279-281.	4.1	123
10	The Shape of the Sc₂(Î¼₂-S) Unit Trapped in C₈₂: Crystallographic, Computational, and Electrochemical Studies of the Isomers, Sc₂(Î¼₂-S)@C_s(6)-C₈₂ and Sc₂(Î¼₂-S)@C_{3v}(8)-C₈₂. Journal of the American Chemical Society, 2011, 133, 6752-6760.	13.7	121
11	Sc₂(Î¼₂-O)₂Trapped in a Fullerene Cage: The Isolation and Structural Characterization of Sc₂(Î¼₂-O)@C_s(6)-C₈₂and the Relevance of the Thermal and Entropic Effects in Fullerene Isomer Selection. Journal of the American Chemical Society, 2010, 132, 12092-12105.	13.7	119
12	Preparation and structure of crystals of the metallofullerene Sc2@C84. Nature, 1994, 370, 196-199.	27.8	118
13	Crystallographic Characterization of the Structure of the Endohedral Fullerene {Er2@C82Isomer I} withCsCage Symmetry and Multiple Sites for Erbium along a Band of Ten Contiguous Hexagons. Journal of the American Chemical Society, 2002, 124, 4172-4173.	13.7	108
14	Nonchromatographic â€œStir and Filter Approachâ€•(SAFA) for Isolating Sc3N@C80Metallofullerenes. Journal of the American Chemical Society, 2006, 128, 8829-8835.	13.7	96
15	Internal and External Factors in the Structural Organization in Cocrystals of the Mixed-Metal Endohedrals (GdSc₂N@I_h-C₈₀,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (C Inorganic Chemistry, 2008, 47, 1420-1427.	4.0	89
16	Automated HPLC Separation of Endohedral Metallofullerene Sc@C2n and Y@C2n Fractions. Analytical Chemistry, 1994, 66, 2675-2679.	6.5	86
17	Radical Trifluoromethylation of Sc3N@C80. Journal of the American Chemical Society, 2007, 129, 11676-11677.	13.7	85
18	Poly(perfluoroalkylation) of Metallic Nitride Fullerenes Reveals Addition-Pattern Guidelines: Synthesis and Characterization of a Family of Sc₃N@C₈₀(CF₃)_n(n= 2â˜16) and Their Radical Anions. Journal of the American Chemical Society, 2011, 133, 2672-2690.	13.7	73

#	Article	IF	Citations
19	Fluorescence spectroscopy and emission lifetimes of Er3+ in Er Sc3â^'N@C80 (x=1â€“3). Chemical Physics Letters, 2001, 343, 229-234.	2.6	69
20	Redox-Active Scandium Oxide Cluster inside a Fullerene Cage: Spectroscopic, Voltammetric, Electron Spin Resonance Spectroelectrochemical, and Extended Density Functional Theory Study of Sc₄O₂@C₈₀ and Its Ion Radicals. Journal of the American Chemical Society, 2012, 134, 19607-19618.	13.7	67
21	Synthesis and Purification of a Metallic Nitride Fullerene BisAdduct:Â Exploring the Reactivity of Gd3N@C80. Journal of the American Chemical Society, 2005, 127, 12776-12777.	13.7	65
22	Rapid Removal ofD5hIsomer Using the â€œStir and Filter Approachâ€•and Isolation of Large Quantities of Isomerically Pure Sc3N@C80Metallic Nitride Fullerenes. Journal of the American Chemical Society, 2007, 129, 6072-6073.	13.7	59
23	Sc₃N@(C₈₀-I_h(7))(CF₃)₁₄ and Sc₃N@(C₈₀-I_h(7))(CF₃)₁₆. Endohedral Metallofullerene Derivatives with Exohedral Addends on Four and Eight Triple-Hexagon Junctions. Does the Sc₃N Cluster Control the Addition Pattern or Vice Versa?. Journal of the American Chemical Society, 2009, 131, 17630-17637.	13.7	59
24	Electronic Structures of Scandium Oxide Endohedral Metallofullerenes, Sc₄(Î¼₃-O)_n@I_h-C₈₀ (n = 2, 3). Inorganic Chemistry, 2009, 48, 5957-5961.	4.0	57
25	Selective Complexation and Reactivity of Metallic Nitride and Oxometallic Fullerenes with Lewis Acids and Use as an Effective Purification Method. Inorganic Chemistry, 2009, 48, 11685-11690.	4.0	57
26	Buckyball maracas: exploring the inside and outside properties of endohedral fullerenes. Journal of Physical Organic Chemistry, 2013, 26, 194-205.	1.9	55
27	La2@C72:Â Metal-Mediated Stabilization of a Carbon Cage. Journal of Physical Chemistry A, 1998, 102, 2833-2837.	2.5	53
28	Making connections between metallofullerenes and fullerenes: electrochemical investigations. Carbon, 2000, 38, 1663-1670.	10.3	51
29	Chemically Adjusting Plasma Temperature, Energy, and Reactivity (CAPTEAR) Method Using NO_x and Combustion for Selective Synthesis of Sc₃N@C₈₀ Metallic Nitride Fullerenes. Journal of the American Chemical Society, 2007, 129, 16257-16262.	13.7	51
30	Evidence for Singlet-Oxygen Generation and Biocidal Activity in Photoresponsive Metallic Nitride Fullereneâ^'Polymer Adhesive Films. ACS Applied Materials & Interfaces, 2009, 1, 882-887.	8.0	49
31	Measurement of Pair Interactions and1.5Î¼mEmission fromEr3+Ions in aC82Fullerene Cage. Physical Review Letters, 1997, 79, 1397-1400.	7.8	48
32	Isolation and Monitoring of the Endohedral Metallofullerenes Y@C82 and Sc3@C82: Online Chromatographic Separation with EPR Detection. Analytical Chemistry, 1994, 66, 2680-2685.	6.5	47
33	Dispersion of Gold Nanoparticles in UV-Cured, Thiolâ^'Ene Films by Precomplexation of Goldâ^'Thiol. Chemistry of Materials, 2008, 20, 5240-5245.	6.7	45
34	Selective Synthesis, Isolation, and Crystallographic Characterization of LaSc₂N@I_h-C₈₀. Inorganic Chemistry, 2012, 51, 13096-13102.	4.0	45
35	Nano- and bulk-tack adhesive properties of stimuli-responsive, fullereneâ€“polymer blends, containing polystyrene-block-polybutadiene-block-polystyrene and polystyrene-block-polyisoprene-block-polystyrene rubber-based adhesives. Polymer, 2007, 48, 6773-6781.	3.8	44
36	Orientational Dynamics of theSc3Trimer inC82: An EPR Study. Physical Review Letters, 1994, 73, 3415-3418.	7.8	42

#	Article	IF	Citations
37	Redoxâ€Tuning Endohedral Fullerene Spin States: From the Dication to the Trianion Radical of Sc₃N@C₈₀(CF₃)₂ in Five Reversible Singleâ€Electron Steps. Chemistry - A European Journal, 2010, 16, 4721-4724.	3.3	42
38	Effect of copper metal on the yield of Sc3N@C80 metallofullerenes. Chemical Communications, 2007, , 4263.	4.1	40
39	Confining the spin between two metal atoms within the carbon cage: redox-active metalâ€“metal bonds in dimetallofullerenes and their stable cation radicals. Nanoscale, 2017, 9, 7977-7990.	5.6	39
40	Enhanced nonlinear optical response of an endohedral metallofullerene through metal-to-cage charge transfer. Applied Physics Letters, 1998, 72, 2788-2790.	3.3	38
41	Fullertubes: Cylindrical Carbon with Half-Fullerene End-Caps and Tubular Graphene Belts, Their Chemical Enrichment, Crystallography of Pristine C₉₀-D_{5h}(1) and C₁₀₀-D_{5d}(1) Fullertubes, and Isolation of C₁₀₈, C₁₂₀, C₁₃₂, and C₁₅₆ Cages of Unknown Structures. Journal of the American Chemical Society, 2020, 142, 15614-15623.	13.7	38
42	Preferential Encapsulation and Stability of La₃N Cluster in 80 Atom Cages: Experimental Synthesis and Computational Investigation of La₃N@C₇₉N. Journal of the American Chemical Society, 2009, 131, 17780-17782.	13.7	37
43	Endohedral fullerenes: Synthesis, isolation, mono- and bis-functionalization. Inorganica Chimica Acta, 2017, 468, 16-27.	2.4	37
44	Title is missing!. Angewandte Chemie, 2003, 115, 928-931.	2.0	34
45	Bis-1,3-dipolar Cycloadditions on Endohedral Fullerenes M3N@Ih-C80(M = Sc, Lu): Remarkable Endohedral-Cluster Regiochemical Control. Journal of the American Chemical Society, 2015, 137, 11775-11782.	13.7	34
46	Electron affinity of some trimetallic nitride and conventional metallofullerenes. International Journal of Mass Spectrometry, 2002, 213, 183-189.	1.5	32
47	13C Dynamic Nuclear Polarization: A Detector for Continuous-Flow, Online Chromatography. Analytical Chemistry, 1994, 66, 2993-2999.	6.5	29
48	The Voltammetry of Sc3@C82. Journal of the American Chemical Society, 1997, 119, 437-438.	13.7	29
49	A reinvestigation of the electrochemical behavior of Sc3N@C80. Journal of Electroanalytical Chemistry, 2008, 614, 171-174.	3.8	24
50	Isolation of CeLu₂N@I_hâ€“C₈₀ through a Nonâ€Chromatographic, Twoâ€Step Chemical Process and Crystallographic Characterization of the Pyramidalized CeLu₂N within the Icosahedral Cage. Chemistry - A European Journal, 2015, 21, 10362-10368.	3.3	21
51	13C Dynamic Nuclear Polarization:Â an Alternative Detector for Recycled-Flow NMR Experiments. Analytical Chemistry, 1998, 70, 2623-2628.	6.5	19
52	CuCl₂ for the Isolation of a Broad Array of Endohedral Fullerenes Containing Metallic, Metallic Carbide, Metallic Nitride, and Metallic Oxide Clusters, and Separation of Their Structural Isomers. Inorganic Chemistry, 2013, 52, 9606-9612.	4.0	18
53	Isolation and Crystallographic Characterization of Gd₃N@D₂(35)-C₈₈ through Non-Chromatographic Methods. Inorganic Chemistry, 2016, 55, 62-67.	4.0	18
54	Semiconducting and Metallic [5,5] Fullertube Nanowires: Characterization of Pristine D_{5h}(1)-C₉₀ and D_{5d}(1)-C₁₀₀. Journal of the American Chemical Society, 2021, 143, 4593-4599.	13.7	17

#	Article	IF	Citations
55	Cylindrical C₉₆ Fullertubes: A Highly Active Metalâ€Free O₂â€Reduction Electrocatalyst. Angewandte Chemie - International Edition, 2022, 61, .	13.8	17
56	Far infrared transmittance of Sc2@C84 and Er2@C82. Chemical Physics Letters, 1997, 264, 359-365.	2.6	16
57	Singlet oxygen generation and adhesive loss in stimuliâ€responsive, fullereneâ€polymer blends, containing polystyreneâ€blockâ€polybutadieneâ€blockâ€polystyrene and polystyreneâ€blockâ€polyisopreneâ€blockâ€polystyrene rubberâ€based adhesives. Journal of Applied Polymer Science, 2008, 109, 2895-2904.	2.6	16
58	Tuning the Selectivity of Gd₃N Cluster Endohedral Metallofullerene Reactions with Lewis Acids. Inorganic Chemistry, 2014, 53, 12939-12946.	4.0	16
59	Structures of Gd₃N@C₈₀ Prato Bis-Adducts: Crystal Structure, Thermal Isomerization, and Computational Study. Journal of the American Chemical Society, 2019, 141, 10988-10993.	13.7	16
60	Reducing hazardous material and environmental impact through recycling of scandium nanomaterial waste. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2008, 43, 357-360.	1.7	14
61	Regioselective Synthesis and Characterization of Tris- and Tetra-Prato Adducts of M3N@C80 (M = Y,) Tj ETQq1 1 0.784314 rgBT /Ove	13.7	14
62	Isolation and Crystallographic Characterization of Two, Nonisolated Pentagon Endohedral Fullerenes: Ho₃N@C₂(22010)â€“₇₈ and Tb₃N@C₂(22010)â€“₇₈. Chemistry - A European Journal, 2019, 25, 12545-12551.	3.3	13
63	Fractionation of rare-earth metallofullerenes via reversible uptake and release from reactive silica. Dalton Transactions, 2014, 43, 7435-7441.	3.3	11
64	Identifying a Needle in a Haystack: Isolation and Structural Characterization of Er 2 C 94 as the Carbide Er 2 C 2 @ D 3 (85)â€“ 92. Chemistry - A European Journal, 2018, 24, 13479-13484.	3.3	11
65	Effect of Water and Solvent Selection on the SAFA Purification Times for Metallic Nitride Fullerenes. Fullerenes Nanotubes and Carbon Nanostructures, 2014, 22, 182-189.	2.1	10
66	Exploring the Threshold between Fullerenes and Nanotubes: Characterizing Isomerically Pure, Empty-Caged, and Tubular Fullerenes D_{5h}-C₉₀ and D_{5d}-C₁₀₀. Journal of the American Chemical Society, 2022, 144, 10825-10829.	13.7	10
67	Conversion of Nanomaterial Waste Soot to Recycled Sc₂O₃ Feedstock for the Synthesis of Metallic Nitride Fullerenes. Industrial & Engineering Chemistry Research, 2008, 47, 2096-2099.	3.7	8
68	Isolation and Structural Characterization of the Endohedral Fullerene Sc(3)N@C(78) This work was supported by the US National Science Foundation (Grants CHE 9610507 and CHE 0070291 to A.L.B.), LUNA Innovations (H.C.D.), and the Gulbenkian Foundation (postdoctoral fellowship to A.d.B.-D.).. Angewandte Chemie - International Edition, 2001, 40, 1223-1225.	13.8	8
69	Metallic nitride azafullerenes: A novel class of fullerenes with interesting electronic properties. Chemical Physics Letters, 2011, 508, 121-124.	2.6	7
70	Endohedral Metallofullerenes: Isolation and Characterization. Materials Research Society Symposia Proceedings, 1994, 359, 123.	0.1	6
71	NOVEL STRUCTURES FROM ARC-VAPORIZED CARBON AND METALS: SINGLE-LAYER CARBON NANOTUBES AND METALLOFULLERENES. Surface Review and Letters, 1996, 03, 765-769.	1.1	5
72	An Alternative Approach for Separating Metallic Nitride Fullerenes (MNFs) from Nanomaterial Mixtures. ECS Transactions, 2006, 2, 95-102.	0.5	4

#	Article	IF	Citations
73	Metallic Oxide Clusters in Fullerene Cages. World Scientific Series on Carbon Nanoscience, 2011, , 185-205.	0.1	4
74	The encapsulation of trimetallic nitride clusters in fullerene cages. AIP Conference Proceedings, 2000, , .	0.4	3
75	Metal Oxide Clusterfullerenes. , 2014, , 179-210.		3
76	Cylindrical C ₉₆ Fullertubes: A Highly Active Metalâ€Free O ₂ â€Reduction Electrocatalyst. Angewandte Chemie, 0, , .	2.0	3
77	Vibrational anatomy of C₉₀, C₉₆, and C₁₀₀ fullertubes: probing Frankenstein's skeletal structures of fullerene head endcaps and nanotube belt midsection. Nanoscale, 2022, 14, 10823-10834.	5.6	2
78	Aminopropanolâ€“xylene to chemically purify Gd3N@C88 metallofullerene. Inorganica Chimica Acta, 2017, 468, 177-182.	2.4	1
79	(Invited) In Situ ESR Spectroelectrochemical Study of Sc4MO2@C80: Endohedral Redox System. ECS Meeting Abstracts, 2012, , .	0.0	0
80	(Invited) Fullertubes: Isolation of Isomerically Purified and Pristine Samples. ECS Meeting Abstracts, 2021, MA2021-01, 632-632.	0.0	0
81	(Nanocarbons Division Best Poster Award - 1st Place) Chemical Purification and Isolation of New Fullertube Molecules. ECS Meeting Abstracts, 2021, MA2021-01, 614-614.	0.0	0
82	Non-Chromatographic Separation of Endohedral Metallofullerenes by Utilizing Their Redox Properties. Nanostructure Science and Technology, 2017, , 63-79.	0.1	0
83	Toward the Chemical Isolation of Larger-Size Empty-Cage Fullerenes. ECS Meeting Abstracts, 2018, , .	0.0	0
84	Leveraging Reactivity Differences to Isolate the Less-Common Holmium Metallofullerenes. ECS Meeting Abstracts, 2019, , .	0.0	0
85	(Invited) Nanotubular Fullerenes: Part Buckyball, Part Nanotube. ECS Meeting Abstracts, 2019, , .	0.0	0
86	Chemical Purification of Lutetium Clusters Entrapped in Less-Common Fullerene Cages. ECS Meeting Abstracts, 2019, , .	0.0	0
87	(Invited) Chemical Purification of Nanotubular Fullerenes: Separating Buckyballs from Buckytubes. ECS Meeting Abstracts, 2019, , .	0.0	0
88	(Invited) Pristine Carbon Nanowires: Are They Five-Fold Symmetry C90, C100 and C120 Fullerenes or [5,5] End-Capped Carbon Nanotubes?. ECS Meeting Abstracts, 2019, , .	0.0	0
89	Purification of Nanotubular Fullerenes: Manipulating Reactivity Differences of Carbon Tubes and Spheres. ECS Meeting Abstracts, 2019, , .	0.0	0
90	Selective Chemical Reaction of Empty Cage Fullertubes with Variable-Chain Aminoalcohols. ECS Meeting Abstracts, 2020, MA2020-01, 764-764.	0.0	0

#	Article	IF	Citations
91	Large Carbon Clusters with Entrapped Gadolinium Atoms. ECS Meeting Abstracts, 2020, MA2020-01, 770-770.	0.0	0
92	Chemical Purification of Fullertubes and Isolation of C100-C200 Structures: Tubes or Balls?. ECS Meeting Abstracts, 2020, MA2020-01, 744-744.	0.0	0
93	Recovery and Isolation of Higher Fullerenes and Metallofullerenes Via Selective Chemical Release from Waste Materials. ECS Meeting Abstracts, 2020, MA2020-01, 765-765.	0.0	0
94	Encapsulated Yttrium Atoms in Carbon Cages: Spheres or Tubes?. ECS Meeting Abstracts, 2020, MA2020-01, 768-768.	0.0	0
95	Purification of Small-Cage Endohedral Metallofullerenes Using Wet Chemistry. ECS Meeting Abstracts, 2020, MA2020-02, 1134-1134.	0.0	0
96	Chemical Isolation of Nanotubular Fullerenes (FullerTubes). ECS Meeting Abstracts, 2020, MA2020-02, 1082-1082.	0.0	0
97	Chemical Isolation of Isomerically Purified Sc₃n@C₆₈. ECS Meeting Abstracts, 2022, MA2022-01, 832-832.	0.0	0
98	Detection and Isolation of Isomerically Pure C120 Fullertubes. ECS Meeting Abstracts, 2022, MA2022-01, 834-834.	0.0	0
99	(Invited) Toward the Isolation of Giant C₁₂₀-C₂₀₀ Fullertubes. ECS Meeting Abstracts, 2022, MA2022-01, 820-820.	0.0	0
100	Selective Solubility of Fullertubes with Non-Aromatic Solvents. ECS Meeting Abstracts, 2022, MA2022-01, 835-835.	0.0	0