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List of Publications by Year
in descending order

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116 papers	6,055 citations	94381 37 h-index	74108 75 g-index
155 all docs	155 docs citations	155 times ranked	5901 citing authors

#	Article	IF	Citations
1	Macroscopic transport by synthetic molecular machines. Nature Materials, 2005, 4, 704-710.	13.3	685
2	Curves ahead: molecular receptors for fullerenes based on concaveâ€“convex complementarity. Chemical Society Reviews, 2008, 37, 1512.	18.7	298
3	Ï€â€“Ï€ interactions in carbon nanostructures. Chemical Society Reviews, 2015, 44, 6425-6433.	18.7	275
4	Patterning through Controlled Submolecular Motion: Rotaxane-Based Switches and Logic Gates that Function in Solution and Polymer Films. Angewandte Chemie - International Edition, 2005, 44, 3062-3067.	7.2	210
5	Wraparound Hosts for Fullerenes: Tailored Macrocycles and Cages. Angewandte Chemie - International Edition, 2011, 50, 9248-9259.	7.2	209
6	A Generic Basis for Some Simple Light-Operated Mechanical Molecular Machines. Journal of the American Chemical Society, 2004, 126, 12210-12211.	6.6	199
7	Mechanically interlocked materials. Rotaxanes and catenanes beyond the small molecule. Chemical Society Reviews, 2019, 48, 5016-5032.	18.7	178
8	Chiroptical Switching in a Bistable Molecular Shuttle. Journal of the American Chemical Society, 2003, 125, 13360-13361.	6.6	175
9	exTTF as a Building Block for Fullerene Receptors. Unexpected Solvent-Dependent Positive Homotropic Cooperativity. Journal of the American Chemical Society, 2006, 128, 7172-7173.	6.6	166
10	Selfâ€Organization of Electroactive Materials: A Headâ€toâ€Tail Donorâ€“Acceptor Supramolecular Polymer. Angewandte Chemie - International Edition, 2008, 47, 1094-1097.	7.2	160
11	Layer-Stacking-Driven Fluorescence in a Two-Dimensional Imine-Linked Covalent Organic Framework. Journal of the American Chemical Society, 2018, 140, 12922-12929.	6.6	147
12	Macrocyclic Hosts for Fullerenes: Extreme Changes in Binding Abilities with Small Structural Variations.. Journal of the American Chemical Society, 2011, 133, 3184-3190.	6.6	124
13	An Electroactive Dynamically Polydisperse Supramolecular Dendrimer. Journal of the American Chemical Society, 2008, 130, 2410-2411.	6.6	120
14	Concave Tetrathiafulvalene-Type Donors as Supramolecular Partners for Fullerenes. Angewandte Chemie - International Edition, 2007, 46, 1847-1851.	7.2	117
15	Tripodal exTTF-CTV Hosts for Fullerenes. Journal of the American Chemical Society, 2010, 132, 5351-5353.	6.6	110
16	Discrete Supramolecular Donorâ€“Acceptor Complexes. Angewandte Chemie - International Edition, 2009, 48, 815-819.	7.2	107
17	Entropy-Driven Translational Isomerism: A Tristable Molecular Shuttle. Angewandte Chemie - International Edition, 2003, 42, 5886-5889.	7.2	103
18	Franckeite as a naturally occurring van der Waals heterostructure. Nature Communications, 2017, 8, 14409.	5.8	103

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19	Centimeter-Scale Synthesis of Ultrathin Layered MoO₃ by van der Waals Epitaxy. Chemistry of Materials, 2016, 28, 4042-4051.	3.2	100
20	A Bis-exTTF Macrocyclic Receptor That Associates C60 with Micromolar Affinity. Journal of the American Chemical Society, 2010, 132, 1772-1773.	6.6	93
21	Large exTTF-Based Dendrimers. Self-Assembly and Peripheral Cooperative Multiencapsulation of C60. Journal of the American Chemical Society, 2008, 130, 10674-10683.	6.6	89
22	Shuttling through reversible covalent chemistry. Chemical Communications, 2004, , 2262-2263.	2.2	77
23	Chemical sensing of water contaminants by a colloid of a fluorescent imine-linked covalent organic framework. Chemical Communications, 2019, 55, 1382-1385.	2.2	73
24	Mild Covalent Functionalization of Transition Metal Dichalcogenides with Maleimides: A â€œClickâ€• Reaction for 2H-MoS₂ and WS₂. Journal of the American Chemical Society, 2019, 141, 3767-3771.	6.6	72
25	Weighting non-covalent forces in the molecular recognition of C60. Relevance of concaveâ€“convex complementarity. Chemical Communications, 2008, , 4567.	2.2	71
26	Mechanically Interlocked Singleâ€Wall Carbon Nanotubes. Angewandte Chemie - International Edition, 2014, 53, 5394-5400.	7.2	69
27	Amide-based molecular shuttles (2001-2006). Pure and Applied Chemistry, 2007, 79, 39-54.	0.9	60
28	Molecular tweezers for fullerenes. Pure and Applied Chemistry, 2010, 82, 523-533.	0.9	52
29	Electron Transfer in a Supramolecular Associate of a Fullerene Fragment. Angewandte Chemie - International Edition, 2014, 53, 2170-2175.	7.2	52
30	Supramolecular chemistry of Ï€-extended analogues of TTF and carbon nanostructures. New Journal of Chemistry, 2009, 33, 228-234.	1.4	50
31	Spin-state-dependent electrical conductivity in single-walled carbon nanotubes encapsulating spin-crossover molecules. Nature Communications, 2021, 12, 1578.	5.8	47
32	Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. Nanotechnology, 2017, 28, 455703.	1.3	45
33	Bowl-shape electron donors with absorptions in the visible range of the solar spectrum and their supramolecular assemblies with C₆₀. Chemical Science, 2012, 3, 498-508.	3.7	42
34	Luminescent transition metal dichalcogenide nanosheets through one-step liquid phase exfoliation. 2D Materials, 2016, 3, 035014.	2.0	42
35	Pyrene-based mechanically interlocked SWNTs. Chemical Communications, 2015, 51, 5421-5424.	2.2	41
36	Dynamic Chirality: Molecular Shuttles and Motors. , 0, , 185-208.		39

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37	A MoS2 platform and thionine-carbon nanodots for sensitive and selective detection of pathogens. Biosensors and Bioelectronics, 2021, 189, 113375.	5.3	39
38	Mechanical and liquid phase exfoliation of cylindrite: a natural van der Waals superlattice with intrinsic magnetic interactions. 2D Materials, 2019, 6, 035023.	2.0	38
39	Positive and negative regulation of carbon nanotube catalysts through encapsulation within macrocycles. Nature Communications, 2018, 9, 2671.	5.8	38
40	Engineering the optoelectronic properties of MoS₂ photodetectors through reversible noncovalent functionalization. Chemical Communications, 2016, 52, 14365-14368.	2.2	37
41	Organic Covalent Patterning of Nanostructured Graphene with Selectivity at the Atomic Level. Nano Letters, 2016, 16, 355-361.	4.5	36
42	The mechanical bond on carbon nanotubes: diameter-selective functionalization and effects on physical properties. Nanoscale, 2016, 8, 9254-9264.	2.8	33
43	Dynamics of individual molecular shuttles under mechanical force. Nature Communications, 2018, 9, 4512.	5.8	33
44	High Degree of Polymerization in a Fullereneâ€Containing Supramolecular Polymer. Angewandte Chemie - International Edition, 2014, 53, 5629-5633.	7.2	32
45	Putting Rings around Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, 12681-12689.	1.7	32
46	Determination of association constants towards carbon nanotubes. Chemical Science, 2015, 6, 7008-7014.	3.7	30
47	Threading through Macrocycles Enhances the Performance of Carbon Nanotubes as Polymer Fillers. ACS Nano, 2016, 10, 8012-8018.	7.3	30
48	Group 16 elements control the synthesis of continuous fibers of carbon nanotubes. Carbon, 2016, 101, 458-464.	5.4	30
49	Understanding Noncovalent Interactions of Small Molecules with Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, 12909-12916.	1.7	30
50	Bimodal supramolecular functionalization of carbon nanotubes triggered by covalent bond formation. Chemical Science, 2017, 8, 1927-1935.	3.7	29
51	Interfacing porphyrins and carbon nanotubes through mechanical links. Chemical Science, 2018, 9, 6779-6784.	3.7	29
52	Getting tubed: mechanical bond in endohedral derivatives of carbon nanotubes?. Nanoscale, 2013, 5, 7141.	2.8	27
53	Controlled Self-Assembly of Electron Donor Nanotubes. Organic Letters, 2009, 11, 4524-4527.	2.4	26
54	Optimization and Insights into the Mechanism of Formation of Mechanically Interlocked Derivatives of Singleâ€Walled Carbon Nanotubes. ChemPlusChem, 2015, 80, 1153-1157.	1.3	26

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55	Inherent predominance of high chiral angle metallic carbon nanotubes in continuous fibers grown from a molten catalyst. Nanoscale, 2016, 8, 4236-4244.	2.8	26
56	Controlled Covalent Functionalization of 2â€‰Hâ€MoS₂ with Molecular or Polymeric Adlayers. Chemistry - A European Journal, 2020, 26, 6629-6634.	1.7	26
57	Reversible dispersion and release of carbon nanotubes via cooperative clamping interactions with hydrogen-bonded nanorings. Chemical Science, 2018, 9, 4176-4184.	3.7	25
58	Mechanically Interlocked Carbon Nanotubes as a Stable Electrocatalytic Platform for Oxygen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 32615-32621.	4.0	25
59	Fabrication of devices featuring covalently linked MoS2â€“graphene heterostructures. Nature Chemistry, 2022, 14, 695-700.	6.6	23
60	A xanthone-based neutral receptor for zwitterionic amino acids. Tetrahedron Letters, 2003, 44, 6983-6985.	0.7	22
61	Biomimetic oxidation of pyrene and related aromatic hydrocarbons. Unexpected electron accepting abilities of pyrenequinones. Chemical Communications, 2014, 50, 9372-9375.	2.2	22
62	Dielectrophoretic assembly of liquid-phase-exfoliated TiS₃ nanoribbons for photodetecting applications. Chemical Communications, 2017, 53, 6164-6167.	2.2	22
63	Bandâ€Gap Opening in Metallic Singleâ€Walled Carbon Nanotubes by Encapsulation of an Organic Salt. Angewandte Chemie - International Edition, 2017, 56, 12240-12244.	7.2	22
64	2D MoS2 nanosheets and hematein complexes deposited on screen-printed graphene electrodes as an efficient electrocatalytic sensor for detecting hydrazine. Sensors and Actuators B: Chemical, 2021, 345, 130385.	4.0	21
65	Chiral recognition of carbon nanoforms. Organic and Biomolecular Chemistry, 2012, 10, 3577.	1.5	20
66	Complexation and Electronic Communication between Corannulene-Based Buckybowls and a Curved Truxene-TTF Donor. Chemistry - A European Journal, 2017, 23, 3666-3673.	1.7	20
67	High yielding and extremely site-selective covalent functionalization of graphene. Chemical Communications, 2017, 53, 10418-10421.	2.2	20
68	One-Pot Exfoliation of Graphite and Synthesis of Nanographene/Dimesitylporphyrin Hybrids. International Journal of Molecular Sciences, 2015, 16, 10704-10714.	1.8	17
69	Simultaneous assembly of van der Waals heterostructures into multiple nanodevices. Nanoscale, 2018, 10, 7966-7970.	2.8	17
70	Physically Unclonable Functions Based on Single-Walled Carbon Nanotubes: A Scalable and Inexpensive Method toward Unique Identifiers. ACS Applied Nano Materials, 2019, 2, 1796-1801.	2.4	17
71	Supramolecular Interaction of Single-Walled Carbon Nanotubes with a Functional TTF-Based Mediator Probed by Field-Effect Transistor Devices. Journal of Physical Chemistry C, 2012, 116, 20062-20066.	1.5	16
72	High Degree of Polymerization in a Fullereneâ€Containing Supramolecular Polymer. Angewandte Chemie, 2014, 126, 5735-5739.	1.6	16

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73	trans-Benzoxanthene receptors for enantioselective recognition of amino acid derivatives. Tetrahedron Letters, 2001, 42, 5853-5856.	0.7	15
74	Exploiting Multivalent Nanoparticles for the Supramolecular Functionalization of Graphene with a Nonplanar Recognition Motif. Chemistry - A European Journal, 2013, 19, 9843-9848.	1.7	15
75	Balancing binding strength and charge transfer lifetime in supramolecular associates of fullerenes. Chemical Communications, 2011, 47, 7449.	2.2	14
76	Covalent modification of franckeite with maleimides: connecting molecules and van der Waals heterostructures. Nanoscale Horizons, 2021, 6, 551-558.	4.1	14
77	Energy, supramolecular chemistry, fullerenes, and the sky. Pure and Applied Chemistry, 2010, 83, 201-211.	0.9	12
78	Buckyballs. Topics in Current Chemistry, 2013, 350, 1-64.	4.0	12
79	Understanding the affinity of bis-exTTF macrocyclic receptors towards fullerene recognition. Physical Chemistry Chemical Physics, 2019, 21, 11670-11675.	1.3	12
80	Magnetic, Mechanically Interlocked Porphyrinâ€“Carbon Nanotubes for Quantum Computation and Spintronics. Journal of the American Chemical Society, 2021, 143, 21286-21293.	6.6	12
81	Linear and Hyperbranched Electronâ€Acceptor Supramolecular Oligomers. Chemistry - an Asian Journal, 2011, 6, 1848-1853.	1.7	11
82	Synthetic Molecular Bipeds. Angewandte Chemie - International Edition, 2011, 50, 3359-3361.	7.2	10
83	Surfactantâ€Free Polarâ€toâ€Nonpolar Phase Transfer of Exfoliated MoS₂ Twoâ€Dimensional Colloids. ChemPlusChem, 2017, 82, 732-741.	1.3	10
84	Mechanical measurement of hydrogen bonded hostâ€“guest systems under non-equilibrium, near-physiological conditions. Chemical Science, 2017, 8, 6037-6041.	3.7	9
85	Graphene catalyzes the reversible formation of a Câ€“C bond between two molecules. Science Advances, 2018, 4, eaau9366.	4.7	9
86	Singleâ€Walled Carbon Nanotubes Encapsulated within Metallacycles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	9
87	Organic solar cells based on bowl-shaped small-molecules. RSC Advances, 2015, 5, 31541-31546.	1.7	8
88	exTTF-capped gold nanoparticles as multivalent receptors for C60. Chemical Science, 2011, 2, 1384.	3.7	7
89	Core level photoemission of rotaxanes: A summary on binding energies. Journal of Electron Spectroscopy and Related Phenomena, 2008, 165, 42-45.	0.8	6
90	Quasi-Barrierless Submolecular Motion in Mechanically Interlocked Carbon Nanotubes. Journal of Physical Chemistry C, 2020, 124, 15541-15546.	1.5	6

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91	Covalent Crossâ€Linking of 2Hâ€MoS₂ Nanosheets. Chemistry - A European Journal, 2021, 27, 2993-2996.	1.7	6
92	Functionalized epoxy with adjustable fluorescence and UV-shielding enabled by reactive addition of 9-anthracenemethoxyl glycidyl ether. RSC Advances, 2021, 11, 36719-36725.	1.7	5
93	Threefold exTTF-based Buckycatcher. Journal of Coordination Chemistry, 2010, 63, 2939-2948.	0.8	4
94	Stronger aramids through molecular design and nanoprocessing. Polymer Chemistry, 2020, 11, 1489-1495.	1.9	4
95	Hydrogen-bonded hostâ€“guest systems are stable in ionic liquids. Scientific Reports, 2020, 10, 15414.	1.6	3
96	Experimental Determination of Association Constants Involving Fullerenes. , 0, , 375-390.		3
97	Entropy-Driven Heterocomplexation of Conjugated Polymers in Highly Diluted Solutions. Journal of Physical Chemistry C, 2019, 123, 16596-16601.	1.5	2
98	Microemulsions for the covalent patterning of graphene. Chemical Communications, 2022, 58, 7813-7816.	2.2	1
99	Cover Picture: Patterning through Controlled Submolecular Motion: Rotaxane-Based Switches and Logic Gates that Function in Solution and Polymer Films (Angew. Chem. Int. Ed. 20/2005). Angewandte Chemie - International Edition, 2005, 44, 2985-2985.	7.2	0
100	Innentitelbild: High Degree of Polymerization in a Fullerene-Containing Supramolecular Polymer (Angew. Chem. 22/2014). Angewandte Chemie, 2014, 126, 5580-5580.	1.6	0
101	PROFILE: Early Excellence in Physical Organic Chemistry. Journal of Physical Organic Chemistry, 2015, 28, 445-446.	0.9	0
102	Frontispiece: Putting Rings around Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, .	1.7	0
103	Bandâ€Gap Opening in Metallic Singleâ€Walled Carbon Nanotubes by Encapsulation of an Organic Salt. Angewandte Chemie, 2017, 129, 12408-12412.	1.6	0
104	Measuring the Stability of Supramolecular Complexes in the Proximity of Singleâ€Walled Carbon Nanotubes. ChemistryOpen, 2020, 9, 731-734.	0.9	0
105	Measuring the Stability of Supramolecular Complexes in the Proximity of Singleâ€Walled Carbon Nanotubes. ChemistryOpen, 2020, 9, 730-730.	0.9	0
106	(Invited) In Control of Surface and Electronic Properties of SWNTs through Mechanical Interlocking. ECS Meeting Abstracts, 2021, MA2021-01, 581-581.	0.0	0
107	Rotaxanes Meet Carbon Nanotubes. Synthesis and Physical Properties of Mechanically Interlocked Derivatives of Carbon Nanotubes. ECS Meeting Abstracts, 2016, , .	0.0	0
108	Heterostructures Beyond Van Der Waals. ECS Meeting Abstracts, 2017, , .	0.0	0

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109	(Invited) Rotaxanes and SWNTs Tie the Knot. ECS Meeting Abstracts, 2017, , .	0.0	0
110	(Invited) Site-Selective Covalent Patterning of Epitaxial Graphene with Periodicity at the Nanometer Scale. ECS Meeting Abstracts, 2017, , .	0.0	0
111	Novel Strategies to Interface Molecules and 2D Materials. ECS Meeting Abstracts, 2018, , .	0.0	0
112	Noncovalent Chemistry of SWNTs Inside-Out. ECS Meeting Abstracts, 2018, , .	0.0	0
113	From Liquid-Phase Exfoliated 2D Materials to Functioning Devices. , 0, , .		0
114	(Invited) The Mechanical Bond As a Tool to Control Surface and Electronic Properties of SWNTs. ECS Meeting Abstracts, 2019, , .	0.0	0
115	(Invited) The Mechanical Bond As a New Tool to Revisit Old Problems in Swnt Chemistry. ECS Meeting Abstracts, 2020, MA2020-01, 706-706.	0.0	0
116	Five Minutes in the Life of a Molecular Shuttle: Near-Equilibrium Measurements of Shuttling Dynamics Using Optical Tweezers. Advances in Atom and Single Molecule Machines, 2020, , 219-232.	0.0	0