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List of Publications by Year
in descending order

Version: 2024-02-01

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	Fabrication of devices featuring covalently linked MoS2â€“graphene heterostructures. Nature Chemistry, 2022, 14, 695-700.	6.6	23
2	Microemulsions for the covalent patterning of graphene. Chemical Communications, 2022, 58, 7813-7816.	2.2	1
3	Singleâ€Walled Carbon Nanotubes Encapsulated within Metallacycles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	9
4	Covalent Crossâ€Linking of 2Hâ€MoS₂ Nanosheets. Chemistry - A European Journal, 2021, 27, 2993-2996.	1.7	6
5	Covalent modification of franckeite with maleimides: connecting molecules and van der Waals heterostructures. Nanoscale Horizons, 2021, 6, 551-558.	4.1	14
6	Spin-state-dependent electrical conductivity in single-walled carbon nanotubes encapsulating spin-crossover molecules. Nature Communications, 2021, 12, 1578.	5.8	47
7	(Invited) In Control of Surface and Electronic Properties of SWNTs through Mechanical Interlocking. ECS Meeting Abstracts, 2021, MA2021-01, 581-581.	0.0	0
8	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
9	A MoS2 platform and thionine-carbon nanodots for sensitive and selective detection of pathogens. Biosensors and Bioelectronics, 2021, 189, 113375.	5.3	39
10	Magnetic, Mechanically Interlocked Porphyrinâ€“Carbon Nanotubes for Quantum Computation and Spintronics. Journal of the American Chemical Society, 2021, 143, 21286-21293.	6.6	12
11	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
12	Stronger aramids through molecular design and nanoprocessing. Polymer Chemistry, 2020, 11, 1489-1495.	1.9	4
13	Measuring the Stability of Supramolecular Complexes in the Proximity of Singleâ€Walled Carbon Nanotubes. ChemistryOpen, 2020, 9, 731-734.	0.9	0
14	Measuring the Stability of Supramolecular Complexes in the Proximity of Singleâ€Walled Carbon Nanotubes. ChemistryOpen, 2020, 9, 730-730.	0.9	0
15	Hydrogen-bonded hostâ€“guest systems are stable in ionic liquids. Scientific Reports, 2020, 10, 15414.	1.6	3
16	Quasi-Barrierless Submolecular Motion in Mechanically Interlocked Carbon Nanotubes. Journal of Physical Chemistry C, 2020, 124, 15541-15546.	1.5	6
17	Mechanically Interlocked Carbon Nanotubes as a Stable Electrocatalytic Platform for Oxygen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 32615-32621.	4.0	25
18	Controlled Covalent Functionalization of 2â€‰Hâ€MoS₂ with Molecular or Polymeric Adlayers. Chemistry - A European Journal, 2020, 26, 6629-6634.	1.7	26

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19	(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
20	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
21	Mechanically interlocked materials. Rotaxanes and catenanes beyond the small molecule. Chemical Society Reviews, 2019, 48, 5016-5032.	18.7	178
22	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
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	Entropy-Driven Heterocomplexation of Conjugated Polymers in Highly Diluted Solutions. Journal of Physical Chemistry C, 2019, 123, 16596-16601.	1.5	2
25	Understanding the affinity of bis-exTTF macrocyclic receptors towards fullerene recognition. Physical Chemistry Chemical Physics, 2019, 21, 11670-11675.	1.3	12
26	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
27	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
28	(Invited) The Mechanical Bond As a Tool to Control Surface and Electronic Properties of SWNTs. ECS Meeting Abstracts, 2019, , .	0.0	0
29	Reversible dispersion and release of carbon nanotubes via cooperative clamping interactions with hydrogen-bonded nanorings. Chemical Science, 2018, 9, 4176-4184.	3.7	25
30	Simultaneous assembly of van der Waals heterostructures into multiple nanodevices. Nanoscale, 2018, 10, 7966-7970.	2.8	17
31	Graphene catalyzes the reversible formation of a Câ€“C bond between two molecules. Science Advances, 2018, 4, eaau9366.	4.7	9
32	Dynamics of individual molecular shuttles under mechanical force. Nature Communications, 2018, 9, 4512.	5.8	33
33	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
34	Interfacing porphyrins and carbon nanotubes through mechanical links. Chemical Science, 2018, 9, 6779-6784.	3.7	29
35	Positive and negative regulation of carbon nanotube catalysts through encapsulation within macrocycles. Nature Communications, 2018, 9, 2671.	5.8	38
36	Novel Strategies to Interface Molecules and 2D Materials. ECS Meeting Abstracts, 2018, , .	0.0	0

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37	Noncovalent Chemistry of SWNTs Inside-Out. ECS Meeting Abstracts, 2018, , .	0.0	0
38	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
39	Franckeite as a naturally occurring van der Waals heterostructure. Nature Communications, 2017, 8, 14409.	5.8	103
40	Dielectrophoretic assembly of liquid-phase-exfoliated TiS₃ nanoribbons for photodetecting applications. Chemical Communications, 2017, 53, 6164-6167.	2.2	22
41	Surfactantâ€Free Polarâ€toâ€Nonpolar Phase Transfer of Exfoliated MoS₂ Twoâ€Dimensional Colloids. ChemPlusChem, 2017, 82, 732-741.	1.3	10
42	Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. Nanotechnology, 2017, 28, 455703.	1.3	45
43	High yielding and extremely site-selective covalent functionalization of graphene. Chemical Communications, 2017, 53, 10418-10421.	2.2	20
44	Frontispiece: Putting Rings around Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, .	1.7	0
45	Understanding Noncovalent Interactions of Small Molecules with Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, 12909-12916.	1.7	30
46	Putting Rings around Carbon Nanotubes. Chemistry - A European Journal, 2017, 23, 12681-12689.	1.7	32
47	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
48	Mechanical measurement of hydrogen bonded hostâ€“guest systems under non-equilibrium, near-physiological conditions. Chemical Science, 2017, 8, 6037-6041.	3.7	9
49	Bandâ€Gap Opening in Metallic Singleâ€Walled Carbon Nanotubes by Encapsulation of an Organic Salt. Angewandte Chemie, 2017, 129, 12408-12412.	1.6	0
50	Bimodal supramolecular functionalization of carbon nanotubes triggered by covalent bond formation. Chemical Science, 2017, 8, 1927-1935.	3.7	29
51	Heterostructures Beyond Van Der Waals. ECS Meeting Abstracts, 2017, , .	0.0	0
52	(Invited) Rotaxanes and SWNTs Tie the Knot. ECS Meeting Abstracts, 2017, , .	0.0	0
53	(Invited) Site-Selective Covalent Patterning of Epitaxial Graphene with Periodicity at the Nanometer Scale. ECS Meeting Abstracts, 2017, , .	0.0	0
54	Centimeter-Scale Synthesis of Ultrathin Layered MoO₃ by van der Waals Epitaxy. Chemistry of Materials, 2016, 28, 4042-4051.	3.2	100

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55	The mechanical bond on carbon nanotubes: diameter-selective functionalization and effects on physical properties. Nanoscale, 2016, 8, 9254-9264.	2.8	33
56	Luminescent transition metal dichalcogenide nanosheets through one-step liquid phase exfoliation. 2D Materials, 2016, 3, 035014.	2.0	42
57	Threading through Macrocycles Enhances the Performance of Carbon Nanotubes as Polymer Fillers. ACS Nano, 2016, 10, 8012-8018.	7.3	30
58	Engineering the optoelectronic properties of MoS₂ photodetectors through reversible noncovalent functionalization. Chemical Communications, 2016, 52, 14365-14368.	2.2	37
59	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
60	Organic Covalent Patterning of Nanostructured Graphene with Selectivity at the Atomic Level. Nano Letters, 2016, 16, 355-361.	4.5	36
61	Group 16 elements control the synthesis of continuous fibers of carbon nanotubes. Carbon, 2016, 101, 458-464.	5.4	30
62	Rotaxanes Meet Carbon Nanotubes. Synthesis and Physical Properties of Mechanically Interlocked Derivatives of Carbon Nanotubes. ECS Meeting Abstracts, 2016, , .	0.0	0
63	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
64	PROFILE: Early Excellence in Physical Organic Chemistry. Journal of Physical Organic Chemistry, 2015, 28, 445-446.	0.9	0
65	One-Pot Exfoliation of Graphite and Synthesis of Nanographene/Dimesitylporphyrin Hybrids. International Journal of Molecular Sciences, 2015, 16, 10704-10714.	1.8	17
66	Organic solar cells based on bowl-shaped small-molecules. RSC Advances, 2015, 5, 31541-31546.	1.7	8
67	Ï€â€“Ï€ interactions in carbon nanostructures. Chemical Society Reviews, 2015, 44, 6425-6433.	18.7	275
68	Determination of association constants towards carbon nanotubes. Chemical Science, 2015, 6, 7008-7014.	3.7	30
69	Pyrene-based mechanically interlocked SWNTs. Chemical Communications, 2015, 51, 5421-5424.	2.2	41
70	High Degree of Polymerization in a Fullereneâ€Containing Supramolecular Polymer. Angewandte Chemie - International Edition, 2014, 53, 5629-5633.	7.2	32
71	Mechanically Interlocked Singleâ€Wall Carbon Nanotubes. Angewandte Chemie - International Edition, 2014, 53, 5394-5400.	7.2	69
72	Electron Transfer in a Supramolecular Associate of a Fullerene Fragment. Angewandte Chemie - International Edition, 2014, 53, 2170-2175.	7.2	52

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73	Biomimetic oxidation of pyrene and related aromatic hydrocarbons. Unexpected electron accepting abilities of pyrenequinones. Chemical Communications, 2014, 50, 9372-9375.	2.2	22
74	High Degree of Polymerization in a Fullereneâ€Containing Supramolecular Polymer. Angewandte Chemie, 2014, 126, 5735-5739.	1.6	16
75	Innentitelbild: High Degree of Polymerization in a Fullerene-Containing Supramolecular Polymer (Angew. Chem. 22/2014). Angewandte Chemie, 2014, 126, 5580-5580.	1.6	0
76	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
77	Getting tubed: mechanical bond in endohedral derivatives of carbon nanotubes?. Nanoscale, 2013, 5, 7141.	2.8	27
78	Buckyballs. Topics in Current Chemistry, 2013, 350, 1-64.	4.0	12
79	Chiral recognition of carbon nanoforms. Organic and Biomolecular Chemistry, 2012, 10, 3577.	1.5	20
80	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
81	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
82	exTTF-capped gold nanoparticles as multivalent receptors for C60. Chemical Science, 2011, 2, 1384.	3.7	7
83	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
84	Balancing binding strength and charge transfer lifetime in supramolecular associates of fullerenes. Chemical Communications, 2011, 47, 7449.	2.2	14
85	Linear and Hyperbranched Electronâ€Acceptor Supramolecular Oligomers. Chemistry - an Asian Journal, 2011, 6, 1848-1853.	1.7	11
86	Synthetic Molecular Bipeds. Angewandte Chemie - International Edition, 2011, 50, 3359-3361.	7.2	10
87	Wraparound Hosts for Fullerenes: Tailored Macrocycles and Cages. Angewandte Chemie - International Edition, 2011, 50, 9248-9259.	7.2	209
88	Threefold exTTF-based Buckycatcher. Journal of Coordination Chemistry, 2010, 63, 2939-2948.	0.8	4
89	Molecular tweezers for fullerenes. Pure and Applied Chemistry, 2010, 82, 523-533.	0.9	52
90	Energy, supramolecular chemistry, fullerenes, and the sky. Pure and Applied Chemistry, 2010, 83, 201-211.	0.9	12

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91	A Bis-exTTF Macrocyclic Receptor That Associates C60 with Micromolar Affinity. Journal of the American Chemical Society, 2010, 132, 1772-1773.	6.6	93
92	Tripodal exTTF-CTV Hosts for Fullerenes. Journal of the American Chemical Society, 2010, 132, 5351-5353.	6.6	110
93	Discrete Supramolecular Donorâ€“Acceptor Complexes. Angewandte Chemie - International Edition, 2009, 48, 815-819.	7.2	107
94	Supramolecular chemistry of Ï€-extended analogues of TTF and carbon nanostructures. New Journal of Chemistry, 2009, 33, 228-234.	1.4	50
95	Controlled Self-Assembly of Electron Donor Nanotubes. Organic Letters, 2009, 11, 4524-4527.	2.4	26
96	Selfâ€Organization of Electroactive Materials: A Headâ€toâ€Tail Donorâ€“Acceptor Supramolecular Polymer. Angewandte Chemie - International Edition, 2008, 47, 1094-1097.	7.2	160
97	Core level photoemission of rotaxanes: A summary on binding energies. Journal of Electron Spectroscopy and Related Phenomena, 2008, 165, 42-45.	0.8	6
98	Curves ahead: molecular receptors for fullerenes based on concaveâ€“convex complementarity. Chemical Society Reviews, 2008, 37, 1512.	18.7	298
99	Weighting non-covalent forces in the molecular recognition of C60. Relevance of concaveâ€“convex complementarity. Chemical Communications, 2008, , 4567.	2.2	71
100	An Electroactive Dynamically Polydisperse Supramolecular Dendrimer. Journal of the American Chemical Society, 2008, 130, 2410-2411.	6.6	120
101	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
102	Amide-based molecular shuttles (2001-2006). Pure and Applied Chemistry, 2007, 79, 39-54.	0.9	60
103	Concave Tetrathiafulvalene-Type Donors as Supramolecular Partners for Fullerenes. Angewandte Chemie - International Edition, 2007, 46, 1847-1851.	7.2	117
104	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
105	Macroscopic transport by synthetic molecular machines. Nature Materials, 2005, 4, 704-710.	13.3	685
106	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
107	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
108	Shuttling through reversible covalent chemistry. Chemical Communications, 2004, , 2262-2263.	2.2	77

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109	A Generic Basis for Some Simple Light-Operated Mechanical Molecular Machines. Journal of the American Chemical Society, 2004, 126, 12210-12211.	6.6	199
110	Entropy-Driven Translational Isomerism: A Tristable Molecular Shuttle. Angewandte Chemie - International Edition, 2003, 42, 5886-5889.	7.2	103
111	A xanthone-based neutral receptor for zwitterionic amino acids. Tetrahedron Letters, 2003, 44, 6983-6985.	0.7	22
112	Chiroptical Switching in a Bistable Molecular Shuttle. Journal of the American Chemical Society, 2003, 125, 13360-13361.	6.6	175
113	trans-Benzoxanthene receptors for enantioselective recognition of amino acid derivatives. Tetrahedron Letters, 2001, 42, 5853-5856.	0.7	15
114	Dynamic Chirality: Molecular Shuttles and Motors. , 0, , 185-208.		39
115	Experimental Determination of Association Constants Involving Fullerenes. , 0, , 375-390.		3
116	From Liquid-Phase Exfoliated 2D Materials to Functioning Devices. , 0, , .		0