Aurelio Mateo-Alonso

List of Publications by Year
in descending order

112	4,006	94433 37	138484 58
papers	citations	h-index	g-index

138	138	138	4543
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pyrene-fused pyrazaacenes: from small molecules to nanoribbons. Chemical Society Reviews, 2014, 43, 6311.	38.1	243
2	Manipulating single-wall carbon nanotubes by chemical doping and charge transfer with perylene dyes. Nature Chemistry, 2009, 1, 243-249.	13.6	215
3	Multipurpose Organically Modified Carbon Nanotubes: From Functionalization to Nanotube Composites. Journal of the American Chemical Society, 2008, 130, 8733-8740.	13.7	209
4	Materials chemistry of fullerene C₆₀derivatives. Journal of Materials Chemistry, 2011, 21, 1305-1318.	6.7	159
5	Fullerenes: Multitask Components in Molecular Machinery. Angewandte Chemie - International Edition, 2007, 46, 8120-8126.	13.8	125
6	Twisted Aromatic Frameworks: Readily Exfoliable and Solutionâ€Processable Twoâ€Dimensional Conjugated Microporous Polymers. Angewandte Chemie - International Edition, 2017, 56, 6946-6951.	13.8	100
7	Monodisperse Nâ€Doped Graphene Nanoribbons Reaching 7.7 Nanometers in Length. Angewandte Chemie - International Edition, 2018, 57, 703-708.	13.8	87
8	Tuning Electron Transfer through Translational Motion in Molecular Shuttles. Angewandte Chemie - International Edition, 2007, 46, 3521-3525.	13.8	82
9	Versatile 2,7-Substituted Pyrene Synthons for the Synthesis of Pyrene-Fused Azaacenes. Organic Letters, 2012, 14, 4170-4173.	4.6	77
10	Improving Photocurrent Generation: Supramolecularly and Covalently Functionalized Singleâ€Wall Carbon Nanotubesâ€“Polymer/Porphyrin Donorâ€“Acceptor Nanohybrids. Chemistry - A European Journal, 2008, 14, 8837-8846.	3.3	65
11	Facile Synthesis of Highly Stable Tetraazaheptacene and Tetraazaoctacene Dyes. Chemistry - an Asian Journal, 2010, 5, 482-485.	3.3	65
12	Ï€â€Interpenetrated 3D Covalent Organic Frameworks from Distorted Polycyclic Aromatic Hydrocarbons. Angewandte Chemie - International Edition, 2021, 60, 9941-9946.	13.8	65
13	Nonlinear Optical Properties of Ferrocene- and Porphyrinâ€“[60]Fullerene Dyads. ChemPhysChem, 2007, 8, 1056-1064.	2.1	64
14	Enhancement of the Performance of Perovskite Solar Cells, LEDs, and Optical Amplifiers by Antiâ€Solvent Additive Deposition. Advanced Materials, 2017, 29, 1604056.	21.0	63
15	A Wavy Two-Dimensional Covalent Organic Framework from Core-Twisted Polycyclic Aromatic Hydrocarbons. Journal of the American Chemical Society, 2019, 141, 14403-14410.	13.7	63
16	Gate-tuneable and chirality-dependent charge-to-spin conversion in tellurium nanowires. Nature Materials, 2022, 21, 526-532.	27.5	62
17	Twisted pyrene-fused azaacenes. Chemical Communications, 2014, 50, 1976.	4.1	60
18	Synthesis of Pyrene-Fused Pyrazaacenes on Metal Surfaces: Toward One-Dimensional Conjugated Nanostructures. ACS Nano, 2016, 10, 1033-1041.	14.6	60

#	Article	IF	Citations
19	Structural Approaches to Control Interlayer Interactions in 2D Covalent Organic Frameworks. Advanced Materials, 2020, 32, e2002366.	21.0	60
20	Efficient Modulation of the Third Order Nonlinear Optical Properties of Fullerene Derivatives. Journal of the American Chemical Society, 2008, 130, 1534-1535.	13.7	59
21	A tetraalkylated pyrene building block for the synthesis of pyrene-fused azaacenes with enhanced solubility. Chemical Communications, 2011, 47, 514-516.	4.1	58
22	Lowâ€ŁUMO Pyreneâ€Fused Azaacenes. Chemistry - A European Journal, 2014, 20, 10626-10631.	3.3	57
23	Twisted Molecular Nanoribbons with up to 53 Linearly-Fused Rings. Journal of the American Chemical Society, 2021, 143, 6593-6600.	13.7	56
24	High conductance values in Ï€-folded molecular junctions. Nature Communications, 2017, 8, 15195.	12.8	54
25	Nonplanar Rhombus and Kagome 2D Covalent Organic Frameworks from Distorted Aromatics for Electrical Conduction. Journal of the American Chemical Society, 2022, 144, 5042-5050.	13.7	54
26	Dispersion of Single-Walled Carbon Nanotubes with an Extended Diazapentacene Derivative. Journal of Physical Chemistry A, 2007, 111, 12669-12673.	2.5	53
27	Synthesis and applications of amphiphilic fulleropyrrolidine derivatives. Organic and Biomolecular Chemistry, 2006, 4, 1629.	2.8	52
28	Observing polymerization in 2D dynamic covalent polymers. Nature, 2022, 603, 835-840.	27.8	48
29	Homoepitaxial Branching: An Unusual Polymorph of Zinc Oxide Derived from Seeded Solution Growth. ACS Nano, 2012, 6, 7133-7141.	14.6	47
30	Charge Transfer Reactions along a Supramolecular Redox Gradient. Journal of the American Chemical Society, 2008, 130, 14938-14939.	13.7	46
31	Inducing Single-Handed Helicity in a Twisted Molecular Nanoribbon. Journal of the American Chemical Society, 2022, 144, 2765-2774.	13.7	46
32	Mechanically interlocked molecular architectures functionalised with fullerenes. Chemical Communications, 2010, 46, 9089.	4.1	44
33	Monodisperse Nâ€Doped Graphene Nanoribbons Reaching 7.7 Nanometers in Length. Angewandte Chemie, 2018, 130, 711-716.	2.0	44
34	Real-Time Molecular-Scale Imaging of Dynamic Network Switching between Covalent Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 5964-5968.	13.7	44
35	Reverse Shuttling in a Fullerene-Stoppered Rotaxane. Organic Letters, 2006, 8, 5173-5176.	4.6	40
36	An electrochemically driven molecular shuttle controlled and monitored by C60. Chemical Communications, 2007, , 1945.	4.1	40

#	Article	IF	Citations
37	Electrostatic layer-by-layer construction and characterization of photoelectrochemical solar cells based on water soluble polythiophenes and carbon nanotubes. Journal of Materials Chemistry, 2009, 19, 4319.	6.7	39
38	Two-Dimensional Vibrational Spectroscopy of Rotaxane-Based Molecular Machines. Accounts of Chemical Research, 2009, 42, 1462-1469.	15.6	39
39	Fullerene photoactive dyads assembled byÂaxial coordination with metals. Comptes Rendus Chimie, 2006, 9, 944-951.	0.5	38
40	Energy Level Alignment at Metal/Solutionâ€Processed Organic Semiconductor Interfaces. Advanced Materials, 2017, 29, 1606901.	21.0	37
41	Giant Starâ€Shaped Nitrogenâ€Doped Nanographenes. Angewandte Chemie - International Edition, 2019, 58, 552-556.	13.8	37
42	Stabilization of fulleropyrrolidine N-oxides through intrarotaxane hydrogen bonding. Chemical Communications, 2007, , 1412.	4.1	35
43	Hexaazatrinaphthylenes with Different Twists. Chemistry - A European Journal, 2014, 20, 1525-1528.	3.3	34
44	A Molecular Shuttle Driven by Fullerene Radicalâ€Anion Recognition. Chemistry - A European Journal, 2012, 18, 14063-14068.	3.3	33
45	A thiadiazole-capped nanoribbon with 18 linearly fused rings. Nanoscale, 2018, 10, 11297-11301.	5.6	31
46	Photophysics and transient nonlinear optical response of donorâ€"[60]fullerene hybrids. Journal of Materials Chemistry, 2011, 21, 2524.	6.7	29
47	Singlet Fission in Pyreneâ€Fused Azaacene Dimers. Angewandte Chemie - International Edition, 2020, 59, 1113-1117.	13.8	29
48	An electron-conducting pyrene-fused phenazinothiadiazole. Chemical Communications, 2015, 51, 10754-10757.	4.1	27
49	A short pyrene-fused pyrazaacene with red to near-infrared photoluminescence. Chemical Communications, 2015, 51, 8037-8040.	4.1	27
50	Synthesis and Properties of a Twisted and Stable Tetracyano-Substituted Tetrabenzoheptacene. Organic Letters, 2017, 19, 1718-1721.	4.6	27
51	Doubling the Length of the Longest Pyreneâ€Pyrazinoquinoxaline Molecular Nanoribbons. Angewandte Chemie - International Edition, 2022, 61, .	13.8	26
52	Charge transport modulation in pseudorotaxane 1D stacks of acene and azaacene derivatives. Chemical Science, 2019, 10, 2743-2749.	7.4	25
53	Synthesis of a soluble fullereneâ€"rotaxane incorporating a furamide template. Tetrahedron, 2006, 62, 2003-2007.	1.9	24
54	Bisthiadiazole-Fused Tetraazapentacenequinone: An Air-Stable Solution-Processable n-Type Organic Semiconductor. Organic Letters, 2015, 17, 5902-5905.	4.6	24

#	Article	IF	Citations
55	K-Conjugated Dibenzoazahexacenes. Organic Letters, 2016, 18, 4694-4697.	4.6	22
56	A Three-Level Luminescent Response in a Pyrene/Ferrocene Rotaxane. Organic Letters, 2013, 15, 84-87.	4.6	21
57	11,11,12,12-Tetracyano-4,5-pyrenoquinodimethanes: Air-Stable Pushâ€“Pull o-Quinodimethanes with S2 Fluorescence. Organic Letters, 2014, 16, 6096-6099.	4.6	21
58	Twisted Aromatic Frameworks: Readily Exfoliable and Solutionâ€Processable Twoâ€Dimensional Conjugated Microporous Polymers. Angewandte Chemie, 2017, 129, 7050-7055.	2.0	21
59	A Sterically Congested Nitrogenated Benzodipentaphene with a Double Ï€-Expanded Helicene Structure. Organic Letters, 2020, 22, 3706-3711.	4.6	21
60	Photophysical and electrochemical properties of a fullerene-stoppered rotaxane. Photochemical and Photobiological Sciences, 2006, 5, 1173.	2.9	20
61	Synthesis of Fulleneâ€Stoppered Rotaxanes Bearing Ferrocene Groups on the Macrocycle. European Journal of Organic Chemistry, 2010, 2010, 1324-1332.	2.4	20
62	Synthetic Approaches to Pyreneâ€Fused Twistacenes. European Journal of Organic Chemistry, 2017, 2017, 7006-7011.	2.4	20
63	The reactivity, as electrogenerated bases, of chiral and achiral phenazine radical-anions, including application in asymmetric deprotonation. Organic and Biomolecular Chemistry, 2005, 3, 2842.	2.8	19
64	Pyrene-fused bisphenazinothiadiazoles with red to NIR electroluminescence. Organic Chemistry Frontiers, 2017, 4, 876-881.	4.5	19
65	Virtually pure near-infrared electroluminescence from exciplexes at polyfluorene/hexaazatrinaphthylene interfaces. Applied Physics Letters, 2014, 105, .	3.3	18
66	Bis(triisopropylsilylethynyl)-substituted pyrene-fused tetraazaheptacene: synthesis and properties. Physical Chemistry Chemical Physics, 2016, 18, 11616-11619.	2.8	18
67	Twisted hexaazatrianthrylene: synthesis, optoelectronic properties and near-infrared electroluminescent heterojunctions thereof. Journal of Materials Chemistry C, 2015, 3, 9170-9174.	5.5	17
68	Tuning the ease of formation of on-surface metal-adatom coordination polymers featuring diketones. Nanoscale, 2018, 10, 9561-9568.	5.6	17
69	Three dimensional nanoscale analysis reveals aperiodic mesopores in a covalent organic framework and conjugated microporous polymer. Nanoscale, 2019, 11, 2848-2854.	5.6	17
70	Synthesis of phenazine derivatives for use as precursors to electrochemically generated bases. Organic and Biomolecular Chemistry, 2005, 3, 2832.	2.8	16
71	Functionalization and applications of [60]fullerene. , 2006, , 155-189.		16
72	Readily Processable Holeâ€Transporting Peropyrene Gels. Angewandte Chemie - International Edition, 2018, 57, 8209-8213.	13.8	16

#	Article	IF	Citations
73	Giant Starâ€Shaped Nitrogenâ€Doped Nanographenes. Angewandte Chemie, 2019, 131, 562-566.	2.0	15
74	Carbon Nanostructures in Rotaxane Architectures. European Journal of Organic Chemistry, 2019, 2019, 3371-3383.	2.4	15
75	Understanding charge transport in wavy 2D covalent organic frameworks. Nanoscale, 2021, 13, 6829-6833.	5.6	14
76	Anatomy of On-Surface Synthesized Boroxine Two-Dimensional Polymers. ACS Nano, 2020, 14, 2354-2365.	14.6	14
77	An Expanded 2D Fused Aromatic Network with 90â€Ring Hexagons. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
78	Generation of strong, homochiral bases by electrochemical reduction of phenazine derivativesElectronic supplementary information (ESI) available: procedure for conversion of 7 into 9 using electrochemical reduction of 6a to generate the chiral base; crystallographic data for (pS)-4, 5b, 6a and 6b. See http://www.rsc.org/suppdata/cc/b3/b313995f/. Chemical Communications, 2004, , 412.	4.1	13
79	Multimode assembly of phenanthroline nanowires decorated with gold nanoparticles. Chemical Communications, 2010, 46, 9122.	4.1	13
80	A non-covalent strategy to prepare electron donorâ€“acceptor rotaxanes. Chemical Communications, 2013, 49, 9452.	4.1	10
81	Depositing Molecular Graphene Nanoribbons on Ag(111) by Electrospray Controlled Ion Beam Deposition: Selfâ€Assembly and Onâ€Surface Transformations. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
82	Doubling the Length of the Longest Pyreneâ€Pyrazinoquinoxaline Molecular Nanoribbons. Angewandte Chemie, 2022, 134, .	2.0	10
83	Hooking Together Sigmoidal Monomers into Supramolecular Polymers. Angewandte Chemie - International Edition, 2019, 58, 15788-15792.	13.8	9
84	Ï€â€Interpenetrated 3D Covalent Organic Frameworks from Distorted Polycyclic Aromatic Hydrocarbons. Angewandte Chemie, 2021, 133, 10029-10034.	2.0	9
85	Synthesis and Characterization of Highly Water-Soluble Dendrofulleropyrrolidine Bisadducts with DNA Binding Activity. Organic Letters, 2012, 14, 4450-4453.	4.6	8
86	Isolation and Characterization of the Unexpected 1-n-Octyloxyperopyrene: A Solution-Processable p-Type Organic Semiconductor. Journal of Organic Chemistry, 2019, 84, 3270-3274.	3.2	8
87	Clar Rules the Electronic Properties of 2D Ï€â€Conjugated Frameworks: Mind the Gap. Chemistry - A European Journal, 2020, 26, 6569-6575.	3.3	8
88	Redoxâ€Switchable Complexes Based on Nanographeneâ€NHCs. Chemistry - A European Journal, 2022, 28, .	3.3	8
89	Direct observation of spin-injection in tyrosinate-functionalized single-wall carbon nanotubes. Carbon, 2014, 67, 424-433.	10.3	7
90	Readily Processable Holeâ€Transporting Peropyrene Gels. Angewandte Chemie, 2018, 130, 8341-8345.	2.0	7

#	Article	IF	Citations
91	Mechanically Interlocked Nitrogenated Nanographenes. Journal of the American Chemical Society, 2020, 142, 20481-20488.	13.7	7
92	Increasing and dispersing strain in pyrene-fused azaacenes. Chemical Communications, 2020, 56, 11457-11460.	4.1	7
93	Dibenzoanthradiquinone Building Blocks for the Synthesis of Nitrogenated Polycyclic Aromatic Hydrocarbons. Organic Letters, 2020, 22, 4737-4741.	4.6	7
94	Collecting up to 115% of Singlet-Fission Products by Single-Walled Carbon Nanotubes. ACS Nano, 2020, 14, 8875-8886.	14.6	7
95	Core level photoemission of rotaxanes: A summary on binding energies. Journal of Electron Spectroscopy and Related Phenomena, 2008, 165, 42-45.	1.7	6
96	A partially-planarised hole-transporting quart-p-phenylene for perovskite solar cells. Journal of Materials Chemistry C, 2019, 7, 4332-4335.	5.5	6
97	Singlet Fission in Pyreneâ€Fused Azaacene Dimers. Angewandte Chemie, 2020, 132, 1129-1133.	2.0	6
98	Fullerenes and Their Derivatives. , 2006, , .		5
99	Shuttling as a Strategy to Control the Regiochemistry of Bisâ€Additions on Fullerene Derivatives. ChemPhysChem, 2016, 17, 1823-1828.	2.1	5
100	Exclusive Substitutional Nitrogen Doping on Graphene Decoupled from an Insulating Substrate. Journal of Physical Chemistry C, 2020, 124, 22150-22157.	3.1	5
101	Imaging and analysis of covalent organic framework crystallites on a carbon surface: a nanocrystalline scaly COF/nanotube hybrid. Nanoscale, 2021, 13, 6834-6845.	5.6	5
102	Chapter 7. Fullerenes for Material Science. RSC Nanoscience and Nanotechnology, 2007, , 191-220.	0.2	5
103	Wallâ€•and Hybridisationâ€Selective Synthesis of Nitrogenâ€Doped Doubleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2019, 58, 10276-10280.	13.8	4
104	Depositing Molecular Graphene Nanoribbons on Ag(111) by Electrospray Controlled Ion Beam Deposition: Selfâ€Assembly and Onâ€Surface Transformations. Angewandte Chemie, 2022, 134, .	2.0	4
105	The Influence of Molecular Structure on the Selfâ€Assembly of Phenanthroline Derivatives into Crystalline Nanowires. Particle and Particle Systems Characterization, 2014, 31, 121-125.	2.3	3
106	Fullerene-Stoppered Bistable Rotaxanes. Topics in Current Chemistry, 2013, 348, 127-137.	4.0	2
107	Wallâ€•and Hybridisationâ€Selective Synthesis of Nitrogenâ€Doped Doubleâ€Walled Carbon Nanotubes. Angewandte Chemie, 2019, 131, 10382-10386.	2.0	2
108	Planar and Helical Dinaphthophenazines. Journal of Organic Chemistry, 2022, 87, 7635-7642.	3.2	2

#	Article	IF	Citations
109	Fullerene C60 Architectures in Materials Science. Advanced Materials and Technologies, 2013, , 47-88.	0.4	1
110	Hooking Together Sigmoidal Monomers into Supramolecular Polymers. Angewandte Chemie, 2019, 131, 15935-15939.	2.0	1
111	Optimization of semiconductor halide perovskite layers to implement waveguide amplifiers. , 2017, , .		0
112	An Expanded 2D Fused Aromatic Network with 90â€Ring Hexagons. Angewandte Chemie, 0, , .	2.0	0