Marc FourmiguÃ©

List of Publications by Year
in descending order

110 papers	3,661 citations	147801 31 h-index	149698 56 g-index
110 all docs	110 docs citations	110 times ranked	2851 citing authors

#	Article	IF	Citations
1	Activation of Hydrogen- and Halogen-Bonding Interactions in Tetrathiafulvalene-Based Crystalline Molecular Conductors. Chemical Reviews, 2004, 104, 5379-5418.	47.7	536
2	Halogen bonding: Recent advances. Current Opinion in Solid State and Materials Science, 2009, 13, 36-45.	11.5	291
3	Electrocrystallization, an Invaluable Tool for the Construction of Ordered, Electroactive Molecular Solidsâ€. Chemistry of Materials, 1998, 10, 3005-3015.	6.7	154
4	Chalcogen Bonding: Experimental and Theoretical Determinations from Electron Density Analysis. Geometrical Preferences Driven by Electrophilicâ€“Nucleophilic Interactions. Crystal Growth and Design, 2013, 13, 3283-3289.	3.0	154
5	Chalcogen bonding in crystalline diselenides and selenocyanates: From molecules of pharmaceutical interest to conducting materials. Coordination Chemistry Reviews, 2020, 403, 213084.	18.8	98
6	Single Crystalline Commensurate Metallic Assemblages of Ï€-slabs and CdI2-Type Layers:Â Synthesis and Properties of Î²-(EDT-TTF-I2)2[Pb5/61/6I2]3and Î²-(EDT-TTF-I2)2[Pb2/3+xAg1/3-2xxI2]3,x= 0.05. Journal of the American Chemical Society, 2003, 125, 3295-3301.	13.7	95
7	Halâ‹¯Hal interactions in a series of three isostructural salts of halogenated tetrathiafulvalenes. Contribution of the halogen atoms to the HOMOâ€“HOMO overlap interactions. Journal of Materials Chemistry, 2001, 11, 1570-1575.	6.7	88
8	Expanded Halogen-Bonded Anion Organic Networks with Star-Shaped Iodoethynyl-Substituted Molecules: From Corrugated 2D Hexagonal Lattices to Pyrite-Type 2-Fold Interpenetrated Cubic Lattices. Journal of the American Chemical Society, 2013, 135, 6200-6210.	13.7	78
9	Cocrystal or Salt: Solid State-Controlled Iodine Shift in Crystalline Halogen-Bonded Systems. Crystal Growth and Design, 2015, 15, 3464-3473.	3.0	76
10	Halogen Bonding Interactions of sym-Triiodotrifluorobenzene with Halide Anions: A Combined Structural and Theoretical Study. Crystal Growth and Design, 2008, 8, 2241-2247.	3.0	74
11	Anisotropic Chemical Pressure Effects in Single-Component Molecular Metals Based on Radical Dithiolene and Diselenolene Gold Complexes. Journal of the American Chemical Society, 2012, 134, 17138-17148.	13.7	73
12	Antiferromagnetic interactions in charge-transfer salts of molybdocene dithiolene complexes: the example of [Cp2Mo(dddt)][TCNQ]. Inorganic Chemistry, 1995, 34, 4979-4985.	4.0	67
13	Halogen Bonding in Conducting or Magnetic Molecular Materials. , 2007, , 181-207.		67
14	Chargeâ€Assisted Halogen Bonding: Donorâ€“Acceptor Complexes with Variable Ionicity. Chemistry - A European Journal, 2013, 19, 14804-14813.	3.3	67
15	Organic selenocyanates as strong and directional chalcogen bond donors for crystal engineering. Chemical Communications, 2017, 53, 8467-8469.	4.1	59
16	Fluorine Segregation Controls the Solid-State Organization and Electronic Properties of Ni and Au Dithiolene Complexes: Stabilization of a Conducting Single-Component Gold Dithiolene Complex. Advanced Functional Materials, 2002, 12, 693-698.	14.9	58
17	A Genuine Quarter-Filled Band Mott Insulator, (EDT-TTF-CONMe2)2AsF6: Where the Chemistry and Physics of Weak Intermolecular Interactions Act in Unison. Advanced Materials, 2003, 15, 1251-1254.	21.0	54
18	Amphiphilic paramagnetic neutral gold dithiolene complexes. Dalton Transactions, 2009, , 3052.	3.3	49

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19	Between Ni(mnt)2and Ni(tfd)2Dithiolene Complexes:Â the Unsymmetrical 2-(Trifluoromethyl)acrylonitrile-1,2-dithiolate and Its Nickel Complexes. Inorganic Chemistry, 2005, 44, 9763-9770.	4.0	42
20	Cosublimation: A Rapid Route Toward Otherwise Inaccessible Halogen-Bonded Architectures. Crystal Growth and Design, 2018, 18, 6227-6238.	3.0	42
21	Water-soluble nickel-bis(dithiolene) complexes as photothermal agents. Chemical Communications, 2015, 51, 5268-5270.	4.1	38
22	Influence of the Thiazole Backbone on the Structural, Redox, and Optical Properties of Dithiolene and Diselenolene Complexes. Inorganic Chemistry, 2007, 46, 10647-10654.	4.0	37
23	Combining halogen bonding and chirality in a two-dimensional organic metal (EDT-TTF-I2)2(D-camphorsulfonate)Â·H2O. Chemical Communications, 2010, 46, 3926.	4.1	37
24	Electrochemical activation of a tetrathiafulvalene halogen bond donor in solution. Physical Chemistry Chemical Physics, 2016, 18, 15867-15873.	2.8	37
25	Radical or Not Radical: Compared Structures of Metal (M = Ni, Au) Bis-Dithiolene Complexes with a Thiazole Backbone. Inorganic Chemistry, 2014, 53, 8681-8690.	4.0	35
26	Toward a reverse hierarchy of halogen bonding between bromine and iodine. Faraday Discussions, 2017, 203, 389-406.	3.2	35
27	Oxidation of phosphines containing two or three tetrathiafulvalene (TTF) or o-dimethyl-TTF moieties. Evidence for formation of radical polycations. Journal of the Chemical Society Perkin Transactions II, 1996, , 1409-1414.	0.9	34
28	Cyano-Halogen Interactions in [EDT-TTF-I]2[Ni(mnt)2] and [EDT-TTF-I2]2[Ni(mnt)2] and Geometrical Evolutions within Mixed-Valence or Fully Oxidized TTF Dyads. European Journal of Inorganic Chemistry, 2002, 2002, 2844-2849.	2.0	34
29	A series of strongly one-dimensional organic metals with strictly uniform stacks: (o-DMTTF)2X (X = Cl,) Tj ETQq1 1 0.784314 rgBT /Ov	3.3	34
30	Chalcogen bonding interactions in organic selenocyanates: from cooperativity to chelation. New Journal of Chemistry, 2018, 42, 10502-10509.	2.8	34
31	Organic Selenocyanates as Halide Receptors: From Chelation to One-Dimensional Systems. Crystal Growth and Design, 2019, 19, 1418-1425.	3.0	34
32	Probing magnetic interactions in columnar phases of a paramagnetic gold dithiolene complex. Journal of Materials Chemistry, 2011, 21, 1416-1422.	6.7	33
33	High Photothermal Activity within Neutral Nickel Dithiolene Complexes Derived from Imidazolium-Based Ionic Liquids. Inorganic Chemistry, 2016, 55, 1296-1303.	4.0	32
34	A Single-Component Conductor Based on a Radical Gold Dithiolene Complex with Alkyl-Substituted Thiophene-2,3-dithiolate Ligand. Inorganic Chemistry, 2015, 54, 9908-9913.	4.0	31
35	Near-infrared chiro-optical effects in metallogels. Chemical Communications, 2012, 48, 2283-2285.	4.1	30
36	Chiral, Neutral, and Paramagnetic Gold Dithiolene Complexes Derived from Camphorquinone. European Journal of Inorganic Chemistry, 2009, 2009, 5413-5421.	2.0	29

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37	Strong IodineÂ·Â·Â·Oxygen Interactions in Molecular Conductors Incorporating Sulfonate Anions. Crystal Growth and Design, 2011, 11, 5337-5345.	3.0	26
38	Photothermal Control of the Gelation Properties of Nickel Bis(dithiolene) Metallogelators under Near-Infrared Irradiation. Langmuir, 2014, 30, 8592-8597.	3.5	26
39	Halogen-bonded halide networks from chiral neutral spacers. CrystEngComm, 2015, 17, 50-57.	2.6	26
40	Photoinduced reversible spin-state switching of an FeIII complex assisted by a halogen-bonded supramolecular network. Chemical Communications, 2017, 53, 10283-10286.	4.1	25
41	Toward chiral conductors: combining halogen bonding ability and chirality within a single tetrathiafulvalene molecule. CrystEngComm, 2013, 15, 4408.	2.6	24
42	Mott insulators: A large class of materials for Leaky Integrate and Fire (LIF) artificial neuron. Journal of Applied Physics, 2018, 124, .	2.5	24
43	Redox Multifunctionality in a Series of Pt^{II} Dithiolene Complexes of a Tetrathiafulvaleneâ€Based Diphosphine Ligand. Chemistry - an Asian Journal, 2010, 5, 169-176.	3.3	23
44	Sequential Halogen Bonding with Ditopic Donors: Ïƒ-Hole Evolutions upon Halogen Bond Formation. Crystal Growth and Design, 2016, 16, 2963-2971.	3.0	23
45	Biocompatible nanoparticles containing hydrophobic nickel-bis(dithiolene) complexes for NIR-mediated doxorubicin release and photothermal therapy. Journal of Materials Chemistry B, 2018, 6, 1744-1753.	5.8	23
46	Phase diagram of the correlated quarter-filled-band organic salt series (o-DMTTF)2X(XÂ=ÂCl, Br, I). Physical Review B, 2011, 84, .	3.2	22
47	Single-Component Conductors: A Sturdy Electronic Structure Generated by Bulky Substituents. Inorganic Chemistry, 2016, 55, 6036-6046.	4.0	22
48	Spin-state modulation of molecular Fe^{III} complexes via inclusion in halogen-bonded supramolecular networks. Chemical Communications, 2017, 53, 4989-4992.	4.1	22
49	Room-temperature columnar mesophases of nickel-bis(dithiolene) metallomesogens. RSC Advances, 2012, 2, 4453.	3.6	21
50	Gold dithiolene complexes: easy access to 2-alkylthio-thiazoledithiolate complexes. Dalton Transactions, 2015, 44, 15683-15689.	3.3	20
51	Activating Chalcogen Bonding (ChB) in Alkylseleno/Alkyltelluroacetylenes toward Chalcogen Bonding Directionality Control. Angewandte Chemie - International Edition, 2020, 59, 23583-23587.	13.8	20
52	StrongÏƒâ€Hole Activation on Icosahedral Carborane Derivatives for a Directional Halide Recognition. Angewandte Chemie - International Edition, 2021, 60, 366-370.	13.8	20
53	Hydrogen bonding interactions in single component molecular conductors based on metal (Ni, Au) bis(dithiolene) complexes. Dalton Transactions, 2020, 49, 6056-6064.	3.3	19
54	Molecular Alloys of Neutral Gold/Nickel Dithiolene Complexes in Single-Component Semiconductors. Inorganic Chemistry, 2015, 54, 7454-7460.	4.0	18

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55	Subtle Steric Differences Impact the Structural and Conducting Properties of Radical Gold Bis(dithiolene) Complexes. Chemistry - A European Journal, 2017, 23, 16004-16013.	3.3	18
56	Variable Magnetic Interactions between S = 1/2 Cation Radical Salts of Functionalizable Electron-Rich Dithiolene and Diselenolene Cp₂Mo Complexes. Inorganic Chemistry, 2013, 52, 2162-2173.	4.0	17
57	Dibromohydantoins as halogen bond (XB) donors: a route toward the introduction of chirality in halogen bonded systems. CrystEngComm, 2016, 18, 9325-9333.	2.6	17
58	Halogen bonded metal bis(dithiolene) 2D frameworks. CrystEngComm, 2020, 22, 3579-3587.	2.6	17
59	Chiral, radical, gold bis(dithiolene) complexes. New Journal of Chemistry, 2016, 40, 7113-7120.	2.8	16
60	Supramolecular rectangles through directional chalcogen bonding. Chemical Communications, 2021, 57, 4560-4563.	4.1	16
61	Radical salts of TTF derivatives with the metalâ€“metal bonded [Re2Cl8]2â^' anion. Journal of Molecular Structure, 2008, 890, 81-89.	3.6	15
62	Involvement of weak Cï£¿HÂ·Â·Â·X hydrogen bonds in metalâ€toâ€semiconductor regime change in oneâ€dimensional organic conductors (oâ€DMTTF)₂X (X = Cl, Br, and I): combined IR and Raman studies. Journal of Raman Spectroscopy, 2011, 42, 1518-1527.	2.5	15
63	Inter-layer charge disproportionation in the dual-layer organic metal (tTTF-I)₂ClO₄with unsymmetrical Iâ‹¯O halogen bond interactions. Dalton Transactions, 2014, 43, 5280-5291.	3.3	15
64	Resistive Switching Induced by Electric Pulses in a Single-Component Molecular Mott Insulator. Journal of Physical Chemistry C, 2015, 119, 2983-2988.	3.1	15
65	Cî€Sâ‹¯I halogen bonding interactions in crystalline iodinated dithiole-2-thiones and thiazole-2-thiones. CrystEngComm, 2016, 18, 5474-5481.	2.6	14
66	Fine and Clean Photothermally Controlled NIR Drug Delivery from Biocompatible Nickelâ€bis(dithiolene)â€Containing Liposomes. ChemMedChem, 2017, 12, 1753-1758.	3.2	14
67	Electrochemical Activation of TTFâ€Based Halogen Bond Donors: A Powerful, Selective and Sensitive Analytical Tool for Probing a Weak Interaction in Complex Media. ChemistrySelect, 2018, 3, 8874-8880.	1.5	14
68	Co-crystals of an organic triselenocyanate with ditopic Lewis bases: recurrent chalcogen bond interactions motifs. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 34-38.	1.1	14
69	The near infra red (NIR) chiroptical properties of nickel dithiolene complexes. New Journal of Chemistry, 2015, 39, 122-129.	2.8	13
70	Chalcogen bonding interactions in chelating, chiral bis(selenocyanates). New Journal of Chemistry, 2021, 45, 76-84.	2.8	13
71	Decoupling anion-ordering and spin-Peierls transitions in a strongly one-dimensional organic conductor with a chessboard structure, (o-Me₂TTF)₂NO₃. IUCrJ, 2018, 5, 361-372.	2.2	13
72	Correlation between Metalâ€“Insulator Transition and Hydrogen-Bonding Network in the Organic Metal Î´-(BEDT-TTF)₄ [2,6-Anthracene-bis(sulfonate)]Â·(H₂O)₄. Crystal Growth and Design, 2013, 13, 5135-5145.	3.0	12

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73	(Photo)Thermal Stimulation of Functional Dithiolene Complexes in Soft Matter. European Journal of Inorganic Chemistry, 2020, 2020, 508-522.	2.0	12
74	Solid-solution (alloying) strategies in crystalline molecular conductors. Journal of Materials Chemistry C, 2021, 9, 10557-10572.	5.5	12
75	Syntheses, Crystal Structures, Transport Properties and First-Principles Electronic Structure Study of the (tTTF)₂X (X = Br, I) Low-Dimensional Antiferromagnets. Inorganic Chemistry, 2011, 50, 4171-4181.	4.0	11
76	Single-component conductors based on closed-shell Ni and Pt bis(dithiolene) complexes: metallization under high pressure. Journal of Materials Chemistry C, 2020, 8, 11581-11592.	5.5	11
77	Understanding Reactivity and Assembly of Dichalcogenides: Structural, Electrostatic Potential, and Topological Analyses of 3H-1,2-Benzodithiol-3-one and Selenium Analogs. Crystal Growth and Design, 2020, 20, 7704-7725.	3.0	11
78	Organizing Radical Species in the Solid State with Halogen Bonding. Topics in Current Chemistry, 2014, 359, 91-113.	4.0	10
79	Electronic engineering of a tetrathiafulvalene charge-transfer salt via reduced symmetry induced by combined substituents. Physical Chemistry Chemical Physics, 2019, 21, 22639-22646.	2.8	10
80	Activating Chalcogen Bonding (ChB) in Alkylseleno/Alkyltelluroacetylenes toward Chalcogen Bonding Directionality Control. Angewandte Chemie, 2020, 132, 23789-23793.	2.0	10
81	Ambipolar Discotic Liquid Crystals Built Around Platinum Diimineâ€Dithiolene Cores. Chemistry - A European Journal, 2019, 25, 5719-5732.	3.3	9
82	Topochemical Polymerization of a Diacetylene in a Chalcogenâ€Bonded (ChB) Assembly. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
83	Hybrid Material Based on the Lindquist Polyoxometalate [W6O19]2â^' and the organosulfur donor o-Me2TTF: A Combined Structural and Spectroscopic Study. Journal of Chemical Crystallography, 2013, 43, 178-186.	1.1	8
84	Correlating conduction properties with the molecular symmetry: segregation of Z and E isomers in the charge-assisted, halogen-bonded cocrystal [(Z,E)-Me₂I₂TTF]₂Br. Chemical Communications, 2016, 52, 308-311.	4.1	8
85	Coordination chemistry of anions through halogen-bonding interactions. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2017, 73, 138-139.	1.1	8
86	Chalcogen Bonding in Co-Crystals: Activation through 1,4-Perfluorophenylene vs. 4,4â€²-Perfluorobiphenylene Cores. Molecules, 2021, 26, 4050.	3.8	8
87	Structural properties of solid solutions of the nonâ€dimerized, 3/4â€filled conductors (oâ€DMTTF)₂X (Xâ€‰=â€‰Cl, Br, I). Physica Status Solidi (B): Basic Research, 2012, 249, 943-946.	1.5	6
88	Infrared and Raman spectroscopic studies of the charge localization in oneâ€dimensional organic metals (DMtTTF)₂X (Xâ€‰=â€‰ReO₄, ClO₄) with regular organic stacks. Journal of Raman Spectroscopy, 2013, 44, 1765-1776.	2.5	6
89	Coherent spin dynamics of solitons in the organic spin chain compounds <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi>o</mml:mi></mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mi>X</mml:mi><mml:mo>=</mml:mo><mml:mi>Cl</mml:mi></mml:mrow><mml:mo>,</mml:mo></mml:mo> B, 2019, 100, .	3.2	6
90	Ionic Selfâ€Assembly and Redâ€Phosphorescence Properties of a Charged Platinum(II) 8â€Quinolinol Complex Associated with Ammoniumâ€Based Amphiphiles. Chemistry - A European Journal, 2015, 21, 19149-19158.	3.3	5

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91	The halogen bond in solution: general discussion. Faraday Discussions, 2017, 203, 347-370.	3.2	5
92	Crystal Structure of the Radical-Cation Salt (o-Me2TTF)I3 with Close Intermolecular Sulfur Contacts. Journal of Chemical Crystallography, 2009, 39, 735-739.	1.1	4
93	Electron-molecular vibration coupling in (DMtTTF)Br and (o-DMTTF)2[W6O19] salts studied by vibrational spectroscopy. Synthetic Metals, 2014, 188, 92-99.	3.9	4
94	Temperature-Induced Neutral-Ionic Phase Transition in the (EDT-TTF-I₂)₂TCNQF Mixed-Stack Charge-Transfer Salt. Journal of Physical Chemistry C, 2016, 120, 23740-23747.	3.1	4
95	Neutral, closed-shell nickel bis(2-alkylthio-thiazole-4,5-dithiolate) complexes as single component molecular conductors. Dalton Transactions, 2018, 47, 6580-6589.	3.3	4
96	Activating both Halogen and Chalcogen Bonding Interactions in Cation Radical Salts of Iodinated Tetrathiafulavalene Derivatives. ChemPlusChem, 2020, 85, 2136-2142.	2.8	4
97	Pressure-Induced Neutralâ€“Ionic Phase Transition in the Mixed-Stack 2:1 Charge-Transfer Complex (EDT-TTF-I₂)₂TCNQF. Journal of Physical Chemistry C, 2020, 124, 5552-5558.	3.1	4
98	Strong Ïƒ â€Hole Activation on Icosahedral Carborane Derivatives for a Directional Halide Recognition. Angewandte Chemie, 2021, 133, 370-374.	2.0	4
99	A radical mixed-ligand gold bis(dithiolene) complex. Chemical Communications, 2021, 57, 1615-1618.	4.1	4
100	Introducing Selenium in Single-Component Molecular Conductors Based on Nickel Bis(dithiolene) Complexes. Inorganic Chemistry, 2021, 60, 7876-7886.	4.0	4
101	Mixed-valence gold bis(diselenolene) complex turning metallic under pressure. Journal of Materials Chemistry C, 2021, 9, 12291-12302. Electron-spin interaction in the spin-Peierls phase of the organic spin chain (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 322 Td (>	5.5	4
102	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub><mml:mi>X</mml:mi></mml:mrow></mml:math> (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10	3.2	4
103	Physical Review B, 2022, 105, . Mixed valence trimers in cation radical salts of TMTTF with the planar bis(6-sulfo-8-quinolato) platinum complex [Pt(qS)2]2â^'. New Journal of Chemistry, 2020, 44, 15538-15548.	2.8	3
104	Electron Spin Resonance of Defects in Spin Chainsâ€"$$hbox {o}-(hbox {DMTTF})_2hbox {X}$$: A Versatile System Behaving Like Molecular Magnet. Applied Magnetic Resonance, 2020, 51, 1307-1320.	1.2	3
105	(Pressure, temperature) phase diagram of the quasi-1D 3/4 filled organic salt (o-DMTTF)2Br. Physica B: Condensed Matter, 2012, 407, 1700-1703.	2.7	2
106	Solid-state chemistry and applications: general discussion. Faraday Discussions, 2017, 203, 459-483.	3.2	2
107	Topochemical polymerization of a diacetylene in a chalcogenâ€bonded (ChB) assembly. Angewandte Chemie, 0, , .	2.0	2
108	N-Iodosaccharinâ€“pyridine co-crystal system under pressure: experimental evidence of reversible twinning. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2022, 78, 436-449.	1.1	2

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109	Charge localization in 1D tetramerized organic conductors: the special case of (tTTF)2ClO4. Journal of Physics Condensed Matter, 2019, 31, 155601.	1.8	0
110	Metal-insulator phase transition in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î´</mml:mi><mml:mtext>â€™</mml:mtext><mml:msub><m [2,6-anthracene- bis(sulfonate)] <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>Â·</mml:mo><mml:mn>4</mml:mn><mml:msub><mml: mat. Physical Review B, 2021, 104, .	3.2	0