

Frederic Cherioux

List of Publications by Year in descending order

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papers

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279798

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docs citations

106
times ranked

1854
citing authors

#	ARTICLE	IF	CITATIONS
1	New Octupolar Star-Shaped Structures for Quadratic Nonlinear Optics. <i>Chemistry of Materials</i> , 1999, 11, 1915-1920.	6.7	108
2	Robust and Open Tailored Supramolecular Networks Controlled by the Template Effect of a Silicon Surface. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4094-4098.	13.8	80
3	Synthesis and Electrochemical Properties of Novel 1,3,5-Tris(oligothienyl)benzenes: A New Generation of 3D Reticulating Agents. <i>Advanced Functional Materials</i> , 2001, 11, 305-309.	14.9	73
4	1D and 3D surface-assisted self-organization. <i>Coordination Chemistry Reviews</i> , 2012, 256, 2872-2892.	18.8	55
5	Synthesis and characterisation of an octupolar polymer and new molecular octupoles with off-resonant third order optical nonlinearities. <i>Chemical Communications</i> , 1999, , 2083-2084.	4.1	52
6	Remarkable Anticancer Activity of Triruthenium-Arene Clusters Compared to Tetraruthenium-Arene Clusters. <i>Journal of Cluster Science</i> , 2007, 18, 741-752.	3.3	49
7	Noncovalent Bicomponent Self-Assemblies on a Silicon Surface. <i>ACS Nano</i> , 2012, 6, 6905-6911.	14.6	46
8	New Third-Order Nonlinear Polymers Functionalized with Disperse Red and Disperse Orange Chromophores with Increased Stability. <i>Chemistry of Materials</i> , 1997, 9, 2921-2927.	6.7	43
9	Synthesis and electrochemical properties of new star-shaped thiophene oligomers and their polymers. <i>Chemical Communications</i> , 1998, , 2225-2226.	4.1	41
10	Complete Supramolecular Self-Assembled Adlayer on a Silicon Surface at Room Temperature. <i>Journal of the American Chemical Society</i> , 2008, 130, 6670-6671.	13.7	39
11	Surface-Induced Optimal Packing of Two-Dimensional Molecular Networks. <i>Physical Review Letters</i> , 2015, 114, 066101.	7.8	39
12	Micrometre-long covalent organic fibres by photoinitiated chain-growth radical polymerization on an alkali-halide surface. <i>Nature Chemistry</i> , 2018, 10, 1112-1117.	13.6	38
13	A Stable Room-Temperature Molecular Assembly of Zwitterionic Organic Dipoles Guided by a Si(111)-7 Template Effect. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 9287-9290.	13.8	32
14	Nondestructive Room-Temperature Adsorption of 2,4,6-tri(2-thienyl)-1,3,5-triazine on a Si-B Interface: High-Resolution STM Imaging and Molecular Modeling. <i>Physical Review Letters</i> , 2008, 100, 076405.	7.8	30
15	Energy funnelling within multichromophore architectures monitored with subnanometre resolution. <i>Nature Chemistry</i> , 2021, 13, 766-770.	13.6	30
16	Supramolecular self-assembly on the B-Si(111)-(1x1) R30° surface: From single molecules to multicomponent networks. <i>Surface Science Reports</i> , 2017, 72, 316-349.	7.2	29
17	Synthesis, Electrochemical Properties, and Molecular Computations of New Tris(thienyl)methyl Cations. <i>Advanced Materials</i> , 1998, 10, 1013-1018.	21.0	27
18	New Star-Shaped Molecules with Extended Electronic Delocalization. <i>Chemistry of Materials</i> , 1998, 10, 1984-1989.	6.7	27

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19	Atomic Scale Modeling of Two-Dimensional Molecular Self-Assembly on a Passivated Si Surface. <i>Journal of Physical Chemistry C</i> , 2014, 118, 12817-12825.	3.1	27
20	Symmetric and Asymmetric Conjugated 3,3'-Bipyridine Derivatives as a New Class of Third-Order NLO Chromophores with an Enhanced Non-resonant, Nonlinear Refractive Index in the Picosecond Range. <i>Advanced Functional Materials</i> , 2002, 12, 203.	14.9	26
21	Reversible Photoswitching of Azobenzene-Based Monolayers Physisorbed on a Mica Surface. <i>Langmuir</i> , 2010, 26, 943-949.	3.5	25
22	Subsurface H ₂ S Detection by a Surface Acoustic Wave Passive Wireless Sensor Interrogated with a Ground Penetrating Radar. <i>ACS Sensors</i> , 2020, 5, 1075-1081.	7.8	24
23	First Star-Like Oligophenylene Molecules Containing a Dinuclear Organometallic Core. <i>European Journal of Inorganic Chemistry</i> , 2003, 2003, 1043-1047.	2.0	23
24	Detection and High-Precision Positioning of Liquid Droplets Using SAW Systems. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2007, 54, 2146-2151.	3.0	23
25	Supramolecular self-assembly of brominated molecules on a silicon surface. <i>Chemical Communications</i> , 2014, 50, 5714.	4.1	22
26	Dendritic Systems Based on Dinuclear Ruthenium or Rhodium Units Generating Peripheral Catalytic Sites. <i>Chemistry - A European Journal</i> , 2002, 8, 4377-4382.	3.3	21
27	Reactivity of the Unsaturated Complex [(C ₆ Me ₆) ₂ Ru ₂ (η^1 -H) ₃] ⁺ toward Phosphines: Synthesis and Molecular Structure of the Dinuclear Cations [(C ₆ Me ₆) ₂ Ru ₂ (η^1 -PR ₂)(η^1 -H) ₂] ⁺ and Characterization of the P-C Bond Activation Intermediate [(C ₆ Me ₆) ₂ Ru ₂ (η^1 -PPh ₂)(η^1 -H)(η^1 -Ph)] ⁺ . <i>Organometallics</i> , 2005, 24, 1974-1981.	2.3	21
28	Specific reactivity of SH versus OH functions towards dinuclear arene ruthenium units: synthesis of cationic complexes of the type [(arene) ₂ Ru ₂ (SR) ₃] ⁺ . <i>Polyhedron</i> , 2003, 22, 543-548.	2.2	20
29	Room Temperature Electronic Template Effect of the SmSi(111)-2 Interface for Self-Alignment of Organic Molecules. <i>ChemPhysChem</i> , 2008, 9, 1437-1441.	2.1	20
30	Directional molecular sliding at room temperature on a silicon runway. <i>Nanoscale</i> , 2013, 5, 7005.	5.6	20
31	Molecular Design and Control Over the Morphology of Self-Assembled Films on Ionic Substrates. <i>Advanced Materials Interfaces</i> , 2014, 1, 1400414.	3.7	19
32	Photochemistry Highlights on On-Surface Synthesis. <i>ChemPhysChem</i> , 2019, 20, 2271-2280.	2.1	19
33	Easy and versatile functionalization of lithium niobate wafers by hydrophobic trichlorosilanes. <i>Applied Surface Science</i> , 2008, 255, 1796-1800.	6.1	18
34	Dipole-driven self-organization of zwitterionic molecules on alkali halide surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2012, 3, 285-293.	2.8	18
35	Tailored Molecular Design for Supramolecular Network Engineering on a Silicon Surface. <i>ChemPhysChem</i> , 2013, 14, 900-904.	2.1	18
36	Synthesis and structural characterisation of new cationic dinuclear ruthenium(II) thiolato complexes of the type [Ru ₂ (η^6 -arene) ₂ (η^1 -p-S-C ₆ H ₄ -Br) ₃] ⁺ . <i>Inorganica Chimica Acta</i> , 2004, 357, 834-838.	2.4	16

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37	Synthesis, molecular structure and electrochemical properties of the star-shaped dinuclear complexes $[\text{Ru}_2(\text{1-6-p-Me-C}_6\text{H}_4\text{-iPr})_2(\text{1/4-2-S-p-C}_6\text{H}_4\text{-C}_4\text{H}_3\text{S})_3]^+$ and $[\text{Rh}_2(\text{1-5-C}_5\text{Me}_5)_2(\text{1/4-2-S-p-C}_6\text{H}_4\text{-C}_4\text{H}_3\text{S})_3]^+$. Journal of Organometallic Chemistry, 2005, 690, 2365-2371.		16
38	Controlled Directional Motions of Molecular Vehicles, Rotors, and Motors: From Metallic to Silicon Surfaces, a Strategy to Operate at Higher Temperatures. ChemPhysChem, 2016, 17, 1742-1751.	2.1	16
39	Morphology and Growth Mechanisms of Self-Assembled Films on Insulating Substrates: Role of Molecular Flexibility and Entropy. Journal of Physical Chemistry C, 2017, 121, 4393-4403.	3.1	16
40	Copper-assisted oxidation of catechols into quinone derivatives. Chemical Science, 2021, 12, 2257-2267.	7.4	16
41	Elimination of sulfur from aromatic heterocycles by a water-soluble arene ruthenium cluster: synthesis and molecular structure of $[\text{H}_2\text{S}_2\text{Ru}_4(\text{C}_6\text{H}_6)_4]\text{Cl}_2$. Chemical Communications, 2004, , 204-205.	4.1	15
42	Subsequent Hydride Substitution in (Arene)trihydridoruthenium Complexes: Synthesis and Structure of Thiolato-Bridged Diruthenium Cations of the Type $[\text{H}_2(\text{arene})_2\text{Ru}_2(\text{p-X-C}_6\text{H}_4\text{-S})]^+$ and $[\text{H}(\text{arene})_2\text{Ru}_2(\text{p-X-C}_6\text{H}_4\text{-S})_2]^+$. European Journal of Inorganic Chemistry, 2004, 2004, 2405-2411.	2.0	14
43	Adsorption of an organic zwitterion on a $\text{Si}(111)\text{-}7\text{\AA}\text{-}7$ surface at room temperature. Surface Science, 2008, 602, 2719-2723.	1.9	14
44	Self-Assembly of a Halogenated Molecule on Oxide-Passivated $\text{Cu}(110)$. Chemistry - an Asian Journal, 2013, 8, 1813-1817.	3.3	14
45	STM and DFT Investigations of Isolated Porphyrin on a Silicon-Based Semiconductor at Room Temperature. ChemPhysChem, 2009, 10, 3190-3193.	2.1	13
46	Seeding Molecular Rotators on a Passivated Silicon Surface. ChemPhysChem, 2014, 15, 271-275.	2.1	13
47	Polymorphism of Two-Dimensional Halogen Bonded Supramolecular Networks on a Graphene/Iridium(111) Surface. Journal of Physical Chemistry C, 2017, 121, 2201-2210.	3.1	13
48	Nucleophilic addition reactions on the electron-deficient cluster dication $[\text{H}_4\text{Ru}_4(\text{C}_6\text{H}_6)_4]^{2+}$: synthesis and structural characterisation of the water-soluble cluster cations $[\text{H}_3\text{Ru}_4(\text{C}_6\text{H}_6)_4(\text{CO})]^+$ and $[\text{H}_3\text{Ru}_4(\text{C}_6\text{H}_6)_4(\text{OH})]^{2+}$. Dalton Transactions RSC, 2001, , 2184-2187.	2.3	12
49	Highly Selective Hydrogenation of Carbon-Carbon Multiple Bonds Catalyzed by the Cation $[(\text{C}_6\text{Me}_6)_2\text{Ru}_2(\text{PPh}_2)_2\text{H}_2]^+$: Molecular Structure of $[(\text{C}_6\text{Me}_6)_2\text{Ru}_2(\text{PPh}_2)(\text{CHCHPh})\text{H}]^+$, a Possible Intermediate in the Case of Phenylacetylene Hydrogenation. Chemistry - A European Journal, 2007, 13, 292-299.	3.3	12
50	Large-Scale Patterning of Zwitterionic Molecules on a $\text{Si}(111)\text{-}7\text{\AA}\text{-}7$ Surface. ACS Nano, 2011, 5, 424-428.	4.6	12
51	Role of the Structure and Reactivity of Cu and Ag Surfaces in the Formation of a 2D Metal-Hexahydroxytriphenylene Network. Journal of Physical Chemistry C, 2021, 125, 17333-17341.	3.1	12
52	Amine functionalized SU-8 layer guiding Love mode surface acoustic wave. Sensors and Actuators B: Chemical, 2010, 144, 23-26.	7.8	11
53	Chemisorption of Trimesic Acid on a $\text{Si}(111)\text{-}7\text{\AA}\text{-}7$ Surface. Journal of Physical Chemistry C, 2010, 114, 4511-4514.	3.1	11
54	Thermoelectric properties improvement in Mg_2Sn thin films by structural modification. Journal of Alloys and Compounds, 2019, 797, 1078-1085.	5.5	11

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55	Adsorption-Induced Kondo Effect in Metal-Free Phthalocyanine on Ag(111). <i>Journal of Physical Chemistry C</i> , 2020, 124, 10441-10452.	3.1	10
56	Enhancement of non-resonant non-linear refractive index with reduction of absorption in push-pull molecules by reduction of their donor group strength. <i>Chemical Physics Letters</i> , 2000, 319, 669-673.	2.6	9
57	Reversible Single Molecular Switch Operating at 300 K on a Surface. <i>ChemPhysChem</i> , 2010, 11, 2568-2572.	2.1	9
58	Anisotropic growth of the thiophene-based layer on Si(111)-B. <i>Chemical Communications</i> , 2014, 50, 5484-5486.	4.1	8
59	Photoelectron spectroscopic studies of ultra-thin CuPc layers on a Si(111)-(1×1)R30°-B surface. <i>Surface Science</i> , 2016, 654, 39-47.	1.9	8
60	A surprising double carbon-nitrogen coupling reaction catalyzed by [H ₃ Ru ₄ (C ₆ H ₆) ₄ (OH)] ²⁺ : synthesis of unusual barbiturate analogues. <i>Tetrahedron Letters</i> , 2002, 43, 6653-6655.	1.4	7
61	Electron Deficiency in Tetrahedral Transition-Metal Clusters: Electronic Structure and Magnetic Properties of [Ru ₄ (1,6-C ₆ H ₆) ₄ (1,4-H) ₄] ²⁺ . <i>Inorganic Chemistry</i> , 2003, 42, 8278-8282.	4.0	7
62	Influence of Halogen Bonds on the Compactness of Supramolecular Assemblies on Si(111)-B. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8427-8434.	3.1	7
63	Collective radical oligomerisation induced by an STM tip on a silicon surface. <i>Nanoscale</i> , 2021, 13, 349-354.	5.6	7
64	A Surprising Reaction of Trimethylphosphane with the Unsaturated Diruthenium Complex [(1,6-C ₆ Me ₆) ₂ Ru ₂ (1,4-H) ₃] ⁺ : Synthesis and Molecular Structure of the Cations [(1,6-C ₆ Me ₆)Ru ₂ (PMe ₃) ₃ (1,4-H) ₃] ⁺ and [(1,6-C ₆ Me ₆) ₂ Ru ₂ (PMe ₃) ₂ (1,4-H)(H) ₂] ⁺ . <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 509-513.	2.0	6
65	Dinuclear (Arene)ruthenium Complexes Containing a Chiral-at-Phosphorus Phosphanido Bridge. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 3091-3100.	2.0	6
66	SIMS as a subnanometer probe: A new tool for chemical profile analysis of grafted molecules. <i>Applied Surface Science</i> , 2007, 253, 6140-6143.	6.1	6
67	Self-assembly of zwitterionic molecules on a Au(232321) surface at low temperature. <i>Surface Science</i> , 2010, 604, 27-31.	1.9	6
68	Convergent fabrication of a nanoporous two-dimensional carbon network from an aldol condensation on metal surfaces. <i>2D Materials</i> , 2014, 1, 034005.	4.4	6
69	Towards 1D nanolines on a monolayered supramolecular network adsorbed on a silicon surface. <i>Nanoscale</i> , 2016, 8, 12347-12351.	5.6	6
70	Unravelling the growth mechanism of (3,1) graphene nanoribbons on a Cu(111) surface. <i>Chemical Communications</i> , 2021, 57, 6043-6045.	4.1	6
71	2-Pyridones as a New Photochemically Stable Structural Design for the Off-Resonant Optical Kerr Effect. <i>Advanced Functional Materials</i> , 2002, 12, 339.	14.9	5
72	N,N'-Dicyclohexyl-N-(2-pyrazinoyl)urea. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2002, 58, o27-o29.	0.2	5

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73	Adsorption of zwitterionic assemblies on Si(111)-7 \times 7: A joint tunneling spectroscopy and ab initio study. <i>Physical Review B</i> , 2012, 85, .	3.2	5
74	Sulfur-containing trinuclear arene ruthenium clusters. <i>Journal of Molecular Structure</i> , 2005, 743, 177-181.	3.6	4
75	Tuning the Kondo resonance in two-dimensional lattices of cerium molecular complexes. <i>Nanoscale</i> , 2018, 10, 9123-9132.	5.6	4
76	Grafting of Organoruthenium Oligomers on Quartz Substrates: Synthesis, Electrochemistry, Optical Properties, and AFM Investigations. <i>Chemistry of Materials</i> , 2007, 19, 3754-3762.	6.7	3
77	Soluble Two-Dimensional Covalent Organometallic Polymers by (Arene)Ruthenium-Sulfur Chemistry. <i>Chemistry - A European Journal</i> , 2017, 23, 10969-10973.	3.3	3
78	Influence of Sputtering Parameters on Structural, Electrical and Thermoelectric Properties of Mg-Si Coatings. <i>Coatings</i> , 2018, 8, 380.	2.6	3
79	Controlled growth of a bicomponent supramolecular network by the sergeants & soldiers principle. <i>Chemical Communications</i> , 2018, 54, 9171-9173.	4.1	3
80	General Chemistry for Students Enrolled in a Life Sciences Curriculum. <i>Chimia</i> , 2003, 57, 99-104.	0.6	2
81	A love-wave sensor for direct detection of biofunctionalized nanoparticles. , 2009, , .		2
82	Fabrication and Packaging Technologies of Love-wave-based Microbalance for Fluid Analysis. <i>Procedia Chemistry</i> , 2009, 1, 52-55.	0.7	2
83	Fabrication and packaging technologies of Love-wave-based microbalance for fluid analysis. <i>Sensors and Actuators A: Physical</i> , 2010, 162, 304-309.	4.1	2
84	Large-extended 2D supramolecular network of dipoles with parallel arrangement on a Si(111)-B surface. <i>Nanoscale</i> , 2020, 12, 17399-17404.	5.6	2
85	[2+2] Cyclo-Addition Reactions for Efficient Polymerization on a HOPG Surface at Ambient Conditions. <i>Nanomaterials</i> , 2022, 12, 1334.	4.1	2
86	Design and Use of Wafer Level Fluidic Packaging for Surface Acoustic Wave Sensors. <i>Frequency Control Symposium and Exhibition, Proceedings of the IEEE International</i> , 2007, , .	0.0	1
87	Acoustic characterization of thin polymer layers for Love mode surface acoustic waveguide. , 2008, , .		1
88	Double Decoration of a Si(111)-7 \times 7 Surface at Room Temperature by Chemisorption of an Organic Salt. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3713-3716.	3.1	1
89	Extended monolayer of cyano-ended oligo(para-phenylenes) at the air/HOPG interface investigated by high-resolution AFM. <i>Nanotechnology</i> , 2016, 27, 425601.	2.6	1
90	On-Surface Synthesis of Ligands to Elaborate Coordination Polymers on an Au(111) Surface. <i>Nanomaterials</i> , 2021, 11, 2102.	4.1	1

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91	<title>Modification of push-pull molecules and polymers for higher nonlinear refraction and lower linear and nonlinear absorptions</title>. , 1998, , .		0
92	($\frac{1}{4}$ -Diphenylphosphido- $\frac{1}{4}$ -hydrido-($\frac{1}{4}$ -4-hydroxybenzenethiolato- $\frac{1}{2}$ S:S)bis[($\frac{1}{6}$ -hexamethylbenzene)ruthenium(II)] tetrafluoroborate. Acta Crystallographica Section E: Structure Reports Online, 2006, 62, m2916-m2918.	0.2	0
93	Single Molecular Machines on Semiconductor Surfaces. Advances in Atom and Single Molecule Machines, 2015, , 143-163.	0.0	0
94	Subsurface wireless chemical sensing strategy compatible with Ground Penetrating RADAR. , 2017, , .		0
95	Stable self-assembly of dipolar molecules on an Au(111) surface under UHV and an inert-atmosphere. Nanotechnology, 2020, 31, 105601.	2.6	0
96	Sampling Frequency Fluctuations of the Sensors and Software SPIDAR Ground Penetrating Radar: Impact on Probing Passive Surface Acoustic Wave Delay Lines for Pollution Sensing. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0
97	Nano-sheets of two-dimensional polymers with dinuclear (arene)ruthenium nodes, synthesised at a liquid/liquid interface. Nanotechnology, 2021, 32, 355603.	2.6	0
98	Degradation of Sub-Micrometer Sensitive Polymer Layers of Acoustic Sensors Exposed to Chlorpyrifos Water-Solution. Sensors, 2022, 22, 1203.	3.8	0
99	On-Surface Reactivity of Disubstituted-Bianthryl Molecules on Cu(111) and Au(111) Surfaces. ECS Journal of Solid State Science and Technology, 2022, 11, 035006.	1.8	0