

# Frédéric Lavoie

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/628457/publications.pdf>

Version: 2024-02-01

53  
papers

1,170  
citations

394421

19  
h-index

414414

32  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1413  
citing authors

#	ARTICLE	IF	CITATIONS
1	New Insights into the Redox Properties of Pyridinium Appended 1,2-Dithienylcyclopentenes. ChemPhysChem, 2022, , .	2.1	2
2	Visualization and Comprehension of Electronic and Topographic Contrasts on Cooperatively Switched Diarylethene-Bridged Ditopic Ligand. Nanomaterials, 2022, 12, 1318.	4.1	3
3	From Multi-Switchable Self-Assemblies towards Surface Coordination Chemistry: An STM Investigation of Bipyridine-Terminated Ditopic Ligands. ECS Journal of Solid State Science and Technology, 2022, 11, 055007.	1.8	1
4	Nanopatterning by Length-Dependent Self-Assembly from Fluorene-Terpyridine Derivatives. Journal of Physical Chemistry C, 2022, 126, 10833-10841.	3.1	2
5	Photochromic Metallopolymer Based on Dithienylethene as a Molecular Calculator. Chemistry of Materials, 2022, 34, 5912-5918.	6.7	6
6	Rull tris-bipyridine-modified electrode as a sensor for battery electrolyte. Electrochemistry Communications, 2021, 125, 106990.	4.7	1
7	Unprecedented ON/OFF Ratios in Photoactive Diarylethene-Bisthiénylbenzene Molecular Junctions. Nano Letters, 2021, 21, 7555-7560.	9.1	14
8	Combining Photomodulation and Rectification in Coordination Molecular Wires Based on Dithienylethene Molecular Junctions. Journal of Physical Chemistry C, 2020, 124, 26304-26309.	3.1	22
9	Long-Range Charge Transport in Diazonium-Based Single-Molecule Junctions. Nano Letters, 2020, 20, 6899-6907.	9.1	26
10	Molecular Junctions: Molecular Signature and Activationless Transport in Cobalt-Terpyridine-Based Molecular Junctions (Adv. Electron. Mater. 7/2020). Advanced Electronic Materials, 2020, 6, 2070033.	5.1	1
11	All Visible Light Switch Based on the Dimethyldihydropyrene Photochromic Core. Journal of Physical Chemistry Letters, 2020, 11, 2682-2688.	4.6	21
12	Catalytic Light-Triggered Reduction Promoted by a Dithienylethene Derivative. Chemistry - A European Journal, 2020, 26, 13359-13362.	3.3	5
13	Highly Efficient Photoswitch in Diarylethene-Based Molecular Junctions. Journal of the American Chemical Society, 2020, 142, 7732-7736.	13.7	60
14	Molecular Signature and Activationless Transport in Cobalt-Terpyridine-Based Molecular Junctions. Advanced Electronic Materials, 2020, 6, 1901416.	5.1	27
15	Photochemical and photophysical properties of photochromic osmium terpyridine-dimethyldihydropyrene complexes. Dyes and Pigments, 2019, 160, 93-98.	3.7	6
16	ZnO Nanowires as a Promotor of High Photoinduced Efficiency and Voltage Gain for Cathode Battery Recharging. ACS Applied Energy Materials, 2019, 2, 6254-6262.	5.1	7
17	One-Dimensional Double Wires and Two-Dimensional Mobile Grids: Cobalt/Bipyridine Coordination Networks at the Solid/Liquid Interface. Journal of Physical Chemistry Letters, 2019, 10, 4164-4169.	4.6	16
18	A solvent-free and vacuum-free melt-processing method to fabricate organic semiconducting layers with large crystal size for organic electronic applications. Journal of Materials Chemistry C, 2019, 7, 3190-3198.	5.5	13

#	ARTICLE	IF	CITATIONS
19	Multi-functional switches of ditopic ligands with azobenzene central bridges at a molecular scale. <i>Nanoscale</i> , 2019, 11, 23042-23048.	5.6	6
20	Bidirectional light-induced conductance switching in molecular wires containing a dimethyldihydropyrene unit. <i>Nanoscale</i> , 2018, 10, 5436-5441.	5.6	34
21	Ultrathin Molecular Layer Junctions Based on Cyclometalated Ruthenium Complexes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29069-29074.	3.1	14
22	Orbital Control of Long-Range Transport in Conjugated and Metal-Centered Molecular Electronic Junctions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29028-29038.	3.1	16
23	Supramolecular Networks and Wires Dominated by Intermolecular BiEDOT Interactions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22760-22766.	3.1	11
24	Highly Efficient Long-Range Electron Transport in a Viologen-Based Molecular Junction. <i>Journal of the American Chemical Society</i> , 2018, 140, 10131-10134.	13.7	54
25	Robust Bipolar Light Emission and Charge Transport in Symmetric Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2017, 139, 7436-7439.	13.7	55
26	Efficient Photoswitch System Combining a Dimethyldihydropyrene Pyridinium Core and Ruthenium(II) Bis-Terpyridine Entities. <i>Inorganic Chemistry</i> , 2017, 56, 4357-4368.	4.0	19
27	Light assisted rechargeable batteries: a proof of concept with BODIPY derivatives acting as a combined photosensitizer and electrical storage unit. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1902-1905.	10.3	10
28	Molecular Isomerization and Multiscale Phase Transitions of a Ditopic Ligand on a Surface. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20925-20930.	3.1	14
29	Electrografted monolayer based on a naphthalene diimide-ruthenium terpyridine complex dyad: efficient creation of large-area molecular junctions with high current densities. <i>Chemical Communications</i> , 2017, 53, 10997-11000.	4.1	23
30	Electrochemical control of the switching process of photochromic dimethyldihydropyrene derivatives. <i>Chemical Communications</i> , 2017, 53, 9360-9363.	4.1	14
31	Control of Rectification in Molecular Junctions: Contact Effects and Molecular Signature. <i>Journal of the American Chemical Society</i> , 2017, 139, 11913-11922.	13.7	61
32	Conductance in a bis-terpyridine based single molecular breadboard circuit. <i>Chemical Science</i> , 2017, 8, 1576-1591.	7.4	25
33	Surface functionalization with redox active molecule-based imidazolium via click chemistry. <i>Electrochemistry Communications</i> , 2016, 70, 13-17.	4.7	8
34	Unprecedented Self-Organized Monolayer of a Ru(II) Complex by Diazonium Electroreduction. <i>Journal of the American Chemical Society</i> , 2016, 138, 9381-9384.	13.7	60
35	Dimethyldihydropyrene-cyclophanediene photochromic couple functionalized with terpyridyl metal complexes as multi-addressable redox- and photo-switches. <i>Dalton Transactions</i> , 2016, 45, 13700-13708.	3.3	19
36	A redox- and photo-responsive quadri-state switch based on dimethyldihydropyrene-appended cobalt complexes. <i>Journal of Materials Chemistry C</i> , 2016, 4, 1139-1143.	5.5	29

#	ARTICLE	IF	CITATIONS
37	3,4-Ethylenedioxythiophene-based cobalt complex: an efficient co-mediator in dye-sensitized solar cells with poly(3,4-ethylenedioxythiophene) counter-electrode. <i>Electrochimica Acta</i> , 2015, 179, 237-240.	5.2	13
38	A new surface-bound molecular switch based on the photochromic dimethyldihydropyrene with light-driven release of singlet oxygen properties. <i>Journal of Materials Chemistry C</i> , 2015, 3, 12014-12017.	5.5	13
39	A Multi-Addressable Switch Based on the Dimethyldihydropyrene Photochrome with Remarkable Proton-Triggered Photo-opening Efficiency. <i>Chemistry - A European Journal</i> , 2015, 21, 455-467.	3.3	48
40	Electron Transfer Across Modular Oligo-p-phenylene Bridges in Ru(bpy) <sub>2</sub> (bpy-ph <sub>n</sub> -DQ) <sup>4+</sup> (n = 1-5) Dyads. Unusual Effects of Bridge Elongation. <i>Journal of Physical Chemistry A</i> , 2012, 116, 119-131.	2.5	20
41	One-Step Vs Stepwise Immobilization of 1-D Coordination-Based Rh-Rh Molecular Wires on Gold Surfaces. <i>Langmuir</i> , 2012, 28, 11779-11789.	3.5	12
42	Towards New Molecular Photocatalysts for CO <sub>2</sub> Reduction: Photo-induced Electron Transfer versus CO Dissociation within [Os(NN)(CO) <sub>2</sub> Cl <sub>2</sub> ] Complexes. <i>Chemistry - A European Journal</i> , 2011, 17, 4313-4322.	3.3	45
43	Soluble [Rh(¼-OOCCH <sub>3</sub> ) <sub>2</sub> (dbbpy) <sub>2</sub> ][BF <sub>4</sub> ] <sub>n</sub> molecular wire and [Rh(¼-OOCCH <sub>3</sub> ) <sub>2</sub> (dbbpy) <sub>2</sub> L <sub>2</sub> ] <sub>2+</sub> complexes; dbbpy=4,4-di-tert-butyl-2,2-bipyridine: Synthesis and physicochemical characterization. <i>Polyhedron</i> , 2010, 29, 3059-3065.	2.2	7
44	Structural characterization of metal-metal bonded polymer [Ru(L)(CO) <sub>2</sub> ] <sub>n</sub> (L = 2,2-bipyridine) in the solid state using high-resolution NMR and DFT chemical shift calculations. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 15428.	2.8	19
45	Synthesis and Structural and Physicochemical Characterization of [Rh <sub>2</sub> (¼-OOCCH <sub>3</sub> ) <sub>3</sub> ] <sub>2</sub> (dmbpy) <sub>2</sub> [BF <sub>4</sub> ] <sub>4</sub> Molecular Wire. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 111-118.		
46	Soluble Redox-Active Polymetallic Chains [Ru <sub>0</sub> (CO)(L)(bpy)] <sub>m</sub> <sub>n</sub> (bpy = 2,2-bipyridine, L = PrCN, Cl <sup>-</sup> ; m = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100) <i>TJFTQqO O QrgBT /Ove</i>	4.0	17
47	Electrochemical characterisation of an Os (II) conjugated polymer in aqueous electrolytes. <i>Electrochimica Acta</i> , 2006, 51, 3484-3488.	5.2	6
48	Ultrathin Luminescent Films of Rigid Dinuclear Ruthenium(II) Trisbipyridine Complexes. <i>Advanced Functional Materials</i> , 2006, 16, 625-632.	14.9	18
49	Oligothiophene Bipyridine Alternate Copolymers and Their Ruthenium Metalated Analogues: In Situ ESR and UV-Vis Investigations of Metal-Chain Interactions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12755-12761.	2.6	21
50	Energy Transfer by a Hopping Mechanism in Dinuclear Ir(III)/Ru(II) Complexes: A Molecular Wire?. <i>ChemPhysChem</i> , 2005, 6, 2417-2427.	2.1	93
51	Iridium complexes containing p-phenylene units. The influence of the conjugation on the excited state properties. <i>Journal of Materials Chemistry</i> , 2005, 15, 2820.	6.7	95
52	Control of field-effect mobilities in oligothiophene-bipyridine alternated copolymers. <i>Synthetic Metals</i> , 2004, 142, 201-206.	3.9	4
53	Photoinduced energy and electron transfer processes in heteropolynuclear polypyridyl complexes of Ru(II) and Fe(II). <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2520-2527.	2.8	23