

Frédéric Lavoie

List of Publications by Year in descending order

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394421

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all docs

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docs citations

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times ranked

1413
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	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
5	Highly Efficient Photoswitch in Diarylethene-Based Molecular Junctions. <i>Journal of the American Chemical Society</i> , 2020, 142, 7732-7736.	13.7	60
6	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
7	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
8	A Multi-Addressable Switch Based on the Dimethyldihydropyrene Photochrome with Remarkable Proton-Triggered Photoopening Efficiency. <i>Chemistry - A European Journal</i> , 2015, 21, 455-467.	3.3	48
9	Towards New Molecular Photocatalysts for CO ₂ Reduction: Photo-Induced Electron Transfer versus CO Dissociation within [Os(NN)(CO) ₂ Cl ₂] Complexes. <i>Chemistry - A European Journal</i> , 2011, 17, 4313-4322.	3.3	45
10	Bidirectional light-induced conductance switching in molecular wires containing a dimethyldihydropyrene unit. <i>Nanoscale</i> , 2018, 10, 5436-5441.	5.6	34
11	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
12	Molecular Signature and Activationless Transport in Cobalt-Terpyridine-Based Molecular Junctions. <i>Advanced Electronic Materials</i> , 2020, 6, 1901416.	5.1	27
13	Long-Range Charge Transport in Diazonium-Based Single-Molecule Junctions. <i>Nano Letters</i> , 2020, 20, 6899-6907.	9.1	26
14	Conductance in a bis-terpyridine based single molecular breadboard circuit. <i>Chemical Science</i> , 2017, 8, 1576-1591.	7.4	25
15	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
16	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
17	Combining Photomodulation and Rectification in Coordination Molecular Wires Based on Dithienylethene Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26304-26309.	3.1	22
18	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

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19	All Visible Light Switch Based on the Dimethyldihydropyrene Photochromic Core. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2682-2688.	4.6	21
20	Electron Transfer Across Modular Oligo- <i>p</i> -phenylene Bridges in Ru(bpy) ₂ (bpyâ€“ph _n) ⁺ (n = 1â€“5) Dyads. Unusual Effects of Bridge Elongation. <i>Journal of Physical Chemistry A</i> , 2012, 116, 119-131.	2.5	20
21	Structural characterization of metalâ€“metal bonded polymer [Ru(L)(CO) ₂] _n (L = 2,2â€“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
22	Dimethyldihydropyreneâ€“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
23	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
24	Ultrathin Luminescent Films of Rigid Dinuclear Ruthenium(II) Trisbipyridine Complexes. <i>Advanced Functional Materials</i> , 2006, 16, 625-632.	14.9	18
25	Soluble Redox-Active Polymetallic Chains [{Ru ⁰ (CO)(L)(bpy)} _m] _n (bpy = 2,2â€“bipyridine, L = PrCN, Cl ⁻ ; m = 0, 1, 2) <i>Journal of Physical Chemistry C</i> , 2017, 121, 29028-29038.	4.0	17
26	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
27	One-Dimensional Double Wires and Two-Dimensional Mobile Grids: Cobalt/Bipyridine Coordination Networks at the Solid/Liquid Interface. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4164-4169.	4.6	16
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	Electrochemical control of the switching process of photochromic dimethyldihydropyrene derivatives. <i>Chemical Communications</i> , 2017, 53, 9360-9363.	4.1	14
30	Ultrathin Molecular Layer Junctions Based on Cyclometalated Ruthenium Complexes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29069-29074.	3.1	14
31	Unprecedented ON/OFF Ratios in Photoactive Diarylethene-Bisthienylbenzene Molecular Junctions. <i>Nano Letters</i> , 2021, 21, 7555-7560.	9.1	14
32	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
33	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
34	A solvent-free and vacuum-free melt-processing method to fabricate organic semiconducting layers with large crystal size for organic electronic applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3190-3198.	5.5	13
35	One-Step Vs Stepwise Immobilization of 1-D Coordination-Based Rhâ€“Rh Molecular Wires on Gold Surfaces. <i>Langmuir</i> , 2012, 28, 11779-11789.	3.5	12
36	Supramolecular Networks and Wires Dominated by Intermolecular BiEDOT Interactions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22760-22766.	3.1	11

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37	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
38	Synthesis and Structural and Physicochemical Characterization of $\{[\text{Rh}(\text{OOCCH}_3)_3(\text{dmbpy})_2][\text{BF}_4]\}_n$ Molecular Wire. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 111-118.	2.0	8
39	Surface functionalization with redox active molecule-based imidazolium via click chemistry. <i>Electrochemistry Communications</i> , 2016, 70, 13-17.	4.7	8
40	Soluble $\{[\text{Rh}(\text{OOCCH}_3)_2(\text{dbbpy})_2][\text{BF}_4]\}_n$ molecular wire and $[\text{Rh}(\text{OOCCH}_3)_2(\text{dbbpy})_2\text{L}_2]^{2+}$ complexes; dbbpy=4,4'-di-tert-butyl-2,2'-bipyridine: Synthesis and physicochemical characterization. <i>Polyhedron</i> , 2010, 29, 3059-3065.	2.2	7
41	ZnO Nanowires as a Promotor of High Photoinduced Efficiency and Voltage Gain for Cathode Battery Recharging. <i>ACS Applied Energy Materials</i> , 2019, 2, 6254-6262.	5.1	7
42	Electrochemical characterisation of an Os (II) conjugated polymer in aqueous electrolytes. <i>Electrochimica Acta</i> , 2006, 51, 3484-3488.	5.2	6
43	Photochemical and photophysical properties of photochromic osmium terpyridine-dimethyldihydropyrene complexes. <i>Dyes and Pigments</i> , 2019, 160, 93-98.	3.7	6
44	Multi-functional switches of ditopic ligands with azobenzene central bridges at a molecular scale. <i>Nanoscale</i> , 2019, 11, 23042-23048.	5.6	6
45	Photochromic Metallopolymer Based on Dithienylethene as a Molecular Calculator. <i>Chemistry of Materials</i> , 2022, 34, 5912-5918.	6.7	6
46	Catalytic Light-Triggered Reduction Promoted by a Dithienylethene Derivative. <i>Chemistry - A European Journal</i> , 2020, 26, 13359-13362.	3.3	5
47	Control of field-effect mobilities in oligothiophene-bipyridine alternated copolymers. <i>Synthetic Metals</i> , 2004, 142, 201-206.	3.9	4
48	Visualization and Comprehension of Electronic and Topographic Contrasts on Cooperatively Switched Diarylethene-Bridged Ditopic Ligand. <i>Nanomaterials</i> , 2022, 12, 1318.	4.1	3
49	New Insights into the Redox Properties of Pyridinium Appended 1,2-Dithienylcyclopentenes. <i>ChemPhysChem</i> , 2022, , .	2.1	2
50	Nanopatterning by Length-Dependent Self-Assembly from Fluorene-Terpyridine Derivatives. <i>Journal of Physical Chemistry C</i> , 2022, 126, 10833-10841.	3.1	2
51	Molecular Junctions: Molecular Signature and Activationless Transport in Cobalt-Terpyridine-Based Molecular Junctions (<i>Adv. Electron. Mater.</i> 7/2020). <i>Advanced Electronic Materials</i> , 2020, 6, 2070033.	5.1	1
52	Rull tris-bipyridine-modified electrode as a sensor for battery electrolyte. <i>Electrochemistry Communications</i> , 2021, 125, 106990.	4.7	1
53	From Multi-Switchable Self-Assemblies towards Surface Coordination Chemistry: An STM Investigation of Bipyridine-Terminated Ditopic Ligands. <i>ECS Journal of Solid State Science and Technology</i> , 2022, 11, 055007.	1.8	1