Simon Rondeau-GagnÃ©

List of Publications by Year
in descending order

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79 papers	4,576 citations	185998 28 h-index	102304 66 g-index
84 all docs	84 docs citations	84 times ranked	5873 citing authors

#	Article	IF	Citations
1	Intrinsically stretchable and healable semiconducting polymer for organic transistors. Nature, 2016, 539, 411-415.	13.7	1,030
2	Highly stretchable polymer semiconductor films through the nanoconfinement effect. Science, 2017, 355, 59-64.	6.0	897
3	A Sensitive and Biodegradable Pressure Sensor Array for Cardiovascular Monitoring. Advanced Materials, 2015, 27, 6954-6961.	11.1	544
4	Effect of Nonconjugated Spacers on Mechanical Properties of Semiconducting Polymers for Stretchable Transistors. Advanced Functional Materials, 2018, 28, 1804222.	7.8	134
5	Topochemical Polymerization of Phenylacetylene Macrocycles: A New Strategy for the Preparation of Organic Nanorods. Journal of the American Chemical Society, 2013, 135, 110-113.	6.6	106
6	Amide-Containing Alkyl Chains in Conjugated Polymers: Effect on Self-Assembly and Electronic Properties. Macromolecules, 2018, 51, 1336-1344.	2.2	91
7	The Critical Role of Electronâ€Donating Thiophene Groups on the Mechanical and Thermal Properties of Donorâ€“Acceptor Semiconducting Polymers. Advanced Electronic Materials, 2019, 5, 1800899.	2.6	89
8	Tacky Elastomers to Enable Tearâ€Resistant and Autonomous Selfâ€Healing Semiconductor Composites. Advanced Functional Materials, 2020, 30, 2000663.	7.8	85
9	Synthesis and Cytotoxicity of Bidesmosidic Betulin and Betulinic Acid Saponins. Journal of Natural Products, 2009, 72, 72-81.	1.5	80
10	Probing the Viscoelastic Property of Pseudo Freeâ€Standing Conjugated Polymeric Thin Films. Macromolecular Rapid Communications, 2018, 39, e1800092.	2.0	79
11	Preparation of carbon nanomaterials from molecular precursors. Chemical Society Reviews, 2014, 43, 85-98.	18.7	76
12	Stretchable electronics: recent progress in the preparation of stretchable and self-healing semiconducting conjugated polymers. Flexible and Printed Electronics, 2017, 2, 043002.	1.5	65
13	A comparative analysis of capacitive-based flexible PDMS pressure sensors. Sensors and Actuators A: Physical, 2019, 285, 427-436.	2.0	64
14	The biosynthesis of the cannabinoids. Journal of Cannabis Research, 2021, 3, 7.	1.5	60
15	Influence of amide-containing side chains on the mechanical properties of diketopyrrolopyrrole-based polymers. Polymer Chemistry, 2018, 9, 5531-5542.	1.9	56
16	Soluble Conjugated One-Dimensional Nanowires Prepared by Topochemical Polymerization of a Butadiynes-Containing Star-Shaped Molecule in the Xerogel State. Langmuir, 2013, 29, 3446-3452.	1.6	54
17	Recent progress in the stabilization of supramolecular assemblies with functional polydiacetylenes. Polymer Chemistry, 2018, 9, 3019-3028.	1.9	54
18	Toward the Prediction and Control of Glass Transition Temperature for Donorâ€“Acceptor Polymers. Advanced Functional Materials, 2020, 30, 2002221.	7.8	46

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19	Synthesis of two natural betulinic acid saponins containing Î±-l-rhamnopyranosyl-(1â†'2)-Î±-l-arabinopyranose and their analogues. Tetrahedron, 2008, 64, 7386-7399.	1.0	45
20	Imine and metalâ€"ligand dynamic bonds in soft polymers for autonomous self-healing capacitive-based pressure sensors. Soft Matter, 2019, 15, 7654-7662.	1.2	44
21	Recent Advances in Mechanically Robust and Stretchable Bulk Heterojunction Polymer Solar Cells. Chemical Record, 2019, 19, 1008-1027.	2.9	43
22	Rigid organic nanotubes obtained from phenylene-butadiynylene macrocycles. Chemical Communications, 2013, 49, 9546.	2.2	40
23	Eco-friendly semiconducting polymers: from greener synthesis to greener processability. Journal of Materials Chemistry C, 2020, 8, 14645-14664.	2.7	40
24	Synthesis of betulinic acid acyl glucuronide for application in anticancer prodrug monotherapy. Tetrahedron Letters, 2009, 50, 988-991.	0.7	39
25	Room-temperature synthesis of soluble, fluorescent carbon nanoparticles from organogel precursors. Chemical Communications, 2012, 48, 10144.	2.2	39
26	Molecular Origin of Strainâ€Induced Chain Alignment in PDPPâ€Based Semiconducting Polymeric Thin Films. Advanced Functional Materials, 2021, 31, 2100161.	7.8	38
27	Layered graphitic materials from a molecular precursor. Chemical Science, 2014, 5, 831-836.	3.7	34
28	SMART transfer method to directly compare the mechanical response of water-supported and free-standing ultrathin polymeric films. Nature Communications, 2021, 12, 2347.	5.8	30
29	Elucidating the Role of Hydrogen Bonds for Improved Mechanical Properties in a High-Performance Semiconducting Polymer. Chemistry of Materials, 2022, 34, 2259-2267.	3.2	30
30	Branched Polyethylene as a Plasticizing Additive to Modulate the Mechanical Properties of Ï€-Conjugated Polymers. Macromolecules, 2019, 52, 7870-7877.	2.2	27
31	Morphology and Electronic Properties of Semiconducting Polymer and Branched Polyethylene Blends. ACS Applied Materials & Interfaces, 2019, 11, 12723-12732.	4.0	27
32	Challenge and Solution of Characterizing Glass Transition Temperature for Conjugated Polymers by Differential Scanning Calorimetry. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1635-1644.	2.4	27
33	Synthesis, characterization and DFT calculations of new ethynyl-bridged C60 derivatives. Tetrahedron, 2010, 66, 4230-4242.	1.0	26
34	The importance of the amide configuration in the gelation process and topochemical polymerization of phenylacetylene macrocycles. Journal of Materials Chemistry C, 2013, 1, 2680.	2.7	25
35	Enhanced Cycling Stability of Sulfur Electrodes through Effective Binding of Pyridine-Functionalized Polymer. ACS Energy Letters, 2017, 2, 2454-2462.	8.8	23
36	Covalent Cross-Linking of Diketopyrrolopyrrole-Based Organogels with Polydiacetylenes. Langmuir, 2018, 34, 12126-12136.	1.6	22

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37	H-Bonding-driven gel formation of a phenylacetylene macrocycle. Organic and Biomolecular Chemistry, 2011, 9, 4440.	1.5	21
38	Electronic properties of isoindigo-based conjugated polymers bearing urea-containing and linear alkyl side chains. Journal of Materials Chemistry C, 2018, 6, 12070-12078.	2.7	20
39	Modulating the thermomechanical properties and self-healing efficiency of siloxane-based soft polymers through metalâ€“ligand coordination. New Journal of Chemistry, 2020, 44, 8977-8985.	1.4	20
40	Synthesis and characterization of a new ethynyl-bridged C60 derivative bearing a diketopyrrolopyrrole moiety. Tetrahedron Letters, 2011, 52, 5008-5011.	0.7	18
41	Precise Control of Noncovalent Interactions in Semiconducting Polymers for High-Performance Organic Field-Effect Transistors. Chemistry of Materials, 2021, 33, 8267-8277.	3.2	18
42	Multiamorphous Phases in Diketopyrrolopyrrole-Based Conjugated Polymers: From Bulk to Ultrathin Films. Macromolecules, 2020, 53, 4480-4489.	2.2	18
43	Observation of Stepwise Ultrafast Crystallization Kinetics of Donorâ€“Acceptor Conjugated Polymers and Correlation with Field Effect Mobility. Chemistry of Materials, 2021, 33, 1637-1647.	3.2	17
44	Conjugated Polymer with Polydiacetylene Cross-Links Through Topochemical Polymerization of 1,3-Butadiyne Moieties Toward Photopatternable Thin Films. ACS Applied Polymer Materials, 2019, 1, 1918-1924.	2.0	16
45	Enhancing the Solubility of Semiconducting Polymers in Eco-Friendly Solvents with Carbohydrate-Containing Side Chains. ACS Applied Materials & Interfaces, 2021, 13, 25175-25185.	4.0	15
46	Synthesis and Photocyclization of Conjugated Diselenophene Pyrrole-2,5-dione Based Monomers for Optoelectronics. Macromolecules, 2021, 54, 665-672.	2.2	14
47	Molecular engineering of benzothiadiazole-based polymers: balancing charge transport and stretchability in organic field-effect transistors. Journal of Materials Chemistry C, 2022, 10, 4236-4246.	2.7	14
48	Enhanced Charge Transport and Stability Conferred by Iron(III)â€Coordination in a Conjugated Polymer Thinâ€Film Transistors. Advanced Electronic Materials, 2018, 4, 1800239.	2.6	13
49	A universal and facile approach for building multifunctional conjugated polymers for human-integrated electronics. Matter, 2021, 4, 3015-3029.	5.0	13
50	Synthesis of a fluorescent BODIPY-tagged ROMP catalyst and initial polymerization-propelled diffusion studies. Tetrahedron, 2015, 71, 5965-5972.	1.0	12
51	Iron-coordinating Ï€-conjugated semiconducting polymer: morphology and charge transport in organic field-effect transistors. Journal of Materials Chemistry C, 2020, 8, 8213-8223.	2.7	12
52	Pressure Sensors: A Sensitive and Biodegradable Pressure Sensor Array for Cardiovascular Monitoring (Adv. Mater. 43/2015). Advanced Materials, 2015, 27, 6953-6953.	11.1	11
53	An air-stable n-type bay-and-headland substituted bis-cyano Nâ€“H functionalized perylene diimide for printed electronics. Journal of Materials Chemistry C, 2021, 9, 13630-13634.	2.7	9
54	Topochemical Polymerization of a Nematic Tetraazaporphyrin Derivative To Generate Soluble Polydiacetylene Nanowires. Langmuir, 2019, 35, 15158-15167.	1.6	8

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55	Sidechain engineering of N-annulated perylene diimide molecules. New Journal of Chemistry, 2021, 45, 21001-21005.	1.4	8
56	Synthesis, gelation and topochemical polymerization of meta-linked oligophenylenebutadiynylene derivatives. Organic and Biomolecular Chemistry, 2014, 12, 9236-9242.	1.5	7
57	Topochemical Polymerization of Phenylacetylene Macrocycles under Pressure. Journal of Physical Chemistry C, 2018, 122, 20034-20039.	1.5	7
58	2D Supramolecular networks of dibenzonitrilediacetylene on Ag(111) stabilized by intermolecular hydrogen bonding. Physical Chemistry Chemical Physics, 2017, 19, 10602-10610.	1.3	6
59	Fabrication and Characterization of Autonomously Selfâ€Healable and Stretchable Soft Microfluidics. Advanced Sustainable Systems, 2022, 6, 2100074.	2.7	6
60	Carbohydrate-Containing Conjugated Polymers: Solvent-Resistant Materials for Greener Organic Electronics. ACS Applied Electronic Materials, 2022, 4, 1381-1390.	2.0	6
61	Ethynyl-bridged fullerene derivatives: effect of the secondary group on electronic properties. New Journal of Chemistry, 2011, 35, 942.	1.4	5
62	Improving the reactivity of phenylacetylene macrocycles toward topochemical polymerization by side chains modification. Beilstein Journal of Organic Chemistry, 2014, 10, 1613-1619.	1.3	5
63	Intrinsically Porous Polydiacetylene from a Functionalized Bowl-Shaped Hexaphenoxycyclotriphosphazene Derivative. ACS Applied Polymer Materials, 2021, 3, 191-199.	2.0	5
64	2,9-Dibenzo[b,def]chrysene as a building block for organic electronics. Materials Advances, 2022, 3, 599-603.	2.6	5
65	Impairing proliferation of glioblastoma multiforme with CD44+â€‰selective conjugated polymer nanoparticles. Scientific Reports, 2022, 12, .	1.6	5
66	Photophysical and Optical Properties of Semiconducting Polymer Nanoparticles Prepared from Hyaluronic Acid and Polysorbate 80. ACS Omega, 2019, 4, 22591-22600.	1.6	4
67	Crack propagation and electronic properties of semiconducting polymer and siloxane-urea copolymer blends. Flexible and Printed Electronics, 2020, 5, 035001.	1.5	4
68	Ferrocene metallopolymers of intrinsic microporosity (MPIMs). Chemical Communications, 2021, 58, 238-241.	2.2	4
69	Polyethylene and Semiconducting Polymer Blends for the Fabrication of Organic Field-Effect Transistors: Balancing Charge Transport and Stretchability. Chemosensors, 2022, 10, 201.	1.8	4
70	Pyrazine as a noncovalent conformational lock in semiconducting polymers for enhanced charge transport and stability in thin film transistors. Journal of Materials Chemistry C, 2019, 7, 11507-11514.	2.7	3
71	Selfâ€Assembly of Boardâ€Shaped Diketopyrrolopyrrole and Isoindigo Mesogens into Columnar Ï€â€Ï€ Stacks. ChemPlusChem, 2019, 84, 103-106.	1.3	3
72	Fabrication of an autonomously self-healing flexible thin-film capacitor by slot-die coating. Materials Advances, 0, , .	2.6	3

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73	From Chlorinated Solvents to Branched Polyethylene: Solventâ€Induced Phase Separation for the Greener Processing of Semiconducting Polymers. Advanced Electronic Materials, 2022, 8, 2100928.	2.6	3
74	Carbon nanomaterials from pyrolysis of polydiacetylene-walled nanorods. Materials Research Express, 2014, 1, 015602.	0.8	2
75	Modulating the Photophysical Properties and Electron Transfer Rates in Diketopyrrolopyrrole-Based Coordination Polymers. Journal of Physical Chemistry B, 2021, 125, 9579-9587.	1.2	1
76	<scp>PAMAM</scp>â€containing semiconducting polymers: Effect of dendritic side chains on optoelectronic and <scp>solidâ€state</scp> properties. Journal of Polymer Science, 2022, 60, 590-601.	2.0	1
77	Computational Design of an Integrated CMOS Readout Circuit for Sensing With Organic Field-Effect Transistors. Frontiers in Electronics, 2021, 2, .	2.0	1
78	3. Synthesis, functionalization and properties of fullerenes and graphene materials. , 2014, , 37-60.		0
79	3. Self-Healing Materials: Design and Applications. , 2019, , 87-112.		0