Pavel Troshin

List of Publications by Year
in descending order

332 papers	9,637 citations	50170 46 h-index	60497 81 g-index
359 all docs	359 docs citations	359 times ranked	10372 citing authors

#	Article	IF	Citations
1	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797
2	Biocompatible and Biodegradable Materials for Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2010, 20, 4069-4076.	7.8	387
3	Indigo â€•A Natural Pigment for High Performance Ambipolar Organic Field Effect Transistors and Circuits. Advanced Materials, 2012, 24, 375-380.	11.1	383
4	Material Solubilityâ€Photovoltaic Performance Relationship in the Design of Novel Fullerene Derivatives for Bulk Heterojunction Solar Cells. Advanced Functional Materials, 2009, 19, 779-788.	7.8	355
5	Highly Efficient All-Inorganic Planar Heterojunction Perovskite Solar Cells Produced by Thermal Coevaporation of CsI and PbI₂. Journal of Physical Chemistry Letters, 2017, 8, 67-72.	2.1	269
6	Probing the Intrinsic Thermal and Photochemical Stability of Hybrid and Inorganic Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 1211-1218.	2.1	216
7	C60F18, a Flattened Fullerene: Alias a Hexa-Substituted Benzene. Angewandte Chemie - International Edition, 2000, 39, 3273-3276.	7.2	162
8	Isolation of Two Seven-Membered Ring C58 Fullerene Derivatives: C58F17CF3 and C58F18. Science, 2005, 309, 278-281.	6.0	150
9	Synthesis and Structure of the Highly Chlorinated [60]Fullerene C60Cl30 with a Drum-Shaped Carbon Cage. Angewandte Chemie - International Edition, 2005, 44, 234-237.	7.2	132
10	Environmentally sustainable organic field effect transistors. Organic Electronics, 2010, 11, 1974-1990.	1.4	129
11	The chemical origin of the p-type and n-type doping effects in the hybrid methylammoniumâ€“lead iodide (MAPbI₃) perovskite solar cells. Chemical Communications, 2015, 51, 14917-14920.	2.2	122
12	Effect of Electronâ€Transport Material on Lightâ€Induced Degradation of Inverted Planar Junction Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700476.	10.2	103
13	Chlorofullerene C60Cl6: a precursor for straightforward preparation of highly water-soluble polycarboxylic fullerene derivatives active against HIV. Organic and Biomolecular Chemistry, 2007, 5, 2783.	1.5	93
14	Two Isomers of C60F48: An Indented Fullerene. Angewandte Chemie - International Edition, 2001, 40, 2285-2287.	7.2	90
15	Water-Soluble Fullerene Derivatives as Brain Medicine: Surface Chemistry Determines If They Are Neuroprotective and Antitumor. ACS Applied Materials & Interfaces, 2017, 9, 11482-11492.	4.0	87
16	Light or Heat: What Is Killing Lead Halide Perovskites under Solar Cell Operation Conditions?. Journal of Physical Chemistry Letters, 2020, 11, 333-339.	2.1	85
17	Hexaazatriphenylene-based polymer cathode for fast and stable lithium-, sodium- and potassium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 22596-22603.	5.2	80
18	Organic chemistry of fullerenes: the major reactions, types of fullerene derivatives and prospects for practical use. Russian Chemical Reviews, 2008, 77, 323-369.	2.5	79

#	Article	IF	Citations
19	Exploring the Effects of the Pb²⁺ Substitution in MAPbI₃ on the Photovoltaic Performance of the Hybrid Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2016, 7, 4353-4357.	2.1	79
20	Facile preparation of amine and amino acid adducts of [60]fullerene using chlorofullerene C60Cl6 as a precursor. Chemical Communications, 2012, 48, 5461.	2.2	76
21	Design of indigo derivatives as environment-friendly organic semiconductors for sustainable organic electronics. Journal of Materials Chemistry C, 2014, 2, 7621-7631.	2.7	76
22	Antimony (V) Complex Halides: Leadâ€Free Perovskiteâ€Like Materials for Hybrid Solar Cells. Advanced Energy Materials, 2018, 8, 1701140.	10.2	72
23	Overcoming the Thermal Instability of Efficient Polymer Solar Cells by Employing Novel Fullereneâ€Based Acceptors. Advanced Energy Materials, 2017, 7, 1601204.	10.2	69
24	Design of rewritable and read-only non-volatile optical memory elements using photochromic spiropyran-based salts as light-sensitive materials. Journal of Materials Chemistry C, 2015, 3, 11675-11680.	2.7	68
25	High-Energy and High-Power-Density Potassium Ion Batteries Using Dihydrophenazine-Based Polymer as Active Cathode Material. Journal of Physical Chemistry Letters, 2019, 10, 5440-5445.	2.1	68
26	Synthesis and antiviral activity of highly water-soluble polycarboxylic derivatives of [70]fullerene. Chemical Communications, 2011, 47, 8298.	2.2	66
27	Complexation of pyrrolidinofullerenes and zinc-phthalocyanine in a bilayer organic solar cell structure. Applied Physics Letters, 2005, 87, 244102.	1.5	65
28	Highly selective reactions of C60Cl6 with thiols for the synthesis of functionalized [60]fullerene derivatives. Chemical Communications, 2012, 48, 7158.	2.2	64
29	An Efficient [2+3] Cycloaddition Approach to the Synthesis of Pyridyl-Appended Fullerene Ligands. European Journal of Organic Chemistry, 2005, 2005, 3064-3074.	1.2	62
30	An ultrafast charging polyphenylamine-based cathode material for high rate lithium, sodium and potassium batteries. Journal of Materials Chemistry A, 2019, 7, 11430-11437.	5.2	62
31	Bromination of [60]Fullerene. II. Crystal and Molecular Structure of [60]Fullerene Bromides, C60Br6, C60Br8, and C60Br24. Fullerenes Nanotubes and Carbon Nanostructures, 2003, 11, 61-77.	1.0	60
32	Photoswitchable organic field-effect transistors and memory elements comprising an interfacial photochromic layer. Chemical Communications, 2015, 51, 6130-6132.	2.2	60
33	A Novel Family of Polyiodoâ€Bromoantimonate(III) Complexes: Cationâ€Driven Selfâ€Assembly of Photoconductive Metalâ€Polyhalide Frameworks. Chemistry - A European Journal, 2018, 24, 14707-14711.	1.7	60
34	Hydrazinium-assisted stabilisation of methylammonium tin iodide for lead-free perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 21389-21395.	5.2	59
35	Suppressing photooxidation of conjugated polymers and their blends with fullerenes through nickel chelates. Energy and Environmental Science, 2017, 10, 2005-2016.	15.6	57
36	C60F20: â€œSaturneneâ€, an Extraordinary Squashed Fullerene. Angewandte Chemie - International Edition, 2001, 40, 787-789.	7.2	56

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37	Supramolecular Association of Pyrrolidinofullerenes Bearing Chelating Pyridyl Groups and Zinc Phthalocyanine for Organic Solar Cells. Chemistry of Materials, 2007, 19, 5363-5372.	3.2	56
38	Organic Solar Cells with Semitransparent Metal Back Contacts for Power Window Applications. ChemSusChem, 2009, 2, 309-313.	3.6	56
39	Reversible Pb²⁺/Pb⁰ and I^{âˆ’}/I₃^{âˆ’} Redox Chemistry Drives the Lightâ€Induced Phase Segregation in Allâ€Inorganic Mixed Halide Perovskites. Advanced Energy Materials, 2021, 11, 2002934.	10.2	56
40	Fullerenolates: metallated polyhydroxylated fullerenes with potent anti-amyloid activity. Organic and Biomolecular Chemistry, 2011, 9, 5714.	1.5	54
41	ESR spectroscopy for monitoring the photochemical and thermal degradation of conjugated polymers used as electron donor materials in organic bulk heterojunction solar cells. Chemical Communications, 2015, 51, 2242-2244.	2.2	54
42	Bromination of [60]Fullerene. I. Highâ€Yield Synthesis of C60Br x (x=6, 8, 24). Fullerenes Nanotubes and Carbon Nanostructures, 2003, 11, 47-60.	1.0	53
43	Polymeric iodobismuthates {[Bi₃I₁₀]} and {[BiI₄]} with N-heterocyclic cations: promising perovskite-like photoactive materials for electronic devices. Journal of Materials Chemistry A, 2019, 7, 5957-5966.	5.2	53
44	Nickel(II) and Copper(II) Coordination Polymers Derived from 1,2,4,5-Tetraaminobenzene for Lithium-Ion Batteries. Chemistry of Materials, 2019, 31, 5197-5205.	3.2	52
45	[70]Fullereneâ€Based Materials for Organic Solar Cells. ChemSusChem, 2011, 4, 119-124.	3.6	51
46	XPS spectra as a tool for studying photochemical and thermal degradation in APbX3 hybrid halide perovskites. Nano Energy, 2021, 79, 105421.	8.2	50
47	Rear Electrode Materials for Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	49
48	C60F18O, the first characterised intramolecular fullerene ether. Chemical Communications, 2000, , 1325-1326.	2.2	48
49	Material solubility and molecular compatibility effects in the design of fullerene/polymer composites for organic bulk heterojunction solar cells. Journal of Materials Chemistry, 2012, 22, 18433.	6.7	48
50	Efficient and Stable MAPbI₃-Based Perovskite Solar Cells Using Polyvinylcarbazole Passivation. Journal of Physical Chemistry Letters, 2020, 11, 6772-6778.	2.1	48
51	Impedance Measurements as a Simple Tool to Control the Quality of Conjugated Polymers Designed for Photovoltaic Applications. Advanced Functional Materials, 2010, 20, 4351-4357.	7.8	46
52	Light-induced generation of free radicals by fullerene derivatives: an important degradation pathway in organic photovoltaics?. Journal of Materials Chemistry A, 2017, 5, 8044-8050.	5.2	46
53	Arbuzov chemistry with chlorofullerene C60Cl6: a powerful method for selective synthesis of highly functionalized [60]fullerene derivatives. Chemical Communications, 2012, 48, 8916.	2.2	45
54	New pyrrolidine and pyrroline derivatives of fullerenes: from the synthesis to the use in light-converting systems. Russian Chemical Bulletin, 2008, 57, 887-912.	0.4	41

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55	Towards understanding the behavior of indigo thin films in organic field-effect transistors: a template effect of the aliphatic hydrocarbon dielectric on the crystal structure and electrical performance of the semiconductor. Chemical Communications, 2014, 50, 7639.	2.2	40
56	A zeta potential value determines the aggregateâ€™s size of penta-substituted [60]fullerene derivatives in aqueous suspension whereas positive charge is required for toxicity against bacterial cells. Journal of Nanobiotechnology, 2015, 13, 50.	4.2	40
57	Synthesis of Fullerenols from Halofullerenes. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 331-343.	1.0	39
58	Carboxylic Fullerene C60 Derivatives: Efficient Microbicides Against Herpes Simplex Virus And Cytomegalovirus Infections In Vitro. Mendeleev Communications, 2012, 22, 254-256.	0.6	39
59	Spatially-resolved nanoscale measurements of grain boundary enhanced photocurrent in inorganic CsPbBr3 perovskite films. Solar Energy Materials and Solar Cells, 2017, 171, 205-212.	3.0	38
60	Î3-Ray-Induced Degradation in the Triple-Cation Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 813-818.	2.1	38
61	What is Killing Organic Photovoltaics: Lightâ€Induced Crosslinking as a General Degradation Pathway of Organic Conjugated Molecules. Advanced Energy Materials, 2020, 10, 1903163.	10.2	38
62	Some New Aspects of Chlorination of Fullerenes. Fullerenes Nanotubes and Carbon Nanostructures, 2003, 11, 165-185.	1.0	37
63	Photoaddition of N-Substituted Piperazines to C60: An Efficient Approach to the Synthesis of Water-Soluble Fullerene Derivatives. Chemistry - A European Journal, 2006, 12, 5569-5577.	1.7	37
64	Organic solar cells: Structure, materials, critical characteristics, and outlook. Nanotechnologies in Russia, 2008, 3, 242-271.	0.7	36
65	Comparative Intrinsic Thermal and Photochemical Stability of Sn(II) Complex Halides as Next-Generation Materials for Lead-Free Perovskite Solar Cells. Journal of Physical Chemistry C, 2019, 123, 26862-26869.	1.5	36
66	ESR spectroscopy as a powerful tool for probing the quality of conjugated polymers designed for photovoltaic applications. Chemical Communications, 2015, 51, 2239-2241.	2.2	35
67	Understanding the correlation and balance between the miscibility and optoelectronic properties of polymerâ€“fullerene solar cells. Journal of Materials Chemistry A, 2017, 5, 17570-17579.	5.2	35
68	New tetraazapentacene-based redox-active material as a promising high-capacity organic cathode for lithium and potassium batteries. Journal of Power Sources, 2019, 435, 226724.	4.0	35
69	Unravelling the Material Composition Effects on the Gamma Ray Stability of Lead Halide Perovskite Solar Cells: MAPbI₃ Breaks the Records. Journal of Physical Chemistry Letters, 2020, 11, 2630-2636.	2.1	35
70	Unraveling the Impact of Hole Transport Materials on Photostability of Perovskite Films and pâ€“iâ€“n Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 19161-19173.	4.0	35
71	Hydrazinium-loaded perovskite solar cells with enhanced performance and stability. Journal of Materials Chemistry A, 2016, 4, 18378-18382.	5.2	34
72	Biomimetic Approach to Inhibition of Photooxidation in Organic Solar Cells Using Beta-Carotene as an Additive. ACS Applied Materials & Interfaces, 2019, 11, 41570-41579.	4.0	34

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73	Design of (X-DADAD)_{<i>n</i>} Type Copolymers for Efficient Bulk Heterojunction Organic Solar Cells. Macromolecules, 2015, 48, 2013-2021.	2.2	33
74	Statistical carbazoleâ€“fluoreneâ€“TTBTBTT terpolymers as promising electron donor materials for organic solar cells. Chemical Communications, 2015, 51, 7562-7564.	2.2	33
75	Reduction of Methylammonium Cations as a Major Electrochemical Degradation Pathway in MAPbI₃ Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2020, 11, 221-228.	2.1	33
76	New phenazine based anolyte material for high voltage organic redox flow batteries. Chemical Communications, 2021, 57, 2986-2989.	2.2	33
77	Selfâ€Assembly of Thiopheneâ€•and Furanâ€Appended Methanofullerenes with Poly(3â€Hexylthiophene) in Organic Solar Cells. ChemSusChem, 2010, 3, 356-366.	3.6	32
78	Photovoltaic performance of PPE-PPV copolymers: effect of the fullerene component. Journal of Materials Chemistry, 2011, 21, 2356-2361.	6.7	32
79	A new polytriarylamine derivative for dopant-free high-efficiency perovskite solar cells. Sustainable Energy and Fuels, 2019, 3, 2627-2632.	2.5	32
80	Phenyl-C₆₁-butyric Acid as an Interface Passivation Layer for Highly Efficient and Stable Perovskite Solar Cells. Journal of Physical Chemistry C, 2020, 124, 1872-1877.	1.5	32
81	Organic-based active electrode materials for potassium batteries: status and perspectives. Journal of Materials Chemistry A, 2020, 8, 17296-17325.	5.2	32
82	Fullerene solubilityâ€“current density relationship in polymer solar cells. Physica Status Solidi - Rapid Research Letters, 2008, 2, 263-265.	1.2	31
83	Toxic and DNA damaging effects of a functionalized fullerene in human embryonic lung fibroblasts. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2016, 805, 46-57.	0.9	31
84	Efficient and stable all-inorganic perovskite solar cells based on nonstoichiometric Cs_xPbI₂Br_x (<i>x</i> > 1) alloys. Journal of Materials Chemistry C, 2019, 7, 5314-5323.	2.7	30
85	Antioxidant Properties of Fullerene Derivatives Depend on Their Chemical Structure: A Study of Two Fullerene Derivatives on HELFs. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-13.	1.9	30
86	Isolation and spectroscopic characterisation of C60F17CF2CF3 and isomers of C60F17CF3; insertion of :CF2 into fluorofullerene Câ€“F bonds. Perkin Transactions II RSC, 2000, , 2410-2414.	1.1	29
87	C2 C70F38 is aromatic, contains three planar hexagons, and has equatorial addends. Chemical Communications, 2005, , 75.	2.2	29
88	Penetration of Fullerene C₆₀Derivatives Through Biological Membranes. Fullerenes Nanotubes and Carbon Nanostructures, 2008, 16, 89-102.	1.0	29
89	Morphology evaluation of a polymerâ€“fullerene bulk heterojunction ensemble generated by the fullerene derivatization. Journal of Materials Chemistry, 2012, 22, 15987.	6.7	29
90	Structural origins of capacity fading in lithium-polyimide batteries. Journal of Materials Chemistry A, 2017, 5, 6532-6537.	5.2	29

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91	Preparation and spectroscopic properties of chlorofullerenes C60Cl24, C60Cl28, and C60Cl30. Carbon, 2006, 44, 2770-2777.	5.4	28
92	OFETâ€Based Memory Devices Operating via Optically and Electrically Modulated Charge Separation between the Semiconductor and 1,2â€bis(Hetaryl)ethene Dielectric Layers. Advanced Electronic Materials, 2016, 2, 1500219.	2.6	28
93	Synthesis of different types of alkoxy fullerene derivatives from chlorofullerene C₆₀Cl₆. Organic and Biomolecular Chemistry, 2017, 15, 773-777.	1.5	28
94	Incorporation of Vanadium(V) Oxide in Hybrid Hole Transport Layer Enables Long-term Operational Stability of Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2020, 11, 5563-5568.	2.1	28
95	A strong influence of the positions of solubilizing alkyl side chains on optoelectronic and photovoltaic properties of TTBTBTT-based conjugated polymers. Journal of Materials Chemistry C, 2015, 3, 1497-1506.	2.7	27
96	Reversible and Irreversible Electric Field Induced Morphological and Interfacial Transformations of Hybrid Lead Iodide Perovskites. ACS Applied Materials & Interfaces, 2017, 9, 33478-33483.	4.0	27
97	An environment-friendly approach to produce nanostructured germanium anodes for lithium-ion batteries. Green Chemistry, 2020, 22, 359-367.	4.6	27
98	Polydiphenylamine as a promising high-energy cathode material for dual-ion batteries. Journal of Materials Chemistry A, 2021, 9, 2864-2871.	5.2	27
99	3D quater- and quinquethiophenesilanes as promising electron-donor materials for BHJ photovoltaic cells and photodetectors. Energy and Environmental Science, 2010, 3, 1941.	15.6	26
100	[C₆₀(CN)₅]^{â€"}: A Remarkably Stable [60]Fullerene Anion. European Journal of Organic Chemistry, 2010, 2010, 3265-3268.	1.2	26
101	Toward Understanding the Antitumor Effects of Water-Soluble Fullerene Derivatives on Lung Cancer Cells: Apoptosis or Autophagy Pathways?. Journal of Medicinal Chemistry, 2019, 62, 7111-7125.	2.9	26
102	Metal-ion batteries meet supercapacitors: high capacity and high rate capability rechargeable batteries with organic cathodes and a Na/K alloy anode. Chemical Communications, 2019, 55, 11758-11761.	2.2	26
103	Highly Regioâ€•and Stereoselective [2+3] Cycloadditions of Azomethine Ylides to [70]Fullerene. European Journal of Organic Chemistry, 2007, 2007, 5861-5866.	1.2	25
104	The Activity of [60]Fullerene Derivatives Bearing Amine and Carboxylic Solubilizing Groups against<i>Escherichia coli</i>: A Comparative Study. Journal of Nanomaterials, 2014, 2014, 1-9.	1.5	25
105	Fullerene derivatives as a new class of inhibitors of protein tyrosine phosphatases. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 3175-3179.	1.0	25
106	Organic Field-effect Transistors based on Disubstituted Perylene Diimides: Effect of Alkyl Chains on the Device Performance. Mendeleev Communications, 2014, 24, 306-307.	0.6	25
107	Exploring the Photovoltaic Performance of All-Inorganic Ag₂PbI₄/PbI₂ Blends. Journal of Physical Chemistry Letters, 2017, 8, 1651-1656.	2.1	25
108	Synthesis and investigation of fullerene-based acceptor materials. Mendeleev Communications, 2007, 17, 175-177.	0.6	24

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109	Hybrid photoactive fullerene derivativeâ€“ruboxyl nanostructures for photodynamic therapy. Organic and Biomolecular Chemistry, 2013, 11, 4397.	1.5	24
110	Highly sensitive and selective ammonia gas sensor based on FAPbCl₃ lead halide perovskites. Journal of Materials Chemistry C, 2021, 9, 2561-2568.	2.7	24
111	C1C70F38Contains Four Planar Aromatic Hexagons; The Parallel between Fluorination of [60]- and [70]Fullerenes. Organic Letters, 2005, 7, 1975-1978.	2.4	23
112	Reactions of chlorofullerene C60Cl6 with N-substituted piperazines. Tetrahedron, 2006, 62, 10147-10151.	1.0	23
113	Improved Photovoltaic Performance of PPVâ€Based Copolymers Using Optimized Fullereneâ€Based Counterparts. Advanced Energy Materials, 2013, 3, 161-166.	10.2	23
114	Direct arylation of C₆₀Cl₆ and C₇₀Cl₈ with carboxylic acids: a synthetic avenue to water-soluble fullerene derivatives with promising antiviral activity. Chemical Communications, 2020, 56, 1179-1182.	2.2	23
115	Non-covalent complexes of polycationic fullerene C60 derivative with xanthene dyes â€" Spectral and photochemical properties in water and in liposomes. Dyes and Pigments, 2017, 139, 65-72.	2.0	22
116	Impact of charge transport layers on the photochemical stability of MAPbI₃ in thin films and perovskite solar cells. Sustainable Energy and Fuels, 2019, 3, 2705-2716.	2.5	22
117	Film Deposition Techniques Impact the Defect Density and Photostability of MAPbI₃ Perovskite Films. Journal of Physical Chemistry C, 2020, 124, 21378-21385.	1.5	22
118	Reactive modification of zinc oxide with methylammonium iodide boosts the operational stability of perovskite solar cells. Nano Energy, 2021, 83, 105774.	8.2	22
119	Characterization of reactions of fullerene C60 with bromine. Crystal structures of bromofullerenes C60Br6, C60Br6Â·CS2, C60Br8Â·CHBr3Â·2Br2, and C60Br24Â· C6H4Cl2Â·Br2. Russian Chemical Bulletin, 2004, 53, 2787-2792.	0.4	21
120	Material solubility effects in bulk heterojunction solar cells based on the bis-cyclopropane fullerene adducts and P3HT. Solar Energy Materials and Solar Cells, 2014, 120, 30-36.	3.0	21
121	High LUMO energy pyrrolidinofullerenes as promising electron-acceptor materials for organic solar cells. Journal of Materials Chemistry C, 2015, 3, 11612-11617.	2.7	21
122	New Naphthaleneâ€Based Polyimide as an Environmentâ€Friendly Organic Cathode Material for Lithium Batteries. Energy Technology, 2019, 7, 1801016.	1.8	21
123	Molecular structureâ€"electrical performance relationship for OFET-based memory elements comprising unsymmetrical photochromic diarylethenes. Journal of Materials Chemistry C, 2019, 7, 6889-6894.	2.7	21
124	<i>m</i>-Phenylenediamine as a Building Block for Polyimide Battery Cathode Materials. ACS Applied Energy Materials, 2021, 4, 4465-4472.	2.5	21
125	Partial Substitution of Pb²⁺ in CsPbI₃ as an Efficient Strategy To Design Fairly Stable All-Inorganic Perovskite Formulations. ACS Applied Materials & Interfaces, 2021, 13, 5184-5194.	4.0	21
126	Efficient 2Â+Â3 Cycloaddition Approach to Synthesis of Pyridinyl Based [60]Fullerene Ligands. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 12, 413-419.	1.0	20

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127	Photoluminescence Studies on the Supramolecular Interactions Between a Pyrollidinofullerene and Zincâ€Phthalocyanine Used in Organic Solar Cells. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 441-446.	1.0	20
128	Benzylamine imines as versatile precursors to azomethine and nitrile ylides in the [2 + 3] cycloaddition reactions with [60]fullerene. Mendeleev Communications, 2007, 17, 116-118.	0.6	20
129	Influence of water-soluble derivatives of [60]fullerene on therapeutically important targets related to neurodegenerative diseases. MedChemComm, 2014, 5, 1664-1668.	3.5	20
130	Molecular Engineering of the Fullereneâ€Based Electron Transport Layer Materials for Improving Ambient Stability of Perovskite Solar Cells. Solar Rrl, 2019, 3, 1900223.	3.1	20
131	A nickel coordination polymer derived from 1,2,4,5-tetraaminobenzene for fast and stable potassium battery anodes. Chemical Communications, 2020, 56, 1541-1544.	2.2	20
132	Quaterthiophene-based multipods as promising materials for solution-processible organic solar cells and field effect transistors. Solar Energy Materials and Solar Cells, 2010, 94, 2064-2072.	3.0	19
133	Synthesis of the (X-DADAD) -type conjugated polymers with 2,1,3-benzoxadiazole acceptor blocks and their application in organic solar cells. Tetrahedron Letters, 2017, 58, 97-100.	0.7	19
134	MOLECULAR AND CRYSTAL STRUCTURE OF THE ADDUCTS OF C60F18 WITH AROMATIC HYDROCARBONS. Fullerenes Nanotubes and Carbon Nanostructures, 2002, 10, 243-259.	1.0	18
135	Highâ€Performing Polycarbazole Derivatives for Efficient Solutionâ€Processing of Organic Solar Cells in Air. ChemSusChem, 2015, 8, 4209-4215.	3.6	18
136	Impressive Radiation Stability of Organic Solar Cells Based on Fullerene Derivatives and Carbazole-Containing Conjugated Polymers. ACS Applied Materials & Interfaces, 2019, 11, 21741-21748.	4.0	18
137	Decoupling Contributions of Chargeâ€Transport Interlayers to Lightâ€Induced Degradation of pâ€iâ€n Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000191.	3.1	18
138	Influence of Ion Migration from ITO and SiO₂ Substrates on Photo and Thermal Stability of CH₃NH₃SnI₃ Hybrid Perovskite. Journal of Physical Chemistry C, 2020, 124, 14928-14934.	1.5	18
139	Design of novel thiazolothiazole-containing conjugated polymers for organic solar cells and modules. Solar Energy, 2020, 198, 605-611.	2.9	18
140	Donorâ€“acceptor complex formation in evaporated small molecular organic photovoltaic cells. Solar Energy Materials and Solar Cells, 2010, 94, 803-811.	3.0	17
141	Synthesis and biological activity of a novel water-soluble methano[60]fullerene tetracarboxylic derivative. Mendeleev Communications, 2013, 23, 323-325.	0.6	17
142	Cyclopentadithiopheneâ€“Fluorene Copolymer for Organic Solar Cells and Light Emitting Diodes. Mendeleev Communications, 2013, 23, 26-28.	0.6	17
143	Anti-amyloid activities of three different types of water-soluble fullerene derivatives. Colloids and Surfaces B: Biointerfaces, 2019, 183, 110426.	2.5	17
144	Impact of P3HT materials properties and layer architecture on OPV device stability. Solar Energy Materials and Solar Cells, 2019, 202, 110151.	3.0	17

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145	New alternating thiophene-benzothiadiazole electron donor material for small-molecule organic solar cells and field-effect transistors. Synthetic Metals, 2019, 250, 7-11.	2.1	17
146	Suzuki polycondensation for the synthesis of polytriarylamines: A method to improve hole-transport material performance in perovskite solar cells. Tetrahedron Letters, 2020, 61, 152317.	0.7	17
147	Novel synthetic route to fluorofullerenes: reaction with binary and complex lead fluorides. Journal of Fluorine Chemistry, 2001, 110, 157-163.	0.9	16
148	Trannulenes: a new class of photoactive materials for organic photovoltaic devices. Journal of Materials Chemistry, 2009, 19, 7738.	6.7	16
149	Halogenated fullerenes as precursors for the synthesis of functional derivatives of C₆₀ and C₇₀. Russian Chemical Reviews, 2017, 86, 805-830.	2.5	16
150	Positive side of disorder: Statistical fluorene-carbazole-TTBTBTT terpolymers show improved optoelectronic and photovoltaic properties compared to the regioregular structures. Solar Energy Materials and Solar Cells, 2017, 160, 346-354.	3.0	16
151	Dihydrophenazineâ€Based Copolymers as Promising Cathode Materials for Dualâ€Ion Batteries. Energy Technology, 2021, 9, .	1.8	16
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