Vytautas Getautis

List of Publications by Year
in descending order

117 papers	5,714 citations	126907 33 h-index	79698 73 g-index
121 all docs	121 docs citations	121 times ranked	5418 citing authors

#	Article	IF	Citations
1	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. Science, 2020, 370, 1300-1309.	12.6	1,120
2	Conformal monolayer contacts with lossless interfaces for perovskite single junction and monolithic tandem solar cells. Energy and Environmental Science, 2019, 12, 3356-3369.	30.8	519
3	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2015, 137, 16172-16178.	13.7	321
4	Enhancing Thermal Stability and Lifetime of Solid-State Dye-Sensitized Solar Cells via Molecular Engineering of the Hole-Transporting Material Spiro-OMeTAD. ACS Applied Materials & Interfaces, 2015, 7, 11107-11116.	8.0	284
5	A Methoxydiphenylamineâ€Substituted Carbazole Twin Derivative: An Efficient Holeâ€Transporting Material for Perovskite Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 11409-11413.	13.8	239
6	Molecular engineering of face-on oriented dopant-free hole transporting material for perovskite solar cells with 19% PCE. Journal of Materials Chemistry A, 2017, 5, 7811-7815.	10.3	209
7	Selfâ€Assembled Hole Transporting Monolayer for Highly Efficient Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1801892.	19.5	172
8	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie - International Edition, 2016, 55, 7464-7468.	13.8	165
9	Charge transfer rates and electron trapping at buried interfaces of perovskite solar cells. Joule, 2021, 5, 2915-2933.	24.0	140
10	Branched methoxydiphenylamine-substituted fluorene derivatives as hole transporting materials for high-performance perovskite solar cells. Energy and Environmental Science, 2016, 9, 1681-1686.	30.8	138
11	Perovskite/CIGS Tandem Solar Cells: From Certified 24.2% toward 30% and Beyond. ACS Energy Letters, 2022, 7, 1298-1307.	17.4	128
12	18.4â€‰% Organic Solar Cells Using a High Ionization Energy Selfâ€Assembled Monolayer as Holeâ€Extraction Interlayer. ChemSusChem, 2021, 14, 3569-3578.	6.8	121
13	Tuning structural isomers of phenylenediammonium to afford efficient and stable perovskite solar cells and modules. Nature Communications, 2021, 12, 6394.	12.8	98
14	Diphenylamineâ€Substituted Carbazoleâ€Based Hole Transporting Materials for Perovskite Solar Cells: Influence of Isomeric Derivatives. Advanced Functional Materials, 2018, 28, 1704351.	14.9	95
15	High hole mobilities in carbazole-based glass-forming hydrazones. Journal of Materials Chemistry, 2002, 12, 3469-3474.	6.7	87
16	Perovskite Solar Cells go Outdoors: Field Testing and Temperature Effects on Energy Yield. Advanced Energy Materials, 2020, 10, 2000454.	19.5	86
17	Longâ€Term Stability of the Oxidized Holeâ€Transporting Materials used in Perovskite Solar Cells. Chemistry - A European Journal, 2018, 24, 9910-9918.	3.3	75
18	Efficient and Stable Perovskite Solar Cells Using Lowâ€Cost Anilineâ€Based Enamine Holeâ€Transporting Materials. Advanced Materials, 2018, 30, e1803735.	21.0	68

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19	Pyridination of hole transporting material in perovskite solar cells questions the long-term stability. Journal of Materials Chemistry C, 2018, 6, 8874-8878.	5.5	67
20	Additiveâ€Free Transparent Triarylamineâ€Based Polymeric Holeâ€Transport Materials for Stable Perovskite Solar Cells. ChemSusChem, 2016, 9, 2567-2571.	6.8	65
21	Synthesis of Conjugated Carbazole Trimers and Pentamers by Suzuki Coupling. Macromolecular Chemistry and Physics, 2003, 204, 1706-1712.	2.2	56
22	Air stable electron-transporting and ambipolar bay substituted perylene bisimides. Journal of Materials Chemistry, 2011, 21, 7811.	6.7	56
23	Dopantâ€Free Hole Transport Materials Afford Efficient and Stable Inorganic Perovskite Solar Cells and Modules. Angewandte Chemie - International Edition, 2021, 60, 20489-20497.	13.8	56
24	Can hydrogen bonds improve the hole-mobility in amorphous organic semiconductors? Experimental and theoretical insights. Journal of Materials Chemistry C, 2015, 3, 11660-11674.	5.5	51
25	Tripletâ€“Triplet Annihilation in 9,10-Diphenylanthracene Derivatives: The Role of Intersystem Crossing and Exciton Diffusion. Journal of Physical Chemistry C, 2017, 121, 8515-8524.	3.1	47
26	Nonspiro, Fluoreneâ€Based, Amorphous Hole Transporting Materials for Efficient and Stable Perovskite Solar Cells. Advanced Science, 2018, 5, 1700811.	11.2	45
27	Adduct-based p-doping of organic semiconductors. Nature Materials, 2021, 20, 1248-1254.	27.5	40
28	Coâ€Evaporated MAPbI₃ with Graded Fermi Levels Enables Highly Performing, Scalable, and Flexible pâ€iâ€n Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2103252.	14.9	40
29	Efficiency enhancement of perovskite solar cells via incorporation of phenylethenyl side arms into indolocarbazole-based hole transporting materials. Nanoscale, 2016, 8, 8530-8535.	5.6	39
30	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie, 2016, 128, 7590-7594.	2.0	37
31	Lowâ€Cost Perovskite Solar Cells Employing Dimethoxydiphenylamineâ€Substituted Bistricyclic Aromatic Enes as Hole Transport Materials. ChemSusChem, 2017, 10, 3825-3832.	6.8	37
32	Inexpensive Holeâ€Transporting Materials Derived from TrÃ¶ger's Base Afford Efficient and Stable Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 11266-11272.	13.8	37
33	Easily functionalizable carbazole based building blocks with extended conjugated systems for optoelectronic applications. Tetrahedron, 2010, 66, 3199-3206.	1.9	33
34	Effect of Methoxy Substituents on the Properties of the Derivatives of Carbazole and Diphenylamine. Journal of Physical Chemistry C, 2011, 115, 4856-4862.	3.1	33
35	New derivatives of triphenylamine and naphthalimide as ambipolar organic semiconductors: Experimental and theoretical approach. Dyes and Pigments, 2014, 106, 58-70.	3.7	33
36	Dâ€“Ï€â€“Aâ€Type Triazatruxeneâ€Based Dopantâ€Free Hole Transporting Materials for Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000173.	5.8	33

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37	Influence of methoxy groups on the properties of 1,1-bis(4-aminophenyl)cyclohexane based arylamines: experimental and theoretical approach. Journal of Materials Chemistry, 2012, 22, 3015.	6.7	31
38	Stable radical cores: a key for bipolar charge transport in glass forming carbazole and indole derivatives. Chemical Communications, 2010, 46, 5130.	4.1	29
39	Carbazole-Terminated Isomeric Hole-Transporting Materials for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 19710-19717.	8.0	28
40	Phenylethenylâ€Substituted Triphenylamines: Efficient, Easily Obtainable, and Inexpensive Holeâ€Transporting Materials. Chemistry - A European Journal, 2013, 19, 15044-15056.	3.3	27
41	Hole-Transporting Glass-Forming 3,3â€²-Dicarbazyl-Based Hydrazones. Molecular Crystals and Liquid Crystals, 2005, 427, 95/[407]-106/[418].	0.9	26
42	Fluorene-based enamines as low-cost and dopant-free hole transporting materials for high performance and stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 301-309.	10.3	25
43	Isomeric Carbazole-Based Hole-Transporting Materials: Role of the Linkage Position on the Photovoltaic Performance of Perovskite Solar Cells. Chemistry of Materials, 2021, 33, 3286-3296.	6.7	25
44	Stable Allâ€Organic Radicals with Ambipolar Charge Transport. Chemistry - A European Journal, 2016, 22, 18551-18558.	3.3	24
45	Oxidized Spiro-OMeTAD: Investigation of Stability in Contact with Various Perovskite Compositions. ACS Applied Energy Materials, 2021, 4, 13696-13705.	5.1	24
46	Greenâ€Chemistryâ€Inspired Synthesis of Cyclobutaneâ€Based Holeâ€Selective Materials for Highly Efficient Perovskite Solar Cells and Modules. Angewandte Chemie - International Edition, 2022, 61, .	13.8	23
47	Methoxydiphenylamine-substituted fluorene derivatives as hole transporting materials: role of molecular interaction on device photovoltaic performance. Scientific Reports, 2017, 7, 150.	3.3	22
48	Effect of linking topology on the properties of star-shaped derivatives of triazine and fluorene. Synthetic Metals, 2014, 195, 266-275.	3.9	21
49	Morphology and Emission Tuning in Fluorescent Nanoparticles Based on Phenylenediacetonitrile. Journal of Physical Chemistry C, 2014, 118, 25261-25271.	3.1	20
50	Synthesis and properties of the derivatives of triphenylamine and 1,8-naphthalimide with the olefinic linkages between chromophores. RSC Advances, 2016, 6, 2191-2201.	3.6	20
51	Molecular engineering of enamine-based small organic compounds as hole-transporting materials for perovskite solar cells. Journal of Materials Chemistry C, 2019, 7, 2717-2724.	5.5	19
52	Stable Perovskite Solar Cells Using Molecularly Engineered Functionalized Oligothiophenes as Lowâ€Cost Holeâ€Transporting Materials. Small, 2021, 17, e2100783.	10.0	19
53	A structural study of 1-phenyl-1,2,3,4-tetrahydroquinoline-based dyes for solid-state DSSC applications. Dyes and Pigments, 2014, 104, 211-219.	3.7	18
54	Structureâ€"property relationship of isomeric diphenylethenyl-disubstituted dimethoxycarbazoles. RSC Advances, 2015, 5, 49577-49589.	3.6	17

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55	New solution-processable carbazole derivatives as deep blue emitters for organic light-emitting diodes. RSC Advances, 2016, 6, 9247-9253.	3.6	17
56	Amorphous Holeâ€Transporting Material based on 2,2â€²â€Bisâ€substituted 1,1â€²â€Biphenyl Scaffold for Application in Perovskite Solar Cells. Chemistry - an Asian Journal, 2017, 12, 958-962.	3.3	17
57	Glass-Forming Hole-Transporting Triphenylamine-Based Hydrazones with Reactive Functional Groups. Molecular Crystals and Liquid Crystals, 2007, 466, 85-100.	0.9	16
58	Organic Dyes with Hydrazone Moieties: A Study of Correlation between Structure and Performance in the Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 7832-7843.	3.1	16
59	Symmetrical azine-based polymers possessing 1-phenyl-1,2,3,4-tetrahydroquinoline moieties as materials for optoelectronics. Reactive and Functional Polymers, 2011, 71, 1016-1022.	4.1	15
60	Organic dyes containing a hydrazone moiety as auxiliary donor for solid-state DSSC applications. Dyes and Pigments, 2015, 114, 175-183.	3.7	15
61	Sb₂S₃ solar cells with a cost-effective and dopant-free fluorene-based enamine as a hole transport material. Sustainable Energy and Fuels, 2022, 6, 3220-3229.	4.9	12
62	Enamineâ€Based Crossâ€Linkable Holeâ€Transporting Materials for Perovskite Solar Cells. Solar Rrl, 2021, 5, .	5.8	11
63	Branched Methoxydiphenylamine-Substituted Carbazole Derivatives for Efficient Perovskite Solar Cells: Bigger Is Not Always Better. Chemistry of Materials, 2021, 33, 7017-7027.	6.7	11
64	Highly Planar Benzodipyrroleâ€Based Hole Transporting Materials with Passivation Effect for Efficient Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100667.	5.8	11
65	High-triplet-energy carbazole and fluorene tetrads. Journal of Luminescence, 2016, 169, 256-265.	3.1	10
66	Bipolar charge transport in organic electron donorâ€acceptor systems with stable organic radicals as electronâ€withdrawing moieties. Journal of Physical Organic Chemistry, 2019, 32, e3974.	1.9	10
67	9-(4-Methoxyphenyl) Carbazolyl-Containing Hydrazones for Optoelectronic Applications. Molecular Crystals and Liquid Crystals, 2005, 427, 107/[419]-116/[428].	0.9	9
68	Simple and Inexpensive Organic Dyes with Hydrazone Moiety as Ï€â€Conjugation Bridge for Solidâ€State Dyeâ€Sensitized Solar Cells. Chemistry - an Asian Journal, 2013, 8, 538-541.	3.3	9
69	Synthesis and properties of hole-transporting triphenylamine-derived dendritic compounds. Dyes and Pigments, 2015, 115, 135-142.	3.7	9
70	Synthesis and Investigation of the Vâ€shaped TrÃ¶gerâ€²s Base Derivatives as Holeâ€transporting Materials. Chemistry - an Asian Journal, 2016, 11, 2049-2056.	3.3	9
71	Synthesis, properties, and self-polymerization of hole-transporting carbazole- and triphenylamine-based hydrazone monomers. Designed Monomers and Polymers, 2014, 17, 255-265.	1.6	8
72	Triarylamine-Functionalized Imidazolyl-Capped Bithiophene Hole Transporting Material for Cost-Effective Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 22053-22060.	8.0	8

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73	An Efficient Scalable Synthesis of 2,3-Epoxypropyl Phenylhydrazones. Molecules, 2006, 11, 64-71.	3.8	7
74	Synthesis and properties of new derivatives of poly[9-(2,3-epoxypropyl)carbazole]. Polymer International, 2008, 57, 1159-1164.	3.1	7
75	Self-assembled nanoparticles of p-phenylenediacetonitrile derivatives with fluorescence turn-on. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	7
76	Hole-transporting thiophene-based hydrazones with reactive vinyl groups. Synthetic Metals, 2014, 197, 1-7.	3.9	7
77	A structural study of Troger's base scaffold-based dyes for DSSC applications. Dyes and Pigments, 2017, 143, 48-61.	3.7	7
78	Focus-Induced Photoresponse Technique-Based NIR Photodetectors Containing Dimeric Polymethine Dyes. Journal of Electronic Materials, 2019, 48, 5843-5849.	2.2	7
79	Cut from the Same Cloth: Enamine-Derived Spirobifluorenes as Hole Transporters for Perovskite Solar Cells. Chemistry of Materials, 2021, 33, 6059-6067.	6.7	7
80	Lowâ€Cost Dopantâ€Free Carbazole Enamine Holeâ€Transporting Materials for Thermally Stable Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	7
81	Cross-linkable carbazole-based hole transporting materials for perovskite solar cells. Chemical Communications, 2022, 58, 7495-7498.	4.1	7
82	Airâ€Stable, Narrowâ€Bandâ€Gap Ambipolar C₆₀ Fullereneâ€"Hydrazone Hybrid Materials. Chemistry - an Asian Journal, 2012, 7, 614-620.	3.3	6
83	V-Shaped Hole-Transporting TPD Dimers Containing TrÃ¶gerâ€™s Base Core. Journal of Physical Chemistry C, 2017, 121, 10267-10274.	3.1	6
84	Melt Spin Coating for Xâ€Rayâ€Sensitive Hybrid Organicâ€"Inorganic Layers of Small Carbazolylâ€Containing Molecules Blended with Tungsten. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900635.	1.8	6
85	Enamine-based hole transporting materials for vacuum-deposited perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 5017-5023.	4.9	6
86	Dopantâ€Free Hole Transport Materials Afford Efficient and Stable Inorganic Perovskite Solar Cells and Modules. Angewandte Chemie, 2021, 133, 20652-20660.	2.0	6
87	Starburst Carbazole Derivatives as Efficient Hole Transporting Materials for Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100877.	5.8	6
88	Molecular Engineering of Fluoreneâ€Based Holeâ€Transporting Materials for Efficient Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	6
89	Novel method for synthesis of 3-hydroxy-1-phenyl-1,2,3,4-tetrahydroquinoline. Chemistry of Heterocyclic Compounds, 2006, 42, 123-124.	1.2	5
90	Inexpensive Holeâ€Transporting Materials Derived from TrÃ¶ger's Base Afford Efficient and Stable Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 11388.	2.0	5

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91	Investigation of photophysical properties of triphenylamine phenylethenyl derivatives containing tertiary amine groups. Dyes and Pigments, 2019, 166, 122-129.	3.7	5
92	Triphenylamine-based phenylhydrazone-indolium cationic dyes for solid-state DSSC applications. Materials Letters, 2020, 274, 128001.	2.6	5
93	Electron Transporting Molecular Glasses Based on Arylmethylene-1,3-Indandione. Molecular Crystals and Liquid Crystals, 2008, 497, 173/[505]-185/[517].	0.9	4
94	Oxetanyl-functionalized 9-aryl[3,3â€²]bicarbazolyl derivatives as building blocks for electro-active polymers. Journal of Polymer Research, 2011, 18, 731-737.	2.4	4
95	Relationship between measurement conditions and energy levels in the organic dyes used in dye-sensitized solar cells. RSC Advances, 2015, 5, 82859-82864.	3.6	4
96	An air-stable and solution processable tetracarboxydiimide-based materials with tunable charge transport properties. Dyes and Pigments, 2018, 158, 157-164.	3.7	4
97	Application of a Tetraâ€TPDâ€Type Holeâ€Transporting Material Fused by a TrÃ¶ger's Base Core in Perovskite SolarÂCells. Solar Rrl, 2019, 3, 1900224.	5.8	4
98	Greenâ€Chemistryâ€Inspired Synthesis of Cyclobutaneâ€Based Holeâ€Selective Materials for Highly Efficient Perovskite Solar Cells and Modules. Angewandte Chemie, 2022, 134, .	2.0	4
99	Thiophene-based glass-forming hole-transporting hydrazones. Monatshefte FÃ¼r Chemie, 2008, 139, 1011-1017.	1.8	3
100	Study on the influence of methyl groups and their location on properties of triphenylamino-based charge transporting hydrazones. Monatshefte FÃ¼r Chemie, 2009, 140, 1453-1458.	1.8	3
101	9-Phenylcarbazoleâ€“Based Hydrazone Twin Compounds as P-Type Organic Semiconductors. Molecular Crystals and Liquid Crystals, 2011, 536, 182/[414]-191/[423].	0.9	3
102	Charge-transporting 3,4-ethylenedioxythiophene-based hydrazone monomers and oligomers. Polymer Bulletin, 2013, 70, 1519-1529.	3.3	3
103	Di(9-alkylcarbazol-3-yl)arylamines as Electroactive Amorphous Materials for Optoelectronics. Monatshefte FÃ¼r Chemie, 2006, 137, 1053-1062.	1.8	2
104	Synthesis and thermal reactions of N-(2,3-epoxypropyl)diphenylamine. Chemistry of Heterocyclic Compounds, 2007, 43, 718-721.	1.2	2
105	Hole-Transporting Carbazole-Based Imines. Molecular Crystals and Liquid Crystals, 2011, 536, 192/[424]-199/[431].	0.9	2
106	N,N-di(4-methoxyphenyl)hydrazones of carbazole and phenothiazine carbaldehydes containing 4-methoxyphenyl groups as hole transporting materials. Synthetic Metals, 2022, 287, 117057.	3.9	2
107	Novel hole-transporting carbazole main chain oligomer and its model glass-forming compound. Polymer Bulletin, 2002, 49, 95-101.	3.3	1
108	Cationic ring-opening polymerization of carbazolyl-containing epoxy monomers by triphenyl carbenium salts as thermal- and photolatent initiators. Monatshefte FÃ¼r Chemie, 2009, 140, 565-571.	1.8	1

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109	Electroactive Twin Compounds Containing Trioxothioxanthene Electron Accepting Moieties. Molecular Crystals and Liquid Crystals, 2011, 535, 189-195.	0.9	1
110	Fluorescence sensing based on phenylenediacetonitrile doped into polymer host. Journal of Luminescence, 2016, 170, 293-298.	3.1	1
111	Enamineâ€Based Crossâ€Linkable Holeâ€Transporting Materials for Perovskite Solar Cells. Solar Rrl, 2021, 5, 2170012.	5.8	1
112	Condensed Aromatic Amines as Electroactive Materials for Optoelectronic Applications. Molecular Crystals and Liquid Crystals, 2007, 468, 95/[447]-105/[457].	0.9	0
113	3,9â€²-Bicarbazole-Based Compounds with Reactive Functional Groups as Potential Cross-Linkable High Triplet Energy Hole-Transporting Materials. Molecular Crystals and Liquid Crystals, 2011, 536, 200/[432]-207/[439].	0.9	0
114	Frontispiece: A Methoxydiphenylamineâ€Substituted Carbazole Twin Derivative: An Efficient Holeâ€Transporting Material for Perovskite Solar Cells. Angewandte Chemie - International Edition, 2015, 54, .	13.8	0
115	1,3-Diphenylethenylcarbazolyl-Based Monomer for Cross-Linked Hole Transporting Layers. Molecules, 2015, 20, 9124-9138.	3.8	0
116	Frontispiz: Methoxydiphenylamin-substituiertes Carbazol-Zwillingsderivat: ein effizienter organischer Lochleiter fÃ¼r Perowskit-Solarzellen. Angewandte Chemie, 2015, 127, n/a-n/a.	2.0	0
117	Photoemission studies of organic semiconducting materials using open Geiger-MÃ¼ller counter. Journal of Applied Physics, 2019, 126, 015501.	2.5	0