Yuriy Luponosov

List of Publications by Year in descending order

88 papers	1,991 citations	257450 24 h-index	265206 42 g-index
91 all docs	91 docs citations	91 times ranked	2539 citing authors

#	Article	IF	Citations
1	Development of new methods in modern selective organic synthesis: preparation of functionalized molecules with atomic precision. Russian Chemical Reviews, 2014, 83, 885-985.	6.5	182
2	Solubility Based Identification of Green Solvents for Small Molecule Organic Solar Cells. Advanced Functional Materials, 2014, 24, 1449-1457.	14.9	132
3	Evaluation of Electron Donor Materials for Solutionâ€Processed Organic Solar Cells via a Novel Figure of Merit. Advanced Energy Materials, 2017, 7, 1700465.	19.5	114
4	Effects of Alkyl Terminal Chains on Morphology, Charge Generation, Transport, and Recombination Mechanisms in Solutionâ€Processed Small Molecule Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2015, 5, 1500386.	19.5	112
5	Alkyl Chain Engineering of Solutionâ€Processable Starâ€Shaped Molecules for Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2014, 4, 1301234.	19.5	96
6	Interface Design to Improve the Performance and Stability of Solutionâ€Processed Smallâ€Molecule Conventional Solar Cells. Advanced Energy Materials, 2014, 4, 1400816.	19.5	76
7	Fully Solutionâ€Processed Small Molecule Semitransparent Solar Cells: Optimization of Transparent Cathode Architecture and Four Absorbing Layers. Advanced Functional Materials, 2016, 26, 4543-4550.	14.9	73
8	A solution-processable star-shaped molecule for high-performance organic solar cells via alkyl chain engineering and solvent additive. Organic Electronics, 2013, 14, 219-229.	2.6	57
9	Perovskite white light-emitting diodes based on a molecular blend perovskite emissive layer. Journal of Materials Chemistry C, 2019, 7, 8634-8642.	5.5	54
10	Molecularly Smooth Single-Crystalline Films of Thiopheneâ€“Phenylene Co-Oligomers Grown at the Gasâ€“Liquid Interface. Crystal Growth and Design, 2014, 14, 1726-1737.	3.0	49
11	A combination of Al-doped ZnO and a conjugated polyelectrolyte interlayer for small molecule solution-processed solar cells with an inverted structure. Journal of Materials Chemistry A, 2013, 1, 11306.	10.3	48
12	Design of donorâ€“acceptor star-shaped oligomers for efficient solution-processible organic photovoltaics. Faraday Discussions, 2014, 174, 313-339.	3.2	44
13	First Organosilicon Molecular Antennas. Chemistry of Materials, 2009, 21, 447-455.	6.7	39
14	Effects of electron-withdrawing group and electron-donating core combinations on physical properties and photovoltaic performance in D-Ï€-A star-shaped small molecules. Organic Electronics, 2016, 32, 157-168.	2.6	39
15	Effects of oligothiophene Ï€-bridge length on physical and photovoltaic properties of star-shaped molecules for bulk heterojunction solar cells. Journal of Materials Chemistry A, 2014, 2, 16135-16147.	10.3	38
16	Nanostructured organosilicon luminophores and their application in highly efficient plastic scintillators. Scientific Reports, 2014, 4, 6549.	3.3	38
17	Highly Luminescent Solution-Grown Thiophene-Phenylene Co-Oligomer Single Crystals. ACS Applied Materials & Interfaces, 2016, 8, 10088-10092.	8.0	36
18	Bithiophenesilane-Based Dendronized Polymers: Facile Synthesis and Properties of Novel Highly Branched Organosilicon Macromolecular Structures. Macromolecules, 2012, 45, 2014-2024.	4.8	35

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19	Ultrafast Charge Generation Pathways in Photovoltaic Blends Based on Novel Starâ€Shaped Conjugated Molecules. Advanced Energy Materials, 2015, 5, 1401657.	19.5	35
20	Effect of Molecular Structure of Î±,Î±â€²-Dialkylquaterthiophenes and Their Organosilicon Multipods on Ordering, Phase Behavior, and Charge Carrier Mobility. Journal of Physical Chemistry C, 2012, 116, 22727-22736.	3.1	31
21	Branched triphenylamine-based oligomers for organic electronics. Polymer Science - Series C, 2014, 56, 104-134.	1.7	30
22	3D quater- and quinquethiophenesilanes as promising electron-donor materials for BHJ photovoltaic cells and photodetectors. Energy and Environmental Science, 2010, 3, 1941.	30.8	26
23	Integrated molecular, morphological and interfacial engineering towards highly efficient and stable solution-processed small molecule solar cells. Journal of Materials Chemistry A, 2015, 3, 22695-22707.	10.3	26
24	Star-shaped Dâ€“Ï€â€“A oligothiophenes with a tris(2-methoxyphenyl)amine core and alkyldicyanovinyl groups: synthesis and physical and photovoltaic properties. Journal of Materials Chemistry C, 2016, 4, 7061-7076.	5.5	26
25	Facile Synthesis and Optical Properties of Bithiophenesilane Monodendrons and Dendrimers. Organic Letters, 2008, 10, 2753-2756.	4.6	25
26	Large-Size Single-Crystal Oligothiophene-Based Monolayers for Field-Effect Transistors. ACS Applied Materials & Interfaces, 2019, 11, 6315-6324.	8.0	23
27	Highly bendable luminescent semiconducting organic single crystal. Synthetic Metals, 2017, 232, 60-65.	3.9	21
28	Star-shaped benzotriindole-based donor-acceptor molecules: Synthesis, properties and application in bulk heterojunction and single-material organic solar cells. Dyes and Pigments, 2020, 181, 108523.	3.7	21
29	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.	6.2	19
30	Simple donor-acceptor molecule with long exciton diffusion length for organic photovoltaics. Organic Electronics, 2018, 53, 185-190.	2.6	19
31	Charge photogeneration and recombination in single-material organic solar cells and photodetectors based on conjugated star-shaped donor-acceptor oligomers. Organic Electronics, 2020, 78, 105588.	2.6	19
32	Development of VUV wavelength shifter for the use with a visible light photodetector in noble gas filled detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 403-406.	1.6	18
33	A new dithienosilole-based oligothiophene with methyldicyanovinyl groups for high performance solution-processed organic solar cells. Organic Electronics, 2014, 15, 3800-3804.	2.6	18
34	Effect of fused triphenylamine core in star-shaped donor-Ï€-acceptor molecules on their physicochemical properties and performance in bulk heterojunction organic solar cells. Dyes and Pigments, 2020, 177, 108260.	3.7	18
35	Uniform Stepped Interfacial Energy Level Structure Boosts Efficiency and Stability of CsPbI₂Br Solar Cells. Advanced Functional Materials, 2021, 31, 2103316.	14.9	18
36	Triphenylamine-Based Pushâ€“Pull Molecule for Photovoltaic Applications: From Synthesis to Ultrafast Device Photophysics. Journal of Physical Chemistry C, 2017, 121, 6424-6435.	3.1	17

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37	A star-shaped Dâ€“Ï€â€“A small molecule based on a tris(2-methoxyphenyl)amine core for highly efficient solution-processed organic solar cells. Journal of Materials Chemistry C, 2014, 2, 7614-7620.	5.5	16
38	Ultrafast Excitonâ€toâ€Polaron Conversion in Densely Packed Small Organic Semiconducting Molecules. Advanced Optical Materials, 2017, 5, 1700024.	7.3	16
39	Highly soluble and thermally stable alkyl-free star-shaped D-Ï€-A oligomer with electron-withdrawing phenyldicyanovinyl groups for organic photovoltaics. Organic Electronics, 2017, 51, 180-189.	2.6	15
40	End group tuning in small molecule donors for non-fullerene organic solar cells. Dyes and Pigments, 2020, 175, 108078.	3.7	14
41	Structure and Properties of Functionalized Bithiophenesilane Monodendrons. Langmuir, 2009, 25, 9270-9284.	3.5	13
42	Branched oligothiophene silanes with the efficient nonradiative energy transfer between the fragments. Russian Chemical Bulletin, 2010, 59, 797-805.	1.5	13
43	Effects of bridging atom in donor units and nature of acceptor groups on physical and photovoltaic properties of A-Ï€-D-Ï€-A oligomers. Organic Electronics, 2018, 55, 42-49.	2.6	12
44	Unsymmetrical donorâ€“acceptor oligothiophenes end-capped with triphenylamine and phenyldicyanovinyl units. Mendeleev Communications, 2018, 28, 415-417.	1.6	12
45	Triphenylamine-based luminophores with different side and central aromatic blocks: Synthesis, thermal, photophysical and photochemical properties. Dyes and Pigments, 2020, 179, 108397.	3.7	12
46	Synthesis and photovoltaic effect in red/near-infrared absorbing A-D-A-D-A-type oligothiophenes containing benzothiadiazole and thienothiadiazole central units. Journal of Photonics for Energy, 2015, 5, 057213.	1.3	11
47	Effect of oligothiophene Ï€-bridge length in D-Ï€-A star-shaped small molecules on properties and photovoltaic performance in single-component and bulk heterojunction organic solar cells and photodetectors. Materials Today Energy, 2021, 22, 100863.	4.7	11
48	Design Principles for Organic Small Molecule Hole-Transport Materials for Perovskite Solar Cells: Film Morphology Matters. ACS Applied Energy Materials, 2022, 5, 5395-5403.	5.1	11
49	Crystallization regulation of solution-processed two-dimensional perovskite solar cells. Journal of Materials Chemistry A, 2022, 10, 13625-13650.	10.3	11
50	Effects of bridging atom and Ï€-bridge length on physical and photovoltaic properties of Aâ€“Ï€-Dâ€“Ï€-A oligomers for solution-processed organic solar cells. Dyes and Pigments, 2015, 122, 213-223.	3.7	10
51	Excited state dynamics and exciton diffusion in triphenylamine/dicyanovinyl pushâ€“pull small molecule for organic optoelectronics. Scientific Reports, 2020, 10, 21198.	3.3	10
52	Branched Electron-Donor Core Effect in D-Ï€-A Star-Shaped Small Molecules on Their Properties and Performance in Single-Component and Bulk-Heterojunction Organic Solar Cells â€. Energies, 2021, 14, 3596.	3.1	10
53	In search of efficient solubilizing groups for liquid and luminescent oligo(phenylene-thiophene) chromophores. Journal of Materials Chemistry C, 2020, 8, 17074-17082.	5.5	9
54	Pixelated full-colour small molecule semiconductor devices towards artificial retinas. Journal of Materials Chemistry C, 2021, 9, 5858-5867.	5.5	9

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55	Nanostructured Organosilicon Luminophores for Effective Light Conversion in Organic Light Emitting Diodes. Organic Photonics and Photovoltaics, 2015, 3, .	1.3	8
56	Push-pull molecules bearing a hydrazonocyclopentadiene acceptor moiety: from the synthesis to organic photovoltaic applications. Mendeleev Communications, 2019, 29, 304-306.	1.6	8
57	Luminescence spectral properties of dendritic oligothiophenesilane macromolecules. Russian Journal of Physical Chemistry A, 2010, 84, 1979-1985.	0.6	7
58	Design of low band gap small molecules with alkyldicyanovinyl acceptor and different donor groups for efficient bulk heterojunction organic solar cells. Proceedings of SPIE, 2015, , .	0.8	7
59	Surface-Enhanced Raman Spectroscopy of 2D Organic Semiconductor Crystals. Journal of Physical Chemistry C, 2019, 123, 27242-27250.	3.1	7
60	Effects of electron-withdrawing group and Ï€-conjugation length in donor-acceptor oligothiophenes on their properties and performance in non-fullerene organic solar cells. Dyes and Pigments, 2021, 194, 109592.	3.7	7
61	Synthesis and properties of a new luminescent oligoarylsilane dendrimer. Mendeleev Communications, 2011, 21, 89-91.	1.6	6
62	Visualization of molecular excitons diffusion. Proceedings of SPIE, 2016, , .	0.8	6
63	Effect of branching on the physical and photovoltaic properties of donorâ€“acceptor oligomers based on triphenylamine. Mendeleev Communications, 2019, 29, 385-387.	1.6	6
64	Electron deficient 5-hydroxy-1,2-dihydroisoquinolin-1-ones â€“ A new class of fluorescent dyes with large Stokes shifts. Dyes and Pigments, 2021, 187, 109107.	3.7	6
65	Luminescence of Agrotextiles Based on Red-Light-Emitting Organic Luminophore and Polypropylene Spunbond Enhances the Growth and Photosynthesis of Vegetable Plants. Frontiers in Plant Science, 2022, 13, 827679.	3.6	6
66	The Effect of Star-Shaped Oligothiophenes with a Carbazole Core on Their Structural and Optical Properties. Nanotechnologies in Russia, 2017, 12, 385-394.	0.7	4
67	p-Flurophenyldicyanovinyl as electron-withdrawing group for highly soluble and thermally stable donorâ€“acceptor small molecules. Journal of Photonics for Energy, 2018, 8, 1.	1.3	4
68	Mechanisms of molecular polarization of bithiophenesilane dendrimers in solutions. Polymer Science - Series A, 2011, 53, 569-577.	1.0	2
69	Optical and electro-optical properties of silicon-contaning thiophene derivatives of star-shaped and dendritic structure. Russian Journal of Applied Chemistry, 2013, 86, 747-755.	0.5	2
70	ULTRAFAST INTRAMOLECULAR DYNAMICS IN NOVEL STAR-SHAPED MOLECULES FOR PHOTOVOLTAIC APPLICATIONS. , 2014, , .		2
71	Solution-processed star-shaped oligomers in normal and inverted organic solar cells. Synthetic Metals, 2016, 215, 229-234.	3.9	2
72	Phase Transitions and Formation of a Monolayer-Type Structure in Thin Oligothiophene Films: Exploration with a Combined In Situ X-ray Diffraction and Electrical Measurements. Nanoscale Research Letters, 2019, 14, 185.	5.7	2

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73	Ultrathin solution-processed single crystals of thiophene-phenylene co-oligomers for organic field-effect devices. , 2017, , .		2
74	Highly electrochemically and thermally stable donorâ€“Ï€â€“acceptor triphenylamine-based hole-transporting homopolymersviaoxidative polymerization. New Journal of Chemistry, 2022, 46, 12311-12317.	2.8	2
75	The photoluminescence kinetics of oligothiophene-phenylenesilane crystalline films. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2012, 67, 409-411.	0.4	1
76	Novel conjugated copolymers with dithienyl and cyclopentadithienyl substituted dicyanoethene acceptor blocks. Mendeleev Communications, 2019, 29, 561-563.	1.6	1
77	Synthesis and characterization of polyacrylonitrile-grafted copolymers based on poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	2.1	1
78	Effect of SiO2 nanoparticles embedded in the electrode layer on the efficiency of organic solar cells. Optical Materials Express, 2021, 11, 1537.	3.0	1
79	Effect of core modification in star-shaped donor-acceptor oligomers on physical properties and photovoltaic performance. , 2017, , .		1
80	In Situ Coupling Applied Voltage and Synchrotron Radiation: Operando Characterization of Transistors. Nanoscale Research Letters, 2022, 17, 22.	5.7	1
81	Synthesis and Aggregation Behavior of Novel Linear and Branched Oligothiopheneâ€Containing Organosilicon Multipods. European Journal of Organic Chemistry, 2022, 2022, .	2.4	1
82	Ultrafast Electron and Hole Dynamics in Novel Conjugated Star-Shaped Molecules. , 2014, , .		0
83	Solar Cells: Ultrafast Charge Generation Pathways in Photovoltaic Blends Based on Novel Starâ€Shaped Conjugated Molecules (Adv. Energy Mater. 7/2015). Advanced Energy Materials, 2015, 5, .	19.5	0
84	Processability: Evaluation of Electron Donor Materials for Solutionâ€Processed Organic Solar Cells via a Novel Figure of Merit (Adv. Energy Mater. 18/2017). Advanced Energy Materials, 2017, 7, .	19.5	0
85	Carbazole-based donor-acceptor small molecules with hexyldicyanovinyl electron-withdrawing groups: synthesis and properties. IOP Conference Series: Materials Science and Engineering, 2019, 525, 012036.	0.6	0
86	Ultrafast Charge Dynamics in Novel Star-Shaped Small Molecules: the Effect of Donor and Acceptor Groups. , 2016, , .		0
87	Optical Properties of Quaterthiophenes and Their Dimers End-Capped with Electron-Withdrawing Hexyl-Dicyanovinyl Groups. DEStech Transactions on Environment Energy and Earth Science, 2019, , .	0.0	0
88	The effectiveness of agrotextile cover with organic photoluminophore in rooting cuttings of Hungarian lilac (Syringa josikaea J. Jacq. ex Rchb.). BIO Web of Conferences, 2022, 42, 01017.	0.2	0