Martin Vala

List of Publications by Year
in descending order

69	812	567281 15	552781 26
papers	citations	h-index	g-index

73	73	73	996
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Printing inks of electroactive polymer PEDOT:PSS: The study of biocompatibility, stability, and electrical properties. Journal of Biomedical Materials Research - Part A, 2018, 106, 1121-1128.	4.0	69
2	Absorption and fluorescence of soluble polar diketo-pyrrolo-pyrroles. Dyes and Pigments, 2011, 91, 269-278.	3.7	65
3	The synthesis, absorption and fluorescence of polar diketo-pyrrolo-pyrroles. Dyes and Pigments, 2009, 82, 102-108.	3.7	60
4	Novel, soluble diphenyl-diketo-pyrrolopyrroles: Experimental and theoretical study. Dyes and Pigments, 2010, 84, 176-182.	3.7	52
5	Comparative Studies of Diphenyl-Diketo-Pyrrolopyrrole Derivatives for Electroluminescence Applications. Journal of Fluorescence, 2008, 18, 1181-6.	2.5	47
6	Theoretical and Experimental Study of Charge Transfer through DNA: Impact of Mercury Mediated T-Hg-T Base Pair. Journal of Physical Chemistry B, 2014, 118, 5374-5381.	2.6	41
7	Adamantane substitutions: a path to high-performing, soluble, versatile and sustainable organic semiconducting materials. Journal of Materials Chemistry C, 2017, 5, 4716-4723.	5.5	39
8	Towards improved efficiency of bulk-heterojunction solar cells using various spinel ferrite magnetic nanoparticles. Organic Electronics, 2016, 39, 118-126.	2.6	29
9	Synthesis, structure, spectral properties and DFT quantum chemical calculations of 4-aminoazobenzene dyes. Effect of intramolecular hydrogen bonding on photoisomerization. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 175, 76-91.	3.9	29
10	Stability and structural aspects of diketopyrrolopyrrole pigment and its N-alkyl derivatives. Dyes and Pigments, 2011, 89, 137-143.	3.7	27
11	Fractalâ€“cantorian geometry of space-time. Chaos, Solitons and Fractals, 2009, 42, 1878-1892.	5.1	19
12	Evaluation and improvement of organic semiconductorsâ€™ biocompatibility towards fibroblasts and cardiomyocytes. Sensors and Actuators B: Chemical, 2018, 260, 418-425.	7.8	19
13	HOMO and LUMO energy levels of N,Nâ€²-dinitrophenyl-substituted polar diketopyrrolopyrroles (DPPs). Dyes and Pigments, 2014, 106, 136-142.	3.7	18
14	Thermal properties of bodies in fractal and cantorian physics. Chaos, Solitons and Fractals, 2005, 25, 941-954.	5.1	16
15	A Molecular Photosensor Based on Photoswitching of Charge Carrier Mobility. Macromolecular Symposia, 2007, 247, 318-325.	0.7	16
16	Stability and physical structure tests of piperidyl and morpholinyl derivatives of diphenyl-diketo-pyrrolopyrroles (DPP). Journal of Thermal Analysis and Calorimetry, 2012, 108, 467-473.	3.6	16
17	Diamond-based electrodes for organic photovoltaic devices. Solar Energy Materials and Solar Cells, 2015, 134, 73-79.	6.2	15
18	Diketopyrrolopyrrole-Based Organic Solar Cells Functionality: The Role of Orbital Energy and Crystallinity. Journal of Physical Chemistry C, 2019, 123, 11447-11463.	3.1	15

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19	Adamantyl side groups boosting the efficiency and thermal stability of organic solid-state fluorescent dyes. Journal of Luminescence, 2016, 175, 94-99.	3.1	12
20	Singlet Fission in Thin Solid Films of Bis(thienyl)diketopyrrolopyrroles. ChemPlusChem, 2020, 85, 2689-2703.	2.8	12
21	Influence of dipolar species on charge transport in poly[2-methoxy-5-(2â€²-ethylhexyloxy)-p-phenylene vinylene]. Polymers for Advanced Technologies, 2006, 17, 673-678.	3.2	11
22	Lightâ€Induced Change of Charge Carrier Mobility in Semiconducting Polymers. Macromolecular Symposia, 2008, 268, 125-128.	0.7	11
23	Morphology and properties of thin films of diketopyrrolopyrrole derivatives. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 148-152.	3.5	11
24	Charge transfer through DNA/DNA duplexes and DNA/RNA hybrids: Complex theoretical and experimental studies. Biophysical Chemistry, 2013, 180-181, 127-134.	2.8	11
25	Model of the influence of energetic disorder on inter-chain charge carrier mobility in poly[2-methoxy-5-(2â€²-ethylhexyloxy)-p-phenylene vinylene]. Polymers for Advanced Technologies, 2009, 20, 263-267.	3.2	10
26	Organic Electrochemical Transistor Microplate for Real-Time Cell Culture Monitoring. Applied Sciences (Switzerland), 2017, 7, 998.	2.5	10
27	Reversible Formation of Charge Carrier Traps in Poly(Phenylenevinylene) Derivative due to the Phototransformation of a Photochromic Additive. Molecular Crystals and Liquid Crystals, 2005, 430, 227-233.	0.9	9
28	Photophysical and Electrochemiluminescence of Coumarinâ€Based Oxazaborines. ChemElectroChem, 2020, 7, 1550-1557.	3.4	9
29	Effect of the Side Chains and Anode Material on Thermal Stability and Performance of Bulk-Heterojunction Solar Cells Using DPP(TBFu)₂Derivatives as Donor Materials. International Journal of Photoenergy, 2015, 2015, 1-9.	2.5	8
30	4-OH coumarin based rotary switches: Tautomeric state and effect of the stator. Dyes and Pigments, 2021, 184, 108861.	3.7	8
31	Diphenylamine end-capped diketopyrrolopyrroles with phenyleneâ€“vinylene conjugation extension. Tetrahedron Letters, 2014, 55, 2829-2834.	1.4	7
32	Effect of the ethynylene linker on the properties and carrier mobility of naphthalene derivatives with hexylbithienyl arms. Synthetic Metals, 2016, 217, 156-171.	3.9	7
33	Thiophene-free diphenyl-amino-stilbene-diketo-pyrrolo-pyrrole derivatives as donors for organic bulk heterojunction solar cells. Chemical Papers, 2016, 70, .	2.2	7
34	Solid-state fluorescence organic materials as a tool for spectral modification of ZnS-based screen-printed thick layer electroluminescence devices. Chemical Papers, 2018, 72, 1677-1684.	2.2	7
35	Greenâ€, Redâ€, and Infraredâ€Emitting Polymorphs of Sterically Hindered Pushâ€“Pull Substituted Stilbenes. Chemistry - A European Journal, 2021, 27, 4341-4348.	3.3	7
36	Near-infrared absorbing hydrogen-bonded dithioketopyrrolopyrrole (DTPP) n-type semiconductors. Dyes and Pigments, 2022, 197, 109884.	3.7	7

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37	Energy versus charge transfer in Ï€-conjugated polymer:fullerene blends. Chemical Physics Letters, 2014, 592, 314-319.	2.6	6
38	Solid-state deep blue and UV fluorescent dyes based on para-bis(2-thienyl)phenylene. Journal of Luminescence, 2015, 167, 222-226.	3.1	6
39	Improved crystallinity of the asymmetrical diketopyrrolopyrrole derivatives by the adamantane substitution. Dyes and Pigments, 2020, 175, 108141.	3.7	6
40	Morphology versus Vertical Phase Segregation in Solvent Annealed Small Molecule Bulk Heterojunction Organic Solar Cells. International Journal of Photoenergy, 2015, 2015, 1-8.	2.5	5
41	UV-cured TiO₂ electron transport layers for printable solar cells. RSC Advances, 2016, 6, 66705-66711.	3.6	5
42	Conductive Polymer PEDOT:PSS-Based Platform for Embryonic Stem-Cell Differentiation. International Journal of Molecular Sciences, 2022, 23, 1107.	4.1	5
43	Photoinduced reversible switching of charge carrier mobility in conjugated polymers. EPJ Applied Physics, 2009, 48, 10401.	0.7	4
44	Design rules for the large two-photon absorption diketopyrrolopyrrole-based quadrupolar symmetrical chromophores. Chemical Papers, 2018, 72, 3033-3042.	2.2	4
45	The influence of transport layers on the photodegradation stability of polymer solar cell structures. Journal of Polymer Engineering, 2014, 34, 113-123.	1.4	2
46	Solution processable diketopyrrolopyrrole semiconductor: towards bio-electronic applications. Chemical Papers, 2018, 72, 1635-1643.	2.2	2
47	White Light AC Electroluminescent Displays. , 2019, , .		2
48	Notes to â€œAn irreducibly simple derivation of the Hausdorff dimension of spacetimeâ€•by M.S. El Naschie. Chaos, Solitons and Fractals, 2009, 42, 532-533.	5.1	1
49	Thin polyphenylene vinylene electrophoretically and spin-coated films â€“ photoelectrical properties. Journal of Physics: Conference Series, 2012, 398, 012056.	0.4	1
50	The Study of the Influence of Deposition Method on Electrical and Optical Properties of PPV Polymer with High Glass Temperature. Journal of Physics: Conference Series, 2012, 398, 012057.	0.4	1
51	Photoelectric characterization of thin vacuum deposited diphenyl-diketo-pyrrolopyrroles films. , 2014, , .		1
52	Reducing Recombination Processes in the Inverted-Solution-Processed Small-Molecule Solar Cells by the Inserted Fullerene Cathode. IEEE Journal of Photovoltaics, 2016, 6, 1051-1054.	2.5	1
53	Optical and Optoelectronic Characterization of Novel Diketopyrrolopyrroles for Organic Electronics and Photonics. Materials Science Forum, 2016, 851, 183-188.	0.3	1
54	Voltage source for AC electroluminescent measurements. , 2017, , .		1

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55	Towards optically responsive smart materials: electronic interactions between polymeric semiconductor and photochromic molecule. Chemical Papers, 2018, 72, 1761-1767.	2.2	1
56	Impedance Spectroscopy Study of Organic Photovoltaic Cells with an Inkjet Printed Hole-Extracting Graphene Oxide Layer. Materials Science Forum, 0, 955, 31-36.	0.3	1
57	Local states in organic materials: charge transport and localization. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1001-1015.	2.9	0
58	Polymer optical sensor based on photochromic switching of charge carrier mobility. , 2007, , .		0
59	Characterization of electrophoretic suspension for thin polymer film deposition. Journal of Physics: Conference Series, 2012, 356, 012040.	0.4	0
60	DNA and RNA Charge Transport Effect of Sequence, Stacking, Structure and Hg Incorporation. Biophysical Journal, 2013, 104, 424a.	0.5	0
61	Aerosol flow homogenization in the spray polyphenylene vinylene thin film deposition. Journal of Physics: Conference Series, 2014, 514, 012006.	0.4	0
62	Vacuum-deposited diphenyl-diketo-pyrrolopyrrole solar cell structures. Journal of Physics: Conference Series, 2016, 700, 012046.	0.4	0
63	Organic Sensor for Cardiomyocytes Research. Materials Science Forum, 2016, 851, 194-198.	0.3	0
64	The Influence of Diketopyrrolopyrrole Chemical Structure on Organic Field-Effect Transistors Performance. Materials Science Forum, 0, 851, 189-193.	0.3	0
65	Measurement of Impedance with Computer Controlled Setup. , 2018, , .		0
66	Diketopyrrolopyrrole: Adjustment of Molecular Properties. , 2018, , .		0
67	Determination of Two-Photon Absorption Cross-Sections in Selected Diketo-Pyrrolo-Pyrroles. Materials Science Forum, 2019, 955, 37-43.	0.3	0
68	Modification of PEDOT:PSS Surface by RGD Peptide. Materials Science Forum, 0, 955, 68-73.	0.3	0
69	Improvement of Performance of Electroluminescent Panel by Reducing the Thickness of Dielectric Layer. Materials Science Forum, 2019, 955, 20-24.	0.3	0