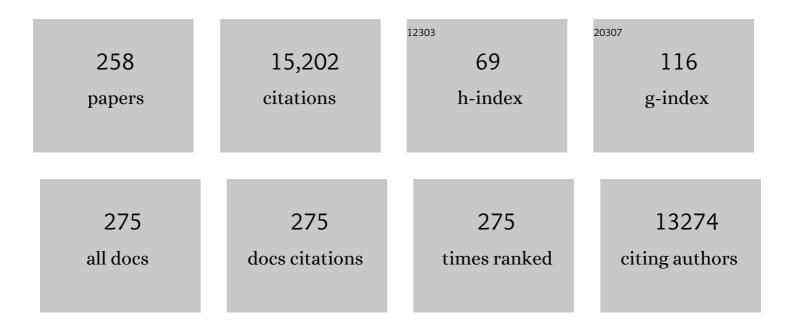
Vladimir Dyakonov

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Charge Transfer in Ternary Solar Cells Employing Two Fullerene Derivatives: Where do Electrons Go?. Israel Journal of Chemistry, 2022, 62, .	1.0	3
2	2D/3D Hybrid Cs ₂ AgBiBr ₆ Double Perovskite Solar Cells: Improved Energy Level Alignment for Higher Contactâ€Selectivity and Large Open Circuit Voltage. Advanced Energy Materials, 2022, 12, 2103215.	10.2	62
3	Photon Echo Polarimetry of Excitons and Biexcitons in a CH ₃ NH ₃ Pbl ₃ Perovskite Single Crystal. ACS Photonics, 2022, 9, 621-629.	3.2	7
4	Spin defects in hexagonal boron nitride for strain sensing on nanopillar arrays. Nanoscale, 2022, 14, 5239-5244.	2.8	17
5	Predicting Solar Cell Performance from Terahertz and Microwave Spectroscopy. Advanced Energy Materials, 2022, 12, .	10.2	40
6	Electron–Nuclear Coherent Coupling and Nuclear Spin Readout through Optically Polarized V _B [–] Spin States in hBN. Nano Letters, 2022, 22, 2718-2724.	4.5	24
7	Geminate and Nongeminate Pathways for Triplet Exciton Formation in Organic Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	22
8	Spin Dynamics of Electrons and Holes Interacting with Nuclei in MAPbI ₃ Perovskite Single Crystals. ACS Photonics, 2022, 9, 1375-1384.	3.2	14
9	Single-crystalline TiO2 nanoparticles for stable and efficient perovskite modules. Nature Nanotechnology, 2022, 17, 598-605.	15.6	121
10	Superradiance of Spin Defects in Silicon Carbide for Maser Applications. Frontiers in Photonics, 2022, 3, .	1.1	4
11	The Landé factors of electrons and holes in lead halide perovskites: universal dependence on the band gap. Nature Communications, 2022, 13, .	5.8	28
12	Identifying carbon as the source of visible single-photon emission from hexagonal boron nitride. Nature Materials, 2021, 20, 321-328.	13.3	210
13	Assigning ionic properties in perovskite solar cells; a unifying transient simulation/experimental study. Sustainable Energy and Fuels, 2021, 5, 3578-3587.	2.5	6
14	Detecting triplet states in opto-electronic and photovoltaic materials and devices by transient optically detected magnetic resonance. Materials Horizons, 2021, 8, 2569-2575.	6.4	3
15	Spin―and Voltageâ€Dependent Emission from Intra―and Intermolecular TADF OLEDs. Advanced Electronic Materials, 2021, 7, 2000702.	2.6	7
16	A temperature-reduced method for the rapid growth of hybrid perovskite single crystals with primary alcohols. CrystEngComm, 2021, 23, 2202-2207.	1.3	9
17	Influence of crystallisation on the structural and optical properties of lead-free Cs ₂ AgBiBr ₆ perovskite crystals. CrystEngComm, 2021, 23, 6848-6854.	1.3	4
18	Room temperature coherent control of spin defects in hexagonal boron nitride. Science Advances, 2021, 7, .	4.7	95

#	Article	IF	CITATIONS
19	Synthesis, Characterization and Photovoltaic Properties of Electronâ€Accepting (11â€Oxoanthra[2,1â€ <i>b</i>]thiophenâ€6â€ylidene)dipropanedinitrileâ€Based Molecules. ChemistrySelect, 6, 6043-6049.	2021,7	0
20	Spin defects in hBN as promising temperature, pressure and magnetic field quantum sensors. Nature Communications, 2021, 12, 4480.	5.8	105
21	Coupling Spin Defects in Hexagonal Boron Nitride to Monolithic Bullseye Cavities. Nano Letters, 2021, 21, 6549-6555.	4.5	49
22	Reduced Recombination Losses in Evaporated Perovskite Solar Cells by Postfabrication Treatment. Solar Rrl, 2021, 5, 2100400.	3.1	5
23	Roadmap on organic–inorganic hybrid perovskite semiconductors and devices. APL Materials, 2021, 9, .	2.2	102
24	Uphill and downhill charge generation from charge transfer to charge separated states in organic solar cells. Journal of Materials Chemistry C, 2021, 9, 14463-14489.	2.7	10
25	Long-lived spin-polarized intermolecular exciplex states in thermally activated delayed fluorescence-based organic light-emitting diodes. Science Advances, 2021, 7, eabj9961.	4.7	7
26	Optically and electrically excited intermediate electronic states in donor:acceptor based OLEDs. Materials Horizons, 2020, 7, 1126-1137.	6.4	33
27	Optoelectronic Properties of Cs ₂ AgBiBr ₆ Thin Films: The Influence of Precursor Stoichiometry. ACS Applied Energy Materials, 2020, 3, 11597-11609.	2.5	27
28	Highly conducting Wurster-type twisted covalent organic frameworks. Chemical Science, 2020, 11, 12843-12853.	3.7	48
29	Initialization and read-out of intrinsic spin defects in a van der Waals crystal at room temperature. Nature Materials, 2020, 19, 540-545.	13.3	260
30	Influence of Irradiation on Defect Spin Coherence in Silicon Carbide. Physical Review Applied, 2020, 13, .	1.5	36
31	On the absence of triplet exciton loss pathways in non-fullerene acceptor based organic solar cells. Materials Horizons, 2020, 7, 1641-1649.	6.4	24
32	Kinetic Modeling of Transient Electroluminescence Reveals TTA as an Efficiency-Limiting Process in Exciplex-Based TADF OLEDs. Journal of Physical Chemistry C, 2020, 124, 25667-25674.	1.5	31
33	Seed crystal free growth of high-quality double cation – double halide perovskite single crystals for optoelectronic applications. Journal of Materials Chemistry C, 2020, 8, 8275-8283.	2.7	7
34	(Invited) Charge-Localization in Doped Semiconducting Carbon Nanotubes Revealed By IR- and EPR Spectroscopy. ECS Meeting Abstracts, 2020, MA2020-01, 717-717.	0.0	0
35	Triplet exciton losses in polymer: fullerene-free acceptor blends. , 2020, , .		0
36	Charge Carriers Are Not Affected by the Relatively Slow-Rotating Methylammonium Cations in Lead Halide Perovskite Thin Films. Journal of Physical Chemistry Letters, 2019, 10, 5128-5134.	2.1	16

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37	Thermally induced degradation of PBDTTT-CT:PCBM based polymer solar cells. Journal Physics D: Applied Physics, 2019, 52, 475501.	1.3	11
38	Efficient Solution Processed CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells with PolyTPD Hole Transport Layer. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2019, 74, 665-672.	0.7	9
39	Getting the Right Twist: Influence of Donor–Acceptor Dihedral Angle on Exciton Kinetics and Singlet–Triplet Gap in Deep Blue Thermally Activated Delayed Fluorescence Emitter. Journal of Physical Chemistry C, 2019, 123, 27778-27784.	1.5	40
40	Unravelling steady-state bulk recombination dynamics in thick efficient vacuum-deposited perovskite solar cells by transient methods. Journal of Materials Chemistry A, 2019, 7, 14712-14722.	5.2	31
41	Excitation and coherent control of spin qudit modes in silicon carbide at room temperature. Nature Communications, 2019, 10, 1678.	5.8	65
42	Favorable Mixing Thermodynamics in Ternary Polymer Blends for Realizing High Efficiency Plastic Solar Cells. Advanced Energy Materials, 2019, 9, 1803394.	10.2	44
43	Minimizing geminate recombination losses in small-molecule-based organic solar cells. Journal of Materials Chemistry C, 2019, 7, 6641-6648.	2.7	5
44	Single-crystal-like optoelectronic-properties of MAPbI ₃ perovskite polycrystalline thin films. Journal of Materials Chemistry A, 2018, 6, 4822-4828.	5.2	46
45	Understanding the Role of Cesium and Rubidium Additives in Perovskite Solar Cells: Trap States, Charge Transport, and Recombination. Advanced Energy Materials, 2018, 8, 1703057.	10.2	184
46	Revisiting lifetimes from transient electrical characterization of thin film solar cells; a capacitive concern evaluated for silicon, organic and perovskite devices. Energy and Environmental Science, 2018, 11, 629-640.	15.6	89
47	Highly Efficient Optical Pumping of Spin Defects in Silicon Carbide for Stimulated Microwave Emission. Physical Review Applied, 2018, 9, .	1.5	16
48	Influence of Fermi Level Alignment with Tin Oxide on the Hysteresis of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 11414-11419.	4.0	79
49	Room-Temperature Level Anticrossing and Cross-Relaxation Spectroscopy of Spin Color Centers in SiC Single Crystals and Nanostructures. Applied Magnetic Resonance, 2018, 49, 85-95.	0.6	8
50	Spin and Optical Properties of Silicon Vacancies in Silicon Carbide â~' A Review. Physica Status Solidi (B): Basic Research, 2018, 255, 1700258.	0.7	52
51	Spin colour centres in SiC as a material platform for sensing and information processing at ambient conditions. EPJ Web of Conferences, 2018, 190, 04001.	0.1	0
52	Polytypism driven zero-field splitting of silicon vacancies in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>6</mml:mn><mml:mi>H-SiC. Physical Review B, 2018, 98, .</mml:mi></mml:mrow></mml:math 	i> ₄/I mml:m	ır aw > < /mml:
53	Photophysics of Deep Blue Acridane- and Benzonitrile-Based Emitter Employing Thermally Activated Delayed Fluorescence. Journal of Physical Chemistry C, 2018, 122, 22796-22801.	1.5	16

54 Defects for quantum information processing in SiC. , 2018, , 211-240.

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55	Creation of silicon vacancy in silicon carbide by proton beam writing toward quantum sensing applications. Journal Physics D: Applied Physics, 2018, 51, 333002.	1.3	39
56	Influence of replacement of Mn by Cr on magnetocaloric properties of quenched NiMn1– <i>x</i> Cr <i>x</i> Ge alloys. Low Temperature Physics, 2018, 44, 775-779.	0.2	6
57	All-optical quantum thermometry based on spin-level cross-relaxation and multicenter entanglement under ambient conditions in SiC. AIP Advances, 2018, 8, 085304.	0.6	6
58	Removing Leakage and Surface Recombination in Planar Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 424-430.	8.8	117
59	Magnetocaloric effect in Ni 2 MnGa single crystal in the vicinity of the martensitic phase transition. Journal of Magnetism and Magnetic Materials, 2017, 430, 16-21.	1.0	17
60	Three-Dimensional Proton Beam Writing of Optically Active Coherent Vacancy Spins in Silicon Carbide. Nano Letters, 2017, 17, 2865-2870.	4.5	87
61	Triplet Excitons in Highly Efficient Solar Cells Based on the Soluble Small Molecule pâ€ÐTS(FBTTh 2) 2. Advanced Energy Materials, 2017, 7, 1602016.	10.2	15
62	Direct Observation of Spin States Involved in Organic Electroluminescence Based on Thermally Activated Delayed Fluorescence. Advanced Optical Materials, 2017, 5, 1600926.	3.6	11
63	Controlling the Electronic Interface Properties in Polymer–Fullerene Bulk Heterojunction Solar Cells. Advances in Polymer Science, 2017, , 293-310.	0.4	1
64	Interplay Between Microscopic Structure and Intermolecular Charge-Transfer Processes in Polymer–Fullerene Bulk Heterojunctions. Advances in Polymer Science, 2017, , 139-155.	0.4	2
65	Creation and Functionalization of Defects in SiC by Proton Beam Writing. Materials Science Forum, 2017, 897, 233-237.	0.3	7
66	Vibrational Spectroscopy of a Low-Band-Gap Donor–Acceptor Copolymer and Blends. Journal of Physical Chemistry C, 2017, 121, 19543-19547.	1.5	2
67	Impact of Interfaces and Laser Repetition Rate on Photocarrier Dynamics in Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 4698-4703.	2.1	13
68	Impact of Tortuosity on Charge-Carrier Transport in Organic Bulk Heterojunction Blends. Physical Review Applied, 2017, 8, .	1.5	15
69	Carbon Nanoforms for Photovoltaics. Advanced Energy Materials, 2017, 7, 1700252.	10.2	4
70	Locking of electron spin coherence above 20 ms in natural silicon carbide. Physical Review B, 2017, 95, .	1.1	93
71	Magnetic and magnetocaloric properties of the La0.9â^'xAgxMn1.1O3 compounds. Low Temperature Physics, 2017, 43, 1190-1195.	0.2	7
72	Improved charge carrier lifetime in planar perovskite solar cells by bromine doping. Scientific Reports, 2016, 6, 39333.	1.6	113

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73	Spin Physics, Spin Chemistry and Spin Technology. Applied Magnetic Resonance, 2016, 47, 655-656.	0.6	Ο
74	All-Optical dc Nanotesla Magnetometry Using Silicon Vacancy Fine Structure in Isotopically Purified Silicon Carbide. Physical Review X, 2016, 6, .	2.8	83
75	An optical quantum magnetometer with submicron resolution based on the level anticrossing phenomenon. Technical Physics Letters, 2016, 42, 618-621.	0.2	2
76	Analysis of Triplet Exciton Loss Pathways in PTB7:PC71BM Bulk Heterojunction Solar Cells. Scientific Reports, 2016, 6, 29158.	1.6	42
77	Optical thermometry based on level anticrossing in silicon carbide. Scientific Reports, 2016, 6, 33301.	1.6	87
78	Spin Centres in SiC for Quantum Technologies. Applied Magnetic Resonance, 2016, 47, 793-812.	0.6	19
79	Magnetic properties of the nanocrystalline DyMnO ₃ . Phase Transitions, 2016, 89, 319-327.	0.6	4
80	High-Precision Angle-Resolved Magnetometry with Uniaxial Quantum Centers in Silicon Carbide. Physical Review Applied, 2015, 4, .	1.5	71
81	Development of methods for orderly growth of nanowires. Journal of Physics: Conference Series, 2015, 661, 012053.	0.3	1
82	Identification of Trap States in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2350-2354.	2.1	204
83	Photoinduced Dynamics of Charge Separation: From Photosynthesis to Polymer–Fullerene Bulk Heterojunctions. Journal of Physical Chemistry B, 2015, 119, 7407-7416.	1.2	48
84	Engineering near-infrared single-photon emitters with optically active spins in ultrapure silicon carbide. Nature Communications, 2015, 6, 7578.	5.8	182
85	Encounter-Limited Charge-Carrier Recombination in Phase-Separated Organic Semiconductor Blends. Physical Review Letters, 2015, 114, 136602.	2.9	92
86	Conducting materials prepared by the oxidation of p-phenylenediamine with p-benzoquinone. Journal of Solid State Electrochemistry, 2015, 19, 2653-2664.	1.2	13
87	The Effect of Diiodooctane on the Charge Carrier Generation in Organic Solar Cells Based on the Copolymer PBDTTT-C. Scientific Reports, 2015, 5, 8286.	1.6	72
88	Charge transfer and triplet states in OPV materials and devices (Presentation Recording). Proceedings of SPIE, 2015, , .	0.8	0
89	Light-induced electron spin resonance study of galvinoxyl-doped P3HT/PCBM bulk heterojunctions. Organic Electronics, 2015, 27, 119-125.	1.4	9
90	Magnetocaloric Effect in La0.8Sr0.2MnO3Film. Acta Physica Polonica A, 2015, 128, 56-58.	0.2	1

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91	Nongeminate recombination in neat P3HT and P3HT:PCBM blend films. Journal of Applied Physics, 2014, 115, .	1.1	58
92	Magnetic and Ferroelectric Ordering in the TbMnO3Film. Acta Physica Polonica A, 2014, 125, 128-130.	0.2	1
93	Effects of characteristic length scales on the exciton dynamics in rubrene single crystals. Physical Review B, 2014, 90, .	1.1	13
94	Distribution of charge carrier transport properties in organic semiconductors with Gaussian disorder. Journal of Applied Physics, 2014, 115, .	1.1	18
95	Exciton decay dynamics controlled by impurity occupation in strongly Mn-doped and partially compensated bulk GaAs. Physical Review B, 2014, 90, .	1.1	2
96	Nongeminate and Geminate Recombination in PTB7:PCBM Solar Cells. Advanced Functional Materials, 2014, 24, 1306-1311.	7.8	142
97	Effect of interfaces on the magnetoelectric properties of Co/PZT/Co heterostructures. Inorganic Materials, 2014, 50, 280-284.	0.2	10
98	Triplet–triplet exciton dynamics in single-walled carbon nanotubes. Nature Photonics, 2014, 8, 139-144.	15.6	57
99	Excitation and recombination dynamics of vacancy-related spin centers in silicon carbide. Journal of Applied Physics, 2014, 115, .	1.1	57
100	Room-temperature quantum microwave emitters based on spin defects in silicon carbide. Nature Physics, 2014, 10, 157-162.	6.5	193
101	Electronic Structure of Fullerene Heterodimer in Bulkâ€Heterojunction Blends. Advanced Energy Materials, 2014, 4, 1301517.	10.2	30
102	EPR of Dy3+ions in YAl3(BO3)4and EuAl3(BO3)4aluminoborates. Low Temperature Physics, 2014, 40, 730-734.	0.2	11
103	Persistent photovoltage in methylammonium lead iodide perovskite solar cells. APL Materials, 2014, 2, .	2.2	86
104	Band bending at the P3HT/ITO interface studied by photoelectron spectroscopy. Organic Electronics, 2014, 15, 1552-1556.	1.4	22
105	Stabilization of aluminum doped zinc oxide nanoparticle suspensions and their application in organic solar cells. Thin Solid Films, 2014, 564, 213-217.	0.8	21
106	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2014, 4, 1400922.	10.2	54
107	Room-temperature near-infrared silicon carbide nanocrystalline emitters based on optically aligned spin defects. Applied Physics Letters, 2014, 105, .	1.5	47
108	Radiative efficiency of lead iodide based perovskite solar cells. Scientific Reports, 2014, 4, 6071.	1.6	283

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109	Magnetic field and temperature sensing with atomic-scale spin defects in silicon carbide. Scientific Reports, 2014, 4, 5303.	1.6	145
110	Effect of Morphological Changes on Presence of Trap States in P3HT:PCBM Solar Cells Studied by Cross-Sectional Energy Filtered TEM and Thermally Stimulated Current Measurements. Journal of Physical Chemistry C, 2013, 117, 23495-23499.	1.5	13
111	Silicon carbide light-emitting diode as a prospective room temperature source for single photons. Scientific Reports, 2013, 3, 1637.	1.6	108
112	Highly-efficient charge separation and polaron delocalization in polymer–fullerene bulk-heterojunctions: a comparative multi-frequency EPR and DFT study. Physical Chemistry Chemical Physics, 2013, 15, 9562.	1.3	135
113	Effect of cobalt layer thickness on the magnetoelectric properties of Co/PbZr0.45Ti0.55O3/Co heterostructures. Inorganic Materials, 2013, 49, 1011-1014.	0.2	12
114	Multiple Reduction of 2,5 \hat{e} Bis(borolyl)thiophene: Isolation of a Negative Bipolaron by Comproportionation. Angewandte Chemie - International Edition, 2013, 52, 12852-12855.	7.2	62
115	Grain size effect on magnetic properties of REMnO3(RE = Pr, Nd). Low Temperature Physics, 2013, 39, 351-356.	0.2	4
116	Direct and charge transfer state mediated photogeneration in polymer–fullerene bulk heterojunction solar cells. Applied Physics Letters, 2012, 100, .	1.5	46
117	Direct detection of photoinduced charge transfer complexes in polymer fullerene blends. Physical Review B, 2012, 85, .	1.1	70
118	Nongeminate Recombination in Planar and Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2012, 2, 1483-1489.	10.2	61
119	Detailed study of N,N′-(diisopropylphenyl)-terrylene-3,4:11,12-bis(dicarboximide) as electron acceptor for solar cells application. Synthetic Metals, 2012, 161, 2669-2676.	2.1	11
120	Investigation of electronic trap states in organic photovoltaic materials by current-based deep level transient spectroscopy. Applied Physics Letters, 2012, 100, 263304.	1.5	31
121	Shockley equation parameters of P3HT:PCBM solar cells determined by transient techniques. Physical Review B, 2012, 86, .	1.1	101
122	Resonant Addressing and Manipulation of Silicon Vacancy Qubits in Silicon Carbide. Physical Review Letters, 2012, 109, 226402.	2.9	148
123	Impact of nongeminate recombination on the performance of pristine and annealed P3HT:PCBM solar cells. Physica Status Solidi - Rapid Research Letters, 2012, 6, 337-339.	1.2	19
124	Charge Density Dependent Nongeminate Recombination in Organic Bulk Heterojunction Solar Cells. Advanced Functional Materials, 2012, 22, 3371-3377.	7.8	121
125	A New Approach for Probing the Mobility and Lifetime of Photogenerated Charge Carriers in Organic Solar Cells Under Real Operating Conditions. Advanced Materials, 2012, 24, 4381-4386.	11.1	113
126	Excitation Dynamics in Low Band Gap Donor–Acceptor Copolymers and Blends. Advanced Energy Materials, 2012, 2, 1477-1482.	10.2	32

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127	An Isolable Radical Anion Based on the Borole Framework. Angewandte Chemie - International Edition, 2012, 51, 2977-2980.	7.2	131
128	Influence of the Grain Size on the Magnetic Properties of TbMnO ₃ . Acta Physica Polonica A, 2012, 121, 785-788.	0.2	4
129	Observation of bi-polarons in blends of conjugated copolymers and fullerene derivatives. Physical Chemistry Chemical Physics, 2011, 13, 16579.	1.3	9
130	Triplet Exciton Generation in Bulk-Heterojunction Solar Cells Based on Endohedral Fullerenes. Journal of the American Chemical Society, 2011, 133, 9088-9094.	6.6	91
131	Reversible and Irreversible Interactions of Poly(3-hexylthiophene) with Oxygen Studied by Spin-Sensitive Methods. Journal of Physical Chemistry B, 2011, 115, 13513-13518.	1.2	88
132	Built-in potential and validity of the Mott-Schottky analysis in organic bulk heterojunction solar cells. Physical Review B, 2011, 84, .	1.1	74
133	Absence of Postnanosecond Charge Carrier Relaxation in Poly(3-hexylthiophene)/Fullerene Blends. Journal of Physical Chemistry Letters, 2011, 2, 1368-1371.	2.1	30
134	Relation of open circuit voltage to charge carrier density in organic bulk heterojunction solar cells. Applied Physics Letters, 2011, 98, .	1.5	86
135	Photoinduced C ₇₀ radical anions in polymer:fullerene blends. Physica Status Solidi - Rapid Research Letters, 2011, 5, 128-130.	1.2	23
136	Binding energy of singlet excitons and charge transfer complexes in MDMOâ€₽PV:PCBM solar cells. Physica Status Solidi - Rapid Research Letters, 2011, 5, 364-366.	1.2	34
137	Influence of Phase Segregation on Recombination Dynamics in Organic Bulkâ€Heterojunction Solar Cells. Advanced Functional Materials, 2011, 21, 1687-1692.	7.8	90
138	Electronic Trap States in Methanofullerenes. Advanced Energy Materials, 2011, 1, 655-660.	10.2	42
139	Printed Paper Photovoltaic Cells. Advanced Energy Materials, 2011, 1, 1018-1022.	10.2	188
140	Polymer–fullerene bulk heterojunction solar cells. Reports on Progress in Physics, 2010, 73, 096401.	8.1	754
141	Organic Bulk-Heterojunction Solar Cells. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1517-1527.	1.9	71
142	Organic Solar Cell Efficiencies Under the Aspect of Reduced Surface Recombination Velocities. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1759-1763.	1.9	81
143	Role of the Charge Transfer State in Organic Donor–Acceptor Solar Cells. Advanced Materials, 2010, 22, 4097-4111.	11.1	631
144	Polymeric Squaraine Dyes as Electron Donors in Bulk Heterojunction Solar Cells. Macromolecular Chemistry and Physics, 2010, 211, 1098-1108.	1.1	60

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145	Effect of doping of zinc oxide on the hole mobility of poly(3-hexylthiophene) in hybrid transistors. Organic Electronics, 2010, 11, 1569-1577.	1.4	14
146	Oxygen doping of P3HT:PCBM blends: Influence on trap states, charge carrier mobility and solar cell performance. Organic Electronics, 2010, 11, 1693-1700.	1.4	262
147	Organic solar cells characterized by dark lock-in thermography. Solar Energy Materials and Solar Cells, 2010, 94, 642-647.	3.0	39
148	Quality control of polymer solar modules by lock-in thermography. Journal of Applied Physics, 2010, 107, 014505.	1.1	48
149	Recombination processes in systems based on doped ionic crystals with impurity-related nanostructures. Journal of Physics Condensed Matter, 2010, 22, 295306.	0.7	6
150	Photocurrent in bulk heterojunction solar cells. Physical Review B, 2010, 81, .	1.1	76
151	Spectroscopic Signatures of Photogenerated Radical Anions in Polymer-[C ₇₀]Fullerene Bulk Heterojunctions. ECS Transactions, 2010, 28, 3-10.	0.3	7
152	Role of Polaron Pair Diffusion and Surface Losses in Organic Semiconductor Devices. Physical Review Letters, 2010, 105, 266602.	2.9	36
153	Spin Signatures of Photogenerated Radical Anions in Polymerâ^'[70]Fullerene Bulk Heterojunctions: High Frequency Pulsed EPR Spectroscopy. Journal of Physical Chemistry B, 2010, 114, 14426-14429.	1.2	72
154	Charge carrier extraction by linearly increasing voltage: Analytic framework and ambipolar transients. Journal of Applied Physics, 2010, 108, .	1.1	88
155	Energetics of excited states in the conjugated polymer poly(3-hexylthiophene). Physical Review B, 2010, 81, .	1.1	167
156	S-shaped current-voltage characteristics of organic solar devices. Physical Review B, 2010, 82, .	1.1	306
157	Synthesis and Electron Transfer Characteristics of a Neutral, Low-Band-Gap, Mixed-Valence Polyradical. Chemistry of Materials, 2010, 22, 6641-6655.	3.2	35
158	Magnetic Properties of the Nanocrystalline DyMnO3Compound. Acta Physica Polonica A, 2010, 117, 607-610.	0.2	9
159	Charge carrier concentration and temperature dependent recombination in polymer-fullerene solar cells. Applied Physics Letters, 2009, 95, 052104.	1.5	90
160	Bulk vs. surface recombination in polymer-fullerene solar cells. Proceedings of SPIE, 2009, , .	0.8	0
161	Fullerene Dimers (C ₆₀ /C ₇₀) for Energy Harvesting. Chemistry - A European Journal, 2009, 15, 13474-13482.	1.7	65
162	The production and structure of submicrometer Eu0.75Fe0.25O films on InSb, Si, and GaAs substrates. Inorganic Materials, 2009, 45, 254-257.	0.2	3

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163	Spin-dependent recombination of defects in bulk ZnO crystals and ZnO nanocrystals as studied by optically detected magnetic resonance. Physica B: Condensed Matter, 2009, 404, 4783-4786.	1.3	10
164	Origin of the Efficient Polaron-Pair Dissociation in Polymer-Fullerene Blends. Physical Review Letters, 2009, 103, 036402.	2.9	311
165	Origin of reduced polaron recombination in organic semiconductor devices. Physical Review B, 2009, 80, .	1.1	141
166	Identification of recombination centers in wide-band-gap crystals and related nanostructures from spin-dependent tunneling afterglow. Physics of the Solid State, 2009, 51, 2437-2445.	0.2	2
167	Polaron recombination in pristine and annealed bulk heterojunction solar cells. Synthetic Metals, 2009, 159, 2345-2347.	2.1	25
168	A "Cyanineâ^'Cyanine―Salt Exhibiting Photovoltaic Properties. Organic Letters, 2009, 11, 4806-4809.	2.4	70
169	Influence of charge carrier mobility on the performance of organic solar cells. Physica Status Solidi - Rapid Research Letters, 2008, 2, 175-177.	1.2	130
170	Trap distribution and the impact of oxygen-induced traps on the charge transport in poly(3-hexylthiophene). Applied Physics Letters, 2008, 93, .	1.5	125
171	Identification of shallow Al donors in Al-doped ZnO nanocrystals: EPR and ENDOR spectroscopy. Physical Review B, 2008, 77, .	1.1	55
172	Bipolar charge transport in poly(3-hexyl thiophene)/methanofullerene blends: A ratio dependent study. Applied Physics Letters, 2008, 93, .	1.5	69
173	Effect of doping- and field-induced charge carrier density on the electron transport in nanocrystalline ZnO. Nanotechnology, 2008, 19, 485701.	1.3	16
174	Lattice distortion effect on structure and on spin ordering of Mn ions inLa1â^'xNdxMnO3+δmanganites. Physical Review B, 2008, 77, .	1.1	8
175	Polaron recombination in pristine and annealed bulk heterojunction solar cells. Applied Physics Letters, 2008, 93, .	1.5	117
176	Polaron Pair Dissociation and Polaron Recombination in Polymer: Fullerene Solar Cells. Materials Research Society Symposia Proceedings, 2007, 1031, 1.	0.1	3
177	Influence of Thermal Annealing on the Electrical Properties of Poly(3-hexylthiophene)-Based Thin Film Diodes. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2007, 62, 609-619.	0.7	10
178	Structural and magnetic properties ofLa1â^'xPrxMnO3+Î′(0⩽x⩽1.0). Physical Review B, 2006, 74, .	1.1	30
179	Bulk and surface spin excitations in thin films of manganites. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1586-1594.	0.8	5
180	Field effect measurements on charge carrier mobilities in various polymer-fullerene blend compositions. Thin Solid Films, 2006, 511-512, 506-511.	0.8	37

#	Article	IF	CITATIONS
181	Investigations of electron injection in a methanofullerene thin film transistor. Journal of Applied Physics, 2006, 100, 073713.	1.1	11
182	Investigations of the effects of tempering and composition dependence on charge carrier field effect mobilities in polymer and fullerene films and blends. Journal of Applied Physics, 2006, 100, 043702.	1.1	40
183	Current-limiting mechanisms in polymer diodes. Journal of Applied Physics, 2006, 99, 024506.	1.1	31
184	Device Applications of Organic Materials. , 2006, , 267-305.		2
185	Charge Carrier Photogeneration and Transport in Polymer-Fullerene Bulk-Heterojunction Solar Cells. , 2006, , 433-450.		0
186	Surface Magnetic Anisotropy of Epitaxial La _{0.7} Mn _{1.3} O _{2.84} Thin Films. Acta Physica Polonica A, 2006, 110, 57-70.	0.2	2
187	Design, synthesis and photovoltaic properties of [60]fullerene based molecular materials. Materials Science and Engineering C, 2005, 25, 835-842.	3.8	24
188	Study of field effect mobility in PCBM films and P3HT:PCBM blends. Solar Energy Materials and Solar Cells, 2005, 87, 149-156.	3.0	122
189	Diphenylmethanofullerenes: New and Efficient Acceptors in Bulk-Heterojunction Solar Cells. Advanced Functional Materials, 2005, 15, 1979-1987.	7.8	151
190	Polymer solar cells with novel fullerene-based acceptor. Thin Solid Films, 2004, 451-452, 43-47.	0.8	46
191	Photogeneration of charge carriers in blends of conjugated polymers and semiconducting nanoparticles. Thin Solid Films, 2004, 451-452, 48-53.	0.8	26
192	Electrical aspects of operation of polymer–fullerene solar cells. Thin Solid Films, 2004, 451-452, 493-497.	0.8	22
193	Organic p-i-n solar cells. Applied Physics A: Materials Science and Processing, 2004, 79, 1-14.	1.1	308
194	Mechanisms controlling the efficiency of polymer solar cells. Applied Physics A: Materials Science and Processing, 2004, 79, 21-25.	1.1	72
195	Influence of electronic transport properties of polymer-fullerene blends on the performance of bulk heterojunction photovoltaic devices. Physica Status Solidi A, 2004, 201, 1332-1341.	1.7	104
196	Effect of Temperature and Illumination on the Electrical Characteristics of Polymer–Fullerene Bulk-Heterojunction Solar Cells. Advanced Functional Materials, 2004, 14, 38-44.	7.8	519
197	Trap-limited hole mobility in semiconducting poly(3-hexylthiophene). Physical Review B, 2004, 70, .	1.1	207
198	Spectroscopy of electronic defect states in Cu(In,Ga)(S,Se) 2 -based heterojunctions and Schottky diodes under damp-heat exposure. Europhysics Letters, 2004, 66, 399-404.	0.7	4

#	Article	IF	CITATIONS
199	Photoinduced charge transfer in composites of conjugated polymers and semiconductor nanocrystals. Nanotechnology, 2004, 15, 163-170.	1.3	80
200	Influence of nanomorphology on the photovoltaic action of polymer–fullerene composites. Nanotechnology, 2004, 15, 1317-1323.	1.3	695
201	Toward highly efficient photogeneration and loss-free charge transport in polymer-fullerene bulk heterojunction solar cells. , 2004, , .		5
202	Deep-levels in stoichiometry-varied Cu(In,Ga)(S,Se)2 solar cells. Thin Solid Films, 2003, 431-432, 163-166.	0.8	2
203	Spin-wave resonance and magnetization studies in La0.7Mn1.3O3 films. Physica Status Solidi A, 2003, 196, 93-96.	1.7	4
204	Neutron diffraction study of crystal and magnetic structure of (La0.7Ca0.3)1–xMn1+xO3 (x = 0, 0.1) systems. Physica Status Solidi (B): Basic Research, 2003, 236, 458-461.	0.7	8
205	Photoinduced Charge Transfer in Bulk Heterojunction Composites. Springer Series in Materials Science, 2003, , 1-56.	0.4	Ο
206	Ferromagnetic resonance in (La0.7Ca0.3)1â^'xMn1+xO3 films. Journal of Applied Physics, 2003, 93, 2100-2106.	1.1	16
207	Electrical and optical design and characterisation of regioregular poly(3-hexylthiophene-2,5diyl)/fullerene-based heterojunction polymer solar cells. Synthetic Metals, 2003, 138, 299-304.	2.1	84
208	Current limiting mechanisms in indium-tin-oxide/poly3-hexylthiophene/aluminum thin film devices. Journal of Applied Physics, 2003, 94, 2440-2448.	1.1	101
209	Temperature dependent characteristics of poly(3 hexylthiophene)-fullerene based heterojunction organic solar cells. Journal of Applied Physics, 2003, 93, 3376-3383.	1.1	249
210	Recombination of triplet excitons and polaron pairs in a derived paraphenylene vinylene pentamer. Physical Review B, 2003, 68, .	1.1	13
211	Band bending independent of surface passivation in ZnO/CdS/Cu(In,Ga)(S,Se)2 heterojunctions and Cr/Cu(In,Ga)(S,Se)2 Schottky contacts. Applied Physics Letters, 2003, 82, 3559-3561.	1.5	10
212	Defect Spectroscopy on Damp-Heat Treated ZnO/CdS/Cu(In,Ga)(S,Se)2/Mo Heterojunction Solar Cells. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2003, 58, 691-702.	0.7	4
213	Charge Transfer and Transport in Polymer-Fullerene Solar Cells. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2002, 57, 995-1000.	0.7	10
214	Electronic Properties of Polymer-Fullerene Solar Cells StudiedWith Light-Induced Electron Spin Resonance and Admittance Spectroscopy. Materials Research Society Symposia Proceedings, 2002, 725, 1.	0.1	3
215	Influence of damp heat testing on the electrical characteristics of Cu(In,Ga)(S,Se)2 solar cells. Thin Solid Films, 2002, 403-404, 325-330.	0.8	27
216	The polymer–fullerene interpenetrating network: one route to a solar cell approach. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 53-60.	1.3	47

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217	High-frequency (95 GHz) electron paramagnetic resonance study of the photoinduced charge transfer in conjugated polymer-fullerene composites. Physical Review B, 2001, 64, .	1.1	85
218	Spectroscopy on polymer-fullerene composites and photovoltaic cells. Synthetic Metals, 2001, 121, 1529-1532.	2.1	9
219	Electrical characterisation of phthalocyanine-fullerene photovoltaic devices. Synthetic Metals, 2001, 121, 1585-1586.	2.1	41
220	A high-frequency light-induced electron spin resonance study of conjugated polymer/fullerene composites. Synthetic Metals, 2001, 124, 99-101.	2.1	5
221	Electrical admittance studies of polymer photovoltaic cells. Synthetic Metals, 2001, 124, 103-105.	2.1	23
222	Electronic Properties of Polymer-Fullerene Solar Cells. Materials Research Society Symposia Proceedings, 2001, 665, 1.	0.1	7
223	Electrical characterization of defects in Cu(In,Ga)Se2 solar cells containing a ZnSe or a CdS buffer layer. Thin Solid Films, 2001, 387, 231-234.	0.8	10
224	Growth and Properties of Potassium Holmium Double Tungstate KHo(WO4)2. Crystal Research and Technology, 2001, 36, 283-287.	0.6	22
225	Self-Organized Networks Based on Conjugated Polymers. Advanced Materials, 2001, 13, 588-591.	11.1	97
226	Self-Organized Networks Based on Conjugated Polymers. , 2001, 13, 588.		3
227	Photoinduced charge carriers in conjugated polymer–fullerene composites studied with light-induced electron-spin resonance. Physical Review B, 1999, 59, 8019-8025.	1.1	150
228	Time resolved photoinduced electron spin resonance studies on conjugated polymer fullerene mixtures in solution. Synthetic Metals, 1999, 101, 356-357.	2.1	4
229	Light-induced ESR studies in conjugated polymer-fullerene composites. Synthetic Metals, 1999, 102, 1241-1242.	2.1	12
230	On the role played by polaron pairs in photophysical processes in semiconducting polymers. Chemical Physics, 1998, 227, 203-217.	0.9	64
231	Investigation of photoexcitations of conjugated polymer/fullerene composites embedded in conventional polymers. Journal of Chemical Physics, 1998, 109, 1185-1195.	1.2	44
232	Studies of photoinduced charge transfer in conjugated polymer-fullerene composites by light-induced ESR. , 1998, , .		1
233	Evidence for triplet interchain polaron pairs and their transformations in polyphenylenevinylene. Physical Review B, 1997, 56, 3852-3862.	1.1	102
234	Evidence for triplet inter-chain polaron pairs in poly(phenylene vinylene) and their transformations. Synthetic Metals, 1997, 84, 483-488.	2.1	7

#	Article	IF	CITATIONS
235	Magnetic resonance in films and photodiodes based on polyâ€(phenylâ€phenyleneâ€vinylene). Journal of Applied Physics, 1996, 79, 1556-1562.	1.1	12
236	Electron spin resonance in PPV-photodiodes: detection via photoinduced current. Chemical Physics, 1994, 189, 687-695.	0.9	30
237	Electroluminescence and photovoltaic effect in PPV Schottky diodes. Journal of Luminescence, 1994, 60-61, 906-911.	1.5	24
238	Transient electroluminescence in poly(p-phenylenevinylene) light-emitting diodes. Synthetic Metals, 1994, 67, 165-168.	2.1	100
239	Electrical and optical characterization of poly(phenylene-vinylene) light emitting diodes. Synthetic Metals, 1993, 54, 427-433.	2.1	160
240	Dynamic nuclear polarization and overhauser shift on C60 — Radical anion salts. Synthetic Metals, 1993, 56, 3214-3219.	2.1	3
241	Magnetic properties of 1,3,5,6-tetraphenyl- and related verdazyls. Synthetic Metals, 1993, 56, 3273-3278.	2.1	10
242	C ₆₀ ⁻ -Tetraphenylphosphonium ⁺ : an Organic Alloy. Europhysics Letters, 1993, 21, 267-271.	0.7	11
243	Overhauser-shift measurements on Si:P near the metal-insulator transition. Physical Review B, 1992, 46, 5008-5011.	1.1	19
244	Optical Detection of magnetic resonance without microwaves via MCD of F-centers in doped alkali halides. Radiation Effects and Defects in Solids, 1991, 119-121, 165-170.	0.4	3
245	Frenkel Defect Formation by Intense UV Light Irradiation in the Absorption Bands of Tl ⁺ ‣ike Ions in Alkali Halides. Physica Status Solidi (B): Basic Research, 1990, 159, K33.	0.7	3
246	EPR Detected via Magnetic Circular Dichroism of Optical Absorption in Irradiated Alkali Halide Crystals Doped with Cadmium. Physica Status Solidi (B): Basic Research, 1988, 147, K171.	0.7	6
247	Spectroscopy on polymer-fullerene photovoltaic cells. , 0, , .		0
248	Damp-heat treatment of Cu(In,Ga)(S,Se)/sub 2/ solar cells. , 0, , .		0
249	Current-voltage characteristics of polymer-fullerene solar cells. , 0, , .		1
250	Atomic-Scale Defects in Silicon Carbide for Quantum Sensing Applications. Materials Science Forum, 0, 821-823, 355-358.	0.3	0
251	Doping Profile in Planar Hybrid Perovskite Solar Cells Identifying Mobile Ions. ACS Applied Energy Materials, 0, , .	2.5	19
252	Transient driftâ€diffusion simulation of the open circuit voltage decay in ionic perovskite solar cells. , 0, , .		0

#	Article	IF	CITATIONS
253	Triplet exciton loss channels in NFA-based OSC: Have we reached the limit of optimization?. , 0, , .		0
254	Understanding the Role of Cesium and Rubidium Additives in Perovskite Solar Cells: Trap States and Charge Carrier Mobility. , 0, , .		1
255	The Influence of Fermi Level Alignment with Tin Oxide on the Hysteresis of Perovskite Solar Cells. , 0, ,		1
256	On the assignment of carrier lifetimes in high absorption coefficient thin film solar cells via electrical transient methods. , 0, , .		0
257	Energetically Trapped Triplet Excitons and their Generation Pathways in Organic Solar Cell Blends based on (Non-)Halogenated PBDB-T and Y Series. , 0, , .		0
258	2D/3D Hybrid Cs2AgBiBr6 Double Perovskite Solar Cells: Improved Energy Level Alignment for Higher Contact-Selectivity and Large Open Circuit Voltage. , 0, , .		0