

# Vladimir Dyakonov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1785237/publications.pdf>

Version: 2024-02-01

258  
papers

15,202  
citations

12303

69  
h-index

20307

116  
g-index

275  
all docs

275  
docs citations

275  
times ranked

13274  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymerâ€“fullerene bulk heterojunction solar cells. Reports on Progress in Physics, 2010, 73, 096401.	8.1	754
2	Influence of nanomorphology on the photovoltaic action of polymerâ€“fullerene composites. Nanotechnology, 2004, 15, 1317-1323.	1.3	695
3	Role of the Charge Transfer State in Organic Donorâ€“Acceptor Solar Cells. Advanced Materials, 2010, 22, 4097-4111.	11.1	631
4	Effect of Temperature and Illumination on the Electrical Characteristics of Polymerâ€“Fullerene Bulk-Heterojunction Solar Cells. Advanced Functional Materials, 2004, 14, 38-44.	7.8	519
5	Origin of the Efficient Polaron-Pair Dissociation in Polymer-Fullerene Blends. Physical Review Letters, 2009, 103, 036402.	2.9	311
6	Organic p-i-n solar cells. Applied Physics A: Materials Science and Processing, 2004, 79, 1-14.	1.1	308
7	S-shaped current-voltage characteristics of organic solar devices. Physical Review B, 2010, 82, .	1.1	306
8	Radiative efficiency of lead iodide based perovskite solar cells. Scientific Reports, 2014, 4, 6071.	1.6	283
9	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
10	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
11	Temperature dependent characteristics of poly(3 hexylthiophene)-fullerene based heterojunction organic solar cells. Journal of Applied Physics, 2003, 93, 3376-3383.	1.1	249
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	Trap-limited hole mobility in semiconducting poly(3-hexylthiophene). Physical Review B, 2004, 70, .	1.1	207
14	Identification of Trap States in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2350-2354.	2.1	204
15	Room-temperature quantum microwave emitters based on spin defects in silicon carbide. Nature Physics, 2014, 10, 157-162.	6.5	193
16	Printed Paper Photovoltaic Cells. Advanced Energy Materials, 2011, 1, 1018-1022.	10.2	188
17	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
18	Engineering near-infrared single-photon emitters with optically active spins in ultrapure silicon carbide. Nature Communications, 2015, 6, 7578.	5.8	182

#	ARTICLE	IF	CITATIONS
19	Energetics of excited states in the conjugated polymer poly(3-hexylthiophene). <i>Physical Review B</i> , 2010, 81, .	1.1	167
20	Electrical and optical characterization of poly(phenylene-vinylene) light emitting diodes. <i>Synthetic Metals</i> , 1993, 54, 427-433.	2.1	160
21	Diphenylmethanofullerenes: New and Efficient Acceptors in Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2005, 15, 1979-1987.	7.8	151
22	Photoinduced charge carriers in conjugated polymer–fullerene composites studied with light-induced electron-spin resonance. <i>Physical Review B</i> , 1999, 59, 8019-8025.	1.1	150
23	Resonant Addressing and Manipulation of Silicon Vacancy Qubits in Silicon Carbide. <i>Physical Review Letters</i> , 2012, 109, 226402.	2.9	148
24	Magnetic field and temperature sensing with atomic-scale spin defects in silicon carbide. <i>Scientific Reports</i> , 2014, 4, 5303.	1.6	145
25	Nongeminate and Geminate Recombination in PTB7:PCBM Solar Cells. <i>Advanced Functional Materials</i> , 2014, 24, 1306-1311.	7.8	142
26	Origin of reduced polaron recombination in organic semiconductor devices. <i>Physical Review B</i> , 2009, 80, .	1.1	141
27	Highly-efficient charge separation and polaron delocalization in polymer–fullerene bulk-heterojunctions: a comparative multi-frequency EPR and DFT study. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9562.	1.3	135
28	An Isolable Radical Anion Based on the Borole Framework. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2977-2980.	7.2	131
29	Influence of charge carrier mobility on the performance of organic solar cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 175-177.	1.2	130
30	Trap distribution and the impact of oxygen-induced traps on the charge transport in poly(3-hexylthiophene). <i>Applied Physics Letters</i> , 2008, 93, .	1.5	125
31	Study of field effect mobility in PCBM films and P3HT:PCBM blends. <i>Solar Energy Materials and Solar Cells</i> , 2005, 87, 149-156.	3.0	122
32	Charge Density Dependent Nongeminate Recombination in Organic Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2012, 22, 3371-3377.	7.8	121
33	Single-crystalline TiO <sub>2</sub> nanoparticles for stable and efficient perovskite modules. <i>Nature Nanotechnology</i> , 2022, 17, 598-605.	15.6	121
34	Polaron recombination in pristine and annealed bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	117
35	Removing Leakage and Surface Recombination in Planar Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017, 2, 424-430.	8.8	117
36	A New Approach for Probing the Mobility and Lifetime of Photogenerated Charge Carriers in Organic Solar Cells Under Real Operating Conditions. <i>Advanced Materials</i> , 2012, 24, 4381-4386.	11.1	113

#	ARTICLE	IF	CITATIONS
37	Improved charge carrier lifetime in planar perovskite solar cells by bromine doping. <i>Scientific Reports</i> , 2016, 6, 39333.	1.6	113
38	Silicon carbide light-emitting diode as a prospective room temperature source for single photons. <i>Scientific Reports</i> , 2013, 3, 1637.	1.6	108
39	Spin defects in hBN as promising temperature, pressure and magnetic field quantum sensors. <i>Nature Communications</i> , 2021, 12, 4480.	5.8	105
40	Influence of electronic transport properties of polymer-fullerene blends on the performance of bulk heterojunction photovoltaic devices. <i>Physica Status Solidi A</i> , 2004, 201, 1332-1341.	1.7	104
41	Evidence for triplet interchain polaron pairs and their transformations in polyphenylenevinylene. <i>Physical Review B</i> , 1997, 56, 3852-3862.	1.1	102
42	Roadmap on organic-inorganic hybrid perovskite semiconductors and devices. <i>APL Materials</i> , 2021, 9, .	2.2	102
43	Current limiting mechanisms in indium-tin-oxide/poly3-hexylthiophene/aluminum thin film devices. <i>Journal of Applied Physics</i> , 2003, 94, 2440-2448.	1.1	101
44	Shockley equation parameters of P3HT:PCBM solar cells determined by transient techniques. <i>Physical Review B</i> , 2012, 86, .	1.1	101
45	Transient electroluminescence in poly(p-phenylenevinylene) light-emitting diodes. <i>Synthetic Metals</i> , 1994, 67, 165-168.	2.1	100
46	Self-Organized Networks Based on Conjugated Polymers. <i>Advanced Materials</i> , 2001, 13, 588-591.	11.1	97
47	Room temperature coherent control of spin defects in hexagonal boron nitride. <i>Science Advances</i> , 2021, 7, .	4.7	95
48	Locking of electron spin coherence above 20 ms in natural silicon carbide. <i>Physical Review B</i> , 2017, 95, .	1.1	93
49	Encounter-Limited Charge-Carrier Recombination in Phase-Separated Organic Semiconductor Blends. <i>Physical Review Letters</i> , 2015, 114, 136602.	2.9	92
50	Triplet Exciton Generation in Bulk-Heterojunction Solar Cells Based on Endohedral Fullerenes. <i>Journal of the American Chemical Society</i> , 2011, 133, 9088-9094.	6.6	91
51	Charge carrier concentration and temperature dependent recombination in polymer-fullerene solar cells. <i>Applied Physics Letters</i> , 2009, 95, 052104.	1.5	90
52	Influence of Phase Segregation on Recombination Dynamics in Organic Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2011, 21, 1687-1692.	7.8	90
53	Revisiting lifetimes from transient electrical characterization of thin film solar cells; a capacitive concern evaluated for silicon, organic and perovskite devices. <i>Energy and Environmental Science</i> , 2018, 11, 629-640.	15.6	89
54	Charge carrier extraction by linearly increasing voltage: Analytic framework and ambipolar transients. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	88

#	ARTICLE	IF	CITATIONS
55	Reversible and Irreversible Interactions of Poly(3-hexylthiophene) with Oxygen Studied by Spin-Sensitive Methods. <i>Journal of Physical Chemistry B</i> , 2011, 115, 13513-13518.	1.2	88
56	Optical thermometry based on level anticrossing in silicon carbide. <i>Scientific Reports</i> , 2016, 6, 33301.	1.6	87
57	Three-Dimensional Proton Beam Writing of Optically Active Coherent Vacancy Spins in Silicon Carbide. <i>Nano Letters</i> , 2017, 17, 2865-2870.	4.5	87
58	Relation of open circuit voltage to charge carrier density in organic bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	86
59	Persistent photovoltage in methylammonium lead iodide perovskite solar cells. <i>APL Materials</i> , 2014, 2, .	2.2	86
60	High-frequency (95 GHz) electron paramagnetic resonance study of the photoinduced charge transfer in conjugated polymer-fullerene composites. <i>Physical Review B</i> , 2001, 64, .	1.1	85
61	Electrical and optical design and characterisation of regioregular poly(3-hexylthiophene-2,5diyl)/fullerene-based heterojunction polymer solar cells. <i>Synthetic Metals</i> , 2003, 138, 299-304.	2.1	84
62	All-Optical dc Nanotesla Magnetometry Using Silicon Vacancy Fine Structure in Isotopically Purified Silicon Carbide. <i>Physical Review X</i> , 2016, 6, .	2.8	83
63	Organic Solar Cell Efficiencies Under the Aspect of Reduced Surface Recombination Velocities. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1759-1763.	1.9	81
64	Photoinduced charge transfer in composites of conjugated polymers and semiconductor nanocrystals. <i>Nanotechnology</i> , 2004, 15, 163-170.	1.3	80
65	Influence of Fermi Level Alignment with Tin Oxide on the Hysteresis of Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 11414-11419.	4.0	79
66	Photocurrent in bulk heterojunction solar cells. <i>Physical Review B</i> , 2010, 81, .	1.1	76
67	Built-in potential and validity of the Mott-Schottky analysis in organic bulk heterojunction solar cells. <i>Physical Review B</i> , 2011, 84, .	1.1	74
68	Mechanisms controlling the efficiency of polymer solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 21-25.	1.1	72
69	Spin Signatures of Photogenerated Radical Anions in Polymer~[70]Fullerene Bulk Heterojunctions: High Frequency Pulsed EPR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14426-14429.	1.2	72
70	The Effect of Diiodooctane on the Charge Carrier Generation in Organic Solar Cells Based on the Copolymer PBDTTT-C. <i>Scientific Reports</i> , 2015, 5, 8286.	1.6	72
71	Organic Bulk-Heterojunction Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1517-1527.	1.9	71
72	High-Precision Angle-Resolved Magnetometry with Uniaxial Quantum Centers in Silicon Carbide. <i>Physical Review Applied</i> , 2015, 4, .	1.5	71

#	ARTICLE	IF	CITATIONS
73	A $\pi$ -Cyanine $\pi$ -Salt Exhibiting Photovoltaic Properties. <i>Organic Letters</i> , 2009, 11, 4806-4809.	2.4	70
74	Direct detection of photoinduced charge transfer complexes in polymer fullerene blends. <i>Physical Review B</i> , 2012, 85, .	1.1	70
75	Bipolar charge transport in poly(3-hexyl thiophene)/methanofullerene blends: A ratio dependent study. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	69
76	Fullerene Dimers (C <sub>60</sub> /C <sub>70</sub> ) for Energy Harvesting. <i>Chemistry - A European Journal</i> , 2009, 15, 13474-13482.	1.7	65
77	Excitation and coherent control of spin qubit modes in silicon carbide at room temperature. <i>Nature Communications</i> , 2019, 10, 1678.	5.8	65
78	On the role played by polaron pairs in photophysical processes in semiconducting polymers. <i>Chemical Physics</i> , 1998, 227, 203-217.	0.9	64
79	Multiple Reduction of 2,5-Bis(boronyl)thiophene: Isolation of a Negative Bipolaron by Comproportionation. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 12852-12855.	7.2	62
80	2D/3D Hybrid Cs <sub>2</sub> AgBiBr <sub>6</sub> Double Perovskite Solar Cells: Improved Energy Level Alignment for Higher Contact Selectivity and Large Open Circuit Voltage. <i>Advanced Energy Materials</i> , 2022, 12, 2103215.	10.2	62
81	Nongeminate Recombination in Planar and Bulk Heterojunction Organic Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 1483-1489.	10.2	61
82	Polymeric Squaraine Dyes as Electron Donors in Bulk Heterojunction Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1098-1108.	1.1	60
83	Nongeminate recombination in neat P3HT and P3HT:PCBM blend films. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	58
84	Triplet-triplet exciton dynamics in single-walled carbon nanotubes. <i>Nature Photonics</i> , 2014, 8, 139-144.	15.6	57
85	Excitation and recombination dynamics of vacancy-related spin centers in silicon carbide. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	57
86	Identification of shallow Al donors in Al-doped ZnO nanocrystals: EPR and ENDOR spectroscopy. <i>Physical Review B</i> , 2008, 77, .	1.1	55
87	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400922.	10.2	54
88	Spin and Optical Properties of Silicon Vacancies in Silicon Carbide - A Review. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700258.	0.7	52
89	Coupling Spin Defects in Hexagonal Boron Nitride to Monolithic Bullseye Cavities. <i>Nano Letters</i> , 2021, 21, 6549-6555.	4.5	49
90	Quality control of polymer solar modules by lock-in thermography. <i>Journal of Applied Physics</i> , 2010, 107, 014505.	1.1	48

#	ARTICLE	IF	CITATIONS
91	Photoinduced Dynamics of Charge Separation: From Photosynthesis to Polymer–Fullerene Bulk Heterojunctions. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7407-7416.	1.2	48
92	Highly conducting Wurster-type twisted covalent organic frameworks. <i>Chemical Science</i> , 2020, 11, 12843-12853.	3.7	48
93	The polymer–fullerene interpenetrating network: one route to a solar cell approach. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 14, 53-60.	1.3	47
94	Room-temperature near-infrared silicon carbide nanocrystalline emitters based on optically aligned spin defects. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	47
95	Polymer solar cells with novel fullerene-based acceptor. <i>Thin Solid Films</i> , 2004, 451-452, 43-47.	0.8	46
96	Direct and charge transfer state mediated photogeneration in polymer–fullerene bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	46
97	Single-crystal-like optoelectronic-properties of MAPbI <sub>3</sub> perovskite polycrystalline thin films. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4822-4828.	5.2	46
98	Investigation of photoexcitations of conjugated polymer/fullerene composites embedded in conventional polymers. <i>Journal of Chemical Physics</i> , 1998, 109, 1185-1195.	1.2	44
99	Favorable Mixing Thermodynamics in Ternary Polymer Blends for Realizing High Efficiency Plastic Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1803394.	10.2	44
100	Electronic Trap States in Methanofullerenes. <i>Advanced Energy Materials</i> , 2011, 1, 655-660.	10.2	42
101	Analysis of Triplet Exciton Loss Pathways in PTB7:PC71BM Bulk Heterojunction Solar Cells. <i>Scientific Reports</i> , 2016, 6, 29158.	1.6	42
102	Electrical characterisation of phthalocyanine-fullerene photovoltaic devices. <i>Synthetic Metals</i> , 2001, 121, 1585-1586.	2.1	41
103	Investigations of the effects of tempering and composition dependence on charge carrier field effect mobilities in polymer and fullerene films and blends. <i>Journal of Applied Physics</i> , 2006, 100, 043702.	1.1	40
104	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. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27778-27784.	1.5	40
105	Predicting Solar Cell Performance from Terahertz and Microwave Spectroscopy. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	40
106	Organic solar cells characterized by dark lock-in thermography. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 642-647.	3.0	39
107	Creation of silicon vacancy in silicon carbide by proton beam writing toward quantum sensing applications. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 333002.	1.3	39
108	Field effect measurements on charge carrier mobilities in various polymer-fullerene blend compositions. <i>Thin Solid Films</i> , 2006, 511-512, 506-511.	0.8	37

#	ARTICLE	IF	CITATIONS
109	Role of Polaron Pair Diffusion and Surface Losses in Organic Semiconductor Devices. <i>Physical Review Letters</i> , 2010, 105, 266602.	2.9	36
110	Influence of Irradiation on Defect Spin Coherence in Silicon Carbide. <i>Physical Review Applied</i> , 2020, 13, .	1.5	36
111	Synthesis and Electron Transfer Characteristics of a Neutral, Low-Band-Gap, Mixed-Valence Polyradical. <i>Chemistry of Materials</i> , 2010, 22, 6641-6655.	3.2	35
112	Binding energy of singlet excitons and charge transfer complexes in MDMOâ€PPV:PCBM solar cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 364-366.	1.2	34
113	Optically and electrically excited intermediate electronic states in donor:acceptor based OLEDs. <i>Materials Horizons</i> , 2020, 7, 1126-1137.	6.4	33
114	Excitation Dynamics in Low Band Gap Donorâ€Acceptor Copolymers and Blends. <i>Advanced Energy Materials</i> , 2012, 2, 1477-1482.	10.2	32
115	Current-limiting mechanisms in polymer diodes. <i>Journal of Applied Physics</i> , 2006, 99, 024506.	1.1	31
116	Investigation of electronic trap states in organic photovoltaic materials by current-based deep level transient spectroscopy. <i>Applied Physics Letters</i> , 2012, 100, 263304.	1.5	31
117	Unravelling steady-state bulk recombination dynamics in thick efficient vacuum-deposited perovskite solar cells by transient methods. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14712-14722.	5.2	31
118	Kinetic Modeling of Transient Electroluminescence Reveals TTA as an Efficiency-Limiting Process in Exciplex-Based TADF OLEDs. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25667-25674.	1.5	31
119	Electron spin resonance in PPV-photodiodes: detection via photoinduced current. <i>Chemical Physics</i> , 1994, 189, 687-695.	0.9	30
120	Structural and magnetic properties of $\text{La}_{1-x}\text{Pr}_x\text{MnO}_3$ ( $0 \leq x \leq 1.0$ ). <i>Physical Review B</i> , 2006, 74, .	1.1	30
121	Absence of Postnanosecond Charge Carrier Relaxation in Poly(3-hexylthiophene)/Fullerene Blends. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 1368-1371.	2.1	30
122	Electronic Structure of Fullerene Heterodimer in Bulkâ€Heterojunction Blends. <i>Advanced Energy Materials</i> , 2014, 4, 1301517.	10.2	30
123	The Landâ© factors of electrons and holes in lead halide perovskites: universal dependence on the band gap. <i>Nature Communications</i> , 2022, 13, .	5.8	28
124	Influence of damp heat testing on the electrical characteristics of $\text{Cu}(\text{In,Ga})(\text{S,Se})_2$ solar cells. <i>Thin Solid Films</i> , 2002, 403-404, 325-330.	0.8	27
125	Optoelectronic Properties of $\text{Cs}_2\text{AgBiBr}_6$ Thin Films: The Influence of Precursor Stoichiometry. <i>ACS Applied Energy Materials</i> , 2020, 3, 11597-11609.	2.5	27
126	Photogeneration of charge carriers in blends of conjugated polymers and semiconducting nanoparticles. <i>Thin Solid Films</i> , 2004, 451-452, 48-53.	0.8	26



#	ARTICLE	IF	CITATIONS
127	Polaron recombination in pristine and annealed bulk heterojunction solar cells. <i>Synthetic Metals</i> , 2009, 159, 2345-2347.	2.1	25
128	Electroluminescence and photovoltaic effect in PPV Schottky diodes. <i>Journal of Luminescence</i> , 1994, 60-61, 906-911.	1.5	24
129	Design, synthesis and photovoltaic properties of [60]fullerene based molecular materials. <i>Materials Science and Engineering C</i> , 2005, 25, 835-842.	3.8	24
130	On the absence of triplet exciton loss pathways in non-fullerene acceptor based organic solar cells. <i>Materials Horizons</i> , 2020, 7, 1641-1649.	6.4	24
131	Electronâ€“Nuclear Coherent Coupling and Nuclear Spin Readout through Optically Polarized $V_{\text{B}}^{\text{sup}}$ Spin States in hBN. <i>Nano Letters</i> , 2022, 22, 2718-2724.	4.5	24
132	Electrical admittance studies of polymer photovoltaic cells. <i>Synthetic Metals</i> , 2001, 124, 103-105.	2.1	23
133	Photoinduced $C_{70}$ radical anions in polymer:fullerene blends. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 128-130.	1.2	23
134	Growth and Properties of Potassium Holmium Double Tungstate $KHo(WO_4)_2$ . <i>Crystal Research and Technology</i> , 2001, 36, 283-287.	0.6	22
135	Electrical aspects of operation of polymerâ€“fullerene solar cells. <i>Thin Solid Films</i> , 2004, 451-452, 493-497.	0.8	22
136	Band bending at the P3HT/ITO interface studied by photoelectron spectroscopy. <i>Organic Electronics</i> , 2014, 15, 1552-1556.	1.4	22
137	Geminate and Nongeminate Pathways for Triplet Exciton Formation in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	22
138	Stabilization of aluminum doped zinc oxide nanoparticle suspensions and their application in organic solar cells. <i>Thin Solid Films</i> , 2014, 564, 213-217.	0.8	21
139	Overhauser-shift measurements on Si:P near the metal-insulator transition. <i>Physical Review B</i> , 1992, 46, 5008-5011.	1.1	19
140	Impact of nongeminate recombination on the performance of pristine and annealed P3HT:PCBM solar cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012, 6, 337-339.	1.2	19
141	Spin Centres in SiC for Quantum Technologies. <i>Applied Magnetic Resonance</i> , 2016, 47, 793-812.	0.6	19
142	Doping Profile in Planar Hybrid Perovskite Solar Cells Identifying Mobile Ions. <i>ACS Applied Energy Materials</i> , 0, , .	2.5	19
143	Distribution of charge carrier transport properties in organic semiconductors with Gaussian disorder. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	18
144	Magnetocaloric effect in $Ni_2MnGa$ single crystal in the vicinity of the martensitic phase transition. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 430, 16-21.	1.0	17

#	ARTICLE	IF	CITATIONS
145	Polytypism driven zero-field splitting of silicon vacancies in $\alpha$ -SiC. <i>Physical Review B</i> , 2018, 98, .		
146	Spin defects in hexagonal boron nitride for strain sensing on nanopillar arrays. <i>Nanoscale</i> , 2022, 14, 5239-5244.	2.8	17
147	Ferromagnetic resonance in $(\text{La}_{0.7}\text{Ca}_{0.3})_{1-x}\text{Mn}_x\text{O}_3$ films. <i>Journal of Applied Physics</i> , 2003, 93, 2100-2106.	1.1	16
148	Effect of doping- and field-induced charge carrier density on the electron transport in nanocrystalline ZnO. <i>Nanotechnology</i> , 2008, 19, 485701.	1.3	16
149	Highly Efficient Optical Pumping of Spin Defects in Silicon Carbide for Stimulated Microwave Emission. <i>Physical Review Applied</i> , 2018, 9, .	1.5	16
150	Photophysics of Deep Blue Acridane- and Benzonitrile-Based Emitter Employing Thermally Activated Delayed Fluorescence. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22796-22801.	1.5	16
151	Charge Carriers Are Not Affected by the Relatively Slow-Rotating Methylammonium Cations in Lead Halide Perovskite Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5128-5134.	2.1	16
152	Triplet Excitons in Highly Efficient Solar Cells Based on the Soluble Small Molecule $\text{p}\alpha\text{EDTS}(\text{FBTTh } 2) 2$ . <i>Advanced Energy Materials</i> , 2017, 7, 1602016.	10.2	15
153	Impact of Tortuosity on Charge-Carrier Transport in Organic Bulk Heterojunction Blends. <i>Physical Review Applied</i> , 2017, 8, .	1.5	15
154	Effect of doping of zinc oxide on the hole mobility of poly(3-hexylthiophene) in hybrid transistors. <i>Organic Electronics</i> , 2010, 11, 1569-1577.	1.4	14
155	Spin Dynamics of Electrons and Holes Interacting with Nuclei in $\text{MAPbI}_3$ Perovskite Single Crystals. <i>ACS Photonics</i> , 2022, 9, 1375-1384.	3.2	14
156	Recombination of triplet excitons and polaron pairs in a derived paraphenylene vinylene pentamer. <i>Physical Review B</i> , 2003, 68, .	1.1	13
157	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. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23495-23499.	1.5	13
158	Effects of characteristic length scales on the exciton dynamics in rubrene single crystals. <i>Physical Review B</i> , 2014, 90, .	1.1	13
159	Conducting materials prepared by the oxidation of p-phenylenediamine with p-benzoquinone. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 2653-2664.	1.2	13
160	Impact of Interfaces and Laser Repetition Rate on Photocarrier Dynamics in Lead Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4698-4703.	2.1	13
161	Magnetic resonance in films and photodiodes based on poly( $\alpha$ -phenylenevinylene). <i>Journal of Applied Physics</i> , 1996, 79, 1556-1562.	1.1	12
162	Light-induced ESR studies in conjugated polymer-fullerene composites. <i>Synthetic Metals</i> , 1999, 102, 1241-1242.	2.1	12

#	ARTICLE	IF	CITATIONS
163	Effect of cobalt layer thickness on the magnetoelectric properties of Co/PbZr <sub>0.45</sub> Ti <sub>0.55</sub> O <sub>3</sub> /Co heterostructures. <i>Inorganic Materials</i> , 2013, 49, 1011-1014.	0.2	12
164	C <sub>60</sub> -Tetraphenylphosphonium <sup>+</sup> : an Organic Alloy. <i>Europhysics Letters</i> , 1993, 21, 267-271.	0.7	11
165	Investigations of electron injection in a methanofullerene thin film transistor. <i>Journal of Applied Physics</i> , 2006, 100, 073713.	1.1	11
166	Detailed study of N,N'-diisopropylphenyl-terrylene-3,4:11,12-bis(dicarboximide) as electron acceptor for solar cells application. <i>Synthetic Metals</i> , 2012, 161, 2669-2676.	2.1	11
167	EPR of Dy <sup>3+</sup> ions in YAl <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> and EuAl <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> aluminoborates. <i>Low Temperature Physics</i> , 2014, 40, 730-734.	0.2	11
168	Direct Observation of Spin States Involved in Organic Electroluminescence Based on Thermally Activated Delayed Fluorescence. <i>Advanced Optical Materials</i> , 2017, 5, 1600926.	3.6	11
169	Thermally induced degradation of PBDTTT-CT:PCBM based polymer solar cells. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 475501.	1.3	11
170	Magnetic properties of 1,3,5,6-tetraphenyl- and related verdazyls. <i>Synthetic Metals</i> , 1993, 56, 3273-3278.	2.1	10
171	Electrical characterization of defects in Cu(In,Ga)Se <sub>2</sub> solar cells containing a ZnSe or a CdS buffer layer. <i>Thin Solid Films</i> , 2001, 387, 231-234.	0.8	10
172	Charge Transfer and Transport in Polymer-Fullerene Solar Cells. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2002, 57, 995-1000.	0.7	10
173	Band bending independent of surface passivation in ZnO/CdS/Cu(In,Ga)(S,Se) <sub>2</sub> heterojunctions and Cr/Cu(In,Ga)(S,Se) <sub>2</sub> Schottky contacts. <i>Applied Physics Letters</i> , 2003, 82, 3559-3561.	1.5	10
174	Influence of Thermal Annealing on the Electrical Properties of Poly(3-hexylthiophene)-Based Thin Film Diodes. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2007, 62, 609-619.	0.7	10
175	Spin-dependent recombination of defects in bulk ZnO crystals and ZnO nanocrystals as studied by optically detected magnetic resonance. <i>Physica B: Condensed Matter</i> , 2009, 404, 4783-4786.	1.3	10
176	Effect of interfaces on the magnetoelectric properties of Co/PZT/Co heterostructures. <i>Inorganic Materials</i> , 2014, 50, 280-284.	0.2	10
177	Uphill and downhill charge generation from charge transfer to charge separated states in organic solar cells. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14463-14489.	2.7	10
178	Spectroscopy on polymer-fullerene composites and photovoltaic cells. <i>Synthetic Metals</i> , 2001, 121, 1529-1532.	2.1	9
179	Observation of bi-polarons in blends of conjugated copolymers and fullerene derivatives. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 16579.	1.3	9
180	Light-induced electron spin resonance study of galvinoxyl-doped P3HT/PCBM bulk heterojunctions. <i>Organic Electronics</i> , 2015, 27, 119-125.	1.4	9

#	ARTICLE	IF	CITATIONS
181	Efficient Solution Processed CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Solar Cells with PolyTPD Hole Transport Layer. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2019, 74, 665-672.	0.7	9
182	A temperature-reduced method for the rapid growth of hybrid perovskite single crystals with primary alcohols. CrystEngComm, 2021, 23, 2202-2207.	1.3	9
183	Magnetic Properties of the Nanocrystalline DyMnO <sub>3</sub> Compound. Acta Physica Polonica A, 2010, 117, 607-610.	0.2	9
184	Neutron diffraction study of crystal and magnetic structure of (La <sub>0.7</sub> Ca <sub>0.3</sub> ) <sub>1-x</sub> Mn <sub>1+x</sub> O <sub>3</sub> (x = 0, 0.1) systems. Physica Status Solidi (B): Basic Research, 2003, 236, 458-461.	0.7	8
185	Lattice distortion effect on structure and on spin ordering of Mn ions in La <sup>1-x</sup> Nd <sub>x</sub> MnO <sub>3</sub> +Îmanganites. Physical Review B, 2008, 77, .	1.1	8
186	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
187	Evidence for triplet inter-chain polaron pairs in poly(phenylene vinylene) and their transformations. Synthetic Metals, 1997, 84, 483-488.	2.1	7
188	Electronic Properties of Polymer-Fullerene Solar Cells. Materials Research Society Symposia Proceedings, 2001, 665, 1.	0.1	7
189	Spectroscopic Signatures of Photogenerated Radical Anions in Polymer-[C <sub>70</sub> ]Fullerene Bulk Heterojunctions. ECS Transactions, 2010, 28, 3-10.	0.3	7
190	Creation and Functionalization of Defects in SiC by Proton Beam Writing. Materials Science Forum, 2017, 897, 233-237.	0.3	7
191	Magnetic and magnetocaloric properties of the La <sub>0.9</sub> <sup>1-x</sup> Ag <sub>x</sub> Mn <sub>1.1</sub> O <sub>3</sub> compounds. Low Temperature Physics, 2017, 43, 1190-1195.	0.2	7
192	Spin- and Voltage-Dependent Emission from Intra- and Intermolecular TADF OLEDs. Advanced Electronic Materials, 2021, 7, 2000702.	2.6	7
193	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
194	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
195	Photon Echo Polarimetry of Excitons and Biexcitons in a CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Single Crystal. ACS Photonics, 2022, 9, 621-629.	3.2	7
196	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
197	Recombination processes in systems based on doped ionic crystals with impurity-related nanostructures. Journal of Physics Condensed Matter, 2010, 22, 295306.	0.7	6
198	Influence of replacement of Mn by Cr on magnetocaloric properties of quenched NiMn <sub>1-x</sub> Cr <sub>x</sub> Ge alloys. Low Temperature Physics, 2018, 44, 775-779.	0.2	6

#	ARTICLE	IF	CITATIONS
199	All-optical quantum thermometry based on spin-level cross-relaxation and multicenter entanglement under ambient conditions in SiC. <i>AIP Advances</i> , 2018, 8, 085304.	0.6	6
200	Assigning ionic properties in perovskite solar cells; a unifying transient simulation/experimental study. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3578-3587.	2.5	6
201	A high-frequency light-induced electron spin resonance study of conjugated polymer/fullerene composites. <i>Synthetic Metals</i> , 2001, 124, 99-101.	2.1	5
202	Toward highly efficient photogeneration and loss-free charge transport in polymer-fullerene bulk heterojunction solar cells. , 2004, , .		5
203	Bulk and surface spin excitations in thin films of manganites. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 1586-1594.	0.8	5
204	Defects for quantum information processing in SiC. , 2018, , 211-240.		5
205	Minimizing geminate recombination losses in small-molecule-based organic solar cells. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6641-6648.	2.7	5
206	Reduced Recombination Losses in Evaporated Perovskite Solar Cells by Postfabrication Treatment. <i>Solar Rrl</i> , 2021, 5, 2100400.	3.1	5
207	Time resolved photoinduced electron spin resonance studies on conjugated polymer fullerene mixtures in solution. <i>Synthetic Metals</i> , 1999, 101, 356-357.	2.1	4
208	Spin-wave resonance and magnetization studies in La <sub>0.7</sub> Mn <sub>1.3</sub> O <sub>3</sub> films. <i>Physica Status Solidi A</i> , 2003, 196, 93-96.	1.7	4
209	Defect Spectroscopy on Damp-Heat Treated ZnO/CdS/Cu(In,Ga)(S,Se) <sub>2</sub> /Mo Heterojunction Solar Cells. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2003, 58, 691-702.	0.7	4
210	Spectroscopy of electronic defect states in Cu(In,Ga)(S,Se) <sub>2</sub> -based heterojunctions and Schottky diodes under damp-heat exposure. <i>Europhysics Letters</i> , 2004, 66, 399-404.	0.7	4
211	Grain size effect on magnetic properties of RE <sub>2</sub> MnO <sub>3</sub> (RE = Pr, Nd). <i>Low Temperature Physics</i> , 2013, 39, 351-356.	0.2	4
212	Magnetic properties of the nanocrystalline DyMnO <sub>3</sub> . <i>Phase Transitions</i> , 2016, 89, 319-327.	0.6	4
213	Carbon Nanoforms for Photovoltaics. <i>Advanced Energy Materials</i> , 2017, 7, 1700252.	10.2	4
214	Influence of crystallisation on the structural and optical properties of lead-free Cs <sub>2</sub> AgBiBr <sub>6</sub> perovskite crystals. <i>CrystEngComm</i> , 2021, 23, 6848-6854.	1.3	4
215	Influence of the Grain Size on the Magnetic Properties of TbMnO <sub>3</sub> . <i>Acta Physica Polonica A</i> , 2012, 121, 785-788.	0.2	4
216	Superradiance of Spin Defects in Silicon Carbide for Maser Applications. <i>Frontiers in Photonics</i> , 2022, 3, .	1.1	4

#	ARTICLE	IF	CITATIONS
217	Frenkel Defect Formation by Intense UV Light Irradiation in the Absorption Bands of Tl <sup>+</sup> -Like Ions in Alkali Halides. <i>Physica Status Solidi (B): Basic Research</i> , 1990, 159, K33.	0.7	3
218	Optical Detection of magnetic resonance without microwaves via MCD of F-centers in doped alkali halides. <i>Radiation Effects and Defects in Solids</i> , 1991, 119-121, 165-170.	0.4	3
219	Dynamic nuclear polarization and overhauser shift on C60 <sup>-</sup> Radical anion salts. <i>Synthetic Metals</i> , 1993, 56, 3214-3219.	2.1	3
220	Electronic Properties of Polymer-Fullerene Solar Cells Studied With Light-Induced Electron Spin Resonance and Admittance Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 2002, 725, 1.	0.1	3
221	Polaron Pair Dissociation and Polaron Recombination in Polymer: Fullerene Solar Cells. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1031, 1.	0.1	3
222	The production and structure of submicrometer Eu <sub>0.75</sub> Fe <sub>0.25</sub> O films on InSb, Si, and GaAs substrates. <i>Inorganic Materials</i> , 2009, 45, 254-257.	0.2	3
223	Detecting triplet states in opto-electronic and photovoltaic materials and devices by transient optically detected magnetic resonance. <i>Materials Horizons</i> , 2021, 8, 2569-2575.	6.4	3
224	Self-Organized Networks Based on Conjugated Polymers. , 2001, 13, 588.		3
225	Charge Transfer in Ternary Solar Cells Employing Two Fullerene Derivatives: Where do Electrons Go?. <i>Israel Journal of Chemistry</i> , 2022, 62, .	1.0	3
226	Deep-levels in stoichiometry-varied Cu(In,Ga)(S,Se) <sub>2</sub> solar cells. <i>Thin Solid Films</i> , 2003, 431-432, 163-166.	0.8	2
227	Device Applications of Organic Materials. , 2006, , 267-305.		2
228	Identification of recombination centers in wide-band-gap crystals and related nanostructures from spin-dependent tunneling afterglow. <i>Physics of the Solid State</i> , 2009, 51, 2437-2445.	0.2	2
229	Exciton decay dynamics controlled by impurity occupation in strongly Mn-doped and partially compensated bulk GaAs. <i>Physical Review B</i> , 2014, 90, .	1.1	2
230	An optical quantum magnetometer with submicron resolution based on the level anticrossing phenomenon. <i>Technical Physics Letters</i> , 2016, 42, 618-621.	0.2	2
231	Interplay Between Microscopic Structure and Intermolecular Charge-Transfer Processes in Polymer-Fullerene Bulk Heterojunctions. <i>Advances in Polymer Science</i> , 2017, , 139-155.	0.4	2
232	Vibrational Spectroscopy of a Low-Band-Gap Donor-Acceptor Copolymer and Blends. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19543-19547.	1.5	2
233	Surface Magnetic Anisotropy of Epitaxial La <sub>0.7</sub> Mn <sub>1.3</sub> O <sub>2.84</sub> Thin Films. <i>Acta Physica Polonica A</i> , 2006, 110, 57-70.	0.2	2
234	Studies of photoinduced charge transfer in conjugated polymer-fullerene composites by light-induced ESR. , 1998, , .		1

#	ARTICLE	IF	CITATIONS
235	Current-voltage characteristics of polymer-fullerene solar cells. , 0, , .		1
236	Magnetic and Ferroelectric Ordering in the TbMnO <sub>3</sub> Film. Acta Physica Polonica A, 2014, 125, 128-130.	0.2	1
237	Development of methods for orderly growth of nanowires. Journal of Physics: Conference Series, 2015, 661, 012053.	0.3	1
238	Controlling the Electronic Interface Properties in Polymer-Fullerene Bulk Heterojunction Solar Cells. Advances in Polymer Science, 2017, , 293-310.	0.4	1
239	Magnetocaloric Effect in La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3</sub> Film. Acta Physica Polonica A, 2015, 128, 56-58.	0.2	1
240	Understanding the Role of Cesium and Rubidium Additives in Perovskite Solar Cells: Trap States and Charge Carrier Mobility. , 0, , .		1
241	The Influence of Fermi Level Alignment with Tin Oxide on the Hysteresis of Perovskite Solar Cells. , 0, , .		1
242	Spectroscopy on polymer-fullerene photovoltaic cells. , 0, , .		0
243	Damp-heat treatment of Cu(In,Ga)(S,Se)/sub 2/ solar cells. , 0, , .		0
244	Photoinduced Charge Transfer in Bulk Heterojunction Composites. Springer Series in Materials Science, 2003, , 1-56.	0.4	0
245	Charge Carrier Photogeneration and Transport in Polymer-Fullerene Bulk-Heterojunction Solar Cells. , 2006, , 433-450.		0
246	Bulk vs. surface recombination in polymer-fullerene solar cells. Proceedings of SPIE, 2009, , .	0.8	0
247	Charge transfer and triplet states in OPV materials and devices (Presentation Recording). Proceedings of SPIE, 2015, , .	0.8	0
248	Atomic-Scale Defects in Silicon Carbide for Quantum Sensing Applications. Materials Science Forum, 0, 821-823, 355-358.	0.3	0
249	Spin Physics, Spin Chemistry and Spin Technology. Applied Magnetic Resonance, 2016, 47, 655-656.	0.6	0
250	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
251	Transient drift-diffusion simulation of the open circuit voltage decay in ionic perovskite solar cells. , 0, , .		0
252	Triplet exciton loss channels in NFA-based OSC: Have we reached the limit of optimization?. , 0, , .		0

#	ARTICLE	IF	CITATIONS
253	Synthesis, Characterization and Photovoltaic Properties of Electron-Accepting (11'-Oxoanthra[2,1-b']thiophen-6-ylidene)dipropandinitrile-Based Molecules. ChemistrySelect, 2021, 7, 6, 6043-6049.		0
254	On the assignment of carrier lifetimes in high absorption coefficient thin film solar cells via electrical transient methods. , 0, , .		0
255	(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
256	Triplet exciton losses in polymer: fullerene-free acceptor blends. , 2020, , .		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 Cs <sub>2</sub> AgBiBr <sub>6</sub> Double Perovskite Solar Cells: Improved Energy Level Alignment for Higher Contact-Selectivity and Large Open Circuit Voltage. , 0, , .		0