

# Vladimir Dyakonov

## List of Publications by Year in descending order

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258  
papers

15,202  
citations

12330

69  
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20358

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.	20.1	754
2	Influence of nanomorphology on the photovoltaic action of polymerâ€“fullerene composites. Nanotechnology, 2004, 15, 1317-1323.	2.6	695
3	Role of the Charge Transfer State in Organic Donorâ€“Acceptor Solar Cells. Advanced Materials, 2010, 22, 4097-4111.	21.0	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.	14.9	519
5	Origin of the Efficient Polaron-Pair Dissociation in Polymer-Fullerene Blends. Physical Review Letters, 2009, 103, 036402.	7.8	311
6	Organic p-i-n solar cells. Applied Physics A: Materials Science and Processing, 2004, 79, 1-14.	2.3	308
7	S-shaped current-voltage characteristics of organic solar devices. Physical Review B, 2010, 82, .	3.2	306
8	Radiative efficiency of lead iodide based perovskite solar cells. Scientific Reports, 2014, 4, 6071.	3.3	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.	2.6	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.	27.5	260
11	Temperature dependent characteristics of poly(3 hexylthiophene)-fullerene based heterojunction organic solar cells. Journal of Applied Physics, 2003, 93, 3376-3383.	2.5	249
12	Identifying carbon as the source of visible single-photon emission from hexagonal boron nitride. Nature Materials, 2021, 20, 321-328.	27.5	210
13	Trap-limited hole mobility in semiconducting poly(3-hexylthiophene). Physical Review B, 2004, 70, .	3.2	207
14	Identification of Trap States in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2350-2354.	4.6	204
15	Room-temperature quantum microwave emitters based on spin defects in silicon carbide. Nature Physics, 2014, 10, 157-162.	16.7	193
16	Printed Paper Photovoltaic Cells. Advanced Energy Materials, 2011, 1, 1018-1022.	19.5	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.	19.5	184
18	Engineering near-infrared single-photon emitters with optically active spins in ultrapure silicon carbide. Nature Communications, 2015, 6, 7578.	12.8	182

#	ARTICLE	IF	CITATIONS
19	Energetics of excited states in the conjugated polymer poly(3-hexylthiophene). <i>Physical Review B</i> , 2010, 81, .	3.2	167
20	Electrical and optical characterization of poly(phenylene-vinylene) light emitting diodes. <i>Synthetic Metals</i> , 1993, 54, 427-433.	3.9	160
21	Diphenylmethanofullerenes: New and Efficient Acceptors in Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2005, 15, 1979-1987.	14.9	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.	3.2	150
23	Resonant Addressing and Manipulation of Silicon Vacancy Qubits in Silicon Carbide. <i>Physical Review Letters</i> , 2012, 109, 226402.	7.8	148
24	Magnetic field and temperature sensing with atomic-scale spin defects in silicon carbide. <i>Scientific Reports</i> , 2014, 4, 5303.	3.3	145
25	Nongeminate and Geminate Recombination in PTB7:PCBM Solar Cells. <i>Advanced Functional Materials</i> , 2014, 24, 1306-1311.	14.9	142
26	Origin of reduced polaron recombination in organic semiconductor devices. <i>Physical Review B</i> , 2009, 80, .	3.2	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.	2.8	135
28	An Isolable Radical Anion Based on the Borole Framework. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 2977-2980.	13.8	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.	2.4	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, .	3.3	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.	6.2	122
32	Charge Density Dependent Nongeminate Recombination in Organic Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2012, 22, 3371-3377.	14.9	121
33	Single-crystalline TiO <sub>2</sub> nanoparticles for stable and efficient perovskite modules. <i>Nature Nanotechnology</i> , 2022, 17, 598-605.	31.5	121
34	Polaron recombination in pristine and annealed bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	117
35	Removing Leakage and Surface Recombination in Planar Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017, 2, 424-430.	17.4	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.	21.0	113

#	ARTICLE	IF	CITATIONS
37	Improved charge carrier lifetime in planar perovskite solar cells by bromine doping. <i>Scientific Reports</i> , 2016, 6, 39333.	3.3	113
38	Silicon carbide light-emitting diode as a prospective room temperature source for single photons. <i>Scientific Reports</i> , 2013, 3, 1637.	3.3	108
39	Spin defects in hBN as promising temperature, pressure and magnetic field quantum sensors. <i>Nature Communications</i> , 2021, 12, 4480.	12.8	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.	3.2	102
42	Roadmap on organic-inorganic hybrid perovskite semiconductors and devices. <i>APL Materials</i> , 2021, 9, .	5.1	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.	2.5	101
44	Shockley equation parameters of P3HT:PCBM solar cells determined by transient techniques. <i>Physical Review B</i> , 2012, 86, .	3.2	101
45	Transient electroluminescence in poly(p-phenylenevinylene) light-emitting diodes. <i>Synthetic Metals</i> , 1994, 67, 165-168.	3.9	100
46	Self-Organized Networks Based on Conjugated Polymers. <i>Advanced Materials</i> , 2001, 13, 588-591.	21.0	97
47	Room temperature coherent control of spin defects in hexagonal boron nitride. <i>Science Advances</i> , 2021, 7, .	10.3	95
48	Locking of electron spin coherence above 20 ms in natural silicon carbide. <i>Physical Review B</i> , 2017, 95, .	3.2	93
49	Encounter-Limited Charge-Carrier Recombination in Phase-Separated Organic Semiconductor Blends. <i>Physical Review Letters</i> , 2015, 114, 136602.	7.8	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.	13.7	91
51	Charge carrier concentration and temperature dependent recombination in polymer-fullerene solar cells. <i>Applied Physics Letters</i> , 2009, 95, 052104.	3.3	90
52	Influence of Phase Segregation on Recombination Dynamics in Organic Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2011, 21, 1687-1692.	14.9	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.	30.8	89
54	Charge carrier extraction by linearly increasing voltage: Analytic framework and ambipolar transients. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	88

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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.	2.6	88
56	Optical thermometry based on level anticrossing in silicon carbide. <i>Scientific Reports</i> , 2016, 6, 33301.	3.3	87
57	Three-Dimensional Proton Beam Writing of Optically Active Coherent Vacancy Spins in Silicon Carbide. <i>Nano Letters</i> , 2017, 17, 2865-2870.	9.1	87
58	Relation of open circuit voltage to charge carrier density in organic bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	86
59	Persistent photovoltage in methylammonium lead iodide perovskite solar cells. <i>APL Materials</i> , 2014, 2, .	5.1	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, .	3.2	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.	3.9	84
62	All-Optical dc Nanotesla Magnetometry Using Silicon Vacancy Fine Structure in Isotopically Purified Silicon Carbide. <i>Physical Review X</i> , 2016, 6, .	8.9	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.	2.9	81
64	Photoinduced charge transfer in composites of conjugated polymers and semiconductor nanocrystals. <i>Nanotechnology</i> , 2004, 15, 163-170.	2.6	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.	8.0	79
66	Photocurrent in bulk heterojunction solar cells. <i>Physical Review B</i> , 2010, 81, .	3.2	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, .	3.2	74
68	Mechanisms controlling the efficiency of polymer solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 21-25.	2.3	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.	2.6	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.	3.3	72
71	Organic Bulk-Heterojunction Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1517-1527.	2.9	71
72	High-Precision Angle-Resolved Magnetometry with Uniaxial Quantum Centers in Silicon Carbide. <i>Physical Review Applied</i> , 2015, 4, .	3.8	71

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73	A $\pi$ -Cyanine $\pi$ -Cyanine $\pi$ -Salt Exhibiting Photovoltaic Properties. <i>Organic Letters</i> , 2009, 11, 4806-4809.	4.6	70
74	Direct detection of photoinduced charge transfer complexes in polymer fullerene blends. <i>Physical Review B</i> , 2012, 85, .	3.2	70
75	Bipolar charge transport in poly(3-hexyl thiophene)/methanofullerene blends: A ratio dependent study. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	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.	3.3	65
77	Excitation and coherent control of spin qubit modes in silicon carbide at room temperature. <i>Nature Communications</i> , 2019, 10, 1678.	12.8	65
78	On the role played by polaron pairs in photophysical processes in semiconducting polymers. <i>Chemical Physics</i> , 1998, 227, 203-217.	1.9	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.	13.8	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.	19.5	62
81	Nongeminate Recombination in Planar and Bulk Heterojunction Organic Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 1483-1489.	19.5	61
82	Polymeric Squaraine Dyes as Electron Donors in Bulk Heterojunction Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2010, 211, 1098-1108.	2.2	60
83	Nongeminate recombination in neat P3HT and P3HT:PCBM blend films. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	58
84	Triplet $\pi$ -triplet exciton dynamics in single-walled carbon nanotubes. <i>Nature Photonics</i> , 2014, 8, 139-144.	31.4	57
85	Excitation and recombination dynamics of vacancy-related spin centers in silicon carbide. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	57
86	Identification of shallow Al donors in Al-doped ZnO nanocrystals: EPR and ENDOR spectroscopy. <i>Physical Review B</i> , 2008, 77, .	3.2	55
87	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400922.	19.5	54
88	Spin and Optical Properties of Silicon Vacancies in Silicon Carbide $\pi$ A Review. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1700258.	1.5	52
89	Coupling Spin Defects in Hexagonal Boron Nitride to Monolithic Bullseye Cavities. <i>Nano Letters</i> , 2021, 21, 6549-6555.	9.1	49
90	Quality control of polymer solar modules by lock-in thermography. <i>Journal of Applied Physics</i> , 2010, 107, 014505.	2.5	48

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91	Photoinduced Dynamics of Charge Separation: From Photosynthesis to Polymer–Fullerene Bulk Heterojunctions. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7407-7416.	2.6	48
92	Highly conducting Wurster-type twisted covalent organic frameworks. <i>Chemical Science</i> , 2020, 11, 12843-12853.	7.4	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.	2.7	47
94	Room-temperature near-infrared silicon carbide nanocrystalline emitters based on optically aligned spin defects. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	47
95	Polymer solar cells with novel fullerene-based acceptor. <i>Thin Solid Films</i> , 2004, 451-452, 43-47.	1.8	46
96	Direct and charge transfer state mediated photogeneration in polymer–fullerene bulk heterojunction solar cells. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	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.	10.3	46
98	Investigation of photoexcitations of conjugated polymer/fullerene composites embedded in conventional polymers. <i>Journal of Chemical Physics</i> , 1998, 109, 1185-1195.	3.0	44
99	Favorable Mixing Thermodynamics in Ternary Polymer Blends for Realizing High Efficiency Plastic Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1803394.	19.5	44
100	Electronic Trap States in Methanofullerenes. <i>Advanced Energy Materials</i> , 2011, 1, 655-660.	19.5	42
101	Analysis of Triplet Exciton Loss Pathways in PTB7:PC71BM Bulk Heterojunction Solar Cells. <i>Scientific Reports</i> , 2016, 6, 29158.	3.3	42
102	Electrical characterisation of phthalocyanine-fullerene photovoltaic devices. <i>Synthetic Metals</i> , 2001, 121, 1585-1586.	3.9	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.	2.5	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.	3.1	40
105	Predicting Solar Cell Performance from Terahertz and Microwave Spectroscopy. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	40
106	Organic solar cells characterized by dark lock-in thermography. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 642-647.	6.2	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.	2.8	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.	1.8	37

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109	Role of Polaron Pair Diffusion and Surface Losses in Organic Semiconductor Devices. <i>Physical Review Letters</i> , 2010, 105, 266602.	7.8	36
110	Influence of Irradiation on Defect Spin Coherence in Silicon Carbide. <i>Physical Review Applied</i> , 2020, 13, .	3.8	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.	6.7	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.	2.4	34
113	Optically and electrically excited intermediate electronic states in donor:acceptor based OLEDs. <i>Materials Horizons</i> , 2020, 7, 1126-1137.	12.2	33
114	Excitation Dynamics in Low Band Gap Donorâ€Acceptor Copolymers and Blends. <i>Advanced Energy Materials</i> , 2012, 2, 1477-1482.	19.5	32
115	Current-limiting mechanisms in polymer diodes. <i>Journal of Applied Physics</i> , 2006, 99, 024506.	2.5	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.	3.3	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.	10.3	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.	3.1	31
119	Electron spin resonance in PPV-photodiodes: detection via photoinduced current. <i>Chemical Physics</i> , 1994, 189, 687-695.	1.9	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, .	3.2	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.	4.6	30
122	Electronic Structure of Fullerene Heterodimer in Bulkâ€Heterojunction Blends. <i>Advanced Energy Materials</i> , 2014, 4, 1301517.	19.5	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, .	12.8	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.	1.8	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.	5.1	27
126	Photogeneration of charge carriers in blends of conjugated polymers and semiconducting nanoparticles. <i>Thin Solid Films</i> , 2004, 451-452, 48-53.	1.8	26



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127	Polaron recombination in pristine and annealed bulk heterojunction solar cells. <i>Synthetic Metals</i> , 2009, 159, 2345-2347.	3.9	25
128	Electroluminescence and photovoltaic effect in PPV Schottky diodes. <i>Journal of Luminescence</i> , 1994, 60-61, 906-911.	3.1	24
129	Design, synthesis and photovoltaic properties of [60]fullerene based molecular materials. <i>Materials Science and Engineering C</i> , 2005, 25, 835-842.	7.3	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.	12.2	24
131	Electronâ€“Nuclear Coherent Coupling and Nuclear Spin Readout through Optically Polarized $V_{\text{B}}^{\text{spin}}$ Spin States in hBN. <i>Nano Letters</i> , 2022, 22, 2718-2724.	9.1	24
132	Electrical admittance studies of polymer photovoltaic cells. <i>Synthetic Metals</i> , 2001, 124, 103-105.	3.9	23
133	Photoinduced $C_{70}$ radical anions in polymer:fullerene blends. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 128-130.	2.4	23
134	Growth and Properties of Potassium Holmium Double Tungstate $KHo(WO_4)_2$ . <i>Crystal Research and Technology</i> , 2001, 36, 283-287.	1.3	22
135	Electrical aspects of operation of polymerâ€“fullerene solar cells. <i>Thin Solid Films</i> , 2004, 451-452, 493-497.	1.8	22
136	Band bending at the P3HT/ITO interface studied by photoelectron spectroscopy. <i>Organic Electronics</i> , 2014, 15, 1552-1556.	2.6	22
137	Geminate and Nongeminate Pathways for Triplet Exciton Formation in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	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.	1.8	21
139	Overhauser-shift measurements on Si:P near the metal-insulator transition. <i>Physical Review B</i> , 1992, 46, 5008-5011.	3.2	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.	2.4	19
141	Spin Centres in SiC for Quantum Technologies. <i>Applied Magnetic Resonance</i> , 2016, 47, 793-812.	1.2	19
142	Doping Profile in Planar Hybrid Perovskite Solar Cells Identifying Mobile Ions. <i>ACS Applied Energy Materials</i> , 0, , .	5.1	19
143	Distribution of charge carrier transport properties in organic semiconductors with Gaussian disorder. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	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.	2.3	17

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145	Polytypism driven zero-field splitting of silicon vacancies in $\alpha$ -SiC. Physical Review B, 2018, 98, .		
146	Spin defects in hexagonal boron nitride for strain sensing on nanopillar arrays. Nanoscale, 2022, 14, 5239-5244.	5.6	17
147	Ferromagnetic resonance in $(\text{La}_{0.7}\text{Ca}_{0.3})_{1-x}\text{Mn}_x\text{O}_3$ films. Journal of Applied Physics, 2003, 93, 2100-2106.	2.5	16
148	Effect of doping- and field-induced charge carrier density on the electron transport in nanocrystalline ZnO. Nanotechnology, 2008, 19, 485701.	2.6	16
149	Highly Efficient Optical Pumping of Spin Defects in Silicon Carbide for Stimulated Microwave Emission. Physical Review Applied, 2018, 9, .	3.8	16
150	Photophysics of Deep Blue Acridane- and Benzonitrile-Based Emitter Employing Thermally Activated Delayed Fluorescence. Journal of Physical Chemistry C, 2018, 122, 22796-22801.	3.1	16
151	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.	4.6	16
152	Triplet Excitons in Highly Efficient Solar Cells Based on the Soluble Small Molecule $\text{p}\alpha\text{EDTS}(\text{FBTTh } 2) 2$ . Advanced Energy Materials, 2017, 7, 1602016.	19.5	15
153	Impact of Tortuosity on Charge-Carrier Transport in Organic Bulk Heterojunction Blends. Physical Review Applied, 2017, 8, .	3.8	15
154	Effect of doping of zinc oxide on the hole mobility of poly(3-hexylthiophene) in hybrid transistors. Organic Electronics, 2010, 11, 1569-1577.	2.6	14
155	Spin Dynamics of Electrons and Holes Interacting with Nuclei in $\text{MAPbI}_3$ Perovskite Single Crystals. ACS Photonics, 2022, 9, 1375-1384.	6.6	14
156	Recombination of triplet excitons and polaron pairs in a derived paraphenylene vinylene pentamer. Physical Review B, 2003, 68, .	3.2	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. Journal of Physical Chemistry C, 2013, 117, 23495-23499.	3.1	13
158	Effects of characteristic length scales on the exciton dynamics in rubrene single crystals. Physical Review B, 2014, 90, .	3.2	13
159	Conducting materials prepared by the oxidation of p-phenylenediamine with p-benzoquinone. Journal of Solid State Electrochemistry, 2015, 19, 2653-2664.	2.5	13
160	Impact of Interfaces and Laser Repetition Rate on Photocarrier Dynamics in Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 4698-4703.	4.6	13
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