Yossi Paltiel

List of Publications by Year
in descending order

113	3,612	159585 30	149698 56
papers	citations	h-index	g-index

116	116	116	2555
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Chiral molecules and the electron spin. Nature Reviews Chemistry, 2019, 3, 250-260.	30.2	462
2	Separation of enantiomers by their enantiospecific interaction with achiral magnetic substrates. Science, 2018, 360, 1331-1334.	12.6	283
3	Chiral spintronics. Nature Reviews Physics, 2021, 3, 328-343.	26.6	191
4	A chiral-based magnetic memory device without a permanent magnet. Nature Communications, 2013, 4, 2256.	12.8	151
5	Magnetization switching in ferromagnets by adsorbed chiral molecules without current or external magnetic field. Nature Communications, 2017, 8, 14567.	12.8	132
6	Chiral Molecules and the Spin Selectivity Effect. Journal of Physical Chemistry Letters, 2020, 11, 3660-3666.	4.6	126
7	Theory of Chirality Induced Spin Selectivity: Progress and Challenges. Advanced Materials, 2022, 34, e2106629.	21.0	119
8	Chiral Induced Spin Selectivity Gives a New Twist on Spin-Control in Chemistry. Accounts of Chemical Research, 2020, 53, 2659-2667.	15.6	102
9	Local Light-Induced Magnetization Using Nanodots and Chiral Molecules. Nano Letters, 2014, 14, 6042-6049.	9.1	88
10	The spin selectivity effect in chiral materials. APL Materials, 2021, 9, 040902.	5.1	88
11	Cold denaturation induces inversion of dipole and spin transfer in chiral peptide monolayers. Nature Communications, 2016, 7, 10744.	12.8	83
12	A Chirality-Based Quantum Leap. ACS Nano, 2022, 16, 4989-5035.	14.6	74
13	Single Nanoparticle Magnetic Spin Memristor. Small, 2018, 14, e1801249.	10.0	70
14	The Electron Spin as a Chiral Reagent. Angewandte Chemie - International Edition, 2020, 59, 1653-1658.	13.8	65
15	Effect of Chiral Molecules on the Electronâ€™s Spin Wavefunction at Interfaces. Journal of Physical Chemistry Letters, 2020, 11, 1550-1557.	4.6	65
16	Enantioseparation by crystallization using magnetic substrates. Chemical Science, 2019, 10, 5246-5250.	7.4	62
17	Magnetic Nanoplateletâ€Based Spin Memory Device Operating at Ambient Temperatures. Advanced Materials, 2017, 29, 1606748.	21.0	48
18	AFMâ€Based Spinâ€Exchange Microscopy Using Chiral Molecules. Advanced Materials, 2019, 31, e1904206.	21.0	45

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19	A nanoscale optical biosensor based on peptide encapsulated SWCNTs for detection of acetic acid in the gaseous phase. Sensors and Actuators B: Chemical, 2021, 327, 128832.	7.8	43
20	Asymmetric reactions induced by electron spin polarization. Physical Chemistry Chemical Physics, 2020, 22, 21570-21582.	2.8	40
21	Energy Sources of the Depth-Generalist Mixotrophic Coral Stylophora pistillata. Frontiers in Marine Science, 2020, 7, 988.	2.5	36
22	A Paper-Based Near-Infrared Optical Biosensor for Quantitative Detection of Protease Activity Using Peptide-Encapsulated SWCNTs. Sensors, 2020, 20, 5247.	3.8	36
23	Chiral Induced Spin Selectivity and Its Implications for Biological Functions. Annual Review of Biophysics, 2022, 51, 99-114.	10.0	36
24	Role of Exchange Interactions in the Magnetic Response and Intermolecular Recognition of Chiral Molecules. Nano Letters, 2020, 20, 7077-7086.	9.1	35
25	Analytic Model of Chiral-Induced Spin Selectivity. Journal of Physical Chemistry C, 2020, 124, 11716-11721.	3.1	35
26	Hybrid nanocrystals-organic-semiconductor light sensor. Applied Physics Letters, 2008, 92, .	3.3	34
27	Nanoscale Charge Separation Using Chiral Molecules. ACS Photonics, 2015, 2, 1476-1481.	6.6	34
28	Magnetic-related States and Order Parameter Induced in a Conventional Superconductor by Nonmagnetic Chiral Molecules. Nano Letters, 2019, 19, 5167-5175.	9.1	34
29	Transient Dissipative Optical Properties of Aggregated Au Nanoparticles, CdSe/ZnS Quantum Dots, and Supramolecular Nucleic Acid-Stabilized Ag Nanoclusters. Journal of the American Chemical Society, 2021, 143, 17622-17632.	13.7	34
30	Electric Field-Controlled Magnetization in GaAs/AlGaAs Heterostructuresâ€“Chiral Organic Molecules Hybrids. Journal of Physical Chemistry Letters, 2019, 10, 1139-1145.	4.6	33
31	Single Domain 10 nm Ferromagnetism Imprinted on Superparamagnetic Nanoparticles Using Chiral Molecules. Small, 2019, 15, e1804557.	10.0	33
32	3D strain-induced superconductivity in La ₂ CuO _{4+Î´} using a simple vertically aligned nanocomposite approach. Science Advances, 2019, 5, eaav5532.	10.3	31
33	Optical Multilevel Spin Bit Device Using Chiral Quantum Dots. Nano Letters, 2020, 20, 8675-8681.	9.1	30
34	Unconventional superconductivity induced in Nb films by adsorbed chiral molecules. New Journal of Physics, 2016, 18, 113048.	2.9	29
35	A nanoscale paper-based near-infrared optical nose (NIRON). Biosensors and Bioelectronics, 2021, 172, 112763.	10.1	28
36	Long-Time-Scale Magnetization Ordering Induced by an Adsorbed Chiral Monolayer on Ferromagnets. ACS Nano, 2021, 15, 5574-5579.	14.6	28

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37	Spinâ€Ðependent Processes Measured without a Permanent Magnet. Advanced Materials, 2018, 30, e1707390.	21.0	27
38	Room-Temperature Inter-Dot Coherent Dynamics in Multilayer Quantum Dot Materials. Journal of Physical Chemistry C, 2020, 124, 16222-16231.	3.1	27
39	InGaAs/GaAsSb Type-II superlattice based photodiodes for short wave infrared detection. Infrared Physics and Technology, 2017, 84, 63-71.	2.9	26
40	Changes in aggregation states of light-harvesting complexes as a mechanism for modulating energy transfer in desert crust cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9481-9486.	7.1	26
41	Chiral molecules-ferromagnetic interfaces, an approach towards spin controlled interactions. Applied Physics Letters, 2019, 115, .	3.3	25
42	Regulating the Energy Flow in a Cyanobacterial Light-Harvesting Antenna Complex. Journal of Physical Chemistry B, 2017, 121, 1240-1247.	2.6	23
43	Fast Energy Transfer in CdSe Quantum Dot Layered Structures: Controlling Coupling with Covalent-Bond Organic Linkers. Journal of Physical Chemistry C, 2018, 122, 5753-5758.	3.1	22
44	Four-wave mixing and nonlinear parameter measurement in a gallium-nitride ridge waveguide. Optical Materials Express, 2018, 8, 66.	3.0	22
45	Marine cyanobacteria tune energy transfer efficiency in their lightâ€harvesting antennae by modifying pigment coupling. FEBS Journal, 2021, 288, 980-994.	4.7	21
46	Increased Superconducting Transition Temperature of a Niobium Thin Film Proximity Coupled to Gold Nanoparticles Using Linking Organic Molecules. Physical Review Letters, 2012, 108, 107004.	7.8	19
47	Achieving Exciton Delocalization in Quantum Dot Aggregates Using Organic Linker Molecules. Journal of Physical Chemistry Letters, 2017, 8, 1014-1018.	4.6	19
48	Unconventional order parameter induced by helical chiral molecules adsorbed on a metal proximity coupled to a superconductor. Physical Review B, 2018, 98, .	3.2	19
49	Correlation between Ferromagnetic Layer Easy Axis and the Tilt Angle of Self Assembled Chiral Molecules. Molecules, 2020, 25, 6036.	3.8	19
50	Atomic and Molecular Layer Deposition of Chiral Thin Films Showing up to 99% Spin Selective Transport. Nano Letters, 2022, 22, 5022-5028.	9.1	19
51	Self-assembling of InAs nanocrystals on GaAs: The effect of electronic coupling and embedded gold nanoparticles on the photoluminescence. Applied Physics Letters, 2006, 89, 033108.	3.3	18
52	Light Adaptation in Phycobilisome Antennas: Influence on the Rod Length and Structural Arrangement. Journal of Physical Chemistry B, 2017, 121, 9196-9202.	2.6	18
53	Photosynthetic Energy Transfer at the Quantum/Classical Border. Trends in Plant Science, 2018, 23, 497-506.	8.8	18
54	Chirality and Spin: A Different Perspective on Enantioselective Interactions. Chimia, 2018, 72, 394.	0.6	18

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55	Dynamic Spin-Controlled Enantioselective Catalytic Chiral Reactions. Journal of Physical Chemistry Letters, 2021, 12, 5469-5472.	4.6	17
56	Evidence for new enantiospecific interaction force in chiral biomolecules. CheM, 2021, 7, 2787-2799.	11.7	17
57	Concentration-based self-assembly of phycocyanin. Photosynthesis Research, 2017, 134, 39-49.	2.9	16
58	Coupling effects in QD dimers at sub-nanometer interparticle distance. Nano Research, 2020, 13, 1071-1080.	10.4	16
59	Interplay between friction and spin-orbit coupling as a source of spin polarization. Physical Review B, 2021, 104, .	3.2	14
60	Nano bio optically tunable composite nanocrystalline cellulose films. RSC Advances, 2015, 5, 7713-7719.	3.6	12
61	Helical Ordering of Î±-<scp>l-</scp>Polyalanine Molecular Layers by Interdigitation. Journal of Physical Chemistry C, 2019, 123, 612-617.	3.1	12
62	Charge-Ordered Î±-Helical Polypeptide Monolayers on Au(111). Journal of Physical Chemistry C, 2020, 124, 5734-5739.	3.1	12
63	Simultaneous High-Purity Enantiomeric Resolution of Conglomerates Using Magnetic Substrates. Crystal Growth and Design, 2021, 21, 2925-2931.	3.0	12
64	Metal Organic Spin Transistor. Nano Letters, 2021, 21, 8657-8663.	9.1	12
65	Interior and Edge Magnetization in Thin Exfoliated CrGeTe₃ Films. Nano Letters, 2022, 22, 3165-3172.	9.1	12
66	Proximity Effect through Chiral Molecules in Nbâ€“Grapheneâ€Based Devices. Advanced Materials Technologies, 2018, 3, 1700300.	5.8	11
67	Optical Chiral Induced Spin Selectivity XMCD Study. Chimia, 2018, 72, 379.	0.6	11
68	Unconventional Meissner screening induced by chiral molecules in a conventional superconductor. Physical Review Materials, 2021, 5, .	2.4	11
69	Collective Effects in Charge Transfer within a Hybrid Organic-Inorganic System. Physical Review Letters, 2010, 104, 016804.	7.8	10
70	Chirality Nanosensor with Direct Electric Readout by Coupling of Nanofloret Localized Plasmons with Electronic Transport. Nano Letters, 2021, 21, 6496-6503.	9.1	10
71	Properties of Self-Assembled Hybrid Organic Molecule/Quantum Dot Multilayered Structures. Journal of Physical Chemistry C, 2014, 118, 25725-25730.	3.1	9
72	Spin-Exciton Delocalization Enhancement in Multilayer Chiral Linker/Quantum Dot Structures. Journal of Physical Chemistry Letters, 2019, 10, 3858-3862.	4.6	9

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73	Spin-Induced Organization of Cellulose Nanocrystals. Biomacromolecules, 2022, 23, 2098-2105.	5.4	9
74	Increasing the critical temperature of Nb films by chemically linking magnetic nanoparticles using organic molecules. Europhysics Letters, 2014, 108, 37006.	2.0	8
75	Features of the electrical and photoelectrical properties of nanocrystalline indium and zinc oxide films. Russian Journal of Physical Chemistry B, 2016, 10, 810-815.	1.3	8
76	Dynamic Control of the Vortex Pinning Potential in a Superconductor Using Current Injection through Nanoscale Patterns. Nano Letters, 2017, 17, 2934-2939.	9.1	8
77	Chiral Molecule-Enhanced Extinction Ratios of Quantum Dots Coupled to Random Plasmonic Structures. Langmuir, 2018, 34, 3076-3081.	3.5	8
78	The Electron Spin as a Chiral Reagent. Angewandte Chemie, 2020, 132, 1670-1675.	2.0	8
79	Photosystem II core quenching in desiccated Leptolyngbya ohadii. Photosynthesis Research, 2020, 143, 13-18.	2.9	7
80	Control of magneto-optical properties of cobalt-layers by adsorption of Î±-helical polyalanine self-assembled monolayers. Journal of Materials Chemistry C, 2020, 8, 11822-11829.	5.5	7
81	Magnetic passivation using chiral molecules. Applied Physics Letters, 2021, 118, .	3.3	7
82	Self-formed nanogap junctions for electronic detection and characterization of molecules and quantum dots. RSC Advances, 2017, 7, 25861-25866.	3.6	6
83	Broad-band high-gain room temperature photodetectors using semiconductorâ€“metal nanofloret hybrids with wide plasmonic response. Nanoscale, 2019, 11, 6368-6376.	5.6	6
84	Reducing Optical Losses in GaN Waveguides â€“ Toward an Electroâ€Optic Phase Modulator. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700551.	1.8	5
85	Selective enantiomer purification using magnetic oriented interacting microparticles. Separation and Purification Technology, 2020, 239, 116501.	7.9	5
86	Probing Molecularâ€Transport Properties using the Superconducting Proximity Effect. Small Methods, 2017, 1, 1600034.	8.6	4
87	Confined water dynamics in a hydrated photosynthetic pigmentâ€“protein complex. Physical Chemistry Chemical Physics, 2017, 19, 28063-28070.	2.8	4
88	Nano Ferromagnetism: Single Domain 10 nm Ferromagnetism Imprinted on Superparamagnetic Nanoparticles Using Chiral Molecules (Small 1/2019). Small, 2019, 15, 1970004.	10.0	4
89	Electronic transport through single polyalanine molecules. Physical Review B, 2020, 102, .	3.2	4
90	Increasing the Transition Temperature of High-TC Superconductor Thin Films by Organic Linking of Gold Nanoparticles. Journal of Superconductivity and Novel Magnetism, 2020, 33, 1941-1948.	1.8	4

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91	Universal proximity effects in hybrid superconductorâ€“linker moleculeâ€“nanoparticle systems: The effect of molecular chirality. Applied Physics Letters, 2020, 117, .	3.3	4
92	Unusual ZFC and FC magnetic behavior in thin Co multi-layered structure. Journal of Magnetism and Magnetic Materials, 2017, 428, 357-361.	2.3	3
93	Optical losses in p-type layers of GaN ridge waveguides in the IR region. Applied Physics Letters, 2017, 111, .	3.3	3
94	Determining the Molecular Dipole Orientation on Nanoplasmonic Structures. Journal of Physical Chemistry C, 2018, 122, 16901-16908.	3.1	3
95	Tuning Quantum Dots Coupling Using Organic Linkers with Different Vibrational Modes. Journal of Physical Chemistry C, 2020, 124, 16159-16165.	3.1	3
96	Enhancement of near infrared light sensing using side-gate modulation. Sensors and Actuators A: Physical, 2017, 267, 1-7.	4.1	2
97	Simple fabrication of SWIR detectors based on wet deposition of carbon nanotubes and quantum dots. Sensors and Actuators A: Physical, 2019, 295, 469-473.	4.1	2
98	Simple Multi Spectral Detection Using Infrared Nanocrystal Detector. IEEE Sensors Journal, 2019, 19, 3668-3672.	4.7	2
99	Structure-based Hamiltonian model for IsiA uncovers a highly robust pigmentâ€“protein complex. Journal of the Royal Society Interface, 2020, 17, 20200399.	3.4	2
100	Sensory properties of oxide films with high concentrations of conduction electrons. Russian Journal of Physical Chemistry A, 2017, 91, 572-576.	0.6	1
101	Magnetic Memory: Magnetic Nanoplateletâ€Based Spin Memory Device Operating at Ambient Temperatures (Adv. Mater. 17/2017). Advanced Materials, 2017, 29, .	21.0	1
102	Enhanced vortex pinning in Nb using proximity effect through organic molecules. Journal of Physics Communications, 2018, 2, 025001.	1.2	1
103	Molecular Fingerprint Detection Using Portable Waterâ€Compatible Electronic Tunneling Spectroscopy Device. Advanced Materials Interfaces, 2020, 7, 2000605.	3.7	1
104	Nonequilibrium crackling charge transfer in 2-D molecular layers. , 2013, , .		0
105	Highly sensitive hybrid organic-nanocrystal detector. , 2015, , .		0
106	Quantum Dot Coupling in a Vertical Transport Device under Ambient Conditions. ACS Omega, 2018, 3, 6224-6229.	3.5	0
107	An n-Bit Adder Realized via Coherent Optical Parallel Computing. , 2019, , .		0
108	Molecular Fingerprint Detection: Molecular Fingerprint Detection Using Portable Waterâ€Compatible Electronic Tunneling Spectroscopy Device (Adv. Mater. Interfaces 19/2020). Advanced Materials Interfaces, 2020, 7, 2070106.	3.7	0

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109	Magnetic oriented microparticles preparation. MethodsX, 2020, 7, 100975.	1.6	0
110	How Do Bacteria Produce Energy From Sunlight in the Deep Ocean?. Frontiers for Young Minds, 0, 9, .	0.8	0
111	Multi-purpose highly sensitive room temperature nano based detector (Conference Presentation). , 2017, , .		0
112	Four-Wave Mixing in GaN Waveguides. , 2018, , .		0
113	Molecular assembly of Quantum Dots towards new frontiers of optoelectronics. , 0, , .		0