Yossi Paltiel

List of Publications by Citations

100 papers	1,846 citations	22 h-index	39 g-index
116 ext. papers	2,590 ext. citations	8.2 avg, IF	5.55 L-index

#	Paper	IF	Citations
100	Chiral molecules and the electron spin. *Nature Reviews Chemistry*, **2019**, 3, 250-260	34.6	226
99	Separation of enantiomers by their enantiospecific interaction with achiral magnetic substrates. *Science*, **2018**, 360, 1331-1334	33.3	183
98	A chiral-based magnetic memory device without a permanent magnet. *Nature Communications*, **2013**, 4, 2256	17.4	116
97	Magnetization switching in ferromagnets by adsorbed chiral molecules without current or external magnetic field. *Nature Communications*, **2017**, 8, 14567	17.4	90
96	Local light-induced magnetization using nanodots and chiral molecules. *Nano Letters*, **2014**, 14, 6042-9	11.5	67
95	Cold denaturation induces inversion of dipole and spin transfer in chiral peptide monolayers. *Nature Communications*, **2016**, 7, 10744	17.4	62
94	Chiral Molecules and the Spin Selectivity Effect. *Journal of Physical Chemistry Letters*, **2020**, 11, 3660-3666	6.4	55
93	Single Nanoparticle Magnetic Spin Memristor. *Small*, **2018**, 14, e1801249	11	48
92	Chiral spintronics. *Nature Reviews Physics*, **2021**, 3, 328-343	23.6	41
91	Magnetic Nanoplatelet-Based Spin Memory Device Operating at Ambient Temperatures. *Advanced Materials*, **2017**, 29, 1606748	24	34
90	Effect of Chiral Molecules on the Electron's Spin Wavefunction at Interfaces. *Journal of Physical Chemistry Letters*, **2020**, 11, 1550-1557	6.4	33
89	The Electron Spin as a Chiral Reagent. *Angewandte Chemie - International Edition*, **2020**, 59, 1653-1658	16.4	33
88	Hybrid nanocrystals-organic-semiconductor light sensor. *Applied Physics Letters*, **2008**, 92, 223112	3.4	31
87	Enantioseparation by crystallization using magnetic substrates. *Chemical Science*, **2019**, 10, 5246-5250	9.4	30
86	Nanoscale Charge Separation Using Chiral Molecules. *ACS Photonics*, **2015**, 2, 1476-1481	6.3	28
85	AFM-Based Spin-Exchange Microscopy Using Chiral Molecules. *Advanced Materials*, **2019**, 31, e1904206	24	25
84	The spin selectivity effect in chiral materials. *APL Materials*, **2021**, 9, 040902	5.7	25

83	Chiral Induced Spin Selectivity Gives a New Twist on Spin-Control in Chemistry. *Accounts of Chemical Research*, **2020**, 53, 2659-2667	24.3	24
82	Single Domain 10 nm Ferromagnetism Imprinted on Superparamagnetic Nanoparticles Using Chiral Molecules. *Small*, **2019**, 15, e1804557	11	24
81	3D strain-induced superconductivity in LaCuO using a simple vertically aligned nanocomposite approach. *Science Advances*, **2019**, 5, eaav5532	14.3	22
80	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	11.5	22
79	Unconventional superconductivity induced in Nb films by adsorbed chiral molecules. *New Journal of Physics*, **2016**, 18, 113048	2.9	22
78	Electric Field-Controlled Magnetization in GaAs/AlGaAs Heterostructures-Chiral Organic Molecules Hybrids. *Journal of Physical Chemistry Letters*, **2019**, 10, 1139-1145	6.4	21
77	Spin-Dependent Processes Measured without a Permanent Magnet. *Advanced Materials*, **2018**, 30, e1707390	24	21
76	Magnetic-related States and Order Parameter Induced in a Conventional Superconductor by Nonmagnetic Chiral Molecules. *Nano Letters*, **2019**, 19, 5167-5175	11.5	19
75	Role of Exchange Interactions in the Magnetic Response and Intermolecular Recognition of Chiral Molecules. *Nano Letters*, **2020**, 20, 7077-7086	11.5	19
74	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	8.5	19
73	Regulating the Energy Flow in a Cyanobacterial Light-Harvesting Antenna Complex. *Journal of Physical Chemistry B*, **2017**, 121, 1240-1247	3.4	18
72	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	3.8	18
71	Achieving Exciton Delocalization in Quantum Dot Aggregates Using Organic Linker Molecules. *Journal of Physical Chemistry Letters*, **2017**, 8, 1014-1018	6.4	17
70	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	3.4	17
69	InGaAs/GaAsSb Type-II superlattice based photodiodes for short wave infrared detection. *Infrared Physics and Technology*, **2017**, 84, 63-71	2.7	16
68	Analytic Model of Chiral-Induced Spin Selectivity. *Journal of Physical Chemistry C*, **2020**, 124, 11716-11721	3.8	16
67	Increased superconducting transition temperature of a niobium thin film proximity coupled to gold nanoparticles using linking organic molecules. *Physical Review Letters*, **2012**, 108, 107004	7.4	15
66	Theory of Chirality Induced Spin Selectivity: Progress and Challenges.. *Advanced Materials*, **2022**, e2106629	24	14

65	Room-Temperature Inter-Dot Coherent Dynamics in Multilayer Quantum Dot Materials. *Journal of Physical Chemistry C*, **2020**, 124, 16222-16231	3.8	13
64	Asymmetric reactions induced by electron spin polarization. *Physical Chemistry Chemical Physics*, **2020**, 22, 21570-21582	3.6	13
63	Chirality and Spin: A Different Perspective on Enantioselective Interactions. *Chimia*, **2018**, 72, 394-398	1.3	13
62	Concentration-based self-assembly of phycocyanin. *Photosynthesis Research*, **2017**, 134, 39-49	3.7	12
61	Nano bio optically tunable composite nanocrystalline cellulose films. *RSC Advances*, **2015**, 5, 7713-7719	3.7	12
60	Photosynthetic Energy Transfer at the Quantum/Classical Border. *Trends in Plant Science*, **2018**, 23, 497-506	13.1	12
59	Four-wave mixing and nonlinear parameter measurement in a gallium-nitride ridge waveguide. *Optical Materials Express*, **2018**, 8, 66	2.6	12
58	A Paper-Based Near-Infrared Optical Biosensor for Quantitative Detection of Protease Activity Using Peptide-Encapsulated SWCNTs. *Sensors*, **2020**, 20,	3.8	12
57	A nanoscale paper-based near-infrared optical nose (NIRON). *Biosensors and Bioelectronics*, **2021**, 172, 112763	11.8	11
56	Long-Time-Scale Magnetization Ordering Induced by an Adsorbed Chiral Monolayer on Ferromagnets. *ACS Nano*, **2021**, 15, 5574-5579	16.7	11
55	Unconventional order parameter induced by helical chiral molecules adsorbed on a metal proximity coupled to a superconductor. *Physical Review B*, **2018**, 98,	3.3	11
54	Chiral molecules-ferromagnetic interfaces, an approach towards spin controlled interactions. *Applied Physics Letters*, **2019**, 115, 133701	3.4	10
53	Coupling effects in QD dimers at sub-nanometer interparticle distance. *Nano Research*, **2020**, 13, 1071-1080	10	10
52	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	16.4	10
51	Marine cyanobacteria tune energy transfer efficiency in their light-harvesting antennae by modifying pigment coupling. *FEBS Journal*, **2021**, 288, 980-994	5.7	10
50	Light Adaptation in Phycobilisome Antennas: Influence on the Rod Length and Structural Arrangement. *Journal of Physical Chemistry B*, **2017**, 121, 9196-9202	3.4	9
49	Optical Multilevel Spin Bit Device Using Chiral Quantum Dots. *Nano Letters*, **2020**, 20, 8675-8681	11.5	9
48	Correlation between Ferromagnetic Layer Easy Axis and the Tilt Angle of Self Assembled Chiral Molecules. *Molecules*, **2020**, 25,	4.8	9

47	Charge-Ordered Helical Polypeptide Monolayers on Au(111). *Journal of Physical Chemistry C*, **2020**, 124, 5734-5739	3.8	8
46	Optical Chiral Induced Spin Selectivity XMCD Study. *Chimia*, **2018**, 72, 379-383	1.3	8
45	Properties of Self-Assembled Hybrid Organic Molecule/Quantum Dot Multilayered Structures. *Journal of Physical Chemistry C*, **2014**, 118, 25725-25730	3.8	8
44	Helical Ordering of -Polyalanine Molecular Layers by Interdigitation. *Journal of Physical Chemistry C*, **2019**, 123, 612-617	3.8	8
43	Chiral Molecule-Enhanced Extinction Ratios of Quantum Dots Coupled to Random Plasmonic Structures. *Langmuir*, **2018**, 34, 3076-3081	4	7
42	Collective effects in charge transfer within a hybrid organic-inorganic system. *Physical Review Letters*, **2010**, 104, 016804	7.4	7
41	Energy Sources of the Depth-Generalist Mixotrophic Coral. *Frontiers in Marine Science*, **2020**, 7, 988	4.5	7
40	Evidence for new enantiospecific interaction force in chiral biomolecules. *CheM*, **2021**,	16.2	7
39	Proximity Effect through Chiral Molecules in Nb raphene-Based Devices. *Advanced Materials Technologies*, **2018**, 3, 1700300	6.8	6
38	Dynamic Control of the Vortex Pinning Potential in a Superconductor Using Current Injection through Nanoscale Patterns. *Nano Letters*, **2017**, 17, 2934-2939	11.5	5
37	Spin-Exciton Delocalization Enhancement in Multilayer Chiral Linker/Quantum Dot Structures. *Journal of Physical Chemistry Letters*, **2019**, 10, 3858-3862	6.4	5
36	Broad-band high-gain room temperature photodetectors using semiconductor-metal nanofloret hybrids with wide plasmonic response. *Nanoscale*, **2019**, 11, 6368-6376	7.7	5
35	Features of the electrical and photoelectrical properties of nanocrystalline indium and zinc oxide films. *Russian Journal of Physical Chemistry B*, **2016**, 10, 810-815	1.2	5
34	Increasing the critical temperature of Nb films by chemically linking magnetic nanoparticles using organic molecules. *Europhysics Letters*, **2014**, 108, 37006	1.6	5
33	Confined water dynamics in a hydrated photosynthetic pigment-protein complex. *Physical Chemistry Chemical Physics*, **2017**, 19, 28063-28070	3.6	4
32	Reducing Optical Losses in GaN Waveguides oward an Electro-Optic Phase Modulator. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1700551	1.6	4
31	Self-formed nanogap junctions for electronic detection and characterization of molecules and quantum dots. *RSC Advances*, **2017**, 7, 25861-25866	3.7	4
30	Magnetic passivation using chiral molecules. *Applied Physics Letters*, **2021**, 118, 172401	3.4	4

29	Chirality Nanosensor with Direct Electric Readout by Coupling of Nanofloret Localized Plasmons with Electronic Transport. *Nano Letters*, **2021**, 21, 6496-6503	11.5	4
28	Photosystem II core quenching in desiccated Leptolyngbya ohadii. *Photosynthesis Research*, **2020**, 143, 13-18	3.7	4
27	Probing Molecular-Transport Properties using the Superconducting Proximity Effect. *Small Methods*, **2017**, 1, 1600034	12.8	3
26	Simultaneous High-Purity Enantiomeric Resolution of Conglomerates Using Magnetic Substrates. *Crystal Growth and Design*, **2021**, 21, 2925-2931	3.5	3
25	Dynamic Spin-Controlled Enantioselective Catalytic Chiral Reactions. *Journal of Physical Chemistry Letters*, **2021**, 12, 5469-5472	6.4	3
24	Nano Ferromagnetism: Single Domain 10 nm Ferromagnetism Imprinted on Superparamagnetic Nanoparticles Using Chiral Molecules (Small 1/2019). *Small*, **2019**, 15, 1970004	11	3
23	Interplay between friction and spin-orbit coupling as a source of spin polarization. *Physical Review B* , **2021**, 104,	3.3	3
22	Enhancement of near infrared light sensing using side-gate modulation. *Sensors and Actuators A: Physical*, **2017**, 267, 1-7	3.9	2
21	. *IEEE Sensors Journal*, **2019**, 19, 3668-3672	4	2
20	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	1.5	2
19	Optical losses in p-type layers of GaN ridge waveguides in the IR region. *Applied Physics Letters*, **2017**, 111, 022103	3.4	2
18	Metal Organic Spin Transistor. *Nano Letters*, **2021**, 21, 8657-8663	11.5	2
17	The Electron Spin as a Chiral Reagent. *Angewandte Chemie*, **2020**, 132, 1670-1675	3.6	2
16	Selective enantiomer purification using magnetic oriented interacting microparticles. *Separation and Purification Technology*, **2020**, 239, 116501	8.3	2
15	Electronic transport through single polyalanine molecules. *Physical Review B*, **2020**, 102,	3.3	2
14	Determining the Molecular Dipole Orientation on Nanoplasmonic Structures. *Journal of Physical Chemistry C*, **2018**, 122, 16901-16908	3.8	2
13	Sensory properties of oxide films with high concentrations of conduction electrons. *Russian Journal of Physical Chemistry A*, **2017**, 91, 572-576	0.7	1
12	Simple fabrication of SWIR detectors based on wet deposition of carbon nanotubes and quantum dots. *Sensors and Actuators A: Physical*, **2019**, 295, 469-473	3.9	1

List of Publications

11	Tuning Quantum Dots Coupling Using Organic Linkers with Different Vibrational Modes. *Journal of Physical Chemistry C*, **2020**, 124, 16159-16165	3.8	1
10	Enhanced vortex pinning in Nb using proximity effect through organic molecules. *Journal of Physics Communications*, **2018**, 2, 025001	1.2	1
9	Molecular Fingerprint Detection Using Portable Water-Compatible Electronic Tunneling Spectroscopy Device. *Advanced Materials Interfaces*, **2020**, 7, 2000605	4.6	1
8	Control of magneto-optical properties of cobalt-layers by adsorption of α-helical polyalanine self-assembled monolayers. *Journal of Materials Chemistry C*, **2020**, 8, 11822-11829	7.1	1
7	Structure-based Hamiltonian model for IsiA uncovers a highly robust pigment-protein complex. *Journal of the Royal Society Interface*, **2020**, 17, 20200399	4.1	1
6	Spin-Induced Organization of Cellulose Nanocrystals.. *Biomacromolecules*, **2022**,	6.9	1
5	Unusual ZFC and FC magnetic behavior in thin Co multi-layered structure. *Journal of Magnetism and Magnetic Materials*, **2017**, 428, 357-361	2.8	0
4	Universal proximity effects in hybrid superconductor–linker molecule–nanoparticle systems: The effect of molecular chirality. *Applied Physics Letters*, **2020**, 117, 242601	3.4	0
3	Magnetic oriented microparticles preparation. *MethodsX*, **2020**, 7, 100975	1.9	
2	Quantum Dot Coupling in a Vertical Transport Device under Ambient Conditions. *ACS Omega*, **2018**, 3, 6224-6229	3.9	
1	Molecular Fingerprint Detection: Molecular Fingerprint Detection Using Portable Water-Compatible Electronic Tunneling Spectroscopy Device (Adv. Mater. Interfaces 19/2020). *Advanced Materials Interfaces*, **2020**, 7, 2070106	4.6	