Sivan Refaely-Abramson

List of Publications by Year
in descending order

36 papers	3,430 citations	257450 24 h-index	361022 35 g-index

37 all docs	37 docs citations	37 times ranked	3705 citing authors

#	Article	IF	Citations
1	Bright excitonic multiplexing mediated by dark exciton transition in two-dimensional TMDCs at room temperature. Materials Horizons, 2022, 9, 1089-1098.	12.2	8
2	Theory of Chirality Induced Spin Selectivity: Progress and Challenges. Advanced Materials, 2022, 34, e2106629.	21.0	119
3	Identifying Hidden Intracell Symmetries in Molecular Crystals and Their Impact for Multiexciton Generation. Journal of Physical Chemistry Letters, 2022, 13, 747-753.	4.6	3
4	Optical absorption of interlayer excitons in transition-metal dichalcogenide heterostructures. Science, 2022, 376, 406-410.	12.6	42
5	Mixed excitonic nature in water-oxidized <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiVO</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> surfaces with defects. Physical Review Materials, 2022, 6, .	2.4	5
6	Anisotropic 2D excitons unveiled in organicâ€“inorganic quantum wells. Materials Horizons, 2021, 8, 197-208.	12.2	17
7	Rational Passivation of Sulfur Vacancy Defects in Two-Dimensional Transition Metal Dichalcogenides. ACS Nano, 2021, 15, 8780-8789.	14.6	52
8	The role of chalcogen vacancies for atomic defect emission in MoS2. Nature Communications, 2021, 12, 3822.	12.8	94
9	Signatures of Dimensionality and Symmetry in Exciton Band Structure: Consequences for Exciton Dynamics and Transport. Nano Letters, 2021, 21, 7644-7650.	9.1	21
10	Exciton Modulation in Perylene-Based Molecular Crystals Upon Formation of a Metal-Organic Interface From Many-Body Perturbation Theory. Frontiers in Chemistry, 2021, 9, 743391.	3.6	2
11	Quantum Phase Transitions of Trilayer Excitons in Atomically Thin Heterostructures. Physical Review Letters, 2020, 125, 255301.	7.8	21
12	Layer-Dependent Quasiparticle Electronic Structure of the P3HT:PCBM Interface from a First-Principles Substrate Screening GW Approach. Journal of Physical Chemistry C, 2020, 124, 13592-13601.	3.1	4
13	How Substitutional Point Defects in Two-Dimensional WS₂ Induce Charge Localization, Spinâ€“Orbit Splitting, and Strain. ACS Nano, 2019, 13, 10520-10534.	14.6	86
14	Large Spin-Orbit Splitting of Deep In-Gap Defect States of Engineered Sulfur Vacancies in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Physical Review Letters, 2019, 123, 076801.	7.8	120
15	Identifying substitutional oxygen as a prolific point defect in monolayer transition metal dichalcogenides. Nature Communications, 2019, 10, 3382.	12.8	196
16	First-Principles Approach to the Conductance of Covalently Bound Molecular Junctions. Journal of Physical Chemistry C, 2019, 123, 6379-6387.	3.1	10
17	Electronic structure of dipeptides in the gas-phase and as an adsorbed monolayer. Physical Chemistry Chemical Physics, 2018, 20, 6860-6867.	2.8	9
18	Probing Charge Transport through Peptide Bonds. Journal of Physical Chemistry Letters, 2018, 9, 763-767.	4.6	38

#	Article	IF	Citations
19	Long-Lived Correlated Triplet Pairs in a Ï€-Stacked Crystalline Pentacene Derivative. Journal of the American Chemical Society, 2018, 140, 2326-2335.	13.7	68
20	Defect-Induced Modification of Low-Lying Excitons and Valley Selectivity in Monolayer Transition Metal Dichalcogenides. Physical Review Letters, 2018, 121, 167402.	7.8	109
21	Quantitative Prediction of Optical Absorption in Molecular Solids from an Optimally Tuned Screened Range-Separated Hybrid Functional. Journal of Chemical Theory and Computation, 2018, 14, 2919-2929.	5.3	51
22	Energy level alignment at molecule-metal interfaces from an optimally tuned range-separated hybrid functional. Journal of Chemical Physics, 2017, 146, .	3.0	59
23	Origins of Singlet Fission in Solid Pentacene from an abÂinitio Greenâ€™s Function Approach. Physical Review Letters, 2017, 119, 267401.	7.8	55
24	Cold denaturation induces inversion of dipole and spin transfer in chiral peptide monolayers. Nature Communications, 2016, 7, 10744.	12.8	83
25	Tuning electronic transport via hepta-alanine peptides junction by tryptophan doping. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10785-10790.	7.1	77
26	Solid-state optical absorption from optimally tuned time-dependent range-separated hybrid density functional theory. Physical Review B, 2015, 92, .	3.2	210
27	Electronic Transport via Homopeptides: The Role of Side Chains and Secondary Structure. Journal of the American Chemical Society, 2015, 137, 9617-9626.	13.7	101
28	Outer-valence Electron Spectra of Prototypical Aromatic Heterocycles from an Optimally Tuned Range-Separated Hybrid Functional. Journal of Chemical Theory and Computation, 2014, 10, 1934-1952.	5.3	128
29	Experimental and theoretical electronic structure of quinacridone. Physical Review B, 2014, 90, .	3.2	70
30	Simultaneous Determination of Structures, Vibrations, and Frontier Orbital Energies from a Self-Consistent Range-Separated Hybrid Functional. Journal of Physical Chemistry Letters, 2014, 5, 2734-2741.	4.6	49
31	Gap renormalization of molecular crystals from density-functional theory. Physical Review B, 2013, 88, .	3.2	239
32	Quasiparticle Spectra from a Nonempirical Optimally Tuned Range-Separated Hybrid Density Functional. Physical Review Letters, 2012, 109, 226405.	7.8	236
33	Excitation Gaps of Finite-Sized Systems from Optimally Tuned Range-Separated Hybrid Functionals. Journal of Chemical Theory and Computation, 2012, 8, 1515-1531.	5.3	765
34	Fundamental and excitation gaps in molecules of relevance for organic photovoltaics from an optimally tuned range-separated hybrid functional. Physical Review B, 2011, 84, .	3.2	281
35	From exciton dispersion to exciton dynamics in functional materials. , 0, , .		0
36	Excited-State Properties of Perylene-Based Organic-Inorganic Interfaces from First Principles. , 0, , .		0