## Sherif Abdulkader Tawfik

## List of Publications by Citations

 $\textbf{Source:} \ https://exaly.com/author-pdf/8900604/sherif-abdulkader-tawfik-publications-by-citations.pdf$ 

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58 1,179 19 33 h-index g-index citations papers 66 1,561 4.76 7.2 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
58	Activation of the surface dark-layer to enhance upconversion in a thermal field. <i>Nature Photonics</i> , <b>2018</b> , 12, 154-158	33.9	174
57	First-principles investigation of quantum emission from hBN defects. <i>Nanoscale</i> , <b>2017</b> , 9, 13575-13582	7.7	122
56	Robust Solid-State Quantum System Operating at 800 K. ACS Photonics, 2017, 4, 768-773	6.3	68
55	Multifunctional Optoelectronics via Harnessing Defects in Layered Black Phosphorus. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901991	15.6	50
54	Fully Light-Controlled Memory and Neuromorphic Computation in Layered Black Phosphorus. <i>Advanced Materials</i> , <b>2021</b> , 33, e2004207	24	50
53	Efficient and Fast Synthesis of Few-Layer Black Phosphorus via Microwave-Assisted Liquid-Phase Exfoliation. <i>Small Methods</i> , <b>2017</b> , 1, 1700260	12.8	47
52	Evaluation of van der Waals density functionals for layered materials. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	47
51	Sensing sulfur-containing gases using titanium and tin decorated zigzag graphene nanoribbons from first-principles. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 6925-32	3.6	46
50	Systematic investigation of functional ligands for colloidal stable upconversion nanoparticles <i>RSC Advances</i> , <b>2018</b> , 8, 4842-4849	3.7	46
49	Efficient Production of Phosphorene Nanosheets via Shear Stress Mediated Exfoliation for Low-Temperature Perovskite Solar Cells. <i>Small Methods</i> , <b>2019</b> , 3, 1800521	12.8	42
48	Electrocatalytic Activity of a 2D Phosphorene-Based Heteroelectrocatalyst for Photoelectrochemical Cells. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 2644-2647	16.4	39
47	Efficiency Enhancement of Single-Walled Carbon Nanotube-Silicon Heterojunction Solar Cells Using Microwave-Exfoliated Few-Layer Black Phosphorus. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1704488	15.6	36
46	Liquid-Metal Synthesized Ultrathin SnS Layers for High-Performance Broadband Photodetectors. <i>Advanced Materials</i> , <b>2020</b> , 32, e2004247	24	34
45	Efficient Prediction of Structural and Electronic Properties of Hybrid 2D Materials Using Complementary DFT and Machine Learning Approaches. <i>Advanced Theory and Simulations</i> , <b>2019</b> , 2, 180	0∮258	34
44	Multiple CO2 capture in stable metal-doped graphene: a theoretical trend study. <i>RSC Advances</i> , <b>2015</b> , 5, 50975-50982	3.7	33
43	Anisotropic functionalization of upconversion nanoparticles. <i>Chemical Science</i> , <b>2018</b> , 9, 4352-4358	9.4	31
42	Electrically Sorted Single-Walled Carbon Nanotubes-Based Electron Transporting Layers for Perovskite Solar Cells. <i>IScience</i> , <b>2019</b> , 14, 100-112	6.1	22

## (2016-2018)

41	van der Waals forces control ferroelectric-antiferroelectric ordering in CuInPS and CuBiPSe laminar materials. <i>Chemical Science</i> , <b>2018</b> , 9, 7620-7627	9.4	21
40	Ordered-vacancy-enabled indium sulphide printed in wafer-scale with enhanced electron mobility. <i>Materials Horizons</i> , <b>2020</b> , 7, 827-834	14.4	19
39	Structural-Defect-Mediated Grafting of Alkylamine on Few-Layer MoS and Its Potential for Enhancement of Tribological Properties. <i>ACS Applied Materials &amp; Description</i> (2018), 12, 30720-30730	9·5	18
38	Electrically Activated UV-A Filters Based on Electrochromic MoO. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2020</b> , 12, 16997-17003	9.5	17
37	2D/3D Hybrid of MoS2/GaN for a High-Performance Broadband Photodetector. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 2407-2414	4	16
36	Predicting Thermal Properties of Crystals Using Machine Learning. <i>Advanced Theory and Simulations</i> , <b>2020</b> , 3, 1900208	3.5	14
35	High On/Off Conductance Switching Ratio via H-Tautomerization in Quinone. <i>Journal of Chemical Theory and Computation</i> , <b>2015</b> , 11, 4154-8	6.4	12
34	Magnetic properties of stoichiometric and defective CoS. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 2356-2362	3.6	11
33	van der Waals Forces Control the Internal Chemical Structure of Monolayers within the Lamellar Materials CuInP2S6 and CuBiP2Se6. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 22675-22687	3.8	11
32	Adsorption of toxic gases on silicene/Ag(111). Physical Chemistry Chemical Physics, 2019, 21, 17521-175	5 <b>3</b> <del>7</del> .6	10
32	Adsorption of toxic gases on silicene/Ag(111). <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 17521-175  Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191	2.5	10
	Are dispersion corrections accurate outside equilibrium? A case study on benzene. Beilstein Journal		
31	Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191  Near-Perfect Spin Filtering and Negative Differential Resistance in an Fe(II)S Complex. <i>Journal of</i>	2.5	10
31	Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191  Near-Perfect Spin Filtering and Negative Differential Resistance in an Fe(II)S Complex. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2189-2194  Electrocatalytic Activity of a 2D Phosphorene-Based Heteroelectrocatalyst for	2.5 6.4	10
31 30 29	Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191  Near-Perfect Spin Filtering and Negative Differential Resistance in an Fe(II)S Complex. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2189-2194  Electrocatalytic Activity of a 2D Phosphorene-Based Heteroelectrocatalyst for Photoelectrochemical Cells. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 2674-2677  Observation of near-infrared sub-Poissonian photon emission in hexagonal boron nitride at room	2.5	10 9 8
31 30 29 28	Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191  Near-Perfect Spin Filtering and Negative Differential Resistance in an Fe(II)S Complex. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2189-2194  Electrocatalytic Activity of a 2D Phosphorene-Based Heteroelectrocatalyst for Photoelectrochemical Cells. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 2674-2677  Observation of near-infrared sub-Poissonian photon emission in hexagonal boron nitride at room temperature. <i>APL Photonics</i> , <b>2020</b> , 5, 076103  Tuning the work function of the silicene/4 Ag(111) surface. <i>Physical Chemistry Chemical Physics</i> ,	2.5 6.4 3.6 5.2	10 9 8
31 30 29 28 27	Are dispersion corrections accurate outside equilibrium? A case study on benzene. <i>Beilstein Journal of Organic Chemistry</i> , <b>2018</b> , 14, 1181-1191  Near-Perfect Spin Filtering and Negative Differential Resistance in an Fe(II)S Complex. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 2189-2194  Electrocatalytic Activity of a 2D Phosphorene-Based Heteroelectrocatalyst for Photoelectrochemical Cells. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 2674-2677  Observation of near-infrared sub-Poissonian photon emission in hexagonal boron nitride at room temperature. <i>APL Photonics</i> , <b>2020</b> , 5, 076103  Tuning the work function of the silicene/4 IA Ag(111) surface. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 7165-7173  Enhanced oscillatory rectification and negative differential resistance in pentamantane	2.5 6.4 3.6 5.2 3.6	10 9 8 7 6

23	Plasmonic Slot Waveguides with Core Nonlinearity. <i>Plasmonics</i> , <b>2014</b> , 9, 409-413	2.4	5
22	First principles calculation of field emission from carbon nanotubes with nitrogen and boron doping. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2011</b> , 44, 111-114	3	5
21	Detection of adsorbed transition-metal porphyrins by spin-dependent conductance of graphene nanoribbon. <i>RSC Advances</i> , <b>2017</b> , 7, 29112-29121	3.7	5
20	Endohedral metallofullerenes, M@C60 (M = Ca, Na, Sr): selective adsorption and sensing of open-shell NOx gases. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 21315-21	3.6	5
19	Mixed Ionic-Electronic Charge Transport in Layered Black-Phosphorus for Low-Power Memory. <i>Advanced Functional Materials</i> ,2107068	15.6	4
18	Communication: Electrical rectification of C59N: The role of anchoring and doping sites. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 021101	3.9	3
17	Photochemical Etching of Carbonyl Groups from a Carbon Matrix: The (001) Diamond Surface. <i>Physical Review Letters</i> , <b>2019</b> , 122, 016802	7.4	3
16	Alkali-Assisted Hydrothermal Exfoliation and Surfactant-Driven Functionalization of h-BN Nanosheets for Lubrication Enhancement. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 9143-9154	5.6	3
15	Electronic transport investigation of redox-switching of azulenequinones/hydroquinones via first-principles studies. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 17859-17867	3.6	2
14	Localized states in an ultracold atomic gas trapped in a bichromatic potential: The effect of a time-varying phase. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2012</b> , 17, 3552-3557	3.7	2
13	First principles calculation of field emission from nanostructures using time-dependent density functional theory: A simplified approach. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2011</b> , 43, 1360-1364	3	2
12	Theoretical insight on the origin of anelasticity in zinc oxide nanowires. <i>Nanoscale</i> , <b>2020</b> , 12, 2439-2444	7.7	2
11	Interplay of Mechanical and Chemical Tunability of Phosphorene for Flexible Nanoelectronic Applications. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 24391-24399	3.8	2
10	Attenuation of Redox Switching and Rectification in Azulenequinones/Hydroquinones after B and N Doping: A First-Principles Investigation. <i>Advanced Theory and Simulations</i> , <b>2021</b> , 4, 2000203	3.5	2
9	The generalized spin-orbit interaction: A microscopic origin of the Ested magnetic field. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 504, 166660	2.8	1
8	TDDFT Study of the Optical Excitation of Nucleic Acid Bases-C Complexes. <i>Journal of Physical Chemistry A</i> , <b>2017</b> , 121, 9058-9063	2.8	1
7	Superconductivity in intercalated buckled two-dimensional materials: KGe. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 24027-24032	3.6	1
6	Mono- to few-layer non-van der Waals 2D lanthanide-doped NaYF4 nanosheets with upconversion luminescence. 2D Materials, <b>2021</b> , 8, 015005	5.9	O

## LIST OF PUBLICATIONS

5	PyPhotonics: A python package for the evaluation of luminescence properties of defects. <i>Computer Physics Communications</i> , <b>2021</b> , 108222	4.2	О
4	Role of Surface Paramagnetic Oxygen Species in the Desulfurization Reactions on Zinc Oxide. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 4559-4566	3.8	O
3	Black Phosphorus Diketopyrrolopyrrole Polymer Semiconductor Hybrid for Enhanced Charge Transfer and Photodetection. <i>Advanced Photonics Research</i> , <b>2021</b> , 2100150	1.9	О
2	Twist-Dependent Electron Charge Transfer and Transport in Phosphorene©raphene Heterobilayers. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 25886-25897	3.8	
1	The current magnetization hypothesis as a microscopic theory of the Ested magnetic field induction. European Physical Journal Plus, 2022, 137, 1	3.1	