

# Abul Kalam

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2840536/publications.pdf>

Version: 2024-02-01

51  
papers

802  
citations

430874

18  
h-index

552781

26  
g-index

52  
all docs

52  
docs citations

52  
times ranked

885  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of Cuboidal $\text{KNbO}_3 @ \text{Fe}_2\text{O}_3$ Hybrid Nanostructures for Improved Photocatalytic and Photoelectrocatalytic Applications. <i>ACS Omega</i> , 2020, 5, 20491-20505.	3.5	47
2	Reducing ion migration in methylammonium lead tri-bromide single crystal via lead sulfate passivation. <i>Journal of Applied Physics</i> , 2020, 127, .	2.5	46
3	Influence of A-site cations on the open-circuit voltage of efficient perovskite solar cells: a case of rubidium and guanidinium additives. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8218-8225.	10.3	43
4	Counteraction of Biofilm Formation and Antimicrobial Potential of Terminalia catappa Functionalized Silver Nanoparticles against <i>Candida albicans</i> and Multidrug-Resistant Gram-Negative and Gram-Positive Bacteria. <i>Antibiotics</i> , 2021, 10, 725.	3.7	38
5	Elucidation of the role of guanidinium incorporation in single-crystalline $\text{MAPbI}_3$ perovskite on ion migration and activation energy. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 11467-11473.	2.8	36
6	Recent Progress in Growth of Single-Crystal Perovskites for Photovoltaic Applications. <i>ACS Omega</i> , 2021, 6, 1030-1042.	3.5	35
7	Interpretation of Resistance, Capacitance, Defect Density, and Activation Energy Levels in Single-Crystalline $\text{MAPbI}_3$ . <i>Journal of Physical Chemistry C</i> , 2020, 124, 3496-3502.	3.1	33
8	AIE active multianalyte fluorescent probe for the detection of $\text{Cu}^{2+}$ , $\text{Ni}^{2+}$ and $\text{Hg}^{2+}$ ions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 201, 54-60.	3.9	31
9	Changes in the Electrical Characteristics of Perovskite Solar Cells with Aging Time. <i>Molecules</i> , 2020, 25, 2299.	3.8	31
10	Metal Halide Perovskites for Energy Storage Applications. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 1201-1212.	2.0	29
11	Constructing anatase $\text{TiO}_2$ /Amorphous $\text{Nb}_2\text{O}_5$ heterostructures to enhance photocatalytic degradation of acetaminophen and nitrogen oxide. <i>Journal of Colloid and Interface Science</i> , 2021, 601, 346-354.	9.4	29
12	A review on perovskite materials with solar cell prospective. <i>International Journal of Energy Research</i> , 2021, 45, 19729-19745.	4.5	28
13	AIE active turn-off fluorescent probe for the detection of $\text{Cu}^{2+}$ ions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 183, 84-89.	3.9	26
14	The effect of anchoring groups on the electro-optical and charge injection in triphenylamine derivatives@ $\text{Ti}_6\text{O}_{12}$ . <i>Journal of Theoretical and Computational Chemistry</i> , 2015, 14, 1550027.	1.8	25
15	Evaluation of humidity sensing properties of TMBHPET thin film embedded with spinel cobalt ferrite nanoparticles. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	22
16	Vanadium Sulfide@Sulfur Composites as High-Performance Cathode for Advanced Lithium-Sulfur Batteries. <i>Energy Technology</i> , 2020, 8, 1901163.	3.8	21
17	Colorimetric optical chemosensor of toxic metal ion ( $\text{Hg}^{2+}$ ) and biological activity using green synthesized AgNPs. <i>Green Chemistry Letters and Reviews</i> , 2018, 11, 484-491.	4.7	20
18	Mesoscopic $\text{TiO}_2/\text{Nb}_2\text{O}_5$ Electron Transfer Layer for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100177.	3.7	20

#	ARTICLE	IF	CITATIONS
19	A Combined Experimental and Computational Investigation on Spectroscopic and Photophysical Properties of a Coumarinyl Chalcone. <i>Journal of Fluorescence</i> , 2016, 26, 1357-1365.	2.5	16
20	Current scenario of CNG vehicular pollution and their possible abatement technologies: an overview. <i>Environmental Science and Pollution Research</i> , 2020, 27, 39977-40000.	5.3	16
21	In the Quest of Low-Frequency Impedance Spectra of Efficient Perovskite Solar Cells. <i>Energy Technology</i> , 2021, 9, 2100229.	3.8	16
22	Fabrication of Metal (Cu and Cr) Incorporated Nickel Oxide Films for Electrochemical Oxidation of Methanol. <i>Crystals</i> , 2021, 11, 1398.	2.2	16
23	Quinazolinone derivative: Model compound for determination of dipole moment, solvatochromism and metal ion sensing. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 171, 97-103.	3.9	15
24	Effect of Strontium Doping on the Band Gap of $\text{CeO}_2$ Nanoparticles Synthesized Using Facile Co-precipitation. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 6295-6302.	3.0	15
25	Role of the spacer cation in the growth and crystal orientation of two-dimensional perovskites. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1255-1279.	4.9	14
26	Influence of the A-site cation on hysteresis and ion migration in lead-free perovskite single crystals. <i>Physical Review Materials</i> , 2022, 6, .	2.4	13
27	Quenching Assisted Reverse Micellar Synthesis and Electrical Properties of High Surface Area $\text{BiFeO}_3$ Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2020, 20, 3823-3831.	0.9	12
28	Precise and Prompt Analyte Detection via Ordered Orientation of Receptor in $\text{WSe}_2$ -Based Field Effect Transistor. <i>Nanomaterials</i> , 2022, 12, 1305.	4.1	11
29	Gold Nanoparticles as Efficient Catalysts in Organic Transformations. <i>Current Pharmaceutical Biotechnology</i> , 2021, 22, 724-732.	1.6	9
30	Interface Engineering of Mesoscopic Perovskite Solar Cells by Atomic Layer Deposition of $\text{Ta}_2\text{O}_5$ . <i>ACS Applied Energy Materials</i> , 2021, 4, 10433-10441.	5.1	9
31	Conductive Zn(II)-metallohydrogels: the role of alkali metal cation size in gelation, rheology and conductance. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 654-661.	3.4	8
32	Investigation of the Mechanism Behind Conductive Fluorescent and Multistimuli-Responsive $\text{Li}^+$ -enriched Metallogel Formation. <i>Chemistry - an Asian Journal</i> , 2020, 15, 3020-3028.	3.3	7
33	$\text{Li}^+$ - $\text{Zn}^{2+}$ tailored nanostructured metallohydrogel based mixed ionic-electronic conductors. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1708-1713.	4.9	7
34	Transformation of diffusive to capacitive kinetics in nanoscale modified $\text{Co-TiO}_2/\text{CNTs}$ composites safeguarding steady reversible capacity as sodium-ion battery anode. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163772.	5.5	7
35	Investigation on the Facet-Dependent Anisotropy in Halide Perovskite Single Crystals. <i>Journal of Physical Chemistry C</i> , 2022, 126, 8906-8912.	3.1	7
36	Porous Titanium Oxide Microspheres as Promising Catalyst for Lithium-Oxygen Batteries. <i>Energy Technology</i> , 2020, 8, 1901257.	3.8	6

#	ARTICLE	IF	CITATIONS
37	Recent Progress of Light Intensity-Modulated Small Perturbation Techniques in Perovskite Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, .	2.4	6
38	In Vitro Antimicrobial Activity and Metal Ion Sensing by Green Synthesized Silver Nanoparticles from Fruits of <i>Opuntia Ficus Indica</i> Grown in the Abha Region, Saudi Arabia. <i>Arabian Journal for Science and Engineering</i> , 2019, 44, 43-49.	3.0	4
39	Identification of defects and defect energy distribution in the perovskite layer of MAPbI <sub>3</sub> /Cl perovskite solar cell. <i>Materials Research Express</i> , 2019, 6, 105510.	1.6	4
40	Zirconium-Ferrite Nanoparticles As Improved Adsorbent for Co <sup>2+</sup> , Cu <sup>2+</sup> , and Zn <sup>2+</sup> : Thermodynamic and Kinetic Studies. <i>Russian Journal of Physical Chemistry A</i> , 2020, 94, 2797-2809.	0.6	4
41	Combinatorial synthesis of tin antimony sulfide thin films for solar cell application. <i>International Journal of Energy Research</i> , 2021, 45, 21527-21533.	4.5	4
42	Design and synthesis of organic dyes with various donor groups: promising dyes for dye-sensitized solar cells. <i>Bulletin of Materials Science</i> , 2020, 43, 1.	1.7	3
43	Study of transport and recombination mechanism in hole transporter free perovskite solar cell. <i>Materials Research Express</i> , 2018, 5, 105508.	1.6	2
44	Anthracene Based AIE Active Probe for Colorimetric and Fluorimetric Detection of Cu <sup>2+</sup> Ions. <i>Zeitschrift Fur Physikalische Chemie</i> , 2019, 233, 895-911.	2.8	2
45	Comparative Adsorption of Pb <sup>2+</sup> on Nanostructured Iron-Zirconium Oxide with Fe-to-Zr Molar Ratio of 1:1 and 1:2: Thermodynamic and Kinetic Studies. <i>Arabian Journal for Science and Engineering</i> , 2021, 46, 287-300.	3.0	2
46	A Study on Optoelectronic Properties of Copper Zinc Tin Sulfur Selenide: A Promising Thin-Film Material for Next Generation Solar Technology. <i>Crystal Research and Technology</i> , 2021, 56, 2000159.	1.3	2
47	Band alignment and carrier recombination roles on the open circuit voltage of ETL-passivated perovskite photovoltaics. <i>International Journal of Energy Research</i> , 2022, 46, 6022-6030.	4.5	2
48	Electro-analytical comparison of commercial mono-crystalline silicon and PERC solar cells to maximize performance. <i>Engineering Research Express</i> , 2020, 2, 045018.	1.6	1
49	Analysis of Pitting Corrosion of Pipelines in a Marine Corrosive Environment Using COMSOL Multiphysics. <i>Journal of Bio- and Tribo-Corrosion</i> , 2022, 8, 1.	2.6	1
50	Investigations of the physical behavior of novel polymorphs of indium phosphide from a first-principles perspective. <i>European Physical Journal Plus</i> , 2022, 137, 1.	2.6	1
51	Optoelectronic properties of thermally coated tin selenide thin films for photovoltaics. <i>International Journal of Energy Research</i> , 2022, 46, 3725-3731.	4.5	0