My Ali El Khakani

List of Publications by Year
in descending order

50 papers	1,229 citations	394286 19 h-index	377752 34 g-index
50 all docs	50 docs citations	50 times ranked	2122 citing authors

#	Article	IF	Citations
1	Ultravioletâ€Assisted Directâ€Write Fabrication of Carbon Nanotube/Polymer Nanocomposite Microcoils. Advanced Materials, 2010, 22, 592-596.	11.1	175
2	Tuning the Charge-Transfer Property of PbS-Quantum Dot/TiO₂-Nanobelt Nanohybrids via Quantum Confinement. Journal of Physical Chemistry Letters, 2010, 1, 1030-1035.	2.1	125
3	Controlled Fabrication of PbS Quantumâ€Dot/Carbonâ€Nanotube Nanoarchitecture and its Significant Contribution to Nearâ€Infrared Photonâ€toâ€Current Conversion. Advanced Functional Materials, 2011, 21, 4010-4018.	7.8	84
4	Reconstructing the energy band electronic structure of pulsed laser deposited CZTS thin films intended for solar cell absorber applications. Applied Surface Science, 2017, 396, 1562-1570.	3.1	72
5	Probing the Electronic Surface Properties and Bandgap Narrowing of in situ N, W, and (W,N) Doped Magnetron-Sputtered TiO₂ Films Intended for Electro-Photocatalytic Applications. Journal of Physical Chemistry C, 2016, 120, 631-638.	1.5	54
6	Electrochemical degradation of chlortetracycline using N-doped Ti/TiO2 photoanode under sunlight irradiations. Water Research, 2013, 47, 6801-6810.	5.3	50
7	Enhanced photocatalytic activities of silicon nanowires/graphene oxide nanocomposite: Effect of etching parameters. Journal of Environmental Sciences, 2021, 101, 123-134.	3.2	39
8	Towards high efficiency air-processed near-infrared responsive photovoltaics: bulk heterojunction solar cells based on PbS/CdS coreâ€“shell quantum dots and TiO₂nanorod arrays. Nanoscale, 2015, 7, 10039-10049.	2.8	38
9	Recent Progress in the Synthesis of MoS2 Thin Films for Sensing, Photovoltaic and Plasmonic Applications: A Review. Materials, 2021, 14, 3283.	1.3	38
10	Preparation and mechanical characterization of laser ablated single-walled carbon-nanotubes/polyurethane nanocomposite microbeams. Composites Science and Technology, 2010, 70, 518-524.	3.8	34
11	Reinforcing epoxy nanocomposites with functionalized carbon nanotubes via biotinâ€“streptavidin interactions. Composites Science and Technology, 2012, 72, 1387-1395.	3.8	31
12	Enhanced physical and electrochemical properties of nanostructured carbon nanotubes coated microfibrous carbon paper. Chemical Physics Letters, 2007, 441, 88-93.	1.2	29
13	Ultra-sensitive and fast optical detection of the spike protein of the SARS-CoV-2 using AgNPs/SiNWs nanohybrid based sensors. Surfaces and Interfaces, 2021, 27, 101454.	1.5	27
14	Carbon nanohorns-coated microfibers for use as free-standing electrodes for electrochemical power sources. Electrochemistry Communications, 2009, 11, 862-866.	2.3	26
15	Ag nanoparticle-decorated single wall carbon nanotube films for photovoltaic applications. Materials for Renewable and Sustainable Energy, 2016, 5, 1.	1.5	24
16	Multiple exciton generation induced enhancement of the photoresponse of pulsed-laser-ablation synthesized single-wall-carbon-nanotube/PbS-quantum-dots nanohybrids. Scientific Reports, 2016, 6, 20083.	1.6	23
17	Field emission properties of graphenated multi-wall carbon nanotubes grown by plasma enhanced chemical vapour deposition. Carbon, 2016, 98, 259-266.	5.4	22
18	Electrochemical treatment of domestic wastewater using boron-doped diamond and nanostructured amorphous carbon electrodes. Environmental Science and Pollution Research, 2014, 21, 6578-6589.	2.7	20

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19	Hydrogen-assisted pulsed KrF-laser irradiation for the in situ photoreduction of graphene oxide films. Carbon, 2014, 77, 857-867.	5.4	20
20	Pulsed-laser-ablation based nanodecoration of multi-wall-carbon nanotubes by Coâ€“Ni nanoparticles for dye-sensitized solar cell counter electrode applications. Materials for Renewable and Sustainable Energy, 2017, 6, 1.	1.5	20
21	Probing the electronic structure of carbon nanotubes by nanoscale spectroscopy. Nanoscale, 2010, 2, 1611.	2.8	19
22	Clean electrochemical deposition of calcium carbonate to prevent scale formation in cooling water systems. Environmental Chemistry Letters, 2016, 14, 507-514.	8.3	19
23	Investigation of the plasmonic effect in air-processed PbS/CdS coreâ€“shell quantum dot based solar cells. Journal of Materials Chemistry A, 2016, 4, 13071-13080.	5.2	18
24	Photoconversion Optimization of Pulsed-Laser-Deposited p-CZTS/n-Si-Nanowires Heterojunction-Based Photovoltaic Devices. Nanomaterials, 2020, 10, 1393.	1.9	18
25	Elucidating the local interfacial structure of highly photoresponsive carbon nanotubes/PbS-QDs based nanohybrids grown by pulsed laser deposition. Carbon, 2016, 96, 145-152.	5.4	15
26	Photo-electrocatalytic oxidation of atrazine using sputtured deposited TiO2: WN photoanodes under UV/visible light. Catalysis Today, 2020, 340, 323-333.	2.2	15
27	Binderless Nanothin Catalyst Layers for Next Generation of Micro-Fuel Cells: Concept, Fabrication, Results and Prospective. Journal of the Electrochemical Society, 2012, 159, B331-B339.	1.3	13
28	Statistical optimization of electrochemical oxidation of ethylene glycol using response surface methodology. Chemical Engineering Research and Design, 2017, 105, 12-20.	2.7	13
29	Micro-infiltration of three-dimensional porous networks with carbon nanotube-based nanocomposite for material design. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1910-1919.	3.8	12
30	PbS-quantum-dots/double-wall-carbon-nanotubes nanohybrid based photodetectors with extremely fast response and high responsivity. Materials Today Energy, 2020, 16, 100378.	2.5	12
31	Fabrication of highly oriented 1D SiNW arrays/Au for femto molar level detection of H1N1 protein. Materials Letters, 2021, 300, 130184.	1.3	12
32	Removal of atrazine by photoelectrocatalytic process under sunlight using WN-codoped TiO2 photoanode. Journal of Applied Electrochemistry, 2018, 48, 1353-1361.	1.5	11
33	Electrochemical behavior of Mgâ€“Niâ€“Ti thin films grown by pulsed laser deposition. Journal of Alloys and Compounds, 2003, 358, 126-132.	2.8	10
34	Synthesis, Characterization, and Electrocatalytic Properties of Ultra Highly Densely Packed Carbon Sub-Micrometer Sphere Chains and Sheathed Carbon Microfiber Composites. Journal of Physical Chemistry C, 2010, 114, 1885-1891.	1.5	10
35	Nontrivial role of carbon nanofibers morphology in binderless Pt nanocatalyst supported electrode. International Journal of Hydrogen Energy, 2011, 36, 4682-4688.	3.8	9
36	Enhanced visible-light-photoconversion efficiency of TiO2 nanotubes decorated by pulsed laser deposited CoNi nanoparticles. International Journal of Hydrogen Energy, 2019, 44, 28656-28667.	3.8	9

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37	Optimizing Dye Adsorption in Grapheneâ€“TiO₂Photoanodes for the Enhancement of Photoconversion Efficiency of DSSC Devices. IEEE Journal of Photovoltaics, 2019, 9, 1240-1248.	1.5	9
38	Photoelectrocatalytic bleaching of p-nitrosodimethylaniline using Ti/TiO2 nanostructured electrodes deposited by means of a pulsed laser deposition process. Journal of Applied Electrochemistry, 2013, 43, 467-479.	1.5	7
39	Structural and photoluminescence properties of silicon nanowires extracted by means of a centrifugation process from plasma torch synthesized silicon nanopowder. Nanotechnology, 2017, 28, 285702.	1.3	7
40	Photocatalytic Activity of Silicon Nanowires Decorated with PbS Nanoparticles Deposited by Pulsed Laser Deposition for Efficient Wastewater Treatment. Materials, 2022, 15, 4970.	1.3	6
41	Fast synthesis of ZnO nanostructures by laser-induced chemical liquid deposition. Applied Surface Science, 2009, 255, 5359-5362.	3.1	5
42	Formation of silicon nanocrystal chains induced via Rayleigh instability in ultrathin Si/SiO₂ core/shell nanowires synthesized by an inductively coupled plasma torch process. JPhys Materials, 2019, 2, 015001.	1.8	5
43	Effect of the Helium Background Gas Pressure on the Structural and Optoelectronic Properties of Pulsed-Laser-Deposited PbS Thin Films. Nanomaterials, 2021, 11, 1254.	1.9	5
44	Substrate temperature optimization of pulsed-laser-deposited and in-situ Zn-supplemented-CZTS films and their integration into photovoltaic devices. Journal of Alloys and Compounds, 2022, 893, 162292.	2.8	5
45	Influence of solution parameters for the fast growth of ZnO nanostructures by laser-induced chemical liquid deposition. Applied Physics A: Materials Science and Processing, 2009, 94, 819-829.	1.1	3
46	Self-assembly of silicon nanowires studied by advanced transmission electron microscopy. Beilstein Journal of Nanotechnology, 2017, 8, 440-445.	1.5	3
47	High-temperature nitrogen annealing induced bonding states and photoluminescence changes in inductively coupled plasma torch synthesized silicon nanostructures. Journal of Applied Physics, 2020, 128, .	1.1	3
48	Capacity retention improvement of LiCoO2 cathodes via their laser-ablation-based nanodecoration by BaTiO3 nanoparticles. Journal of Applied Physics, 2022, 131, .	1.1	3
49	Formation of Hybrid Silicon Nanostructures via Capillary Instability Triggered in Inductivelyâ€Coupledâ€Plasma Torch Synthesized Ultraâ€Thin Silicon Nanowires. Physica Status Solidi (B): Basic Research, 2019, 256, 1800620.	0.7	2
50	Ultrafast Carrier Relaxation Dynamics in Quantum Confined Non-Isotropic Silicon Nanostructures Synthesized by an Inductively Coupled Plasma Process. Materials, 2020, 13, 4267.	1.3	0