Sanjayan Sathasivam

List of Publications by Year
in descending order

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Version: 2024-02-01

75 papers	4,642 citations	147801 31 h-index	98798 67 g-index
76 all docs	76 docs citations	76 times ranked	6388 citing authors

#	Article	IF	Citations
1	Robust self-cleaning surfaces that function when exposed to either air or oil. Science, 2015, 347, 1132-1135.	12.6	1,494
2	Bismuth oxyhalides: synthesis, structure and photoelectrochemical activity. Chemical Science, 2016, 7, 4832-4841.	7.4	252
3	Multiâ€Scale Investigations of Îˆâ€Ni_{0.25}V₂O₅Â·nH₂O Cathode Materials in Aqueous Zincâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2000058.	19.5	173
4	Large-scale fabrication of translucent and repairable superhydrophobic spray coatings with remarkable mechanical, chemical durability and UV resistance. Journal of Materials Chemistry A, 2017, 5, 10622-10631.	10.3	164
5	Creating superhydrophobic mild steel surfaces for water proofing and oilâ€“water separation. Journal of Materials Chemistry A, 2014, 2, 11628-11634.	10.3	153
6	Flexible and Selfâ€Powered Photodetector Arrays Based on Allâ€Inorganic CsPbBr₃ Quantum Dots. Advanced Materials, 2020, 32, e2000004.	21.0	134
7	Tungsten Doped TiO2 with Enhanced Photocatalytic and Optoelectrical Properties via Aerosol Assisted Chemical Vapor Deposition. Scientific Reports, 2015, 5, 10952.	3.3	122
8	Enhanced Photocatalytic and Antibacterial Ability of Cu-Doped Anatase TiO₂ Thin Films: Theory and Experiment. ACS Applied Materials & Interfaces, 2020, 12, 15348-15361.	8.0	102
9	Highly conductive and transparent gallium doped zinc oxide thin films via chemical vapor deposition. Scientific Reports, 2020, 10, 638.	3.3	102
10	Efficiently texturing hierarchical superhydrophobic fluoride-free translucent films by AACVD with excellent durability and self-cleaning ability. Journal of Materials Chemistry A, 2018, 6, 17633-17641.	10.3	99
11	Enhanced electrical properties of antimony doped tin oxide thin films deposited via aerosol assisted chemical vapour deposition. Journal of Materials Chemistry C, 2018, 6, 7257-7266.	5.5	97
12	Solution Processing Route to Multifunctional Titania Thin Films: Highly Conductive and Photcatalytically Active Nb:TiO₂. Advanced Functional Materials, 2014, 24, 5075-5085.	14.9	93
13	Fabrication of robust superhydrophobic surfaces via aerosol-assisted CVD and thermo-triggered healing of superhydrophobicity by recovery of roughness structures. Journal of Materials Chemistry A, 2019, 7, 17604-17612.	10.3	91
14	Transforming a Simple Commercial Glue into Highly Robust Superhydrophobic Surfaces via Aerosol-Assisted Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2017, 9, 42327-42335.	8.0	85
15	Chemical Vapor Deposition of Photocatalytically Active Pure Brookite TiO₂ Thin Films. Chemistry of Materials, 2018, 30, 1353-1361.	6.7	79
16	Resonant doping for high mobility transparent conductors: the case of Mo-doped In₂O₃. Materials Horizons, 2020, 7, 236-243.	12.2	64
17	Aerosol assisted chemical vapour deposition of hydrophobic TiO2â€“SnO2 composite film with novel microstructure and enhanced photocatalytic activity. Journal of Materials Chemistry A, 2013, 1, 6271.	10.3	55
18	Chemical Vapor Deposition Synthesis and Optical Properties of Nb₂O₅ Thin Films with Hybrid Functional Theoretical Insight into the Band Structure and Band Gaps. ACS Applied Materials & Interfaces, 2017, 9, 18031-18038.	8.0	54

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19	Transparent superhydrophobic PTFE films via one-step aerosol assisted chemical vapor deposition. RSC Advances, 2017, 7, 29275-29283.	3.6	52
20	Antimicrobial Properties of Copper-Doped ZnO Coatings under Darkness and White Light Illumination. ACS Omega, 2017, 2, 4556-4562.	3.5	52
21	PbO-Modified TiO₂ Thin Films: A Route to Visible Light Photocatalysts. Langmuir, 2014, 30, 624-630.	3.5	50
22	Transparent conducting n-type ZnO:Sc â€“ synthesis, optoelectronic properties and theoretical insight. Journal of Materials Chemistry C, 2017, 5, 7585-7597.	5.5	46
23	Water droplets bouncing on superhydrophobic soft porous materials. Journal of Materials Chemistry A, 2014, 2, 12177-12184.	10.3	45
24	Transparent conductive aluminium and fluorine co-doped zinc oxide films via aerosol assisted chemical vapour deposition. RSC Advances, 2014, 4, 49723-49728.	3.6	42
25	Aerosol assisted chemical vapor deposition of conductive and photocatalytically active tantalum doped titanium dioxide films. Journal of Materials Chemistry A, 2014, 2, 12849.	10.3	42
26	Combined Effect of Temperature Induced Strain and Oxygen Vacancy on Metalâ€Insulator Transition of VO₂ Colloidal Particles. Advanced Functional Materials, 2020, 30, 2005311.	14.9	42
27	Facile fabrication of durable superhydrophobic SiO₂/polyurethane composite sponge for continuous separation of oil from water. RSC Advances, 2017, 7, 11362-11366.	3.6	41
28	Low-Cost One-Step Fabrication of Highly Conductive ZnO:Cl Transparent Thin Films with Tunable Photocatalytic Properties via Aerosol-Assisted Chemical Vapor Deposition. ACS Applied Electronic Materials, 2019, 1, 1408-1417.	4.3	41
29	Aerosol-assisted chemical vapour deposition of transparent superhydrophobic film by using mixed functional alkoxysilanes. Scientific Reports, 2019, 9, 7549.	3.3	41
30	Photocatalytic and electrically conductive transparent Cl-doped ZnO thin films via aerosol-assisted chemical vapour deposition. Journal of Materials Chemistry A, 2018, 6, 12682-12692.	10.3	34
31	Reducing Oxygen Evolution Reaction Overpotential in Cobaltâ€Based Electrocatalysts via Optimizing the â€œMicroparticlesâ€•â€Spider Webâ€•Electrode Configurations. Small, 2020, 16, e1907029.	10.0	34
32	Combinatorial aerosol assisted chemical vapour deposition of a photocatalytic mixed SnO₂/TiO₂ thin film. Journal of Materials Chemistry A, 2014, 2, 5108-5116.	10.3	32
33	A Multifaceted Ferrocene Interlayer for Highly Stable and Efficient Lithium Doped Spiroâ€OMeTADâ€based Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	32
34	Solution Processing of GaAs Thin Films for Photovoltaic Applications. Chemistry of Materials, 2014, 26, 4419-4424.	6.7	29
35	Effect of pretreatment temperature on the photocatalytic activity of microwave irradiated porous nanocrystalline ZnO. New Journal of Chemistry, 2015, 39, 321-332.	2.8	29
36	High Defect Nanoscale ZnO Films with Polar Facets for Enhanced Photocatalytic Performance. ACS Applied Nano Materials, 2019, 2, 2881-2889.	5.0	29

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37	Single step route to highly transparent, conductive and hazy aluminium doped zinc oxide films. RSC Advances, 2018, 8, 42300-42307.	3.6	28
38	Zn and N Codoped TiO₂ Thin Films: Photocatalytic and Bactericidal Activity. ACS Applied Materials & Interfaces, 2021, 13, 10480-10489.	8.0	28
39	Computational and Experimental Study of Ta₂O₅ Thin Films. Journal of Physical Chemistry C, 2017, 121, 202-210.	3.1	27
40	Transparent and Conductive Molybdenum-Doped ZnO Thin Films via Chemical Vapor Deposition. ACS Applied Electronic Materials, 2020, 2, 120-125.	4.3	26
41	Gallium and Indium Î²â€Diketonate Complexes: AACVD of [In(thd)₃] and the Attempted Synthesis of Gallium and Indium Bis(Î²â€diketonates). European Journal of Inorganic Chemistry, 2011, 2011, 1953-1960.	2.0	24
42	InGaN/GaN Multiple Quantum Well Photoanode Modified with Cobalt Oxide for Water Oxidation. ACS Applied Energy Materials, 2018, 1, 6417-6424.	5.1	23
43	Aerosolâ€Assisted Chemical Vapour Deposition of a Copper Gallium Oxide Spinel. ChemPlusChem, 2014, 79, 122-127.	2.8	21
44	Origin of High-Efficiency Photoelectrochemical Water Splitting on Hematite/Functional Nanohybrid Metal Oxide Overlayer Photoanode after a Low Temperature Inert Gas Annealing Treatment. ACS Omega, 2019, 4, 1449-1459.	3.5	20
45	Aerosol assisted chemical vapour deposition of a ZrO₂â€“TiO₂ composite thin film with enhanced photocatalytic activity. RSC Advances, 2015, 5, 67944-67950.	3.6	19
46	A single-source precursor approach to solution processed indium arsenide thin films. Journal of Materials Chemistry C, 2016, 4, 6761-6768.	5.5	19
47	Heteroepitaxy of GaP on silicon for efficient and cost-effective photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 8550-8558.	10.3	19
48	n-Type conducting P doped ZnO thin films via chemical vapor deposition. RSC Advances, 2020, 10, 34527-34533.	3.6	19
49	Production of an EP/PDMS/SA/AlZnO Coated Superhydrophobic Surface through an Aerosol-Assisted Chemical Vapor Deposition Process. Langmuir, 2022, 38, 7825-7832.	3.5	19
50	Photo-activity and low resistivity in N/Nb Co-doped TiO₂ thin films by combinatorial AACVD. Journal of Materials Chemistry A, 2016, 4, 407-415.	10.3	18
51	Dispelling the Myth of Passivated Codoping in TiO₂. Chemistry of Materials, 2019, 31, 2577-2589.	6.7	17
52	Patterning of metal oxide thin films using a H₂/He atmospheric pressure plasma jet. Green Chemistry, 2020, 22, 1406-1413.	9.0	15
53	Photoelectrochemical water oxidation of GaP_{1â^'x}Sb_x with a direct band gap of 1.65 eV for full spectrum solar energy harvesting. Sustainable Energy and Fuels, 2019, 3, 1720-1729.	4.9	14
54	Combinatorial Atmospheric Pressure CVD of a Composite TiO₂/SnO₂ Thin Film. Chemical Vapor Deposition, 2014, 20, 69-79.	1.3	12

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55	Single Step Solution Processed GaAs Thin Films from GaMe3andtBuAsH2under Ambient Pressure. Journal of Physical Chemistry C, 2016, 120, 7013-7019.	3.1	12
56	Antibacterial properties of Cuâ€“ZrO2thin films prepared via aerosol assisted chemical vapour deposition. Journal of Materials Chemistry B, 2016, 4, 666-671.	5.8	12
57	Robust Protection of IIIâ€“V Nanowires in Water Splitting by a Thin Compact TiO₂ Layer. ACS Applied Materials & Interfaces, 2021, 13, 30950-30958.	8.0	12
58	A solution based route to GaAs thin films from As(NMe₂)₃ and GaMe₃ for solar cells. RSC Advances, 2015, 5, 11812-11817.	3.6	11
59	Ga₂O₃â€“Cu₂O: synthesis, characterisation and antibacterial properties. RSC Advances, 2017, 7, 551-558.	3.6	11
60	Room temperature ferromagnetism in mixed-phase titania nanoparticles produced by the levitationâ€“jet generator. Journal of Materials Science: Materials in Electronics, 2018, 29, 3304-3316.	2.2	11
61	Highly Photocatalytically Active Iron(III) Titanium Oxide Thin films via Aerosolâ€Assisted CVD. Chemical Vapor Deposition, 2015, 21, 21-25.	1.3	8
62	A Hierarchical 3D TiO₂/Ni Nanostructure as an Efficient Holeâ€Extraction and Protection Layer for GaAs Photoanodes. ChemSusChem, 2020, 13, 6028-6036.	6.8	8
63	Zincâ€Ion Batteries: Multiâ€Scale Investigations of Îâ€Ni_{0.25}V₂O₅·nH₂O Cathode Materials in Aqueous Zincâ€Ion Batteries (Adv. Energy Mater. 15/2020). Advanced Energy Materials, 2020, 10, 2070068.	19.5	8
64	Strong robust superhydrophobic C/silicone monolith for photothermal ice removal. Journal of Materials Science, 2022, 57, 6963-6970.	3.7	8
65	The Effect of Solvent on the Morphology of Indium Oxide Deposited by Aerosol-assisted Chemical Vapour Deposition. Australian Journal of Chemistry, 2013, 66, 1274.	0.9	7
66	Polyoxometalate Complexes as Precursors to Vanadiumâ€Doped Molybdenum or Tungsten Oxide Thin Films by Means of Aerosolâ€Assisted Chemical Vapour Deposition. ChemPlusChem, 2016, 81, 307-314.	2.8	7
67	Iron-Intercalated Zirconium Diselenide Thin Films from the Low-Pressure Chemical Vapor Deposition of [Fe(Î·⁵-C₅H₄Se)₂Zr(Î·⁵-C₅H₅)₂. ACS Omega, 2020, 5, 15799-15804.	3.5	7
68	The use of time resolved aerosol assisted chemical vapour deposition in mapping metal oxide thin film growth and fine tuning functional properties. Journal of Materials Chemistry A, 2015, 3, 4811-4819.	10.3	5
69	Influence of Lithium and Lanthanum Treatment on TiO 2 Nanofibers and Their Application in nâ€iâ€p Solar Cells. ChemElectroChem, 2019, 6, 3590-3598.	3.4	5
70	Synthesis of superhydrophobic polymer/tungsten (VI) oxide nanocomposite thin films. European Journal of Chemistry, 2016, 7, 139-145.	0.6	5
71	Fabrication of C-Doped Titanium Dioxide Coatings with Improved Anti-icing and Tribological Behavior. Langmuir, 2022, 38, 576-583.	3.5	5
72	A novel adjuvant drug-device combination tissue scaffold for radical prostatectomy. Drug Delivery, 2019, 26, 1115-1124.	5.7	4

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73	Dopant stability in multifunctional doped TiO₂'s under environmental UVA exposure. Environmental Science: Nano, 2017, 4, 1108-1113.	4.3	1
74	Oxygen Evolution Reaction Kinetics: Reducing Oxygen Evolution Reaction Overpotential in Cobaltâ€Based Electrocatalysts via Optimizing the â€œMicroparticlesâ€•nâ€Spider Webâ€•Electrode Configurations (Small 8/2020). Small, 2020, 16, 2070041.	10.0	1
75	Influence of Lithium and Lanthanum Treatment on TiO 2 Nanofibers and Their Application in nâ€•â€p Solar Cells. ChemElectroChem, 2019, 6, 3529-3529.	3.4	0