Kenneth K S Lau

List of Publications by Year
in descending order

74 papers	4,427 citations	147801 31 h-index	102487 66 g-index
81 all docs	81 docs citations	81 times ranked	5138 citing authors

#	Article	IF	Citations
1	Superhydrophobic Carbon Nanotube Forests. Nano Letters, 2003, 3, 1701-1705.	9.1	1,527
2	Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. Nature Energy, 2019, 4, 484-494.	39.5	345
3	Initiated Chemical Vapor Deposition (iCVD) of Poly(alkyl acrylates):Â An Experimental Study. Macromolecules, 2006, 39, 3688-3694.	4.8	265
4	Initiated Chemical Vapor Deposition (iCVD) of Poly(alkyl acrylates):Â A Kinetic Model. Macromolecules, 2006, 39, 3695-3703.	4.8	161
5	Designing polymer surfaces via vapor deposition. Materials Today, 2010, 13, 26-33.	14.2	123
6	Structure and Morphology of Fluorocarbon Films Grown by Hot Filament Chemical Vapor Deposition. Chemistry of Materials, 2000, 12, 3032-3037.	6.7	103
7	Enhanced Charge Storage of Ultrathin Polythiophene Films within Porous Nanostructures. ACS Nano, 2014, 8, 5413-5422.	14.6	88
8	Pore Filling of Nanostructured Electrodes in Dye Sensitized Solar Cells by Initiated Chemical Vapor Deposition. Nano Letters, 2011, 11, 419-423.	9.1	82
9	Title is missing!. Plasmas and Polymers, 1999, 4, 21-32.	1.5	79
10	Particle Surface Design using an All-Dry Encapsulation Method. Advanced Materials, 2006, 18, 1972-1977.	21.0	75
11	All-Dry Synthesis and Coating of Methacrylic Acid Copolymers for Controlled Release. Macromolecular Bioscience, 2007, 7, 429-434.	4.1	73
12	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	12.8	71
13	Initiated chemical vapor deposition (iCVD) of polymeric nanocoatings. Surface and Coatings Technology, 2007, 201, 9400-9405.	4.8	69
14	Engineering Ultrathin Polyaniline in Micro/Mesoporous Carbon Supercapacitor Electrodes Using Oxidative Chemical Vapor Deposition. Advanced Materials Interfaces, 2017, 4, 1601201.	3.7	66
15	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	14.6	61
16	Hot-wire chemical vapor deposition (HWCVD) of fluorocarbon and organosilicon thin films. Thin Solid Films, 2001, 395, 288-291.	1.8	59
17	The importance of interfacial design at the carbon nanotube/polymer composite interface. Journal of Applied Polymer Science, 2006, 102, 1413-1418.	2.6	58
18	Full-Field Dynamic Characterization of Superhydrophobic Condensation on Biotemplated Nanostructured Surfaces. Langmuir, 2014, 30, 7556-7566.	3.5	58

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19	Mechanical Properties of Ultrahigh Molecular Weight PHEMA Hydrogels Synthesized Using Initiated Chemical Vapor Deposition. Biomacromolecules, 2010, 11, 2116-2122.	5.4	53
20	Chemical Vapor Deposition Synthesis of Tunable Unsubstituted Polythiophene. Langmuir, 2011, 27, 15223-15229.	3.5	46
21	Particle functionalization and encapsulation by initiated chemical vapor deposition (iCVD). Surface and Coatings Technology, 2007, 201, 9189-9194.	4.8	44
22	Pulsed plasma enhanced and hot filament chemical vapor deposition of fluorocarbon films. Journal of Fluorine Chemistry, 2000, 104, 119-126.	1.7	40
23	Polymeric nanocoatings by hot-wire chemical vapor deposition (HWCVD). Thin Solid Films, 2006, 501, 211-215.	1.8	40
24	Oxidative chemical vapor deposition of polyaniline thin films. Beilstein Journal of Nanotechnology, 2017, 8, 1266-1276.	2.8	37
25	Fluorocarbon dielectrics via hot filament chemical vapor deposition. Journal of Fluorine Chemistry, 2003, 122, 93-96.	1.7	36
26	Variable angle spectroscopic ellipsometry of fluorocarbon films from hot filament chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2404.	2.1	35
27	Initiated CVD of Poly(2â€Hydroxyethyl Methacrylate) Hydrogels: Synthesis, Characterization and Inâ€vitro Biocompatibility. Chemical Vapor Deposition, 2009, 15, 150-155.	1.3	35
28	Electric Field-Induced, Reversible Lotus-to-Rose Transition in Nanohybrid Shish Kebab Paper with Hierarchical Roughness. ACS Applied Materials & Interfaces, 2013, 5, 12089-12098.	8.0	35
29	Carbon Nanotubeâ€Directed Polytetrafluoroethylene Crystal Growth via Initiated Chemical Vapor Deposition. Macromolecular Rapid Communications, 2013, 34, 251-256.	3.9	34
30	Engineering conformal nanoporous polyaniline via oxidative chemical vapor deposition and its potential application in supercapacitors. Chemical Engineering Science, 2019, 194, 156-164.	3.8	34
31	Reduced cell attachment to poly(2â€hydroxyethyl methacrylate)â€coated ventricular catheters in vitro. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1268-1279.	3.4	33
32	Graft Polymerization of Anti-Fouling PEO Surfaces by Liquid-Free Initiated Chemical Vapor Deposition. Macromolecules, 2012, 45, 6915-6922.	4.8	32
33	High-Resolution 19F MAS NMR Spectroscopy of Fluorocarbon Films from Pulsed PECVD of Hexafluoropropylene Oxide. Journal of Physical Chemistry B, 1998, 102, 5977-5984.	2.6	31
34	Thermochemistry of gas phase CF2 reactions: A density functional theory study. Journal of Chemical Physics, 2000, 113, 4103-4108.	3.0	30
35	Initiated chemical vapor deposition (iCVD) of copolymer thin films. Thin Solid Films, 2008, 516, 678-680.	1.8	27
36	Theoretical and Experimental Study of a Dye-Sensitized Solar Cell. Industrial & Engineering Chemistry Research, 2014, 53, 5234-5247.	3.7	27

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37	Structural Correlation Study of Pulsed Plasma-Polymerized Fluorocarbon Solids by Two-Dimensional Wide-Line Separation NMR Spectroscopy. Journal of Physical Chemistry B, 1997, 101, 6839-6846.	2.6	26
38	Effects of polymer chemistry on polymer-electrolyte dye sensitized solar cell performance: A theoretical and experimental investigation. Journal of Power Sources, 2015, 274, 156-164.	7.8	25
39	Thermal Annealing of Fluorocarbon Films Grown by Hot Filament Chemical Vapor Deposition. Journal of Physical Chemistry B, 2001, 105, 2303-2307.	2.6	22
40	Synthesis and integration of poly(1-vinylimidazole) polymer electrolyte in dye sensitized solar cells by initiated chemical vapor deposition. Chemical Engineering Science, 2016, 154, 136-142.	3.8	22
41	Influence of oCVD Polyaniline Film Chemistry in Carbon-Based Supercapacitors. Industrial & Engineering Chemistry Research, 2017, 56, 6221-6228.	3.7	22
42	â€œToxic memoryâ€•via chaperone modification is a potential mechanism for rapid mallory-denk body reinduction. Hepatology, 2008, 48, 931-942.	7.3	20
43	Pulsed Plasma Enhanced Chemical Vapor Deposition from CH₂F₂, C₂H₂F₄, and CHClF₂. Materials Research Society Symposia Proceedings, 1998, 511, 75.	0.1	18
44	Microencapsulation of a Crop Protection Compound by Initiated Chemical Vapor Deposition. Macromolecular Rapid Communications, 2012, 33, 1375-1380.	3.9	16
45	Kinetic analysis of the initiated chemical vapor deposition of poly(vinylpyrrolidone) and poly(4-vinylpyridine). Thin Solid Films, 2015, 595, 244-250.	1.8	15
46	Photochromic dye-sensitized solar cells. AIMS Materials Science, 2015, 2, 503-509.	1.4	14
47	Masking of a cathepsin G cleavage site in vivo contributes to the proteolytic resistance of major histocompatibility complex class II molecules. Immunology, 2010, 130, 436-446.	4.4	13
48	Firstâ€principles modeling for optimal design, operation, and integration of energy conversion and storage systems. AICHE Journal, 2019, 65, e16482.	3.6	13
49	Oxidative Chemical Vapor Deposition of Conducting Polymer Films on Nanostructured Surfaces for Piezoresistive Sensor Applications. Advanced Electronic Materials, 2021, 7, 2000871.	5.1	13
50	Molecular orientation in mixed LB films containing photochromic molecules. Thin Solid Films, 1997, 307, 266-273.	1.8	12
51	iCVD growth of poly(N-vinylimidazole) and poly(N-vinylimidazole-co-N-vinylpyrrolidone). Thin Solid Films, 2009, 517, 3539-3542.	1.8	12
52	Integration of polymer electrolytes in dye sensitized solar cells by initiated chemical vapor deposition. Thin Solid Films, 2011, 519, 4551-4554.	1.8	12
53	Initiated chemical vapor deposition of poly(2-hydroxyethyl methacrylate) hydrogels. Thin Solid Films, 2011, 519, 4415-4417.	1.8	11
54	Photon to thermal response of a single patterned gold nanorod cluster under near-infrared laser irradiation. Biofabrication, 2011, 3, 015002.	7.1	11

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55	Experimental and theoretical investigation of dye sensitized solar cells integrated with crosslinked poly(vinylpyrrolidone) polymer electrolyte using initiated chemical vapor deposition. Thin Solid Films, 2017, 635, 9-16.	1.8	11
56	Suppressing Crystallinity by Nanoconfining Polymers Using Initiated Chemical Vapor Deposition. Macromolecules, 2019, 52, 5183-5191.	4.8	11
57	Overview of Dye-Sensitized Solar Cells. , 2019, , 1-49.		10
58	Solidâ€State Nuclear Magnetic Resonance Spectroscopy of Low Dielectric Constant Films from Pulsed Hydrofluorocarbon Plasmas. Journal of the Electrochemical Society, 1999, 146, 2652-2658.	2.9	9
59	Thin Film Condensation Supported on Ambiphilic Microstructures. Journal of Heat Transfer, 2017, 139, .	2.1	9
60	Conformal Growth of Ultrathin Hydrophilic Coatings on Hydrophobic Surfaces Using Initiated Chemical Vapor Deposition. Langmuir, 2021, 37, 7751-7759.	3.5	9
61	Growth of Polyglycidol in Porous TiO₂ Nanoparticle Networks via Initiated Chemical Vapor Deposition: Probing Polymer Confinement Under High Nanoparticle Loading. Advanced Materials Interfaces, 2015, 2, 1500341.	3.7	8
62	Suitability of N-propanoic acid spiropyrans and spirooxazines for use as sensitizing dyes in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2017, 19, 2981-2989.	2.8	8
63	Electrical Conductivity and Stability of Oxidative Chemical Vapor Deposition Copolymer Thin Films of Thiophene and Pyrrole. Nanoscience and Nanotechnology Letters, 2015, 7, 50-55.	0.4	8
64	Applying HWCVD to particle coatings and modeling the deposition mechanism. Thin Solid Films, 2008, 516, 674-677.	1.8	7
65	Deposition Behavior of Polyaniline on Carbon Nanofibers by Oxidative Chemical Vapor Deposition. Langmuir, 2020, 36, 13079-13086.	3.5	6
66	Oneâ€Step Bottomâ€Up Growth of Highly Liquid Repellent Wormâ€Like Surfaces on Planar Substrates. Advanced Materials Interfaces, 2022, 9, .	3.7	6
67	Dataâ€driven prediction and optimization of liquid wettability of an initiated chemical vapor depositionâ€produced fluoropolymer. AICHE Journal, 2022, 68, .	3.6	5
68	Cancer Biomarker Discovery via Targeted Profiling of Multiclass Tumor Tissue-Derived Proteomes. Clinical Proteomics, 2009, 5, 163-169.	2.1	3
69	Formation and Stability of Thin Condensing Films on Structured Amphiphilic Surfaces. Langmuir, 2021, 37, 2683-2692.	3.5	3
70	Insights Into Dye-Sensitized Solar Cells From Macroscopic-Scale First-Principles Mathematical Modeling. , 2019, , 83-119.		2
71	In Situ Synthesis and Integration of Polymer Electrolytes in Nanostructured Electrodes for Photovoltaic Applications. Materials Research Society Symposia Proceedings, 2011, 1312, 1.	0.1	1
72	Model-Guided Design and Optimization of Polymer-Electrolyte Dye Sensitized Solar Cells. ECS Meeting Abstracts, 2016, , .	0.0	0

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73	Viable Approach for Forming Uniform Polymer Nanocomposites with Ultrahigh Filler Loading. ECS Meeting Abstracts, 2016, , .	0.0	0
74	Synthesis and Integration of Ultrathin Polyaniline Films into Carbide Derived Carbon Supercapacitors. ECS Meeting Abstracts, 2016, , .	0.0	0