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	Oneâ€Step Bottomâ€Up Growth of Highly Liquid Repellent Wormâ€Like Surfaces on Planar Substrates. Advanced Materials Interfaces, 2022, 9, .	3.7	6
2	Dataâ€driven prediction and optimization of liquid wettability of an initiated chemical vapor depositionâ€produced fluoropolymer. AIChE Journal, 2022, 68, .	3.6	5
3	Formation and Stability of Thin Condensing Films on Structured Amphiphilic Surfaces. Langmuir, 2021, 37, 2683-2692.	3.5	3
4	Conformal Growth of Ultrathin Hydrophilic Coatings on Hydrophobic Surfaces Using Initiated Chemical Vapor Deposition. Langmuir, 2021, 37, 7751-7759.	3.5	9
5	Oxidative Chemical Vapor Deposition of Conducting Polymer Films on Nanostructured Surfaces for Piezoresistive Sensor Applications. Advanced Electronic Materials, 2021, 7, 2000871.	5.1	13
6	Deposition Behavior of Polyaniline on Carbon Nanofibers by Oxidative Chemical Vapor Deposition. Langmuir, 2020, 36, 13079-13086.	3.5	6
7	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
8	Suppressing Crystallinity by Nanoconfining Polymers Using Initiated Chemical Vapor Deposition. Macromolecules, 2019, 52, 5183-5191.	4.8	11
9	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
10	Overview of Dye-Sensitized Solar Cells. , 2019, , 1-49.		10
11	Insights Into Dye-Sensitized Solar Cells From Macroscopic-Scale First-Principles Mathematical Modeling. , 2019, , 83-119.		2
12	Firstâ€principles modeling for optimal design, operation, and integration of energy conversion and storage systems. AIChE Journal, 2019, 65, e16482.	3.6	13
13	Reduced cell attachment to poly(2â€hydroxyethyl methacrylate)â€coated ventricular catheters <i>in vitro</i>. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1268-1279.	3.4	33
14	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
15	Influence of oCVD Polyaniline Film Chemistry in Carbon-Based Supercapacitors. Industrial & Engineering Chemistry Research, 2017, 56, 6221-6228.	3.7	22
16	Engineering Ultrathin Polyaniline in Micro/Mesoporous Carbon Supercapacitor Electrodes Using Oxidative Chemical Vapor Deposition. Advanced Materials Interfaces, 2017, 4, 1601201.	3.7	66
17	Thin Film Condensation Supported on Ambiphilic Microstructures. Journal of Heat Transfer, 2017, 139, .	2.1	9
18	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

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19	Oxidative chemical vapor deposition of polyaniline thin films. Beilstein Journal of Nanotechnology, 2017, 8, 1266-1276.	2.8	37
20	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
21	Model-Guided Design and Optimization of Polymer-Electrolyte Dye Sensitized Solar Cells. ECS Meeting Abstracts, 2016, , .	0.0	0
22	Viable Approach for Forming Uniform Polymer Nanocomposites with Ultrahigh Filler Loading. ECS Meeting Abstracts, 2016, , .	0.0	0
23	Synthesis and Integration of Ultrathin Polyaniline Films into Carbide Derived Carbon Supercapacitors. ECS Meeting Abstracts, 2016, , .	0.0	0
24	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
25	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
26	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	12.8	71
27	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
28	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
29	Photochromic dye-sensitized solar cells. AIMS Materials Science, 2015, 2, 503-509.	1.4	14
30	Theoretical and Experimental Study of a Dye-Sensitized Solar Cell. Industrial & Engineering Chemistry Research, 2014, 53, 5234-5247.	3.7	27
31	Enhanced Charge Storage of Ultrathin Polythiophene Films within Porous Nanostructures. ACS Nano, 2014, 8, 5413-5422.	14.6	88
32	Full-Field Dynamic Characterization of Superhydrophobic Condensation on Biotemplated Nanostructured Surfaces. Langmuir, 2014, 30, 7556-7566.	3.5	58
33	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	14.6	61
34	Carbon Nanotubeâ€Directed Polytetrafluoroethylene Crystal Growth via Initiated Chemical Vapor Deposition. Macromolecular Rapid Communications, 2013, 34, 251-256.	3.9	34
35	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
36	Graft Polymerization of Anti-Fouling PEO Surfaces by Liquid-Free Initiated Chemical Vapor Deposition. Macromolecules, 2012, 45, 6915-6922.	4.8	32

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37	Microencapsulation of a Crop Protection Compound by Initiated Chemical Vapor Deposition. Macromolecular Rapid Communications, 2012, 33, 1375-1380.	3.9	16
38	Chemical Vapor Deposition Synthesis of Tunable Unsubstituted Polythiophene. Langmuir, 2011, 27, 15223-15229.	3.5	46
39	Pore Filling of Nanostructured Electrodes in Dye Sensitized Solar Cells by Initiated Chemical Vapor Deposition. Nano Letters, 2011, 11, 419-423.	9.1	82
40	Initiated chemical vapor deposition of poly(2-hydroxyethyl methacrylate) hydrogels. Thin Solid Films, 2011, 519, 4415-4417.	1.8	11
41	Integration of polymer electrolytes in dye sensitized solar cells by initiated chemical vapor deposition. Thin Solid Films, 2011, 519, 4551-4554.	1.8	12
42	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
43	Photon to thermal response of a single patterned gold nanorod cluster under near-infrared laser irradiation. Biofabrication, 2011, 3, 015002.	7.1	11
44	Designing polymer surfaces via vapor deposition. Materials Today, 2010, 13, 26-33.	14.2	123
45	Masking of a cathepsin G cleavage site <i>in vivo</i> contributes to the proteolytic resistance of major histocompatibility complex class II molecules. Immunology, 2010, 130, 436-446.	4.4	13
46	Mechanical Properties of Ultrahigh Molecular Weight PHEMA Hydrogels Synthesized Using Initiated Chemical Vapor Deposition. Biomacromolecules, 2010, 11, 2116-2122.	5.4	53
47	Initiated CVD of Poly(2â€Hydroxyethyl Methacrylate) Hydrogels: Synthesis, Characterization and Inâ€vitro Biocompatibility. Chemical Vapor Deposition, 2009, 15, 150-155.	1.3	35
48	iCVD growth of poly(N-vinylimidazole) and poly(N-vinylimidazole-co-N-vinylpyrrolidone). Thin Solid Films, 2009, 517, 3539-3542.	1.8	12
49	Cancer Biomarker Discovery via Targeted Profiling of Multiclass Tumor Tissue-Derived Proteomes. Clinical Proteomics, 2009, 5, 163-169.	2.1	3
50	â€œToxic memoryâ€•via chaperone modification is a potential mechanism for rapid mallory-denk body reinduction. Hepatology, 2008, 48, 931-942.	7.3	20
51	Applying HWCVD to particle coatings and modeling the deposition mechanism. Thin Solid Films, 2008, 516, 674-677.	1.8	7
52	Initiated chemical vapor deposition (iCVD) of copolymer thin films. Thin Solid Films, 2008, 516, 678-680.	1.8	27
53	All-Dry Synthesis and Coating of Methacrylic Acid Copolymers for Controlled Release. Macromolecular Bioscience, 2007, 7, 429-434.	4.1	73
54	Particle functionalization and encapsulation by initiated chemical vapor deposition (iCVD). Surface and Coatings Technology, 2007, 201, 9189-9194.	4.8	44

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55	Initiated chemical vapor deposition (iCVD) of polymeric nanocoatings. Surface and Coatings Technology, 2007, 201, 9400-9405.	4.8	69
56	Initiated Chemical Vapor Deposition (iCVD) of Poly(alkyl acrylates):Â An Experimental Study. Macromolecules, 2006, 39, 3688-3694.	4.8	265
57	Initiated Chemical Vapor Deposition (iCVD) of Poly(alkyl acrylates):Â A Kinetic Model. Macromolecules, 2006, 39, 3695-3703.	4.8	161
58	Polymeric nanocoatings by hot-wire chemical vapor deposition (HWCVD). Thin Solid Films, 2006, 501, 211-215.	1.8	40
59	The importance of interfacial design at the carbon nanotube/polymer composite interface. Journal of Applied Polymer Science, 2006, 102, 1413-1418.	2.6	58
60	Particle Surface Design using an All-Dry Encapsulation Method. Advanced Materials, 2006, 18, 1972-1977.	21.0	75
61	Fluorocarbon dielectrics via hot filament chemical vapor deposition. Journal of Fluorine Chemistry, 2003, 122, 93-96.	1.7	36
62	Superhydrophobic Carbon Nanotube Forests. Nano Letters, 2003, 3, 1701-1705.	9.1	1,527
63	Thermal Annealing of Fluorocarbon Films Grown by Hot Filament Chemical Vapor Deposition. Journal of Physical Chemistry B, 2001, 105, 2303-2307.	2.6	22
64	Hot-wire chemical vapor deposition (HWCVD) of fluorocarbon and organosilicon thin films. Thin Solid Films, 2001, 395, 288-291.	1.8	59
65	Pulsed plasma enhanced and hot filament chemical vapor deposition of fluorocarbon films. Journal of Fluorine Chemistry, 2000, 104, 119-126.	1.7	40
66	Thermochemistry of gas phase CF2 reactions: A density functional theory study. Journal of Chemical Physics, 2000, 113, 4103-4108.	3.0	30
67	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
68	Structure and Morphology of Fluorocarbon Films Grown by Hot Filament Chemical Vapor Deposition. Chemistry of Materials, 2000, 12, 3032-3037.	6.7	103
69	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
70	Title is missing!. Plasmas and Polymers, 1999, 4, 21-32.	1.5	79
71	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
72	Pulsed Plasma Enhanced Chemical Vapor Deposition from CH₂F₂, C₂H₂F₄, and CHClF₂. Materials Research Society Symposia Proceedings, 1998, 511, 75.	0.1	18

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73	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
74	Molecular orientation in mixed LB films containing photochromic molecules. Thin Solid Films, 1997, 307, 266-273.	1.8	12