## Jaime C Grunlan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/115779/publications.pdf Version: 2024-02-01

		22153	9861
218	21,193	59	141
papers	citations	h-index	g-index
232	232	232	21759
all docs	docs citations	times ranked	citing authors
232 all docs	232 docs citations	232 times ranked	21759 citing authors

LAIME C COUNLAN

#	Article	IF	CITATIONS
1	Antibacterial cotton from novel phytic acid-based multilayer nanocoating. Green Materials, 2022, 10, 35-40.	2.1	2
2	Layer-by-Layer Deposition: A Promising Environmentally Benign Flame-Retardant Treatment for Cotton, Polyester, Polyamide and Blended Textiles. Materials, 2022, 15, 432.	2.9	23
3	Cross-linking and silanization of clay-based multilayer films for improved corrosion protection of steel. Journal of Materials Science, 2022, 57, 2988-2998.	3.7	8
4	Acid-Doped Biopolymer Nanocoatings for Flame-Retardant Polyurethane Foam. ACS Applied Polymer Materials, 2022, 4, 1983-1990.	4.4	7
5	Small molecule additives in multilayer polymer-clay thin films for improved heat shielding of steel. Npj Materials Degradation, 2022, 6, .	5.8	4
6	Polymeric coacervate coating for flame retardant paper. Cellulose, 2022, 29, 4589-4597.	4.9	14
7	Extraordinarily High Dielectric Breakdown Strength of Multilayer Polyelectrolyte Thin Films. Macromolecules, 2022, 55, 3151-3158.	4.8	11
8	Polyelectrolyte photopolymer complexes for flame retardant wood. Materials Chemistry Frontiers, 2022, 6, 1630-1636.	5.9	10
9	Flame-Retardant, Antimicrobial, and UV-Protective Lignin-Based Multilayer Nanocoating. ACS Applied Polymer Materials, 2022, 4, 4528-4537.	4.4	16
10	Super Gas Barrier of a Polyelectrolyte/Clay Coacervate Thin Film. Macromolecular Rapid Communications, 2021, 42, 2000540.	3.9	10
11	Organic thermoelectric thin films with large p-type and n-type power factor. Journal of Materials Science, 2021, 56, 4291-4304.	3.7	14
12	Mixed solvent synthesis of polydopamine nanospheres for sustainable multilayer flame retardant nanocoating. Polymer Chemistry, 2021, 12, 2389-2396.	3.9	11
13	Clay-Filled Polyelectrolyte Complex Nanocoating for Flame-Retardant Polyurethane Foam. ACS Omega, 2021, 6, 8016-8020.	3.5	22
14	Efficient Heat Shielding of Steel with Multilayer Nanocomposite Thin Film. ACS Applied Materials & Interfaces, 2021, 13, 19369-19376.	8.0	12
15	Environmentally-benign, water-based covalent polymer network for flame retardant cotton. Cellulose, 2021, 28, 5855.	4.9	27
16	Influence of cation size on the thermoelectric behavior of salt-doped organic nanocomposite thin films. Applied Physics Letters, 2021, 118, 151904.	3.3	3
17	Edible Polyelectrolyte Complex Nanocoating for Protection of Perishable Produce. ACS Food Science & Technology, 2021, 1, 495-499.	2.7	10
18	Environmentally Benign Flame Retardant Polyamideâ€6 Filament for Additive Manufacturing. Macromolecular Materials and Engineering, 2021, 306, 2100245.	3.6	6

#	Article	IF	CITATIONS
19	Highly selective hollow fiber membranes for carbon capture via in-situ layer-by-layer surface functionalization. Journal of Membrane Science, 2021, 633, 119381.	8.2	16
20	Polyelectrolyte Complex that Minimizes Bacterial Adhesion to Polyester. Macromolecular Materials and Engineering, 2021, 306, 2100579.	3.6	3
21	Nanoindentation and nanoscratch of sub-micron polymer nanocomposite films on compliant substrate. Thin Solid Films, 2021, 736, 138905.	1.8	2
22	Environmentally Benign Phytic Acid-Based Nanocoating for Multifunctional Flame-Retardant/Antibacterial Cotton. Fibers, 2021, 9, 69.	4.0	16
23	Renewable nanobrick wall coatings for fire protection of wood. Green Materials, 2020, 8, 131-138.	2.1	10
24	Influence of Clay size on corrosion protection by Clay nanocomposite thin films. Progress in Organic Coatings, 2020, 140, 105489.	3.9	18
25	Self-Extinguishing Additive Manufacturing Filament from a Unique Combination of Polylactic Acid and a Polyelectrolyte Complex. , 2020, 2, 15-19.		9
26	Environmentally Benign and Self-Extinguishing Multilayer Nanocoating for Protection of Flammable Foam. ACS Applied Materials & Interfaces, 2020, 12, 49130-49137.	8.0	37
27	Environmentally-Benign Phytic Acid-Based Multilayer Coating for Flame Retardant Cotton. Materials, 2020, 13, 5492.	2.9	27
28	Flame suppression of polyamide through combined enzymatic modification and addition of urea to multilayer nanocoating. Journal of Materials Science, 2020, 55, 15056-15067.	3.7	13
29	UV-protection from chitosan derivatized lignin multilayer thin film. RSC Advances, 2020, 10, 32959-32965.	3.6	9
30	High Modulus, Thermally Stable, and Self-Extinguishing Aramid Nanofiber Separators. ACS Applied Materials & Interfaces, 2020, 12, 25756-25766.	8.0	71
31	Enhancing H2-permselectivity of high-flux hollow fiber membrane via in-situ layer-by-layer surface treatment. Journal of Membrane Science, 2020, 615, 118312.	8.2	4
32	Contact electrification between identical polymers as the basis for triboelectric/flexoelectric materials. Physical Chemistry Chemical Physics, 2020, 22, 13299-13305.	2.8	24
33	Mica-Based Multilayer Nanocoating as a Highly Effective Flame Retardant and Smoke Suppressant. ACS Applied Materials & Interfaces, 2020, 12, 19938-19943.	8.0	36
34	Facile two-step phosphazine-based network coating for flame retardant cotton. Cellulose, 2020, 27, 4123-4132.	4.9	40
35	Amine Salt Thickening of Intumescent Multilayer Flame Retardant Treatment. Industrial & Engineering Chemistry Research, 2020, 59, 2689-2695.	3.7	21
36	Flame-retardant surface treatments. Nature Reviews Materials, 2020, 5, 259-275.	48.7	325

#	Article	IF	CITATIONS
37	Salt doping to improve thermoelectric power factor of organic nanocomposite thin films. RSC Advances, 2020, 10, 11800-11807.	3.6	14
38	Hexagonal Boron Nitride Platelet-Based Nanocoating for Fire Protection. ACS Applied Nano Materials, 2019, 2, 5450-5459.	5.0	30
39	Thermoelectric Performance Improvement of Polymer Nanocomposites by Selective Thermal Degradation. ACS Applied Energy Materials, 2019, 2, 5975-5982.	5.1	21
40	Enzymatic Modification of Polyamide for Improving the Conductivity of Water-Based Multilayer Nanocoatings. ACS Omega, 2019, 4, 12028-12035.	3.5	3
41	Improved Thermoelectric Power Factor in Completely Organic Nanocomposite Enabled by <scp>l</scp> -Ascorbic Acid. ACS Applied Polymer Materials, 2019, 1, 1942-1947.	4.4	15
42	Flame retardant polyester fabric from nitrogen-rich low molecular weight additives within intumescent nanocoating. Polymer Degradation and Stability, 2019, 170, 108998.	5.8	49
43	Unusually fast and large actuation from multilayer polyelectrolyte thin films. Soft Matter, 2019, 15, 2311-2314.	2.7	18
44	Crosslinkableâ€Chitosanâ€Enabled Moistureâ€Resistant Multilayer Gas Barrier Thin Film. Macromolecular Rapid Communications, 2019, 40, e1800853.	3.9	21
45	High Moisture Barrier with Synergistic Combination of SiO <i><sub>x</sub></i> and Polyelectrolyte Nanolayers. Advanced Materials Interfaces, 2019, 6, 1900740.	3.7	10
46	Environmentally Benign Polyelectrolyte Complex That Renders Wood Flame Retardant and Mechanically Strengthened. Macromolecular Materials and Engineering, 2019, 304, 1900179.	3.6	33
47	Combination Intumescent and Kaolinâ€Filled Multilayer Nanocoatings that Reduce Polyurethane Flammability. Macromolecular Materials and Engineering, 2019, 304, 1800531.	3.6	23
48	Super Gas Barrier and Fire Resistance of Nanoplatelet/Nanofibril Multilayer Thin Films. Advanced Materials Interfaces, 2019, 6, 1801424.	3.7	44
49	Thermally Enhanced nâ€Type Thermoelectric Behavior in Completely Organic Graphene Oxideâ€Based Thin Films. Advanced Electronic Materials, 2019, 5, 1800465.	5.1	26
50	Stretchable electrically conductive and high gas barrier nanocomposites. Journal of Materials Chemistry C, 2018, 6, 2095-2104.	5.5	22
51	Carbonâ€Nanotubeâ€Based Thermoelectric Materials and Devices. Advanced Materials, 2018, 30, 1704386.	21.0	411
52	High Oxygen Barrier Thin Film from Aqueous Polymer/Clay Slurry. Industrial & Engineering Chemistry Research, 2018, 57, 6904-6909.	3.7	23
53	Graphene-induced enhancement of water vapor barrier in polymer nanocomposites. Composites Part B: Engineering, 2018, 134, 218-224.	12.0	40
54	Environmentally Benign Halloysite Nanotube Multilayer Assembly Significantly Reduces Polyurethane Flammability. Advanced Functional Materials, 2018, 28, 1703289.	14.9	154

#	Article	IF	CITATIONS
55	Ultrathin Transparent Nanobrick Wall Anticorrosion Coatings. ACS Applied Nano Materials, 2018, 1, 5516-5523.	5.0	13
56	Extreme Heat Shielding of Clay/Chitosan Nanobrick Wall on Flexible Foam. ACS Applied Materials & Interfaces, 2018, 10, 31686-31696.	8.0	81
57	Transparent Polyelectrolyte Complex Thin Films with Ultralow Oxygen Transmission Rate. Langmuir, 2018, 34, 11086-11091.	3.5	22
58	Extraordinary Corrosion Protection from Polymer–Clay Nanobrick Wall Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 21799-21803.	8.0	19
59	High Thermoelectric Power Factor Organic Thin Films through Combination of Nanotube Multilayer Assembly and Electrochemical Polymerization. ACS Applied Materials & Interfaces, 2017, 9, 6306-6313.	8.0	51
60	Combined High Stretchability and Gas Barrier in Hydrogen-Bonded Multilayer Nanobrick Wall Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 7903-7907.	8.0	39
61	Ultrafast and Highly Localized Microwave Heating in Carbon Nanotube Multilayer Thin Films. Advanced Materials Interfaces, 2017, 4, 1700371.	3.7	10
62	Polyelectrolyte Multilayer Nanocoating Dramatically Reduces Bacterial Adhesion to Polyester Fabric. ACS Biomaterials Science and Engineering, 2017, 3, 1845-1852.	5.2	25
63	Fast Selfâ€Healing of Polyelectrolyte Multilayer Nanocoating and Restoration of Super Oxygen Barrier. Macromolecular Rapid Communications, 2017, 38, 1700064.	3.9	36
64	Influence of Graphene Reduction and Polymer Cross-Linking on Improving the Interfacial Properties of Multilayer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 1107-1118.	8.0	19
65	A review of flame retardant nanocoatings prepared using layer-by-layer assembly of polyelectrolytes. Journal of Materials Science, 2017, 52, 12923-12959.	3.7	156
66	In situ nanomechanical behavior and self-healing response of polymeric multilayer thin films. Polymer, 2017, 131, 169-178.	3.8	7
67	Highly selective multilayer polymer thin films for CO <sub>2</sub> /N <sub>2</sub> separation. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1730-1737.	2.1	15
68	Polyelectrolyte Coacervates Deposited as High Gas Barrier Thin Films. Macromolecular Rapid Communications, 2017, 38, 1600594.	3.9	33
69	Nanocoating of starch and clay that reduces the flammability of polyurethane foam. Green Materials, 2017, 5, 182-186.	2.1	8
70	Microintumescent mechanism of flameâ€retardant waterâ€based chitosan–ammonium polyphosphate multilayer nanocoating on cotton fabric. Journal of Applied Polymer Science, 2016, 133, .	2.6	51
71	Outstanding Low Temperature Thermoelectric Power Factor from Completely Organic Thin Films Enabled by Multidimensional Conjugated Nanomaterials. Advanced Energy Materials, 2016, 6, 1502168.	19.5	239
72	Carbon Nanotube Multilayer Nanocoatings Prevent Flame Spread on Flexible Polyurethane Foam. Macromolecular Materials and Engineering, 2016, 301, 665-673.	3.6	41

#	Article	IF	CITATIONS
73	Edge Charge Neutralization of Clay for Improved Oxygen Gas Barrier in Multilayer Nanobrick Wall Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 34784-34790.	8.0	22
74	Nanomechanical Behavior of High Gas Barrier Multilayer Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 11128-11138.	8.0	33
75	Stable n-type thermoelectric multilayer thin films with high power factor from carbonaceous nanofillers. Nano Energy, 2016, 28, 426-432.	16.0	96
76	Highly Conductive Graphene and Polyelectrolyte Multilayer Thin Films Produced From Aqueous Suspension. Macromolecular Rapid Communications, 2016, 37, 1790-1794.	3.9	6
77	Balancing polyelectrolyte diffusion and clay deposition for high gas barrier. Green Materials, 2016, 4, 98-103.	2.1	5
78	A wash-durable polyelectrolyte complex that extinguishes flames on polyester–cotton fabric. RSC Advances, 2016, 6, 33998-34004.	3.6	45
79	Super Oxygen and Improved Water Vapor Barrier of Polypropylene Film with Polyelectrolyte Multilayer Nanocoatings. Macromolecular Rapid Communications, 2016, 37, 963-968.	3.9	28
80	Stiff and Transparent Multilayer Thin Films Prepared Through Hydrogenâ€Bonding Layerâ€by‣ayer Assembly of Graphene and Polymer. Advanced Functional Materials, 2016, 26, 2143-2149.	14.9	36
81	Nano/Microâ€Manufacturing of Bioinspired Materials: a Review of Methods to Mimic Natural Structures. Advanced Materials, 2016, 28, 6292-6321.	21.0	332
82	Ultrastrong, Chemically Resistant Reduced Graphene Oxide-based Multilayer Thin Films with Damage Detection Capability. ACS Applied Materials & Interfaces, 2016, 8, 6229-6235.	8.0	15
83	Clay-mediated carbon nanotube dispersion in poly(N-Isopropylacrylamide). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 489, 19-26.	4.7	22
84	Aluminum hydroxide multilayer assembly capable of extinguishing flame on polyurethane foam. Journal of Materials Science, 2016, 51, 375-381.	3.7	55
85	Macromol. Rapid Commun. 10/2015. Macromolecular Rapid Communications, 2015, 36, 932-932.	3.9	0
86	Exceptional Flame Resistance and Gas Barrier with Thick Multilayer Nanobrick Wall Thin Films. Advanced Materials Interfaces, 2015, 2, 1500214.	3.7	47
87	Water-based chitosan/melamine polyphosphate multilayer nanocoating that extinguishes fire on polyester-cotton fabric. Carbohydrate Polymers, 2015, 130, 227-232.	10.2	79
88	Polymer–Graphene Oxide Quadlayer Thin-Film Assemblies with Improved Gas Barrier. Langmuir, 2015, 31, 5919-5927.	3.5	65
89	Water-soluble polyelectrolyte complex nanocoating for flame retardant nylon-cotton fabric. Polymer Degradation and Stability, 2015, 122, 1-7.	5.8	34
90	Fast Spray Deposition of Super Gas Barrier Polyelectrolyte Multilayer Thin Films. Industrial & Engineering Chemistry Research, 2015, 54, 5254-5260.	3.7	14

#	Article	IF	CITATIONS
91	Intumescing multilayer thin film deposited on clay-based nanobrick wall to produce self-extinguishing flame retardant polyurethane. Journal of Materials Science, 2015, 50, 2451-2458.	3.7	58
92	Water-soluble polyelectrolyte complexes that extinguish fire on cotton fabric when deposited as pH-cured nanocoating. Polymer Degradation and Stability, 2015, 114, 60-64.	5.8	47
93	Water-Based Melanin Multilayer Thin Films with Broadband UV Absorption. ACS Macro Letters, 2015, 4, 335-338.	4.8	18
94	Nanobrick wall multilayer thin films grown faster and stronger using electrophoretic deposition. Nanotechnology, 2015, 26, 185703.	2.6	19
95	Super Hydrogen and Helium Barrier with Polyelectolyte Nanobrick Wall Thin Film. Macromolecular Rapid Communications, 2015, 36, 96-101.	3.9	28
96	Bio-inspired iridescent layer-by-layer assembled cellulose nanocrystal Bragg stacks. Journal of Materials Chemistry C, 2015, 3, 4260-4264.	5.5	16
97	Recent Advances in Gas Barrier Thin Films via Layer-by-Layer Assembly of Polymers and Platelets. Macromolecular Rapid Communications, 2015, 36, 866-879.	3.9	113
98	Completely Organic Multilayer Thin Film with Thermoelectric Power Factor Rivaling Inorganic Tellurides. Advanced Materials, 2015, 27, 2996-3001.	21.0	213
99	Combined Ionic and Hydrogen Bonding in Polymer Multilayer Thin Film for High Gas Barrier and Stretchiness. Macromolecules, 2015, 48, 5723-5729.	4.8	38
100	Flame-Retardant Paper from Wood Fibers Functionalized via Layer-by-Layer Assembly. ACS Applied Materials & Interfaces, 2015, 7, 23750-23759.	8.0	92
101	Elastomeric Polymer Multilayer Thin Film with Sustainable Gas Barrier at High Strain. ACS Applied Materials & Interfaces, 2015, 7, 16148-16151.	8.0	29
102	Structural tailoring of hydrogen-bonded poly(acrylic acid)/poly(ethylene oxide) multilayer thin films for reduced gas permeability. Soft Matter, 2015, 11, 1001-1007.	2.7	45
103	Hydrophobically modified polyelectrolyte for improved oxygen barrier in nanobrick wall multilayer thin films. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1153-1156.	2.1	11
104	Intumescent Nanocoating Extinguishes Flame on Fabric Using Aqueous Polyelectrolyte Complex Deposited in Single Step. Macromolecular Materials and Engineering, 2014, 299, 1180-1187.	3.6	45
105	Controlling Effective Aspect Ratio and Packing of Clay with pH for Improved Gas Barrier in Nanobrick Wall Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 22914-22919.	8.0	38
106	Stretchable Gas Barrier Achieved with Partially Hydrogenâ€Bonded Multilayer Nanocoating. Macromolecular Rapid Communications, 2014, 35, 960-964.	3.9	39
107	Highly Sizeâ€6elective Ionically Crosslinked Multilayer Polymer Films for Light Gas Separation. Advanced Materials, 2014, 26, 746-751.	21.0	45
108	Iron-containing, high aspect ratio clay as nanoarmor that imparts substantial thermal/flame protection to polyurethane with a single electrostatically-deposited bilayer. Journal of Materials Chemistry A, 2014, 2, 17609-17617.	10.3	74

#	Article	IF	CITATIONS
109	High gas barrier imparted by similarly charged multilayers in nanobrick wall thin films. RSC Advances, 2014, 4, 18354-18359.	3.6	31
110	Low-Temperature Thermal Reduction of Graphene Oxide Nanobrick Walls: Unique Combination of High Gas Barrier and Low Resistivity in Fully Organic Polyelectrolyte Multilayer Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 9942-9945.	8.0	37
111	Shift-Time Polyelectrolyte Multilayer Assembly: Fast Film Growth and High Gas Barrier with Fewer Layers by Adjusting Deposition Time. ACS Macro Letters, 2014, 3, 663-666.	4.8	38
112	Inorganic Nanoparticle Thin Film that Suppresses Flammability of Polyurethane with only a Single Electrostatically-Assembled Bilayer. ACS Applied Materials & Interfaces, 2014, 6, 16903-16908.	8.0	82
113	Maintaining hand and improving fire resistance of cotton fabric through ultrasonication rinsing of multilayer nanocoating. Cellulose, 2014, 21, 3023-3030.	4.9	44
114	Large-Scale Continuous Immersion System for Layer-by-Layer Deposition of Flame Retardant and Conductive Nanocoatings on Fabric. Industrial & Engineering Chemistry Research, 2014, 53, 6409-6416.	3.7	66
115	Super Stretchy Polymer Multilayer Thin Film with High Gas Barrier. ACS Macro Letters, 2014, 3, 1055-1058.	4.8	29
116	Influence of polymer interdiffusion and clay concentration on gas barrier of polyelectrolyte/clay nanobrick wall quadlayer assemblies. Journal of Membrane Science, 2014, 452, 46-53.	8.2	32
117	Thick Growing Multilayer Nanobrick Wall Thin Films: Super Gas Barrier with Very Few Layers. Langmuir, 2014, 30, 7057-7060.	3.5	23
118	Surface Coating for Flame-Retardant Behavior of Cotton Fabric Using a Continuous Layer-by-Layer Process. Industrial & Engineering Chemistry Research, 2014, 53, 3805-3812.	3.7	129
119	Improving the Gas Barrier Property of Clay–Polymer Multilayer Thin Films Using Shorter Deposition Times. ACS Applied Materials & Interfaces, 2014, 6, 6040-6048.	8.0	60
120	Synergy in epoxy nanocomposites with cellulose nanocrystals and Boehmite. Green Materials, 2014, 2, 222-231.	2.1	4
121	Editorial: green nanocomposites. Green Materials, 2014, 2, 161-162.	2.1	1
122	Oxygen barrier of multilayer thin films comprised of polysaccharides and clay. Carbohydrate Polymers, 2013, 95, 299-302.	10.2	44
123	Flexible latex—polyaniline segregated network composite coating capable of measuring large strain on epoxy. Smart Materials and Structures, 2013, 22, 015008.	3.5	31
124	Super Gas Barrier and Selectivity of Graphene Oxideâ€Polymer Multilayer Thin Films. Advanced Materials, 2013, 25, 503-508.	21.0	400
125	Thermoelectric behavior of organic thin film nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 119-123.	2.1	111
126	Phosphorous-filled nanobrick wall multilayer thin film eliminates polyurethane melt dripping and reduces heat release associated with fire. Polymer Degradation and Stability, 2013, 98, 2645-2652.	5.8	70

8

#	Article	IF	CITATIONS
127	Exceptionally Flame Retardant Sulfur-Based Multilayer Nanocoating for Polyurethane Prepared from Aqueous Polyelectrolyte Solutions. ACS Macro Letters, 2013, 2, 361-365.	4.8	131
128	Fully Organic Nanocomposites with High Thermoelectric Power Factors by using a Dual‣tabilizer Preparation. Energy Technology, 2013, 1, 265-272.	3.8	66
129	High oxygen barrier, clay and chitosan-based multilayer thin films: an environmentally friendly foil replacement. Green Materials, 2013, 1, 4-10.	2.1	15
130	Precisely Tuning the Clay Spacing in Nanobrick Wall Gas Barrier Thin Films. Chemistry of Materials, 2013, 25, 1649-1655.	6.7	54
131	Transparency, Gas Barrier, and Moisture Resistance of Large-Aspect-Ratio Vermiculite Nanobrick Wall Thin Films. ACS Applied Materials & Interfaces, 2012, 4, 5529-5533.	8.0	59
132	Humidity-Responsive Gas Barrier of Hydrogen-Bonded Polymer–Clay Multilayer Thin Films. Journal of Physical Chemistry C, 2012, 116, 19851-19856.	3.1	45
133	Fine control of carbon nanotubes–polyelectrolyte sensors sensitivity by electrostatic layer by layer assembly (eLbL) for the detection of volatile organic compounds (VOC). Talanta, 2012, 88, 396-402.	5.5	47
134	Clay–Chitosan Nanobrick Walls: Completely Renewable Gas Barrier and Flame-Retardant Nanocoatings. ACS Applied Materials & Interfaces, 2012, 4, 1643-1649.	8.0	327
135	Intumescent Multilayer Nanocoating, Made with Renewable Polyelectrolytes, for Flame-Retardant Cotton. Biomacromolecules, 2012, 13, 2843-2848.	5.4	318
136	Improving oxygen barrier and reducing moisture sensitivity of weak polyelectrolyte multilayer thin films with crosslinking. RSC Advances, 2012, 2, 12355.	3.6	64
137	Increasing the thermoelectric power factor of polymer composites using a semiconducting stabilizer for carbon nanotubes. Carbon, 2012, 50, 885-895.	10.3	95
138	Fully organic ITO replacement through acid doping of double-walled carbon nanotube thin film assemblies. RSC Advances, 2011, 1, 662.	3.6	36
139	Super Gas Barrier of All-Polymer Multilayer Thin Films. Macromolecules, 2011, 44, 1450-1459.	4.8	193
140	Growth and fire protection behavior of POSS-based multilayer thin films. Journal of Materials Chemistry, 2011, 21, 3060.	6.7	105
141	Light-Weight Flexible Carbon Nanotube Based Organic Composites with Large Thermoelectric Power Factors. ACS Nano, 2011, 5, 7885-7892.	14.6	411
142	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. Science, 2011, 331, 568-571.	12.6	6,190
143	Influence of Clay Concentration on the Gas Barrier of Clay–Polymer Nanobrick Wall Thin Film Assemblies. Langmuir, 2011, 27, 12106-12114.	3.5	92
144	Heating and acid doping thin film carbon nanotube assemblies for high transparency and low sheet resistance. Journal of Materials Chemistry, 2011, 21, 363-368.	6.7	41

#	Article	IF	CITATIONS
145	Layer-by-layer assembly of silica-based flame retardant thin film on PET fabric. Polymer Degradation and Stability, 2011, 96, 745-750.	5.8	215
146	Blistering in carbonâ€fiberâ€filled fluorinated polyimide. Polymer Composites, 2011, 32, 185-192.	4.6	3
147	Influence of polymer particle size on the percolation threshold of electrically conductive latexâ€based composites. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1547-1554.	2.1	25
148	Intumescent Allâ€Polymer Multilayer Nanocoating Capable of Extinguishing Flame on Fabric. Advanced Materials, 2011, 23, 3926-3931.	21.0	311
149	Largeâ€5cale Exfoliation of Inorganic Layered Compounds in Aqueous Surfactant Solutions. Advanced Materials, 2011, 23, 3944-3948.	21.0	1,012
150	Flame-Retardant Materials: Intumescent All-Polymer Multilayer Nanocoating Capable of Extinguishing Flame on Fabric (Adv. Mater. 34/2011). Advanced Materials, 2011, 23, 3868-3868.	21.0	1
151	Growth and fire resistance of colloidal silica-polyelectrolyte thin film assemblies. Journal of Colloid and Interface Science, 2011, 356, 69-77.	9.4	109
152	Development of layer-by-layer assembled carbon nanofiber-filled coatings to reduce polyurethane foam flammability. Polymer, 2011, 52, 2847-2855.	3.8	125
153	Chemo-sensitivity of latex-based films containing segregated networks of carbon nanotubes. Sensors and Actuators B: Chemical, 2011, 155, 28-36.	7.8	36
154	Tailoring Properties of Carbon Nanotube Dispersions and Nanocomposites Using Temperature-Responsive Copolymers of Pyrene-Modified Poly(N-cyclopropylacrylamide). Macromolecules, 2010, 43, 9447-9453.	4.8	23
155	Fast switching electrochromism from colloidal indium tin oxide in tungstate-based thin film assemblies. Electrochimica Acta, 2010, 55, 3257-3267.	5.2	15
156	Thermal degradation of highâ€ŧemperature fluorinated polyimide and its carbon fiber composite. Journal of Applied Polymer Science, 2010, 115, 2254-2261.	2.6	24
157	Influence of Stabilizer Concentration on Transport Behavior and Thermopower of CNTâ€Filled Latexâ€Based Composites. Macromolecular Materials and Engineering, 2010, 295, 431-436.	3.6	42
158	Nanotube Friendly Poly( <i>N</i> â€isopropylacrylamide). Macromolecular Rapid Communications, 2010, 31, 1368-1372.	3.9	29
159	Tailored dispersion of carbon nanotubes in water with pH-responsive polymers. Polymer, 2010, 51, 1761-1770.	3.8	47
160	Lowâ€Temperature Formation of Ultraâ€Highâ€Temperature Transition Metal Carbides from Salt–Polymer Precursors. Journal of the American Ceramic Society, 2010, 93, 2222-2228.	3.8	9
161	Transparent Clayâ^'Polymer Nano Brick Wall Assemblies with Tailorable Oxygen Barrier. ACS Applied Materials & Interfaces, 2010, 2, 312-320.	8.0	210
162	Influence of Deposition Time on Layer-by-Layer Growth of Clay-Based Thin Films. Industrial & Engineering Chemistry Research, 2010, 49, 8501-8509.	3.7	59

#	Article	IF	CITATIONS
163	Improved Thermoelectric Behavior of Nanotube-Filled Polymer Composites with Poly(3,4-ethylenedioxythiophene) Poly(styrenesulfonate). ACS Nano, 2010, 4, 513-523.	14.6	547
164	Flame Retardant Behavior of Polyelectrolyteâ ´'Clay Thin Film Assemblies on Cotton Fabric. ACS Nano, 2010, 4, 3325-3337.	14.6	394
165	Note: Influence of rinsing and drying routines on growth of multilayer thin films using automated deposition system. Review of Scientific Instruments, 2010, 81, 036103.	1.3	43
166	Super Gas Barrier of Transparent Polymerâ^'Clay Multilayer Ultrathin Films. Nano Letters, 2010, 10, 4970-4974.	9.1	299
167	High Electrical Conductivity and Transparency in Deoxycholate-Stabilized Carbon Nanotube Thin Films. Journal of Physical Chemistry C, 2010, 114, 6325-6333.	3.1	56
168	Tailoring Thermoelectric Properties of Segregated-Network Polymer Nanocomposites for Thermoelectric Energy Conversion. , 2009, , .		2
169	Comparison of Covalently and Noncovalently Functionalized Carbon Nanotubes in Epoxy. Macromolecular Rapid Communications, 2009, 30, 627-632.	3.9	69
170	pH Tailoring Electrical and Mechanical Behavior of Polymer–Clay–Nanotube Aerogels. Macromolecular Rapid Communications, 2009, 30, 1669-1673.	3.9	36
171	The influence of synergistic stabilization of carbon black and clay on the electrical and mechanical properties of epoxy composites. Carbon, 2009, 47, 3128-3136.	10.3	112
172	Antimicrobial Behavior of Polyelectrolyteâ^'Surfactant Thin Film Assemblies. Langmuir, 2009, 25, 10322-10328.	3.5	79
173	Polyelectrolyte/Nanosilicate Thin-Film Assemblies: Influence of pH on Growth, Mechanical Behavior, and Flammability. ACS Applied Materials & amp; Interfaces, 2009, 1, 2338-2347.	8.0	168
174	Temperature Controlled Dispersion of Carbon Nanotubes in Water with Pyrene-Functionalized Poly( <i>N</i> -cyclopropylacrylamide). Journal of the American Chemical Society, 2009, 131, 13598-13599.	13.7	71
175	Segregated Networks of Carbon Black in Poly(vinyl acetate) Latex: Influence of Clay on the Electrical and Mechanical Behavior. Macromolecular Chemistry and Physics, 2008, 209, 2399-2409.	2.2	31
176	Characterization of Solutionâ€Processed Doubleâ€Walled Carbon Nanotube/Poly(vinylidene fluoride) Nanocomposites. Macromolecular Materials and Engineering, 2008, 293, 123-131.	3.6	43
177	Weak polyelectrolyte control of carbon nanotube dispersion in water. Journal of Colloid and Interface Science, 2008, 317, 346-349.	9.4	57
178	Influence of polymer modulus on the percolation threshold of latex-based composites. Polymer, 2008, 49, 570-578.	3.8	32
179	Layer-by-layer assembly of thin film oxygen barrier. Thin Solid Films, 2008, 516, 4819-4825.	1.8	162
180	Thermoelectric Behavior of Segregated-Network Polymer Nanocomposites. Nano Letters, 2008, 8, 4428-4432.	9.1	384

#	Article	IF	CITATIONS
181	Layer-by-Layer Assembly of UV-Resistant Poly(3,4-ethylenedioxythiophene) Thin Films. Langmuir, 2008, 24, 8314-8318.	3.5	43
182	Preface to Special Topic: Instruments and methods for combinatorial science and high-throughput screening. Review of Scientific Instruments, 2007, 78, 072101.	1.3	1
183	UV Resistant Poly(3,4-ethylenedioxythiophene) Thin Films: Layer-by-Layer Assembly with Absorbing Nanoparticles. Materials Research Society Symposia Proceedings, 2007, 1054, 5.	0.1	0
184	Carbon Nanotube Dispersion in Epoxy Nanocomposites with Clay. Materials Research Society Symposia Proceedings, 2007, 1057, 1.	0.1	1
185	Deposition and patterning of conductive carbon black thin films. Synthetic Metals, 2007, 157, 632-639.	3.9	7
186	Clay Assisted Dispersion of Carbon Nanotubes in Conductive Epoxy Nanocomposites. Advanced Functional Materials, 2007, 17, 2343-2348.	14.9	276
187	Micropatterning and Impedance Characterization of an Electrically Percolating Layer-by-Layer Assembly. Electroanalysis, 2007, 19, 964-972.	2.9	6
188	Conductive coatings and composites from latex-based dispersions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 311, 48-54.	4.7	39
189	Conductive Thin Films on Functionalized Polyethylene Particles. Chemistry of Materials, 2006, 18, 2997-3004.	6.7	19
190	Tunable Single-Walled Carbon Nanotube Microstructure in the Liquid and Solid States Using Poly(acrylic acid). Nano Letters, 2006, 6, 911-915.	9.1	144
191	Carbon black thin films with tunable resistance and optical transparency. Carbon, 2006, 44, 1974-1981.	10.3	26
192	Effects of carbon nanotube fillers on the curing processes of epoxy resin-based composites. Journal of Applied Polymer Science, 2006, 102, 5248-5254.	2.6	141
193	Thermal and Mechanical Behavior of Carbon-Nanotube-Filled Latex. Macromolecular Materials and Engineering, 2006, 291, 1035-1043.	3.6	80
194	Tailoring of Carbon Nanotube Microstructure Using Poly(acrylic acid) and Poly(allylamine) Tj ETQq0 0 0 rgBT /O	verlock 10	Tf 50 222 Td
195	High-throughput measurement of polymer film thickness using optical dyes. Measurement Science and Technology, 2005, 16, 153-161.	2.6	6
196	Robotic dipping system for layer-by-layer assembly of multifunctional thin films. Review of Scientific Instruments, 2005, 76, 103904.	1.3	49
197	Introduction: Combinatorial instruments and techniques. Review of Scientific Instruments, 2005, 76, 062101.	1.3	6
198	High-Throughput Screening of Barrier and Adhesive Behavior of Polymeric Coatings. Materials Research Society Symposia Proceedings, 2005, 894, 1.	0.1	0

#	Article	IF	CITATIONS
199	Antimicrobial Behavior of Polyelectrolyte Multilayer Films Containing Cetrimide and Silver. Biomacromolecules, 2005, 6, 1149-1153.	5.4	134
200	Fast-Switching, High-Contrast Electrochromic Thin Films Prepared Using Layer-by-Layer Assembly of Charged Species. Materials Research Society Symposia Proceedings, 2004, 846, DD11.2.1.	0.1	0
201	Effect of clay concentration on the oxygen permeability and optical properties of a modified poly(vinyl alcohol). Journal of Applied Polymer Science, 2004, 93, 1102-1109.	2.6	117
202	Water-Based Single-Walled-Nanotube-Filled Polymer Composite with an Exceptionally Low Percolation Threshold. Advanced Materials, 2004, 16, 150-153.	21.0	372
203	Combinatorial Development of Pressure-Sensitive Adhesives. Macromolecular Rapid Communications, 2004, 25, 286-291.	3.9	17
204	Method for Combinatorial Screening of Moisture Vapor Transmission Rate. ACS Combinatorial Science, 2003, 5, 362-368.	3.3	28
205	Combinatorial Study and High Throughput Screening of Transparent Oxygen and Moisture Barrier Films. Materials Research Society Symposia Proceedings, 2003, 804, 217.	0.1	0
206	Combinatorial Study and High-Throughput Screening of Transparent Barrier Films using Chemical Sensors. , 2003, , 289-316.		0
207	Interpretations of Indentation Size Effects. Journal of Applied Mechanics, Transactions ASME, 2002, 69, 433-442.	2.2	243
208	Preparation and evaluation of tungsten tips relative to diamond for nanoindentation of soft materials. Review of Scientific Instruments, 2001, 72, 2804-2810.	1.3	48
209	Monodisperse latex with variable glass transition temperature and particle size for use as matrix starting material for conductive polymer composites. Polymer, 2001, 42, 6913-6921.	3.8	35
210	Electrical and mechanical behavior of carbon black-filled poly(vinyl acetate) latex-based composites. Polymer Engineering and Science, 2001, 41, 1947-1962.	3.1	72
211	Lowering the percolation threshold of conductive composites using particulate polymer microstructure. Journal of Applied Polymer Science, 2001, 80, 692-705.	2.6	118
212	Effect of dispersing aid on electrical and mechanical behavior of carbon black-filled latex. Journal of Materials Science Letters, 2001, 20, 1523-1526.	0.5	17
213	Lowering the percolation threshold of conductive composites using particulate polymer microstructure. , 2001, 80, 692.		1
214	Lowering the percolation threshold of conductive composites using particulate polymer microstructure. Journal of Applied Polymer Science, 2001, 80, 692-705.	2.6	2
215	Figures of Merit for Electrically Conductive Polymer Composites. Materials Research Society Symposia Proceedings, 2000, 661, KK5.2.1.	0.1	0
216	Modulus Determination of Polymer Matrix Composites: Comparison of Nanoindentation and Dynamic Mechanical Analysis. Materials Research Society Symposia Proceedings, 2000, 649, 351.	0.1	2

#	Article	IF	CITATIONS
217	Electrical and mechanical property transitions in carbon-filled poly(vinylpyrrolidone). Journal of Materials Research, 1999, 14, 4132-4135.	2.6	21
218	Crosslinking of epoxy-modified phenol novolac (EPN) powder coatings: Particle size and adhesion. Journal of Coatings Technology, 1999, 71, 135-142.	0.7	8