Loïc Dupont

List of Articles by Year
in descending order

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119 peer-reviewed articles	18,082 peer-reviewed citations	44087 49 peer-reviewed h-index	314409 4.65 score
122 documents	19316 doc citations	53288 50 h-index	23647 citing authors

#	Article	IF	Citations
1	Mesoscopic Model of Extrusion during Solvent-Free Lithium-ion Battery Electrode Manufacturing**. Batteries and Supercaps, 2024, 7, .	2.8	10
2	Solvent-free extrusion of a LiFePO4-based monofilament for three-dimensional printing of a lithium-ion battery positive electrode. Journal of Power Sources, 2024, 593, 233973.	6.1	27
3	3D Printing of solvent-free PEO-Polyolefin solid polymer electrolyte by Fused Filament Fabrication. Virtual and Physical Prototyping, 2024, 19, .	6.0	7
4	Effect of dicationic ionic Liquid: Trimethylene bis-methylimidazolium bromide ([M(CH2)3IM2+][2Br-]) on the structural, optical and morphological properties of ZnO nanoparticles. Journal of Molecular Liquids, 2023, 382, 122007.	3.9	7
5	In situ ESEM using 3-D printed and adapted accessories to observe living plantlets and their interaction with enzyme and fungus. Micron, 2022, 153, 103185.	1.9	3
6	Considering lithium-ion battery 3D-printing via thermoplastic material extrusion and polymer powder bed fusion. Additive Manufacturing, 2021, 37, 101651.	2.0	33
7	Environmentally Friendly Lithium-Terephthalate/Polylactic Acid Composite Filament Formulation for Lithium-Ion Battery 3D-Printing via Fused Deposition Modeling. ECS Journal of Solid State Science and Technology, 2021, 10, 037004.	1.5	38
8	Ag-Coated Cu/Polylactic Acid Composite Filament for Lithium and Sodium-Ion Battery Current Collector Three-Dimensional Printing via Thermoplastic Material Extrusion. Frontiers in Energy Research, 2021, 9, .	1.3	22
9	Toward High Resolution 3D Printing of Shape-Conformable Batteries via Vat Photopolymerization: Review and Perspective. IEEE Access, 2021, 9, 140654-140666.	2.4	44
10	Integument-Specific Transcriptional Regulation in the Mid-Stage of Flax Seed Development Influences the Release of Mucilage and the Seed Oil Content. Cells, 2021, 10, 2677.	3.3	5
11	Lithium-Ion Battery 3D Printing: From Thermoplastic Material Extrusion to Vat Photopolymerization Process. ECS Meeting Abstracts, 2021, MA2021-02, 30-30.	0.0	1
12	Disentangling elastic relaxation and ferroelectric domain contributions to in plane X-ray scattering profile: A necessity in strained ferroelectric superlattices. Materials Letters, 2020, 275, 128138.	1.8	4
13	Poly(Ethylene Oxide)–LiTFSI Solid Polymer Electrolyte Filaments for Fused Deposition Modeling Three-Dimensional Printing. Journal of the Electrochemical Society, 2020, 167, 070536.	2.2	115
14	Overview on Lithium-Ion Battery 3D-Printing By Means of Material Extrusion. ECS Transactions, 2020, 98, 3-21.	0.5	33
15	Overview on Lithium-Ion Battery 3D-Printing By Means of Material Extrusion. ECS Meeting Abstracts, 2020, MA2020-02, 3690-3690.	0.0	6
16	Cytological Approaches Combined With Chemical Analysis Reveals the Layered Nature of Flax Mucilage. Frontiers in Plant Science, 2019, 10, .	3.0	20
17	Three-Dimensional Printing of a LiFePO4/Graphite Battery Cell via Fused Deposition Modeling. Scientific Reports, 2019, 9, .	2.7	148
18	Highly Loaded Graphite–Polylactic Acid Composite-Based Filaments for Lithium-Ion Battery Three-Dimensional Printing. Chemistry of Materials, 2018, 30, 7484-7493.	4.6	200

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19	Interlayer strain effects on the structural behavior of BiFeO3/LaFeO3 superlattices. Journal of Applied Physics, 2018, 124, .	1.6	13
20	Phase Diagram of BiFeO3/LaFeO3 Superlattices: Antiferroelectric-Like State Stability Arising from Strain Effects and Symmetry Mismatch at Heterointerfaces. Advanced Materials Interfaces, 2017, 4, .	3.1	24
21	Vanadyl-type defects in Tavorite-like NaVPO4F: from the average long range structure to local environments. Journal of Materials Chemistry A, 2017, 5, 25044-25055.	6.7	42
22	A chemically stable PVD multilayer encapsulation for lithium microbatteries. Journal Physics D: Applied Physics, 2015, 48, 395306.	2.2	8
23	Titanium Oxide Adhesion Layer for High Temperature Annealed Si/Si3N4/TiO x /Pt/LiCoO2 Battery Structures. Journal of Electronic Materials, 2015, 45, 910-916.	1.9	12
24	Lithium cobalt oxide crystallization on flexible polyimide substrate. Journal of Materials Science: Materials in Electronics, 2015, 27, 631-636.	1.8	3
25	Structural and electrical properties of Bi0.5Na0.5 TiO3 based superlattices grown by pulsed laser deposition. Journal of Applied Physics, 2014, 116, .	1.6	13
26	Preparation, structure and electrochemistry of LiFeBO3: a cathode material for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 2060-2070.	6.7	61
27	Pyrolysis reaction of squaric acid: A one-step method for producing expanded foam of mesoporous carbon. Materials Letters, 2014, 137, 233-236.	1.8	4
28	Reversible anionic redox chemistry in high-capacity layered-oxide electrodes. Nature Materials, 2013, 12, 827-835.	23.7	1,501
29	Lithium storage in amorphous TiNi hydride: Electrode for rechargeable lithium-ion batteries. Materials Chemistry and Physics, 2013, 141, 348-354.	3.7	15
30	Silicon-Based Non Aqueous Anolyte for Li Redox-Flow Batteries. Journal of the Electrochemical Society, 2013, 160, A516-A520.	2.2	84
31	Strain effect in PbTiO3/PbZr0.2Ti0.8O3 superlattices: From polydomain to monodomain structures. Journal of Applied Physics, 2012, 112, .	1.6	8
32	Biosynthesis of Co3O4 electrode materials by peptide and phage engineering: comprehension and future. Energy and Environmental Science, 2012, 5, 9936.	22.1	48
33	Evidence of ferroelectricity in metastable Sm2Ti2O7 thin film. Journal of Materials Chemistry, 2012, 22, 9806.	7.3	36
34	Characterization of Transparent Conducting Pulsed Laser Deposited Films in the Indium Zinc Oxide System. Materials Research Society Symposia Proceedings, 2011, 547, .	0.1	1
35	A - and B - Site Order in (Na1/2La1/2)(Mg1/3Ta2/3)O3 Perovskites. Materials Research Society Symposia Proceedings, 2011, 547, .	0.1	4
36	Thin Films of Antimony-Tin Oxide as Counter-Electrodes for Proton Working Electrochromic Devices. Materials Research Society Symposia Proceedings, 2011, 692, .	0.1	0

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37	Existence of Superstructures Due to Large Amounts of Fe Vacancies in the LiFePO4-Type Framework. Chemistry of Materials, 2011, 23, 32-38.	4.6	34
38	Characterization of all-solid-state Li/LiPONB/TiOS microbatteries produced at the pilot scale. Journal of Power Sources, 2011, 196, 10289-10296.	6.1	55
39	Unexpected formation by pulsed laser deposition of nanostructured Fe/olivine thin films on MgO substrates. Journal of Solid State Chemistry, 2011, 184, 351-356.	2.4	5
40	Inhibition of polydomain formation in PbTiO3/PbZr0.2Ti0.8O3 superlattices by intercalation of ultra-thin SrTiO3 layers. Applied Physics Letters, 2011, 99, .	2.3	6
41	Hunting for Better Li-Based Electrode Materials via Low Temperature Inorganic Synthesis. Chemistry of Materials, 2010, 22, 724-739.	4.6	234
42	Structural and textural characterization of LiFePO4 thin films prepared by pulsed laser deposition on Si substrates. Thin Solid Films, 2010, 518, 5447-5451.	1.6	17
43	Structural, Transport, and Electrochemical Investigation of Novel AMSO4F (A = Na, Li; M = Fe, Co, Ni, Mn) Metal Fluorosulphates Prepared Using Low Temperature Synthesis Routes. Inorganic Chemistry, 2010, 49, 7401-7413.	3.4	181
44	BaTiO 3 ferroelectric nanoparticles dispersed in 5CB nematic liquid crystal: Synthesis and electro-optical characterization. Journal of Applied Physics, 2010, 107, .	1.6	79
45	In-Situ Deposition of Alkali and Alkaline Earth Hydride Thin Films To Investigate the Formation of Reactive Hydride Composites. Journal of Physical Chemistry C, 2010, 114, 13895-13901.	2.3	11
46	Synthesis, Structural, and Transport Properties of Novel Bihydrated Fluorosulphates NaMSO4F·2H2O (M = Fe, Co, and Ni). Chemistry of Materials, 2010, 22, 4062-4068.	4.6	53
47	Characterization of All-Solid-State Li/LiPON/TiOS Microbatteries Produced at the Pilot Scale. ECS Meeting Abstracts, 2010, MA2010-03, 462-462.	0.0	0
48	Polymorphs of Li3PO4 and Li2MSiO4 (M=Mn, Co). Journal of Power Sources, 2009, 189, 638-642.	6.1	43
49	Reversible lithium storage in LiF/Ti nanocomposites. Physical Chemistry Chemical Physics, 2009, 11, 9497.	2.0	70
50	Ionothermal Synthesis of Tailor-Made LiFePO4 Powders for Li-Ion Battery Applications. Chemistry of Materials, 2009, 21, 1096-1107.	4.6	149
51	Ionothermal Synthesis of Sodium-Based Fluorophosphate Cathode Materials. Journal of the Electrochemical Society, 2009, 156, A993.	2.2	253
52	A 3.6 V lithium-based fluorosulphate insertion positive electrode for lithium-ion batteries. Nature Materials, 2009, 9, 68-74.	23.7	565
53	Better electrode materials for Li-based batteries via diversified chemical approaches. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2008, 634, 2005-2005.	0.6	1
54	Mesoporous Cr2O3 as negative electrode in lithium batteries: TEM study of the texture effect on the polymeric layer formation. Journal of Power Sources, 2008, 175, 502-509.	6.1	104

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55	Li-Driven Copper Extrusion/Re-injection in Various Cu-based Oxides and Sulfides. Israel Journal of Chemistry, 2008, 48, 235-249.	1.3	9
56	First Cross-Section Observation of an All Solid-State Lithium-Ion "Nanobattery" by Transmission Electron Microscopy. Chemistry of Materials, 2008, 20, 2352-2359.	4.6	125
57	Formation of a Complete Solid Solution between the Triphylite and Fayalite Olivine Structures. Chemistry of Materials, 2008, 20, 6798-6809.	4.6	43
58	On the Energetic Stability and Electrochemistry of Li2MnSiO4 Polymorphs. Chemistry of Materials, 2008, 20, 5574-5584.	4.6	183
59	Electrochemical Method for Direct Deposition of Nanometric Bismuth and Its Electrochemical Properties vs Li. Electrochemical and Solid-State Letters, 2008, 11, E5.	2.3	50
60	The reaction of lithium with CuCr2S4—lithium intercalation and copper displacement/extrusion. Journal of Materials Chemistry, 2007, 17, 3238.	7.3	28
61	Structural evolution during the reaction of Li with nano-sized rutile type TiO2 at room temperature. Electrochemistry Communications, 2007, 9, 337-342.	2.9	217
62	Structure, texture and reactivity versus lithium of chromium-based oxides films as revealed by TEM investigations. Journal of Power Sources, 2007, 164, 839-848.	6.1	43
63	Vanadium diphosphides as negative electrodes for secondary Li-ion batteries. Journal of Power Sources, 2007, 172, 877-885.	6.1	56
64	Synthesis of non-stoichiometric Bi2O4−x by oxidative precipitation. Materials Research Bulletin, 2007, 42, 707-712.	4.6	34
65	Electrochemical lithium insertion into anatase-type TiO2: An in situ Raman microscopy investigation. Electrochimica Acta, 2007, 52, 5357-5367.	4.1	140
66	Alkali hexatitanates—A2Ti6O13 (A = Na, K) as host structure for reversible lithium insertion. Journal of Power Sources, 2007, 174, 1172-1176.	6.1	51
67	Enhanced Reducibility of Ce1-xTixO2Compared to That of CeO2and Higher Redox Catalytic Activity of Ce1-x-yTixPtyO2-δCompared to That of Ce1-xPtxO2-δ. Journal of Physical Chemistry B, 2006, 110, 5262-5272.	2.0	83
68	Copper Extrusion/Reinjection in Cu-Based Thiospinels by Electrochemical and Chemical Routes. Chemistry of Materials, 2006, 18, 4278-4287.	4.6	54
69	Electrochemical Reactivity of Li2VOSiO4toward Li. Chemistry of Materials, 2006, 18, 407-412.	4.6	32
70	FeP: Another Attractive Anode for the Li-Ion Battery Enlisting a Reversible Two-Step Insertion/Conversion Process. Chemistry of Materials, 2006, 18, 3531-3538.	4.6	192
71	Benefits of carbon addition on the hydrogen absorption properties of Mg-based thin films grown by Pulsed Laser Deposition. Thin Solid Films, 2006, 515, 1299-1306.	1.6	6
72	Reactivity of transition metal (Co, Ni, Cu) sulphides versus lithium: The intriguing case of the copper sulphide. Solid State Sciences, 2006, 8, 640-651.	2.5	244

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73	Recent Developments in Transmission Electron Microscopy Techniques to the Characterization of Cycled Li-Ion Electrode Materials. ECS Transactions, 2006, 3, 139-153.	0.5	5
74	Reversible electrochemical extrusion of copper by lithium. Role of the initial structure. Materials Research Society Symposia Proceedings, 2005, 835, .	0.1	0
75	On the Reactivity of Li8-yMnyP4 toward Lithium. Chemistry of Materials, 2005, 17, 3627-3635.	4.6	36
76	Electrochemical Reactivity and Design of NiP2 Negative Electrodes for Secondary Li-Ion Batteries. Chemistry of Materials, 2005, 17, 6327-6337.	4.6	235
77	Combining Electrochemistry and Metallurgy for New Electrode Designs in Li-Ion Batteries. Chemistry of Materials, 2005, 17, 5041-5047.	4.6	67
78	Structural and Electrochemical Properties of Newly Synthesized Fe-Substituted MnO2Samples. Chemistry of Materials, 2004, 16, 2772-2782.	4.6	35
79	The Electrochemistry of Germanium Nitride Versus Lithium. Materials Research Society Symposia Proceedings, 2003, 756, .	0.1	3
80	An update on the reactivity of nanoparticles Co-based compounds towards Li. Solid State Sciences, 2003, 5, 895-904.	2.5	562
81	Synthesis and characterization of bimetallic Ni–Cu particles. Journal of Solid State Chemistry, 2003, 172, 111-115.	2.4	82
82	A reversible copper extrusion–insertion electrode for rechargeable Li batteries. Nature Materials, 2003, 2, 755-761.	23.7	241
83	On the electrochromic properties of antimony–tin oxide thin films deposited by pulsed laser deposition. Solid State Ionics, 2003, 156, 463-474.	2.6	14
84	Study of the Reactivity Mechanism of M3B2O6(with M = Co, Ni, and Cu) toward Lithium. Chemistry of Materials, 2003, 15, 3683-3691.	4.6	39
85	On the Electrochemical Reactivity Mechanism of CoSb[sub 3] vs. Lithium. Journal of the Electrochemical Society, 2003, 150, A732.	2.2	58
86	Electrochemistry of Cu[sub 3]N with Lithium. Journal of the Electrochemical Society, 2003, 150, A1273.	2.2	158
87	The Electrochemistry of Germanium Nitride with Lithium. Journal of the Electrochemical Society, 2003, 150, A1118.	2.2	75
88	Hydrated Iron Phosphates FePO[sub 4]·nH[sub 2]O and Fe[sub 4](P[sub 2]O[sub 7])[sub 3]·nH[sub 2]O as 3 V Positive Electrodes in Rechargeable Lithium Batteries. Journal of the Electrochemical Society, 2002, 149, A1037.	2.2	87
89	Experimental Evidence for Electrolyte Involvement in the Reversible Reactivity of CoO toward Compounds at Low Potential. Electrochemical and Solid-State Letters, 2002, 5, A18.	2.3	82
90	Lithium Insertion/Extraction into/from LiMX2O7Compositions (M = Fe, V; X = P, As) Prepared via a Solution Method. Chemistry of Materials, 2002, 14, 2701-2710.	4.6	70

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91	On the Origin of the Extra Electrochemical Capacity Displayed by MO/Li Cells at Low Potential. Journal of the Electrochemical Society, 2002, 149, A627.	2.2	1,202
92	Influence of tin doping on the structural and physical properties of indium–zinc oxides thin films deposited by pulsed laser deposition. Thin Solid Films, 2002, 419, 160-165.	1.6	21
93	Étude de la modélisation de l'adsorption de l'acide polyacrylique sur le dioxyde de titane par ses oligomères. European Polymer Journal, 2002, 38, 1211-1217.	4.6	0
94	Particle Size Effects on the Electrochemical Performance of Copper Oxides toward Lithium. Journal of the Electrochemical Society, 2001, 148, A285.	2.2	682
95	In situ TEM study of the interface carbon/electrolyte. Journal of Power Sources, 2001, 97-98, 104-106.	6.1	84
96	Searching for new anode materials for the Li-ion technology: time to deviate from the usual path. Journal of Power Sources, 2001, 97-98, 235-239.	6.1	302
97	On the role of defects in decreasing the extra 3.3/3.95 and 4.5 V redox steps in Li–Mn–O spinels. Journal of Power Sources, 2001, 97-98, 398-401.	6.1	8
98	Structural changes induced by Sn, Zr, Al substitution in ZnkIn2Ok+3 transparent conducting oxides powders as deduced by transmission electron microscopy. Journal of Physics and Chemistry of Solids, 2001, 62, 1375-1386.	4.2	2
99	Structures and Textures of Transparent Conducting Pulsed Laser Deposited In2O3–ZnO Thin Films Revealed by Transmission Electron Microscopy. Journal of Solid State Chemistry, 2001, 158, 119-133.	2.4	43
100	Systematic study and performance optimization of transparent conducting indium–zinc oxides thin films. Electrochimica Acta, 2001, 46, 2007-2013.	4.1	44
101	A Transmission Electron Microscopy Study of the Reactivity Mechanism of Tailor-Made CuO Particles toward Lithium. Journal of the Electrochemical Society, 2001, 148, A1266.	2.2	495
102	TEM Studies: The Key for Understanding the Origin of the 3.3 V and 4.5 V Steps Observed in LiMn2O4-based Spinels. Journal of Solid State Chemistry, 2000, 155, 394-408.	2.4	31
103	Nano-sized transition-metal oxides as negative-electrode materials for lithium-ion batteries. Nature, 2000, 407, 496-499.	30.7	7,913
104	Low temperature synthesis and electrochemical performance of crystallized FeVO4·1.1H2O. Solid State Ionics, 2000, 138, 31-40.	2.6	91
105	From the vanadates to 3d-metal oxides negative electrodes. Ionics, 2000, 6, 321-330.	2.2	79
106	On the Origin of the 3.3 and 4.5 V Steps Observed in LiMn[sub 2]O[sub 4]-Based Spinels. Journal of the Electrochemical Society, 2000, 147, 845.	2.2	77
107	Scanning and transmission electron microscopy contributions to the improvement of electrode materials and interfaces in the design of better batteries. Solid State Sciences, 2000, 2, 701-715.	0.9	15
108	Structural and physical characterisation of transparent conducting pulsed laser deposited In2O3–ZnO thin films. Journal of Materials Chemistry, 2000, 10, 2315-2319.	7.3	119

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109	The Phase Transitions between H0.13V0.13Mo0.87O3·0.26H2O and MoO3: An X-Ray, Thermal Analysis, and TEM Study. Journal of Solid State Chemistry, 1999, 143, 41-51.	2.4	10
110	A new Mg0.9Y0.1Ni hydride forming composition obtained by mechanical grinding. Journal of Alloys and Compounds, 1999, 292, 84-89.	4.9	21
111	Synthesis and Crystal Structure Determination of Tl8Nb27.2O72Using TEM and Single-Crystal X-Ray Diffraction. Journal of Solid State Chemistry, 1998, 135, 282-292.	2.4	2
112	The Phase Transitions between H0.27V0.27W0.73O3· H2O and V0.27W0.73O2.865: An X-Ray, Thermal Analysis, and HREM Study. Journal of Solid State Chemistry, 1998, 136, 284-292.	2.4	2
113	'Chimie douce' synthesis and electrochemical properties of amorphous and crystallized LiNiVO4 vs. Li. Solid State Ionics, 1998, 107, 123-133.	2.6	55
114	Synthesis and study of a well crystallized CaCO3 vaterite showing a new habitus. Journal of Materials Chemistry, 1997, 7, 797-800.	7.3	110
115	Effect of Mechanical Grinding on the Lithium Intercalation Process in Graphites and Soft Carbons. Journal of the Electrochemical Society, 1996, 143, 3959-3972.	2.2	170
116	Evaluation of the adsorption trends of a low molecular-weight polyelectrolyte with a site-binding model. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 110, 235-248.	4.2	15
117	Synthesis and Characterization of New Oxide Hydrates Hx(VxMo1−x)O3·0.3H2O and H0.27(V0.27W0.73)O3·1/3H2O. Journal of Solid State Chemistry, 1996, 121, 339-349.	2.4	17
118	Synthesis and chemical reactivity of polyol prepared monodisperse nickel powders. Solid State Ionics, 1996, 93, 33-50.	2.6	108
119	Effect of Calcium Ions on the Adsorption of Polyacrylic Acid onto Alumina. Journal of Colloid and Interface Science, 1993, 161, 455-464.	7.9	56