Alexandru Vlad

List of Publications by Year
in descending order

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85	2,854	159525	182361
papers	citations	30 h-index	51 g-index

90	90	90	4054
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design Considerations for Unconventional Electrochemical Energy Storage Architectures. Advanced Energy Materials, 2015, 5, 1402115.	10.2	271
2	Paintable Battery. Scientific Reports, 2012, 2, 481.	1.6	144
3	A perspective on organic electrode materials and technologies for next generation batteries. Journal of Power Sources, 2021, 482, 228814.	4.0	140
4	Roll up nanowire battery from silicon chips. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15168-15173.	3.3	118
5	Conjugated sulfonamides as a class of organic lithium-ion positive electrodes. Nature Materials, 2021, 20, 665-673.	13.3	110
6	A H-bond stabilized quinone electrode material for Liâ€“organic batteries: the strength of weak bonds. Chemical Science, 2019, 10, 418-426.	3.7	108
7	A TiSe₂â€Graphite Dual Ion Battery: Fast Naâ€Ion Insertion and Excellent Stability. Angewandte Chemie - International Edition, 2021, 60, 18430-18437.	7.2	102
8	Chemically anchored liquid-PEO based block copolymer electrolytes for solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 11839-11846.	5.2	78
9	Grafting of a redox polymer onto carbon nanotubes for high capacity battery materials. Journal of Materials Chemistry A, 2015, 3, 8832-8839.	5.2	77
10	Single-ion diblock copolymers for solid-state polymer electrolytes. Polymer, 2015, 68, 344-352.	1.8	71
11	Porous materials get energized. Nature Materials, 2017, 16, 161-162.	13.3	66
12	Towards Allâ€Organic Fieldâ€Effect Transistors by Additive Soft Lithography. Small, 2009, 5, 1117-1122.	5.2	59
13	Meltâ€Polymerization of TEMPO Methacrylates with Nano Carbons Enables Superior Battery Materials. ChemSusChem, 2015, 8, 1692-1696.	3.6	59
14	Graphene-coated holey metal films: Tunable molecular sensing by surface plasmon resonance. Applied Physics Letters, 2013, 102, .	1.5	58
15	Exploring the potential of polymer battery cathodes with electrically conductive molecular backbone. Journal of Materials Chemistry A, 2015, 3, 11189-11193.	5.2	58
16	Synthesis of nitroxideâ€containing block copolymers for the formation of organic cathodes. Journal of Polymer Science Part A, 2013, 51, 101-108.	2.5	56
17	An Electrically Conducting Li-Ion Metalâ€“Organic Framework. Journal of the American Chemical Society, 2021, 143, 11641-11650.	6.6	50
18	Surface Coating Mediated Swelling and Fracture of Silicon Nanowires during Lithiation. ACS Nano, 2014, 8, 9427-9436.	7.3	48

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19	Micellar Cathodes from Selfâ€Assembled Nitroxideâ€Containing Block Copolymers in Battery Electrolytes. Macromolecular Rapid Communications, 2014, 35, 228-233.	2.0	45
20	Organic Negative Electrode Materials for Metalâ€Ion and Molecularâ€Ion Batteries: Progress and Challenges from a Molecular Engineering Perspective. Advanced Energy Materials, 2021, 11, 2101562.	10.2	44
21	Mechanochemical Synthesis of PEDOT:PSS Hydrogels for Aqueous Formulation of Li-Ion Battery Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 34865-34874.	4.0	43
22	A new design of organic radical batteries (ORBs): carbon nanotube buckypaper electrode functionalized by electrografting. Chemical Communications, 2015, 51, 9301-9304.	2.2	40
23	Nanowireâ€Decorated Microscale Metallic Electrodes. Small, 2008, 4, 557-560.	5.2	39
24	Through-Space Charge Modulation Overriding Substituent Effect: Rise of the Redox Potential at 3.35 V in a Lithium-Phenolate Stereoelectronic Isomer. Chemistry of Materials, 2020, 32, 9996-10006.	3.2	39
25	Miscibility between Differently Shaped Mesogens: Structural and Morphological Study of a Phthalocyanine-Perylene Binary System. Journal of Physical Chemistry B, 2009, 113, 5448-5457.	1.2	37
26	Functionalized Nanoporous Thin Films From Photocleavable Block Copolymers. Macromolecular Rapid Communications, 2012, 33, 199-205.	2.0	37
27	Controlled growth of single nanowires within a supported alumina template. Nanotechnology, 2006, 17, 4873-4876.	1.3	36
28	Wavelength-scale lens microscopy via thermal reshaping of colloidal particles. Nanotechnology, 2012, 23, 285708.	1.3	36
29	A High-Voltage Organic Framework for High-Performance Na- and K-Ion Batteries. ACS Energy Letters, 2022, 7, 668-674.	8.8	34
30	Direct Transcription of Twoâ€Dimensional Colloidal Crystal Arrays into Threeâ€Dimensional Photonic Crystals. Advanced Functional Materials, 2013, 23, 1164-1171.	7.8	33
31	Amine-functionalized nanoporous thin films from a poly(ethylene oxide)-block-polystyrene diblock copolymer bearing a photocleavable o-nitrobenzyl carbamate junction. Soft Matter, 2012, 8, 4486.	1.2	32
32	Electroactive polymer/carbon nanotube hybrid materials for energy storage synthesized via a â€œgrafting toâ€•approach. RSC Advances, 2017, 7, 17301-17310.	1.7	30
33	Three-dimensional microsupercapacitors based on interdigitated patterns of interconnected nanowire networks. Energy Storage Materials, 2019, 21, 77-84.	9.5	29
34	Highly Ordered Conjugated Polymer Nanoarchitectures with Three-Dimensional Structural Control. Nano Letters, 2009, 9, 2838-2843.	4.5	28
35	Synthesis of polymer precursors of electroactive materials by SET-LRP. Polymer Chemistry, 2015, 6, 6067-6072.	1.9	28
36	Nanowires and nanostructures fabrication using template methods: a step forward to real devices combining electrochemical synthesis with lithographic techniques. Journal of Materials Science: Materials in Electronics, 2009, 20, 249-254.	1.1	27

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37	Three-dimensional interconnected Ni_{core}â€“NiO_{shell} nanowire networks for lithium microbattery architectures. Journal of Materials Chemistry A, 2016, 4, 1603-1607.	5.2	27
38	Nanowire-templated microelectrodes for high-sensitivity pH detection. Applied Physics Letters, 2009, 94, .	1.5	26
39	Nanostructured organic radical cathodes from self-assembled nitroxide-containing block copolymer thin films. Journal of Materials Chemistry A, 2015, 3, 19575-19581.	5.2	26
40	Lithium Diffusion in Copper. Journal of Physical Chemistry Letters, 2019, 10, 5206-5210.	2.1	26
41	Core-shell nanostructured organic redox polymer cathodes with superior performance. Nano Energy, 2019, 64, 103949.	8.2	26
42	Kinked Silicon Nanowires: Superstructures by Metal-Assisted Chemical Etching. Nano Letters, 2019, 19, 7681-7690.	4.5	24
43	Redox-controlled upper critical solution temperature behaviour of a nitroxide containing polymer in alcoholâ€“water mixtures. Polymer Chemistry, 2016, 7, 1088-1095.	1.9	22
44	High Salt-Content Plasticized Flame-Retardant Polymer Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 44844-44859.	4.0	22
45	Synthesis of an original fluorinated triethylene glycol methacrylate monomer and its radical copolymerisation with vinylidene fluoride. Its application as a gel polymer electrolyte for Li-ion batteries. Polymer Chemistry, 2015, 6, 6021-6028.	1.9	20
46	Mechanochemical assembly of 3D mesoporous conducting-polymer aerogels for high performance hybrid electrochemical energy storage. Nano Energy, 2017, 41, 193-200.	8.2	20
47	Kinked silicon nanowires-enabled interweaving electrode configuration for lithium-ion batteries. Scientific Reports, 2018, 8, 9794.	1.6	20
48	Structural and Charge-Transport Properties of a Liquid-Crystalline Î±,Ï‰-Disubstituted Thiophene Derivative: A Joint Experimental and Theoretical Study. Journal of Physical Chemistry C, 2010, 114, 4617-4627.	1.5	18
49	Functionalized Nanoporous Thin Films From Blends of Block Copolymers and Homopolymers Interacting via Hydrogen Bonding. Macromolecular Chemistry and Physics, 2012, 213, 2075-2080.	1.1	17
50	A facile and fast electrochemical route to produce functional few-layer graphene sheets for lithium battery anode application. Journal of Materials Chemistry A, 2014, 2, 15298-15302.	5.2	17
51	One-pot synthesis of electro-active polymer gels via Cu(0)-mediated radical polymerization and click chemistry. Polymer Chemistry, 2017, 8, 441-450.	1.9	17
52	On the Reliability of Sodium Metal Anodes: The Influence of Neglected Parameters. Journal of the Electrochemical Society, 2019, 166, A3122-A3131.	1.3	17
53	Hybrid LiMn2O4â€“radical polymer cathodes for pulse power delivery applications. Electrochimica Acta, 2017, 255, 442-448.	2.6	16
54	Phendioneâ€“Transitionâ€Metal Complexes with Bipolar Redox Activity for Lithium Batteries. ChemSusChem, 2020, 13, 2225-2231.	3.6	16

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55	Mixed Anionic and Cationic Redox Chemistry in a Tetrathiomolybdate Amorphous Coordination Framework. Angewandte Chemie - International Edition, 2020, 59, 16579-16586.	7.2	15
56	Design of Flexible and Selfâ€Standing Electrodes for Liâ€ion Batteries. Chinese Journal of Chemistry, 2017, 35, 41-47.	2.6	14
57	Versatile Synthesis of Vanadium(III, IV, V) Oxides@Reduced Graphene Oxide Nanocomposites and Evaluation of their Lithium and Sodium Storage Performances. Batteries and Supercaps, 2019, 2, 1016-1025.	2.4	14
58	Negative Redox Potential Shift in Fire-Retardant Electrolytes and Consequences for High-Energy Hybrid Batteries. ACS Applied Energy Materials, 2019, 2, 7879-7885.	2.5	14
59	On the improved electrochemistry of hybrid conducting-redox polymer electrodes. Scientific Reports, 2017, 7, 4847.	1.6	12
60	Femtogramâ€Controlled Synthesis and Selfâ€Aligned Fabrication of Polyaniline Microâ€and Nanostructures. Small, 2010, 6, 627-632.	5.2	10
61	Probing Graphene Ï‡⁽²⁾ Using a Gold Photon Sieve. Nano Letters, 2016, 16, 48-54.	4.5	10
62	Empowering magnesium. Nature Energy, 2020, 5, 945-946.	19.8	9
63	MIMC reliability and electrical behavior defined by a physical layer property of the dielectric. Microelectronics Reliability, 2008, 48, 1553-1556.	0.9	8
64	Low-power dihexylquaterthiophene-based thin film transistors for analog applications. Applied Physics Letters, 2008, 92, .	1.5	7
65	Vertical Nanowire Architectures: Statistical Processing of Porous Templates Towards Discrete Nanochannel Integration. Small, 2010, 6, 1974-1980.	5.2	5
66	Effects of Electrolyte Additives and Nanowire Diameter on the Electrochemical Performance of Lithiumâ€ion Battery Anodes based on Interconnected Nickelâ€“Tin Nanowire Networks. Energy Technology, 2021, 9, 2100062.	1.8	5
67	Unlocking the Electrochemistry and the Activation Mechanism in the Ironâ€Rich Na_{0.6}Fe_{1.2}PO₄ Phase for Highâ€Performance Sodiumâ€ion Storage. Batteries and Supercaps, 2022, 5, .	2.4	5
68	Strong ion pairing at the origin of modified Li-cation solvation and improved performances of dual-salt electrolytes. Journal of Power Sources, 2022, 541, 231644.	4.0	5
69	Materials, electrodes and electrolytes advances for next-generation lithium-based anode-free batteries. Oxford Open Materials Science, 2022, 2, .	0.5	5
70	Application of Redox-Responsive Hydrogels Based on 2,2,6,6-Tetramethyl-1-Piperidinyloxy Methacrylate and Oligo(Ethyleneglycol) Methacrylate in Controlled Release and Catalysis. Polymers, 2021, 13, 1307.	2.0	4
71	Nâ€doped carbon nanotube sponges and their excellent lithium storage performances. Nano Select, 0, , .	1.9	4
72	Erbium Silicide Growth in the Presence of Residual Oxygen. Journal of the Electrochemical Society, 2011, 158, H715-H723.	1.3	3

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73	Flexible fiber batteries for applications in smart textiles. Materials Research Society Symposia Proceedings, 2013, 1489, 7.	0.1	3
74	New Cathode Materials in the Feâ€PO₄â€F Chemical Space for Highâ€Performance Sodiumâ€Ion Storage. Advanced Science, 2022, 9, .	5.6	3
75	Colloidal pattern replication through contact photolithography operated in a â€˜Talbotâ€“Fabryâ€“Perotâ€™ regime. Nanotechnology, 2014, 25, 145303.	1.3	2
76	Visibleâ€light Augmented Lithium Storage Capacity in a Ruthenium(II) Photosensitizer Conjugated with a dioneâ€catechol Redox Couple. Chemistry - A European Journal, 0, , .	1.7	2
77	Thermopower evidence for Wigner crystallization in the insulating phase of two-dimensional GaAs bilayer hole systems. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 120-123.	1.3	1
78	MIMC Reliability and Electrical Behavior Defined by a Physical Layer Properties of the Dielectric. ECS Transactions, 2008, 13, 83-90.	0.3	1
79	Technological and Material Related Challenges for Large Area, High Aspect-Ratio, Near Teradot/Inch² Areal Density and Three-Dimensional Structuring of Polyaniline. Journal of Nanoscience and Nanotechnology, 2011, 11, 8924-8935.	0.9	1
80	Surveying colloid sedimentation by coplanar waveguides. Nanotechnology, 2016, 27, 225502.	1.3	1
81	Mixed Anionic and Cationic Redox Chemistry in a Tetrathiomolybdate Amorphous Coordination Framework. Angewandte Chemie, 2020, 132, 16722.	1.6	1
82	High Power Cathodes from Poly(2,2,6,6-Tetramethyl-1-Piperidinyloxy Methacrylate)/Li(NixMnyCoz)O2 Hybrid Composites. Polymers, 2021, 13, 986.	2.0	1
83	Study of the Electrochemical Performance of Activated Carbon Bulky Paper Electrode for Electrical Double Layer Capacitor (EDLC). IOP Conference Series: Materials Science and Engineering, 2018, 436, 012015.	0.3	0
84	Batteries and Supercapacitorsâ€”Fundamentals, Materials and Devices (Eâ€MRS Spring Meeting 2019): Foreword. Batteries and Supercaps, 2020, 3, 474-475.	2.4	0
85	Coated silicon nanowires for battery applications. Series in Materials Science and Engineering, 2017, , 475-494.	0.1	0