

# Ulaganathan Mani

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9136945/publications.pdf>

Version: 2024-02-01

75  
papers

2,974  
citations

185998

28  
h-index

174990

52  
g-index

76  
all docs

76  
docs citations

76  
times ranked

3997  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advancements in All-Vanadium Redox Flow Batteries. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500309.	1.9	351
2	Few-layered Ni(OH) <sub>2</sub> nanosheets for high-performance supercapacitors. <i>Journal of Power Sources</i> , 2015, 295, 323-328.	4.0	180
3	Advanced Cathode Materials for Sodium-Ion Batteries: What Determines Our Choices?. <i>Small Methods</i> , 2017, 1, 1700098.	4.6	179
4	Fabrication of Bi <sub>2</sub> O <sub>3</sub>   AC asymmetric supercapacitor with redox additive aqueous electrolyte and its improved electrochemical performances. <i>Electrochimica Acta</i> , 2014, 115, 518-524.	2.6	159
5	Research progress in Na-ion capacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7538-7548.	5.2	131
6	Bio-mass derived mesoporous carbon as superior electrode in all vanadium redox flow battery with multicouple reactions. <i>Journal of Power Sources</i> , 2015, 274, 846-850.	4.0	97
7	Two-Dimensional Polymer Synthesized via Solid-State Polymerization for High-Performance Supercapacitors. <i>ACS Nano</i> , 2018, 12, 852-860.	7.3	91
8	Li-ion vs. Na-ion capacitors: A performance evaluation with coconut shell derived mesoporous carbon and natural plant based hard carbon. <i>Chemical Engineering Journal</i> , 2017, 316, 506-513.	6.6	90
9	A chemically bonded NaTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /rGO microsphere composite as a high-rate insertion anode for sodium-ion capacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17506-17516.	5.2	80
10	Highly porous lithium-ion conducting solvent-free poly(vinylidene fluoride-co-hexafluoropropylene) battery applications. <i>Electrochimica Acta</i> , 2013, 93, 230-235.	2.6	79
11	Building next-generation supercapacitors with battery type Ni(OH) <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2021, 9, 15542-15585.	5.2	74
12	Highly mesoporous carbon from Teak wood sawdust as prospective electrode for the construction of high energy Li-ion capacitors. <i>Electrochimica Acta</i> , 2017, 228, 131-138.	2.6	66
13	Robust, Flexible, and Binder Free Highly Crystalline V <sub>2</sub> O <sub>5</sub> Thin Film Electrodes and Their Superior Supercapacitor Performances. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13115-13126.	3.2	63
14	Li-ion conduction on nanofiller incorporated PVdF-co-HFP based composite polymer blend electrolytes for flexible battery applications. <i>Solid State Ionics</i> , 2012, 218, 7-12.	1.3	59
15	Preparation and characterizations of PVAc/P(VdF-HFP)-based polymer blend electrolytes. <i>Ionics</i> , 2010, 16, 515-521.	1.2	54
16	Li-ion conduction in PVAc based polymer blend electrolytes for lithium battery applications. <i>Materials Chemistry and Physics</i> , 2011, 129, 471-476.	2.0	52
17	High surface area bio-waste based carbon as a superior electrode for vanadium redox flow battery. <i>Journal of Power Sources</i> , 2017, 362, 50-56.	4.0	42
18	New Zinc-Vanadium (Zn-V) Hybrid Redox Flow Battery: High-Voltage and Energy-Efficient Advanced Energy Storage System. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6053-6060.	3.2	42

#	ARTICLE	IF	CITATIONS
19	High performance zinc-bromine redox flow batteries: Role of various carbon felts and cell configurations. <i>Journal of Energy Storage</i> , 2018, 20, 134-139.	3.9	41
20	$\text{Co(OH)}_2$ Nanosheets: A Superior Pseudocapacitive Electrode for High-Energy Supercapacitors. <i>Chemistry - an Asian Journal</i> , 2017, 12, 2127-2133.	1.7	40
21	High energy Li-ion capacitors with conversion type $\text{Mn}_3\text{O}_4$ particulates anchored to few layer graphene as the negative electrode. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15134-15139.	5.2	39
22	Electrochemical behaviour of titanium/iridium(IV) oxide: Tantalum pentoxide and graphite for application in vanadium redox flow battery. <i>Journal of Power Sources</i> , 2013, 238, 103-108.	4.0	38
23	Preparation and characterization of novel solid polymer blend electrolytes based on poly (vinyl Tj ETQq1 1 0.784314 rgBT /Overlock 10 B: Solid-State Materials for Advanced Technology, 2014, 184, 26-33.	1.7	37
24	Realizing highly efficient energy retention of $\text{Zn-Br}_2$ redox flow battery using rGO supported 3D carbon network as a superior electrode. <i>Journal of Power Sources</i> , 2019, 438, 226998.	4.0	35
25	Ultralong Durability of Porous $\text{Fe}_2\text{O}_3$ Nanofibers in Practical Li-Ion Configuration with $\text{LiMn}_2\text{O}_4$ Cathode. <i>Advanced Science</i> , 2015, 2, 1500050.	5.6	34
26	Evaluation of lithium ion conduction in PAN/PMMA-based polymer blend electrolytes for Li-ion battery applications. <i>Ionics</i> , 2012, 18, 731-736.	1.2	32
27	Polymeric Nanomaterials Based on the Buckybowl Motif: Synthesis through Ring-Opening Metathesis Polymerization and Energy Storage Applications. <i>ACS Macro Letters</i> , 2017, 6, 1212-1216.	2.3	32
28	Highly active and stable heterogeneous catalysts based on the entrapment of noble metal nanoparticles in 3D ordered porous carbon. <i>Carbon</i> , 2016, 96, 75-82.	5.4	30
29	Waste-Driven Bio-Carbon Electrode Material for Na-Ion Storage Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 13915-13923.	3.2	30
30	Fabrication of New 2.4V Lithium-Ion Cell with Carbon-Coated $\text{LiTi}_2(\text{PO}_4)_3$ as the Cathode. <i>ChemElectroChem</i> , 2015, 2, 231-235.	1.7	28
31	Transport, structural and thermal studies on nanocomposite polymer blend electrolytes for Li-ion battery applications. <i>Current Applied Physics</i> , 2012, 12, 789-793.	1.1	27
32	S-Doped $\text{TiSe}_2$ Nanoplates/ $\text{Fe}_3\text{O}_4$ Nanoparticles Heterostructure. <i>Small</i> , 2017, 13, 1702181.	5.2	27
33	Photopolymerization of Diacetylene on Aligned Multiwall Carbon Nanotube Microfibers for High-Performance Energy Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 32643-32648.	4.0	25
34	Effect of different salts on PVAc/PVdF-CHFP based polymer blend electrolytes. <i>Journal of Applied Polymer Science</i> , 2010, 118, 646-651.	1.3	24
35	Novel Li-ion conduction on poly(vinyl acetate)-based hybrid polymer electrolytes with double plasticizers. <i>Journal of Applied Electrochemistry</i> , 2011, 41, 83-88.	1.5	24
36	Enhancement of Bromine Reversibility using Chemically Modified Electrodes and their Applications in Zinc Bromine Hybrid Redox Flow Batteries. <i>ChemElectroChem</i> , 2018, 5, 3411-3418.	1.7	24

#	ARTICLE	IF	CITATIONS
37	Conversion of uniform graphene oxide/polypyrrole composites into functionalized 3D carbon nanosheet frameworks with superior supercapacitive and sodium-ion storage properties. Journal of Power Sources, 2016, 307, 17-24.	4.0	23
38	Mn <sub>3</sub> O <sub>4</sub> nanoparticles grown on surface activated graphite paper for aqueous asymmetric supercapacitors. Journal of Alloys and Compounds, 2018, 767, 141-150.	2.8	23
39	FT-IR and DSC studies of poly(vinylidene chloride-co-acrylonitrile) complexed with LiBF <sub>4</sub> . Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 109, 105-109.	2.0	22
40	An Interwoven Network of MnO <sub>2</sub> Nanowires and Carbon Nanotubes as the Anode for Bendable Lithium-Ion Batteries. ChemPhysChem, 2014, 15, 2445-2449.	1.0	22
41	Activated Carbon-Anchored 3D Carbon Network for Bromine Activity and its Enhanced Electrochemical Performance in Zn <sup>2+</sup> /Br <sub>2</sub> Hybrid Redox Flow Battery. ChemElectroChem, 2019, 6, 5688-5697.	1.7	22
42	Investigations on new Fe <sup>2+</sup> /Mn redox couple based aqueous redox flow battery. Electrochimica Acta, 2020, 345, 136245.	2.6	22
43	Role of Different Plasticizers in Li-Ion Conducting Poly(Acrylonitrile)-Poly(Methyl Methacrylate) Hybrid Polymer Electrolyte. International Journal of Polymeric Materials and Polymeric Biomaterials, 2013, 62, 737-742.	1.8	21
44	High performance <i>in situ</i> annealed partially pressurized pulsed laser deposited WO <sub>3</sub> & V <sub>2</sub> O <sub>5</sub> thin film electrodes for use as flexible all solid state supercapbatteries. Journal of Materials Chemistry A, 2020, 8, 24148-24165.	5.2	21
45	Low loading of Pt@Graphite felt for enhancing multifunctional activity towards achieving high energy efficiency of Zn <sup>2+</sup> /Br <sub>2</sub> redox flow battery. Journal of Power Sources, 2021, 482, 228912.	4.0	21
46	Effect of Bromine Complexing Agents on the Performance of Cation Exchange Membranes in Second-Generation Vanadium Bromide Battery. ChemPlusChem, 2015, 80, 376-381.	1.3	19
47	Solid Polymer Blend Electrolyte Based on Poly(ethylene oxide) and Poly(vinyl pyrrolidone) for Lithium Secondary Batteries. Brazilian Journal of Physics, 2015, 45, 19-27.	0.7	18
48	Fabrication of High Energy Li-Ion Capacitors from Orange Peel Derived Porous Carbon. ChemistrySelect, 2017, 2, 5051-5058.	0.7	17
49	Li ion conduction on plasticizer-added PVAc-based hybrid polymer electrolytes. Ionics, 2010, 16, 667-672.	1.2	16
50	Preparation of durable nanocatalyzed MEA for PEM fuel cell applications. Ionics, 2011, 17, 361-366.	1.2	15
51	Advances in membrane and stack design of redox flow batteries (RFBs) for medium- and large-scale energy storage. , 2015, , 477-507.		15
52	Studies on MWCNT-Incorporated Composite Polymer Electrolytes for Electrochemical Applications. Soft Materials, 2010, 8, 358-369.	0.8	14
53	Evaluation of impregnated nanocomposite membranes for aqueous methanol electrochemical reforming. Solid State Ionics, 2015, 283, 16-20.	1.3	14
54	Electrochemical analysis on poly(ethyl methacrylate)-based electrolyte membranes. Bulletin of Materials Science, 2015, 38, 151-156.	0.8	14

#	ARTICLE	IF	CITATIONS
55	Nanoionic transport and electric double layer formation at the electrode/polymer interface for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23650-23658.	5.2	14
56	Fabrication and electrochemical characterization of Pt@Pd impregnated nanocomposite polymer electrolyte membranes for high concentration DMFCs. <i>RSC Advances</i> , 2015, 5, 981-987.	1.7	13
57	Exploring Anatase TiO <sub>2</sub> Nanofibers as New Cathode for Constructing 1.6 V Class Rocking-Type Li-Ion Cells. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 306-310.	1.2	13
58	Carbon Nanotube Scaffolds Entrapped in a Gel Matrix for Realizing the Improved Cycle Life of Zinc Bromine Redox Flow Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 48110-48118.	4.0	13
59	Investigations on New Electrolyte Composition and Modified Membrane for High Voltage Zinc-Manganese Hybrid Redox Flow Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 1464-1472.	2.4	12
60	An optimistic approach on flow rate and supporting electrolyte for enhancing the performance characteristics of Zn-Br <sub>2</sub> redox flow battery. <i>Electrochimica Acta</i> , 2021, 388, 138451.	2.6	12
61	Polysulfide diffusion controlled, non-shrinkable, porous, PAN/PES electrospun membrane for high energy Li-S battery application. <i>Materials Today Energy</i> , 2019, 12, 37-45.	2.5	11
62	Low cost bio-derived carbon-sprinkled manganese dioxide as an efficient sulfur host for lithium-sulfur batteries. <i>RSC Advances</i> , 2018, 8, 24261-24267.	1.7	10
63	Evaluation of platinum catalyzed MEAs for PEM fuel cell applications. <i>Solid State Ionics</i> , 2011, 190, 88-92.	1.3	9
64	Enhancement of Bromine Kinetics Using Pt@Graphite Felt and Its Applications in Zn-Br <sub>2</sub> Redox Flow Battery. <i>Journal of the Electrochemical Society</i> , 2021, 168, 090566.	1.3	9
65	Development of nano-catalyzed membrane for PEM fuel cell applications. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2917-2925.	1.2	8
66	Transformation of Spent Li-Ion Battery in to High Energy Supercapacitors in Asymmetric Configuration. <i>ChemElectroChem</i> , 2019, 6, 5283-5292.	1.7	8
67	Modified viologen as an efficient anolyte for aqueous organic redox flow batteries. <i>Materials Letters</i> , 2022, 314, 131876.	1.3	8
68	Electrospun Carbon Nanofiber Sprinkled with Co <sub>3</sub> O <sub>4</sub> as an Efficient Electrocatalyst for Oxygen Reduction Reaction in Alkaline Medium. <i>ChemistrySelect</i> , 2019, 4, 5160-5167.	0.7	7
69	Electrodeposited partially oxidized Bi & NiCo alloy based thin films for aqueous hybrid high energy microcapacitor. <i>Journal of Alloys and Compounds</i> , 2021, 888, 161453.	2.8	7
70	Charge Transport, Mechanical and Storage Performances of Sepiolite Based Composite Polymer Electrolytes. <i>ChemistrySelect</i> , 2016, 1, 5821-5827.	0.7	6
71	Fe@ZnS Composite Nanosheets for Enhanced Lithium Storage Properties. <i>ChemNanoMat</i> , 2017, 3, 420-427.	1.5	6
72	Synthesis of Bendable Plasticized Nanocomposite Polymer Electrolyte Using Poly(Acrylonitrile)/Poly(Methyl Methacrylate) Polymer Blends. <i>Zeitschrift Fur Physikalische Chemie</i> , 2014, 228, 673-684.	1.4	4

#	ARTICLE	IF	CITATIONS
73	Graphene Quantum Dot beyond Electrocatalyst: An In Situ Electrolyte Catalyst towards Improved Reaction Kinetics of VO <sup>2+</sup> /VO <sup>2+</sup> Redox Couples. Journal of the Electrochemical Society, 2020, 167, 140540.	1.3	4
74	Structural, Thermal, and Electrochemical Studies of Novel Li <sub>2</sub> Co <sub>x</sub> Mn <sub>1-x</sub> (SO <sub>4</sub> ) <sub>2</sub> Bimetallic Sulfates. Journal of Physical Chemistry C, 2017, 121, 24971-24978.	1.5	3
75	Palladium and Gold Nanoparticle Modified Porous Carbon as a High Power Anode for Lithium Ion Batteries. ChemPhysChem, 2013, 14, 3887-3890.	1.0	2