A review of power battery thermal energy management

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#	Paper	IF	Citations
720	Integrated energy and thermal management for hybrid electric heavy duty trucks. **2012**,		12
719	Molecular dynamics simulations of melting behavior of alkane as phase change materials slurry. **2012**, 64, 152-156		22
718	Self diffusion of the nano-encapsulated phase change materials: A molecular dynamics study. **2012**, 100, 303-308		43
717	Fundamental Aspects of Mechanical Dehydrogenation of Li- Based Complex Hydride Nanocomposites and Their Self-Discharge at Low Temperatures. **2012**, 29, 644-653		4
716	Dissipative particle dynamics investigation of microencapsulated thermal energy storage phase change materials. **2012**, 44, 805-812		24
715	Experimental evaluation on natural convection heat transfer of microencapsulated phase change materials slurry in a rectangular heat storage tank. **2012**, 59, 33-39		46
714	Thermal characterization of a high-power lithium-ion battery: Potentiometric and calorimetric measurement of entropy changes. **2013**, 61, 432-439		105
713	The effect of non-covalent functionalization on the thermal conductance of graphene/organic interfaces. **2013**, 24, 165702		75
712	Sustainable urban rail systems: Strategies and technologies for optimal management of regenerative braking energy. **2013**, 75, 374-388		249
711	Self diffusion and heat capacity of n-alkanes based phase change materials: A molecular dynamics study. **2013**, 64, 581-589		37
710	Boundary control synthesis for a lithium-ion battery thermal regulation problem. **2013**, 59, 3782-3796		6
709	High Energy Density Metal-Air Batteries: A Review. **2013**, 160, A1759-A1771		453
708	Lithium-ion battery heat generation investigation based on calorimetric entropy measurements. **2013**,		5
707	Temperature Characteristics Improvement of Power Battery Module for Electric Vehicles. **2013**,		1
706	Study on the improvement in continuously variable transmission efficiency with a thermal management system. **2013**, 61, 11-19		7
705	A design of air flow configuration for cooling lithium ion battery in hybrid electric vehicles. **2013**, 239, 30-36		258
704	Development of an optimal charging algorithm of a Ni-MH battery for stationary fuel cell/battery hybrid system application. **2013**, 38, 9008-9015		5

703	Control strategies for high-power electric vehicles powered by hydrogen fuel cell, battery and supercapacitor. **2013**, 40, 4791-4804		129
702	Experimental investigation on thermal management of electric vehicle battery with heat pipe. **2013**, 65, 92-97		271
701	Arrhenius Equation-Based Cell-Health Assessment: Application to Thermal Energy Management Design of a HEV NiMH Battery Pack. **2013**, 6, 2709-2725		31
700	Progress in Hydrogen Storage in Complex Hydrides. **2013**, 293-332		7
699	. **2013**,		1
698	The estimation of radial temperature distribution in cylindrical battery cells under unknown cooling conditions. **2013**,		
697	Adaptive temperature monitoring for battery thermal management. **2013**,		6
696	Performance Improvement of a Two Speed EV through Combined Gear Ratio and Shift Schedule Optimization. **2013**,		18
695	Cost-Effective Energy Management for Hybrid Electric Heavy-Duty Truck Including Battery Aging. **2013**,		3
694	Transport. 599-670		3
693	Molecular dynamics simulation of the molar volumes and solubility parameters of straight alkanes. **2014**, 28, 1450240		3
692	A study on structure-performance relationship of overcharged 18650-size Li4Ti5O12/LiMn2O4 battery. **2014**, 118, 1413-1418		6
691	Thermal Management System Design and Simulation of Battery Pack for Electric Vehicles. **2014**, 494-495, 100-103		2
690	Cellulose in Printed Electronics. **2014**, 237-252		1
689	Thermal Characteristic Analysis of Rectangular and Large-Capacity Lithium-Ion Power Batteries. **2014**, 1044-1045, 448-456		
688	Effect of the inclination angle on the transient performance of a phase change material-based heat sink under pulsed heat loads. **2014**, 15, 789-797		16
687	Thermal Management Modeling for Avoidance of Thermal Runaway Conditions in Lithium-Ion Batteries. **2014**,		3
686	Hybrid electric vehicles and their challenges: A review. *Renewable and Sustainable Energy Reviews*, **2014**, 29, 135-150	16.2	364

685	Measurement of anisotropic thermophysical properties of cylindrical Li-ion cells. **2014**, 252, 298-304	131
684	Development and characteristics of a membraneless microfluidic fuel cell array. **2014**, 135, 467-477	50
683	Experimental study of the heat generations of Li/SOCl2 and Li/SO2 batteries using a phase-change measurement method. **2014**, 116, 1011-1017	6
682	Heat dissipation structure research for rectangle LiFePO4 power battery. **2014**, 50, 887-893	11
681	Numerical model of the passive thermal management system for high-power lithium ion battery by using porous metal foam saturated with phase change material. **2014**, 39, 3904-3913	137
680	Review on thermal management systems using phase change materials for electronic components, Li-ion batteries and photovoltaic modules. *Renewable and Sustainable Energy Reviews*, **2014**, 31, 427-438 16.2	296
679	A review of phase change materials for vehicle component thermal buffering. **2014**, 113, 1525-1561	244
678	On-chip phase change heat sinks designed for computational sprinting. **2014**,	16
677	The Estimation of Temperature Distribution in Cylindrical Battery Cells Under Unknown Cooling Conditions. **2014**, 22, 2277-2286	75
676	Enhanced thermal conductivity of phase change materials with ultrathin-graphite foams for thermal energy storage. **2014**, 7, 1185-1192	410
675	Thermal investigation of lithium-ion battery module with different cell arrangement structures and forced air-cooling strategies. **2014**, 134, 229-238	321
674	Dissipative particle dynamics and experimental study of alkane-based nanoencapsulated phase change material for thermal energy storage. **2014**, 4, 20797-20803	14
673	Novel thermal management system design methodology for power lithium-ion battery. **2014**, 272, 291-302	63
672	Review of underhood aerothermal management: Towards vehicle simplified models. **2014**, 73, 842-858	24
671	Experimental performances of a battery thermal management system using a phase change material. **2014**, 270, 349-358	99
670	Amorphous silica-coated graphite particles for thermally conductive and electrically insulating resins. **2014**, 78, 204-211	33
669	Thermal analysis and two-directional air flow thermal management for lithium-ion battery pack. **2014**, 270, 193-200	125
668	Optimal power management for a series hybrid electric vehicle cognizant of battery mechanical effects. **2014**,	7

667	LiFePO4 Optimal Operation Temperature Range Analysis for EV/HEV. **2014**, 476-485		2
666	Experimental study of an OHP-cooled thermal management system for electric vehicle power battery. **2014**, 57, 20-26		80
665	Shortcut computation for the thermal management of a large air-cooled battery pack. **2014**, 66, 445-452		82
664	Dynamic electro-thermal modeling of all-vanadium redox flow battery with forced cooling strategies. **2014**, 135, 1-10		51
663	Investigation on a hydrogel based passive thermal management system for lithium ion batteries. **2014**, 68, 854-861		61
662	Comparison of comprehensive properties of Ni-MH (nickel-metal hydride) and Li-ion (lithium-ion) batteries in terms of energy efficiency. **2014**, 70, 618-625		60
661	A theoretical and computational study of lithium-ion battery thermal management for electric vehicles using heat pipes. **2014**, 257, 344-355		153
660	Review on the heat dissipation performance of battery pack with different structures and operation conditions. *Renewable and Sustainable Energy Reviews*, **2014**, 29, 301-315	16.2	49
659	Multi-objective optimal design of lithium-ion battery packs based on evolutionary algorithms. **2014**, 267, 288-299		48
658	On the competitiveness of electric driving in France: Impact of driving patterns. *Renewable and Sustainable Energy Reviews*, **2014**, 37, 348-359	16.2	20
657	Simulative method for determining the optimal operating conditions for a cooling plate for lithium-ion battery cell modules. **2014**, 267, 784-792		58
656	Modeling Temperature Development of Li-Ion Battery Packs Using Phase Change Materials (PCM) and Fluid Flow. **2014**,		
655	Qualitative thermal characterization and cooling of lithium batteries for electric vehicles. **2014**, 501, 012035		2
654	Temperature response of a high power lithium-ion battery subjected to high current discharge. **2015**, 19, S2-156-S2-160		7
653	Electric, Hybrid, and Advanced Vehicles: Finding a Lane on the Road Ahead. **2015**, 1-21		
652	Fan-pad evaporative battery cooling for hybrid electric vehicle thermal management. **2015**,		1
651	Sustainable Power Supply Solutions for Off-Grid Base Stations. **2015**, 8, 10904-10941		73
650	Battery Heating System for Electric Vehicles. **2015**,		2

649	Theoretical Modelling Methods for Thermal Management of Batteries. **2015**, 8, 10153-10177		69
648	Improved rate ability of low cost sulfur cathodes by using ultrathin graphite sheets with self-wrapped function as cheap conductive agent. **2015**, 3, 8015-8021		16
647	High thermal conductivity phase change composite with percolating carbon fiber network. **2015**, 154, 678-685		112
646	. **2015**, 1-1		5
645	Smart cooling system of the double loop coolant structure with engine thermal management modeling. **2015**, 79, 124-131		30
644	Experimental investigation of battery thermal management system for electric vehicle based on paraffin/copper foam. **2015**, 88, 241-246		96
643	Experimental investigation on EV battery cooling and heating by heat pipes. **2015**, 88, 54-60		142
642	Paraffin and paraffin/aluminum foam composite phase change material heat storage experimental study based on thermal management of Li-ion battery. **2015**, 78, 428-436		207
641	Thermal management of a Li-ion battery using carbon fiber-PCM composites. **2015**, 82, 281-290		159
640	Thermal management of batteries for electric vehicles. **2015**, 327-358		8
639	Retention of mechanical performance of polymer matrix composites above the glass transition temperature by vascular cooling. **2015**, 78, 412-423		24
638	Numerical investigation of water cooling for a lithium-ion bipolar battery pack. **2015**, 94, 259-269		87
637	Development of efficient air-cooling strategies for lithium-ion battery module based on empirical heat source model. **2015**, 90, 521-529		132
636	Adaptive Kalman filtering based internal temperature estimation with an equivalent electrical network thermal model for hard-cased batteries. **2015**, 293, 351-365		54
635	Thermal performance of mini-channel liquid cooled cylinder based battery thermal management for cylindrical lithium-ion power battery. **2015**, 103, 157-165		222
634	Computational scheduling methods for integrating plug-in electric vehicles with power systems: A review. *Renewable and Sustainable Energy Reviews*, **2015**, 51, 396-416	16.2	127
633	Thermal Management in Electrochemical Energy Storage Systems. **2015**, 1-10		4
632	A concise guide to sustainable PEMFCs: recent advances in improving both oxygen reduction catalysts and proton exchange membranes. **2015**, 44, 5836-60		225

631	Experimental validation of a 0-D numerical model for phase change thermal management systems in lithium-ion batteries. **2015**, 287, 211-219		35
630	Thermal management of cylindrical power battery module for extending the life of new energy electric vehicles. **2015**, 85, 33-43		149
629	A hybrid thermal management system for lithium ion batteries combining phase change materials with forced-air cooling. **2015**, 148, 403-409		351
628	Integrated Systems: Innovations and Applications. **2015**,		2
627	Protection of Electronics from Environmental Temperature Spikes by Phase Change Materials. **2015**, 44, 4589-4594		5
626	A review of thermal performance improving methods of lithium ion battery: Electrode modification and thermal management system. **2015**, 299, 557-577		178
625	Experimental demonstration of active thermal control of a battery module consisting of multiple Li-ion cells. **2015**, 91, 630-639		40
624	The numerical investigation of nanofluid based cylinder battery thermal management using lattice Boltzmann method. **2015**, 91, 374-384		75
623	Size matters: Why cell size is vital for minimizing cost of air-cooling in battery packs. **2015**,		2
622	Investigation of thermal energy losses in the powertrain of an electric city bus. **2015**,		7
621	A control-oriented lithium-ion battery pack model for plug-in hybrid electric vehicle cycle-life studies and system design with consideration of health management. **2015**, 279, 791-808		73
620	Thermal conductivity of an organic phase change material/expanded graphite composite across the phase change temperature range and a novel thermal conductivity model. **2015**, 102, 202-208		180
619	Thermal management of batteries employing active temperature control and reciprocating cooling flow. **2015**, 83, 164-172		76
618	An investigation of lithium-ion battery thermal management using paraffin/porous-graphite-matrix composite. **2015**, 278, 50-68		103
617	Experiment and simulation of a LiFePO4 battery pack with a passive thermal management system using composite phase change material and graphite sheets. **2015**, 275, 742-749		145
616	Investigation of power battery thermal management by using mini-channel cold plate. **2015**, 89, 387-395		318
615	The development of new energy vehicles for a sustainable future: A review. *Renewable and Sustainable Energy Reviews*, **2015**, 42, 298-305	16.2	137
614	Optimal economy-based battery degradation management dynamics for fuel-cell plug-in hybrid electric vehicles. **2015**, 274, 367-381		43

613	Thermal Management of Power Batteries for Electric Vehicles Using Phase Change Materials: A Review. **2016**,	15
612	Assessing Electric Vehicles Battery Second Life Remanufacture and Management. **2016**, 6, 77-98	19
611	Characterization and modeling of the thermal mechanics of lithium-ion battery cells. **2016**, 178, 633-646	26
610	Review on use of phase change materials in battery thermal management for electric and hybrid electric vehicles. **2016**, 40, 1011-1031	128
609	Modeling efforts in the key areas of thermal management and safety of lithium ion battery cells: a mini review. **2016**, 11, 399-406	18
608	High thermal conductivity phase change composite with a metal-stabilized carbon-fiber network. **2016**, 179, 1-6	42
607	Three Dimensional Thermal Modeling of Li-Ion Battery Pack Based on Multiphysics and Calorimetric Measurement. **2016**,	4
606	Investigation of current sharing and heat dissipation in parallel-connected lithium-ion battery packs. **2016**,	2
605	Energy management system for smart house with multi-sources using PI-CA controller. **2016**,	4
604	Chemical Strategies for Enhancing Activity and Charge Transfer in Ultrathin Pt Nanowires Immobilized onto Nanotube Supports for the Oxygen Reduction Reaction. **2016**, 8, 34280-34294	12
603	Measurement of Multiscale Thermal Transport Phenomena in Li-Ion Cells: A Review. **2016**, 13,	43
602	Hydrogen storage alloys/reduced graphite oxide: an efficient hybrid electrode with enhanced high-rate dischargeability. **2016**, 200, 59-65	26
601	Determination of the behavior and performance of commercial Li-Ion pouch cells by means of isothermal calorimeter. **2016**,	4
600	Multiphysics based thermal modeling of a pouch lithium-ion battery cell for the development of pack level thermal management system. **2016**,	4
599	Dynamic thermal characteristics of heat pipe via segmented thermal resistance model for electric vehicle battery cooling. **2016**, 321, 57-70	85
598	A coupled thermal and electrochemical study of lithium-ion battery cooled by paraffin/porous-graphite-matrix composite. **2016**, 315, 127-139	32
597	Experiment study of oscillating heat pipe and phase change materials coupled for thermal energy storage and thermal management. **2016**, 99, 252-260	55
596	An experimental study of thermal management system using copper mesh-enhanced composite phase change materials for power battery pack. **2016**, 113, 909-916	113

595	Experimental and modeling study of controller-based thermal management of battery modules under dynamic loads. **2016**, 103, 154-164		32
594	Numerical studies of lithium-ion battery thermal management systems using phase change materials and metal foams. **2016**, 102, 1159-1168		125
593	Thermal performance of lithium-ion battery thermal management system by using mini-channel cooling. **2016**, 126, 622-631		252
592	Experimental study of a cylindrical lithium ion battery thermal management using phase change material composites. **2016**, 8, 168-174		72
591	High temperature electrical energy storage: advances, challenges, and frontiers. **2016**, 45, 5848-5887		182
590	Design of Hydrogen Storage Alloys/Nanoporous Metals Hybrid Electrodes for Nickel-Metal Hydride Batteries. **2016**, 6, 27601		21
589	Experimental investigation of a passive thermal management system for high-powered lithium ion batteries using nickel foam-paraffin composite. **2016**, 115, 209-218		99
588	An alternating current heating method for lithium-ion batteries from subzero temperatures. **2016**, 40, 1869-1883		54
587	Chapter 7 Energy Security and Sustainability for Road Transport Sector: The Role of Hydrogen Fuel Cell Technology. **2016**, 149-204		1
586	Expanded graphite embedded with aluminum nanoparticles as superior thermal conductivity anodes for high-performance lithium-ion batteries. **2016**, 6, 33833		33
585	Experimental investigation of thermal characteristics of lithium ion battery using phase change materials combined with metallic foams and fins. **2016**, 40, 012045		1
584	Computational fluid dynamic and thermal analysis of Lithium-ion battery pack with air cooling. **2016**, 177, 783-792		234
583	A critical review of thermal management models and solutions of lithium-ion batteries for the development of pure electric vehicles. *Renewable and Sustainable Energy Reviews*, **2016**, 64, 106-128	16.2	413
582	Figure-of-merit for phase-change materials used in thermal management. **2016**, 101, 764-771		46
581	Active Cooling of a Microvascular Shape Memory Alloy-Polymer Matrix Composite Hybrid Material . **2016**, 18, 1145-1153		17
580	Thermo-electrochemical model for forced convection air cooling of a lithium-ion battery module. **2016**, 99, 672-682		60
579	Thermal Management of Large-Format Prismatic Lithium-Ion Battery in PHEV Application. **2016**, 163, A309-A317		31
578	Twelve Principles for Green Energy Storage in Grid Applications. **2016**, 50, 1046-55		55

577	Review of mechanical design and strategic placement technique of a robust battery pack for electric vehicles. *Renewable and Sustainable Energy Reviews*, **2016**, 60, 1319-1331	16.2	115
576	Performance enhancement of a Building-Integrated Concentrating Photovoltaic system using phase change material. **2016**, 149, 29-39		120
575	Thermal management analysis of a Li-ion battery cell using phase change material loaded with carbon fibers. **2016**, 96, 355-371		187
574	Unbalanced discharging and aging due to temperature differences among the cells in a lithium-ion battery pack with parallel combination. **2016**, 306, 733-741		136
573	Energy-Conscious Warm-Up of Li-Ion Cells From Subzero Temperatures. **2016**, 63, 2954-2964		30
572	. **2016**, 52, 369-377		27
571	Estimating the Power Capability of Li-ion Batteries Using Informationally Partitioned Estimators. **2016**, 24, 1643-1654		24
570	Thermal management for high power lithium-ion battery by minichannel aluminum tubes. **2016**, 101, 284-292		150
569	Thermal performance of phase change material/oscillating heat pipe-based battery thermal management system. **2016**, 102, 9-16		111
568	Understanding atomic scale phenomena within the surface layer of a long-term cycled 5 V spinel electrode. **2016**, 19, 297-306		17
567	A comprehensive review of lithium-ion batteries used in hybrid and electric vehicles at cold temperatures. **2016**, 164, 99-114		510
566	Investigation of the thermal performance of phase change material/mini-channel coupled battery thermal management system. **2016**, 164, 659-669		210
565	Comparison of different cooling methods for lithium ion battery cells. **2016**, 94, 846-854		289
564	Performance assessment and optimization of a heat pipe thermal management system for fast charging lithium ion battery packs. **2016**, 92, 893-903		83
563	Real-time estimation of battery internal temperature based on a simplified thermoelectric model. **2016**, 302, 146-154		64
562	Experimental investigation on thermal performance of phase change material coupled with closed-loop oscillating heat pipe (PCM/CLOHP) used in thermal management. **2016**, 93, 90-100		69
561	On using splitter plates and flow guide-vanes for battery module cooling. **2017**, 53, 1-10		13
560	Multidisciplinary Design Optimization of Air-based Battery Thermal Management System in Electric Vehicles. **2017**,		

559	Investigation on the promotion of temperature uniformity for the designed battery pack with liquid flow in cooling process. **2017**, 116, 655-662	82
558	Analytical methods for determining the effects of lithium-ion cell size in aligned air-cooled battery packs. **2017**, 10, 39-47	12
557	Modeling and state-of-charge prediction of lithium-ion battery and ultracapacitor hybrids with a co-estimator. **2017**, 121, 739-750	115
556	Safety of Rechargeable Energy Storage Systems with a focus on Li-ion Technology. **2017**, 253-290	10
555	Constrained generalized predictive control of battery charging process based on a coupled thermoelectric model. **2017**, 347, 145-158	86
554	Thermal analysis and simulation of a Li-ion battery pack for a lightweight commercial EV. **2017**, 192, 159-177	57
553	Experimental investigation on the thermal performance of heat pipe-assisted phase change material based battery thermal management system. **2017**, 138, 486-492	199
552	Lattice Boltzmann modeling of melting of phase change materials in porous media with conducting fins. **2017**, 118, 315-327	19
551	Numerical modeling and experimental investigation of a prismatic battery subjected to water cooling. **2017**, 71, 626-637	48
550	Thermal design and simulation of mini-channel cold plate for water cooled large sized prismatic lithium-ion battery. **2017**, 122, 80-90	162
549	Exploring the efficacy of nanofluids for lithium-ion battery thermal management. **2017**, 112, 779-794	58
548	Review Article: Flow battery systems with solid electroactive materials. **2017**, 35, 040801	26
547	Electrochemical-electrical-thermal modeling of a pouch-type lithium ion battery: An application to optimize temperature distribution. **2017**, 11, 249-257	34
546	Thermal Management of Hybrid Energy Storage for Electromagnetic Launch. **2017**, 45, 1459-1464	0
545	Configuration optimization of battery pack in parallel air-cooled battery thermal management system using an optimization strategy. **2017**, 123, 177-186	69
544	Surrogate based multidisciplinary design optimization of lithium-ion battery thermal management system in electric vehicles. **2017**, 56, 1555-1570	36
543	Numerical Analyses on Aluminum Foams Cooling Plate for Lithium-ion Batteries. **2017**, 105, 4751-4756	6
542	Structure optimization of parallel air-cooled battery thermal management system. **2017**, 111, 943-952	87

541	Modular energy efficient and solid-state Battery Thermal Management System. **2017**,	2
540	Thermal properties and thermal conductivity enhancement of composite phase change materials using myristyl alcohol/metal foam for solar thermal storage. **2017**, 170, 68-76	123
539	Thermal management of a Li-ion battery pack employing water evaporation. **2017**, 360, 166-171	33
538	A review of thermal management and safety for lithium ion batteries. **2017**,	4
537	Experimental study of a passive thermal management system for three types of battery using copper foam saturated with phase change materials. **2017**, 7, 27441-27448	19
536	Optimization investigation on the liquid cooling heat dissipation structure for the lithium-ion battery package in electric vehicles. **2017**, 231, 1735-1750	12
535	Nanofluid-based cooling of cylindrical lithium-ion battery packs employing forced air flow. **2017**, 117, 44-58	50
534	Experimental investigation on the thermal behavior of cylindrical battery with composite paraffin and fin structure. **2017**, 109, 958-970	76
533	An advanced Lithium-ion battery optimal charging strategy based on a coupled thermoelectric model. **2017**, 225, 330-344	53
532	The lattice Boltzmann investigation of natural convection for nanofluid based battery thermal management. **2017**, 115, 659-669	37
531	Investigation of phase change material based battery thermal management at cold temperature using lattice Boltzmann method. **2017**, 133, 204-215	61
530	A review on battery thermal management in electric vehicle application. **2017**, 367, 90-105	243
529	The electric vehicle: a review. **2017**, 9, 49	19
528	Electrochemical-thermal Modeling to Evaluate Active Thermal Management of a Lithium-ion Battery Module. **2017**, 254, 59-71	38
527	Experimental investigations of an AC pulse heating method for vehicular high power lithium-ion batteries at subzero temperatures. **2017**, 367, 145-157	64
526	A thermal management system for rectangular LiFePO4 battery module using novel double copper mesh-enhanced phase change material plates. **2017**, 141, 613-623	54
525	Thermal optimization of composite PCM based large-format lithium-ion battery modules under extreme operating conditions. **2017**, 153, 22-33	67
524	Thermal issues about Li-ion batteries and recent progress in battery thermal management systems: A review. **2017**, 150, 304-330	433

523	Lattice Boltzmann investigation of the solid-liquid phase change process in a cavity with protruding heater. **2017**, 122, 292-301	5
522	Resilient Energy Storage under High-Temperature with In-Situ-Synthesized MnO@Graphene as Anode. **2017**, 9, 33896-33905	25
521	A review on lithium-ion power battery thermal management technologies and thermal safety. **2017** , 26, 391-412	114
520	Thermal management for energy storage system for smart grid. **2017**, 13, 313-324	15
519	Structural optimization of lithium-ion battery pack with forced air cooling system. **2017**, 126, 583-593	98
518	Numerical simulation of transport characteristics of Li-ion battery in different discharging modes. **2017**, 126, 70-80	8
517	Liquid cooling based on thermal silica plate for battery thermal management system. **2017**, 41, 2468-2479	96
516	Performance of Al-0.1In-0.1Ga-0.1Sn-3.0Pb as anode for Al-air battery in KOH solutions. **2017**, 81, 012005	2
515	Flexible, temperature-tolerant supercapacitor based on hybrid carbon film electrodes. **2017**, 40, 224-232	78
514	An Experimental Parametric Study of Air-Based Battery Thermal Management System for Electric Vehicles. **2017**,	1
513	A unified modeling framework for lithium-ion batteries: An artificial neural network based thermal coupled equivalent circuit model approach. **2017**, 138, 118-132	55
512	Experimental Study on a Dual- parallel-evaporator Heat Pump System for Thermal Management of Electric Vehicles. **2017**, 105, 2390-2395	11
511	Optimization of a phase change material based internal cooling system for cylindrical Li-ion battery pack and a hybrid cooling design. **2017**, 135, 811-822	67
510	Enhanced Thermal Conductivity and Durability of a Paraffin Wax Nanocomposite Based on Carbon-Coated Aluminum Nanoparticles. **2017**, 121, 12603-12609	18
509	Prevent thermal runaway of lithium-ion batteries with minichannel cooling. **2017**, 110, 883-890	119
508	Optimization of the air-cooled supercapacitor module compartment for an electric bus. **2017**, 112, 1297-1304	13
507	Impact of Heating System on the Range of an Electric Vehicle. **2017**, 66, 4668-4677	29
506	Preventing thermal runaway propagation in lithium ion battery packs using a phase change composite material: An experimental study. **2017**, 340, 51-59	199

505	A novel lattice Boltzmann model for the solid□liquid phase change with the convection heat transfer in the porous media. **2017**, 104, 675-687	25
504	Enhancing radiative cooling performance using metal-dielectric-metal metamaterials. **2017**, 31, 5107-5112	3
503	Thermal management system design for batteries packs of electric vehicles: A survey. **2017**,	3
502	Simulation of lithium-ion batteries from a electric vehicle perspective. **2017**,	2
501	Analysis of a lithium-ion battery cooling system for electric vehicles using a phase-change material and heat pipes. **2017**, 12, JTST0011-JTST0011	22
500	Towards the implementation of refurbished ev lithium-ion batteries for smart grid energy storage. **2017**,	2
499	Thermal studies on battery packs with different geometric configuration of 18650 cells. **2017**,	0
498	Thermal model of battery for high capacity energy storage systems cell scale model and experimental validation. **2017**,	1
497	Feasibility study of mist cooling for lithium-ion battery. **2017**, 142, 2592-2597	3
496	Experimental Investigation of AC Pulse Heating Method for NMC Lithium-Ion Battery at Subzero Temperatures. **2017**,	
495	An Optimized Energy Management Strategy for Preheating Vehicle-Mounted Li-ion Batteries at Subzero Temperatures. **2017**, 10, 243	27
494	Advances in Integrated Vehicle Thermal Management and Numerical Simulation. **2017**, 10, 1636	27
493	Improving the Performance Attributes of Plug-in Hybrid Electric Vehicles in Hot Climates through Key-Off Battery Cooling. **2017**, 10, 2058	8
492	Lithium-Ion Battery Storage for the Grid□A Review of Stationary Battery Storage System Design Tailored for Applications in Modern Power Grids. **2017**, 10, 2107	287
491	Towards an Ultimate Battery Thermal Management System: A Review. **2017**, 3, 9	50
490	A novel thermal management system for improving discharge/charge performance of Li-ion battery packs under abuse. **2018**, 378, 759-775	24
489	Cold temperature performance of phase change material based battery thermal management systems. **2018**, 4, 303-307	35
488	Study on thermal management of rectangular Li-ion battery with serpentine-channel cold plate. **2018**, 125, 143-152	79

487	Vortex generators for active thermal management in lithium-ion battery systems. **2018**, 124, 800-815	24
486	Passive/Active BTMS For EV Lithium-Ion Batteries. **2018**, 67, 3709-3719	11
485	An experimental study on thermal management of lithium ion battery packs using an improved passive method. **2018**, 134, 163-170	45
484	Experimental investigation of thermal and strain management for lithium-ion battery pack in heat pipe cooling. **2018**, 16, 84-92	57
483	Efficient Large-Scale Thermoelastic Topology Optimization of CAD Geometry with Automated Adaptive Mesh Generation. **2018**,	3
482	Phase-change materials (PCM) for automotive applications: A review. **2018**, 132, 308-320	180
481	Thermal behavior study of discharging/charging cylindrical lithium-ion battery module cooled by channeled liquid flow. **2018**, 120, 751-762	130
480	Electric vehicles batteries thermal management systems employing phase change materials. **2018**, 378, 383-403	175
479	Fuel cells for airborne usage: Energy storage comparison. **2018**, 43, 11853-11861	13
478	A hybrid shuffled frog leaping algorithm and intelligent water drops optimization for efficiency maximization in smart microgrids considering EV energy storage state of health. **2018**, 35, 5619-5634	3
477	Novel thermal management system using mist cooling for lithium-ion battery packs. **2018**, 223, 146-158	112
476	A review on thermal management methods for robots. **2018**, 140, 799-813	28
475	A review of fractional-order techniques applied to lithium-ion batteries, lead-acid batteries, and supercapacitors. **2018**, 390, 286-296	233
474	Electrochemical□thermal Evaluation of an Integrated Thermal Management System for Lithium-Ion Battery Modules. **2018**, 1, 1800021	3
473	Policy impact of new energy vehicles promotion on air quality in Chinese cities. **2018**, 118, 33-40	42
472	Experimental investigation of a novel hybrid cooling method for lithium-ion batteries. **2018**, 136, 375-387	36
471	Pore-size effects on thermal conductivity of SiO2 quartz using non-equilibrium molecular dynamics simulations. **2018**, 17, 1850010	1
470	Smart design and construction of nanoflake-like MnO2/SiO2 hierarchical microcapsules containing phase change material for in-situ thermal management of supercapacitors. **2018**, 164, 311-328	43

469	A reliability design method for a lithium-ion battery pack considering the thermal disequilibrium in electric vehicles. **2018**, 386, 10-20	42
468	Ultrathin Metallic Nanowire-Based Architectures as High-Performing Electrocatalysts. **2018**, 3, 3294-3313	11
467	Thermal management optimization of a prismatic battery with shape-stabilized phase change material. **2018**, 121, 967-977	77
466	Thermal runaway mechanism of lithium ion battery for electric vehicles: A review. **2018**, 10, 246-267	998
465	Thermal management of lithium ion batteries using graphene coated nickel foam saturated with phase change materials. **2018**, 124, 23-35	103
464	Experimental examination of large capacity liFePO4 battery pack at high temperature and rapid discharge using novel liquid cooling strategy. **2018**, 42, 1172-1182	43
463	An innovative practical battery thermal management system based on phase change materials: Numerical and experimental investigations. **2018**, 128, 20-32	78
462	The Lattice Boltzmann Investigation for the Melting Process of Phase Change Material in an Inclined Cavity. **2018**, 140,	4
461	. **2018**,	1
460	Issues, Challenges and Future Prospects of Electric Vehicles: A Review. **2018**,	4
459	Development and Verification of a Distributed Electro-Thermal Li-Ion Cell Model. **2018**,	3
458	Thermal Management of Electric Vehicle Batteries Using Heat Pipe and Phase Change Materials. **2018**, 67, 03034	3
457	Pulsating Heat Pipes: Experimental Analysis, Design and Applications. **2018**, 1-62	15
456	Battery Efficiency Measurement for Electrical Vehicle and Smart Grid Applications Using Isothermal Calorimeter: Method, Design, Theory and Results. **2018**,	
455	Recent Developments in Thermal Management of Electrified Powertrains. **2018**, 67, 11486-11499	19
454	Study of the Temperature and Flame Characteristics of Two Capacity LiFePO4 Batteries in Thermal Runaway. **2018**, 165, A3828-A3836	5
453	Liquid-Vapor Phase-Change Heat Transfer on Functionalized Nanowired Surfaces and Beyond. **2018**, 2, 2307-2347	86
452	In situ grown Co3O4 nanocubes on N-doped graphene as a synergistic hybrid for applications in nickel metal hydride batteries. **2018**, 43, 18421-18435	13

451	Investigation on thermal performance and pressure loss of the fluid cold-plate used in thermal management system of the battery pack. **2018**, 145, 552-568		51
450	Calculation Model of Effective Thermal Conductivity of a Spiral-wound Lithium Ion Battery. **2018**, 27, 572-579		5
449	Battery thermal management system for electric vehicle using heat pipes. **2018**, 134, 517-529		94
448	A comprehensive review on a passive (phase change materials) and an active (thermoelectric cooler) battery thermal management system and their limitations. **2018**, 401, 224-237		88
447	Selection of thermal management system for modular battery packs of electric vehicles: A review of existing and emerging technologies. **2018**, 400, 621-640		102
446	Challenges and Advancements in Fast Charging Solutions for EVs: A Technological Review. **2018**,		8
445	Analysis of Passive Temperature Control Systems Using Phase Change Materials for Application to Secondary Batteries Cooling. **2018**, 10,		2
444	Investigation of the effects of nano-graphite on morphological structure and thermal performances of fatty acid ternary eutectics/polyacrylonitrile/nano-graphite form-stable phase change composite fibrous membranes for thermal energy storage. **2018**, 173, 1197-1206		9
443	A review of novel thermal management systems for batteries. **2018**, 42, 3182-3205		81
442	The solutions to electric vehicle air conditioning systems: A review. *Renewable and Sustainable Energy Reviews*, **2018**, 91, 443-463	16.2	75
441	Multimaterial Thermoelastic Stress-constrained Topology Optimization of Structures with Adaptive Mesh Refinement. **2018**,		0
440	The forced air cooling heat dissipation performance of different battery pack bottom duct. **2018**, 42, 3823-3836		19
439	A thermal conductive composite phase change material with enhanced volume resistivity by introducing silicon carbide for battery thermal management. **2018**, 144, 551-557		38
438	Thermal Management Challenges in Turbo-Electric and Hybrid Electric Propulsion. **2018**,		2
437	Reverse layered air flow for Li-ion battery thermal management. **2018**, 143, 257-262		66
436	Compact liquid cooling strategy with phase change materials for Li-ion batteries optimized using response surface methodology. **2018**, 228, 777-788		78
435	The impact of enclosure and boundary conditions with a wedge-shaped path and air cooling for battery thermal management in electric vehicles. **2018**, 42, 4054-4069		13
434	Experimental Investigation on Cooling/Heating Characteristics of Ultra-Thin Micro Heat Pipe for Electric Vehicle Battery Thermal Management. **2018**, 31,		13

433	Enhanced Battery Thermal Management Systems with Optimal Charge Control for Electric Vehicles. **2018**,	3
432	Application of Robust Design Methodology to Battery Packs for Electric Vehicles: Identification of Critical Technical Requirements for Modular Architecture. **2018**, 4, 30	17
431	Numerical investigation on cooling performance of Li-ion battery thermal management system at high galvanostatic discharge. **2018**, 21, 957-969	19
430	Effects of the different air cooling strategies on cooling performance of a lithium-ion battery module with baffle. **2018**, 144, 231-241	84
429	Modeling and optimization of an enhanced battery thermal management system in electric vehicles. **2019**, 14, 65-75	17
428	Thermal management of cylindrical lithium-ion battery based on a liquid cooling method with half-helical duct. **2019**, 162, 114257	39
427	Comparative study of natural convection melting inside a cubic cavity using an improved two-relaxation-time lattice Boltzmann model. **2019**, 143, 118449	14
426	A Three-dimensional thermal model for a commercial lithium-ion capacitor battery pack with non-uniform temperature distribution. **2019**,	7
425	Cell Tab Cooling System for Battery Life Extension. **2019**,	1
424	Thermal management of batteries. **2019**, 93-110	2
423	Optimal battery sizing procedure for hybrid trolley-bus: A real case study. **2019**, 175, 105930	9
422	A review of heat transfer characteristics of switchable insulation technologies for thermally adaptive building envelopes. **2019**, 199, 427-444	38
421	Electric vehicle battery thermal management system with thermoelectric cooling. **2019**, 5, 822-827	95
420	Pushing the thermal limits of Li-ion batteries. **2019**, 64, 103927	23
419	Transient Temperature Distributions on Lithium-Ion Polymer SLI Battery. **2019**, 1, 127-137	14
418	Design optimization of bifurcating mini-channels cooling plate for rectangular Li-ion battery. **2019**, 139, 963-973	22
417	Three dimensional numerical validation and investigation on air cooling system of Li-ion battery used in hybrid electric vehicles. **2019**, 312, 012025	1
416	Experimental and Numerical Study on Thermal and Energy Management of a Fast-Charging Lithium-Ion Battery Pack with Air Cooling. **2019**, 145, 04019030	16

415	Pre-cooling of air by water spray evaporation to improve thermal performance of lithium battery pack. **2019**, 163, 114401	10
414	Thermal performance of a cylindrical battery module impregnated with PCM composite based on thermoelectric cooling. **2019**, 188, 116048	43
413	The performance management of a Li-ion battery by using tree-like mini-channel heat sinks: Experimental and numerical optimization. **2019**, 189, 116150	36
412	Battery Health Monitoring for Commercialized Electric Vehicle Batteries: Lithium-Ion. **2019**,	5
411	Tu1013 Are Out-Of-Pocket Costs Under Medicare a Deterrent to Screening Colonoscopy?. **2019**, 156, S-947	
410	Cooling performance of nanofluid submerged vs. nanofluid circulated battery thermal management systems. **2019**, 240, 118131	54
409	Investigation on effective thermal conductivities of porous electrodes for the commercial Li-ion battery. **2019**, 268, 012099	
408	Experimental investigation on electro-thermal characteristics of the commercial Li-ion battery. **2019**, 268, 012117	0
407	Designed Novel Carbazole Based Electrolyte Additive for Overcharge Protection of Lithium-Ion Batteries. **2019**, 55, 637-642	4
406	Finite element versus experimental Thermo-mechanical behaviour of prismatic Li-Ion cell. **2019**,	
405	A Review of Phase Change Materials for the Thermal Management and Isothermalisation of Lithium-Ion Cells. **2019**, 25, 100887	49
404	Preparation and characterization of new nano-particle mixed as thermal storage material. **2019**, 163, 114386	11
403	Thermal management of the lithium-ion battery by the composite PCM-Fin structures. **2019**, 145, 118739	66
402	Experimental study on transient thermal characteristics of stagger-arranged lithium-ion battery pack with air cooling strategy. **2019**, 143, 118576	31
401	Multi-objective optimization design of double-layered reverting cooling plate for lithium-ion batteries. **2019**, 143, 118580	26
400	Development and experimental analysis of a hybrid cooling concept for electric vehicle battery packs. **2019**, 25, 100906	15
399	Experimental investigation on thermal management of cylindrical Li-ion battery pack based on vapor chamber combined with fin structure. **2019**, 162, 114272	20
398	A facile strategy to upgrade electrochemical performances of LiEuTiO4 by surface modification derived from pyrolysis of urea. **2019**, 25, 3041-3050	1

397	A lattice Boltzmann modeling and analysis of the thermal convection in a lithium-ion battery. **2019**, 77, 2695-2706		3
396	A comprehensive experimental study on temperature-dependent performance of lithium-ion battery. **2019**, 158, 113800		33
395	Experimental investigation of thermal performance of large-sized battery module using hybrid PCM and bottom liquid cooling configuration. **2019**, 159, 113968		42
394	Thermal Management of Vehicle Cabins, External Surfaces, and Onboard Electronics: An Overview. **2019**, 5, 954-969		27
393	Propagation mechanisms and diagnosis of parameter inconsistency within Li-Ion battery packs. *Renewable and Sustainable Energy Reviews*, **2019**, 112, 102-113	16.2	80
392	Experimental investigation on the effect of ambient pressure on thermal runaway and fire behaviors of lithium-ion batteries. **2019**, 43, 4898-4911		14
391	Experimental and numerical study of supercapacitors module with air-cooling. **2019**, 159, 113903		7
390	Saturated pool boiling heat transfer of acetone and HFE-7200 on modified surfaces by electrophoretic and electrochemical deposition. **2019**, 249, 286-299		29
389	Advanced Electric Vehicle Fast-Charging Technologies. **2019**, 12, 1839		51
388	Optimization on uniformity of lithium-ion cylindrical battery module by different arrangement strategy. **2019**, 157, 113683		16
387	Thermal modeling of full-size-scale cylindrical battery pack cooled by channeled liquid flow. **2019**, 138, 1178-1187		43
386	A novel approach for Lithium-ion battery thermal management with streamline shape mini channel cooling plates. **2019**, 157, 113623		60
385	Experimental Investigation of Water-Cooled Heat Pipes in the Thermal Management of Lithium-Ion EV Batteries. **2019**, 44, 7541-7552		13
384	Experimental Analysis of a Novel Cooling Material for Large Format Automotive Lithium-Ion Cells. **2019**, 12, 1251		7
383	Experimental study on the thermal management performance of air cooling for high energy density cylindrical lithium-ion batteries. **2019**, 155, 96-109		108
382	Simulation of electrochemical-thermal behavior for a 26650 lithium iron phosphate/graphite cell. **2019**, 25, 3715-3726		2
381	A novel flexible room temperature positive temperature coefficient material for thermal management. **2019**, 2, 83-92		14
380	A review on various temperature-indication methods for Li-ion batteries. **2019**, 240, 918-945		122

379	Inhibition effect of different interstitial materials on thermal runaway propagation in the cylindrical lithium-ion battery module. **2019**, 153, 39-50	40
378	Temperature Distribution Optimization of an Air-Cooling Lithium-Ion Battery Pack in Electric Vehicles Based on the Response Surface Method. **2019**, 16,	13
377	Battery pack temperature field compression sensing based on deep learning algorithm. **2019**,	
376	. **2019**,	0
375	Investigation of the Thermal Performance of a Wavy Channel Liquid Cooling System for Electric Vehicle Batteries using Computational Fluid Dynamics. **2019**,	
374	The Role of Domestic Integrated Battery Energy Storage Systems for Electricity Network Performance Enhancement. **2019**, 12, 3954	8
373	Modelling of 3D Temperature Behavior of Prismatic Lithium-Ion Cell With Focus on Experimental Validation Under Battery Electric Vehicle Conditions. **2019**,	3
372	Efficient Modelling Techniques for J-Type Thermocouples in Electric Vehicle Battery Temperature Monitoring System. **2019**,	
371	Nanofluid-filled heat pipes in managing the temperature of EV lithium-ion batteries. **2019**, 1349, 012123	3
370	Experimental and numerical study on the thermal behavior of phase change material infiltrated in low porosity metal foam. **2019**, 26, 101005	18
369	Detection of Lithium Plating During Thermally Transient Charging of Li-Ion Batteries. **2019**, 7,	8
368	Comprehensive analysis of melting and solidification of a phase change material in an annulus. **2019**, 55, 769-790	14
367	Research progress on performance of fuel cell system utilized in vehicle. **2019**, 44, 5530-5537	19
366	Preparation of a novel composite phase change material (PCM) and its locally enhanced heat transfer for power battery module. **2019**, 180, 1196-1202	73
365	Cooling efficiency improvement of air-cooled battery thermal management system through designing the flow pattern. **2019**, 167, 781-790	121
364	A critical review of battery thermal performance and liquid based battery thermal management. **2019**, 182, 262-281	294
363	Thermal analysis of conjugated cooling configurations using phase change material and liquid cooling techniques for a battery module. **2019**, 133, 827-841	80
362	Environmental considerations. **2019**, 415-497	

361	Contextual pillars. **2019**, 527-550	
360	Investigation on the thermal performance of phase change material/porous medium-based battery thermal management in pore scale. **2019**, 43, 767-778	27
359	Review on battery thermal management system for electric vehicles. **2019**, 149, 192-212	321
358	Minimization of thermal non-uniformity in lithium-ion battery pack cooled by channeled liquid flow. **2019**, 129, 660-670	71
357	Performance improvement of thermal management system of lithium-ion battery module on purely electric AUVs. **2019**, 146, 74-84	14
356	A brief review on key technologies in the battery management system of electric vehicles. **2019**, 14, 47-64	180
355	Development of thermal equivalent circuit model of heat pipe-based thermal management system for a battery module with cylindrical cells. **2020**, 164, 114523	62
354	A comprehensive thermal analysis for the fast discharging process of a Li-ion battery module with liquid cooling. **2020**, 44, 12245-12258	8
353	Development of a Two-Dimensional Thermal Model for Li-Ion Battery Pack With Experimental Validation. **2020**, 12,	1
352	Experimental investigation on a novel phase change material composites coupled with graphite film used for thermal management of lithium-ion batteries. **2020**, 145, 2046-2055	38
351	Mobile applications: cars, trucks, locomotives, marine vehicles, and aircraft. **2020**, 333-358	2
350	Thermal properties and crystallization kinetics of pentaglycerine/graphene nanoplatelets composite phase change material for thermal energy storage. **2020**, 44, 448-459	8
349	Optimized charging of lithium-ion battery for electric vehicles: Adaptive multistage constant current–constant voltage charging strategy. **2020**, 146, 2688-2699	40
348	Thermal Modelling of a Prismatic Lithium-Ion Cell in a Battery Electric Vehicle Environment: Influences of the Experimental Validation Setup. **2020**, 13, 62	13
347	Delayed liquid cooling strategy with phase change material to achieve high temperature uniformity of Li-ion battery under high-rate discharge. **2020**, 450, 227673	55
346	RETRACTED: Using of double distribution function LBM (DDF/LBM) and experimental rheological/thermal measurements of nanofluid for battery thermal management. **2020**, 148, 107796	6
345	Thermal properties improvement of lauric acid/iron foam composites with graphene nanoplates as thermal energy storage materials. **2020**, 27, 101163	9
344	A lithium-ion battery-thermal-management design based on phase-change-material thermal storage and spray cooling. **2020**, 168, 114792	46

343	The state of the art on preheating lithium-ion batteries in cold weather. **2020**, 27, 101059	39
342	Research progress on power battery cooling technology for electric vehicles. **2020**, 27, 101155	74
341	Supervised-Learning-Based Optimal Thermal Management in an Electric Vehicle. **2020**, 8, 1290-1302	9
340	Investigation on the thermal behavior of Ni-rich NMC lithium ion battery for energy storage. **2020**, 166, 114749	23
339	Hybrid thermal management of a Li-ion battery module with phase change material and cooling water pipes: An experimental investigation. **2020**, 166, 114759	59
338	An optimised grey buffer operator for forecasting the production and sales of new energy vehicles in China. **2020**, 704, 135321	20
337	Liquid cooling with phase change materials for cylindrical Li-ion batteries: An experimental and numerical study. **2020**, 191, 116565	50
336	A support approach for the modular design of Li-ion batteries: A test case with PCM. **2020**, 31, 101684	10
335	Thermal analysis and optimization of an EV battery pack for real applications. **2020**, 163, 120384	6
334	Heat-pipe based spray-cooling thermal management system for lithium-ion battery: Experimental study and optimization. **2020**, 163, 120494	13
333	The value of thermal management control strategies for battery energy storage in grid decarbonization: Issues and recommendations. **2020**, 276, 124223	18
332	Recent developments in the passive and hybrid thermal management techniques of lithium-ion batteries. **2020**, 480, 228820	47
331	Evaporation of highly wetting fluids on aluminum microporous coating. **2020**, 163, 120451	2
330	Research trends and perspectives of thermal management of electric batteries: Bibliometric analysis. **2020**, 32, 101976	18
329	A state of art review and future viewpoint on advance cooling techniques for Lithium□on battery system of electric vehicles. **2020**, 32, 101771	51
328	Battery heating for lithium-ion batteries based on multi-stage alternative currents. **2020**, 32, 101885	44
327	Bipolar Electrodes for Next-Generation Rechargeable Batteries. **2020**, 7, 2001207	20
326	Impact of pulsating vortex dynamics on the thermal performance of a dimpled surface. **2020**, 78, 276-290	

325	A numerical study on the performance of a thermal management system for a battery pack with cylindrical cells based on heat pipes. **2020**, 179, 115740	28
324	Intelligent optimization methodology of battery pack for electric vehicles: A multidisciplinary perspective. **2020**, 44, 9686-9706	10
323	Induction Heater Based Battery Thermal Management System for Electric Vehicles. **2020**, 13, 5711	3
322	Analysis of the structure arrangement on the thermal characteristics of Li-ion battery pack in thermoelectric generator. **2020**, 8, 3717-3727	4
321	A review on effect of heat generation and various thermal management systems for lithium ion battery used for electric vehicle. **2020**, 32, 101729	44
320	Ni(OH)2 nanosheets coating on 3D flower-like Ni(OH)2 as high-performance electrodes for asymmetric supercapacitor and Ni/MH battery. **2020**, 849, 156616	12
319	Evaluating emissions and sensitivity of economic gains for series plug-in hybrid electric vehicle powertrains for transit bus applications. **2020**, 234, 3272-3287	2
318	Durability of phase-change-material module and its relieving effect on battery deterioration during long-term cycles. **2020**, 179, 115747	39
317	Experimental study on a novel compact cooling system for cylindrical lithium-ion battery module. **2020**, 180, 115772	13
316	Lithium-ion battery thermal management system with Al2O3/AgO/CuO nanofluids and phase change material. **2020**, 180, 115840	42
315	A generalized lattice Boltzmann model for solid–liquid phase change with variable density and thermophysical properties. **2020**, 104, 106250	6
314	Experimental study of lithium-ion battery cooling using mixture of phase change materials. **2020**, 12, 168	1
313	Near-Zero-Energy Smart Battery Thermal Management Enabled by Sorption Energy Harvesting from Air. **2020**, 6, 1542-1554	34
312	Thermal Performance of a Micro Heat Pipe Array for Battery Thermal Management Under Special Vehicle-Operating Conditions. **2020**, 3, 317-327	2
311	A Detailed Review on Electric Vehicles Battery Thermal Management System. **2020**, 912, 042005	4
310	Critical review on battery thermal management and role of nanomaterial in heat transfer enhancement for electrical vehicle application. **2020**, 32, 102003	32
309	. **2020**,	2
308	Thermal Management of Stationary Battery Systems: A Literature Review. **2020**, 13, 4194	6

307	Cell Replacement Strategies for Lithium Ion Battery Packs. **2020**, 6, 39		1
306	Simulation-based optimization framework for economic operations of autonomous electric taxicab considering battery aging. **2020**, 279, 115721		3
305	Experimental Analysis on the Thermal Management of Lithium-Ion Batteries Based on Phase Change Materials. **2020**, 10, 7354		5
304	Design of an Optimized Thermal Management System for Li-Ion Batteries under Different Discharging Conditions. **2020**, 13, 5695		30
303	Thermal management performance of a fin-enhanced phase change material system for the lithium-ion battery. **2020**, 44, 7617-7629		18
302	Performance Evaluation of Battery Thermal Management System in Electric Vehicle using Induction Heater (Part 1: Parallel System). **2020**, 28, 2050003		1
301	Thermal characteristics of power battery module with composite phase change material and external liquid cooling. **2020**, 156, 119820		32
300	Smart Utilization of Multifunctional Metal Oxides in Phase Change Materials. **2020**, 3, 708-741		41
299	Thermal performance enhancement of phase change material using aluminum-mesh grid foil for lithium-capacitor modules. **2020**, 30, 101508		28
298	Simulation analysis of the influence of internal surface morphology of mini-channel on battery thermal management. **2020**, 44, 8854-8864		6
297	Effect of Sm on performance of Pr/Nd/Mg-free and low-cobalt AB4.6 alloys in nickel-metal hydride battery electrode. **2020**, 829, 154530		13
296	Configuration, design, and optimization of air-cooled battery thermal management system for electric vehicles: A review. *Renewable and Sustainable Energy Reviews*, **2020**, 125, 109815	16.2	74
295	Performance of a liquid cooling-based battery thermal management system with a composite phase change material. **2020**, 44, 4727-4742		21
294	An application of evolutionary computation algorithm in multidisciplinary design optimization of battery packs for electric vehicle. **2020**, 2, e158		6
293	A Review on Temperature-Dependent Electrochemical Properties, Aging, and Performance of Lithium-Ion Cells. **2020**, 6, 35		27
292	Recent advances of thermal safety of lithium ion battery for energy storage. **2020**, 31, 195-220		92
291	A thermal-structure coupled optimization study of lithium-ion battery modules with mist cooling. **2020**, 44, 12295-12311		7
290	Modified phase change materials used for thermal management of a novel solar thermoelectric generator. **2020**, 208, 112459		17

289	Experimental study on thermal performance of a pumped two-phase battery thermal management system. **2020**, 44, 4664-4676	7
288	Experimental study on aerogel passive thermal control method for cylindrical lithium-ion batteries at low temperature. **2020**, 169, 114946	11
287	Analysis of a Battery Pack with a Phase Change Material for the Extreme Temperature Conditions of an Electrical Vehicle. **2020**, 13, 507	15
286	Cooling optimization strategy for lithium-ion batteries based on triple-step nonlinear method. **2020**, 201, 117678	18
285	Investigation on the effects of temperature equilibrium strategy in battery thermal management using phase change material. **2020**, 44, 7660-7673	11
284	Impact of Microstructure on the Electrochemical Performance of Round-Shaped Pitch-Based Graphite Fibers. **2020**, 13,	1
283	High Reynolds Number Turbulent Model for Micro-Channel Cold Plate Using Reverse Engineering Approach for Water-Cooled Battery in Electric Vehicles. **2020**, 13, 1638	47
282	Prediction of compression force evolution over degradation for a lithium-ion battery. **2021**, 483, 229079	8
281	Novel experimental approach for the characterisation of Lithium-Ion cells performance in isothermal conditions. **2021**, 214, 118965	2
280	A novel procedure combining computational fluid dynamics and evolutionary approach to minimize parasitic power loss in air cooling of Li-ion battery for thermal management system design. **2021**, 3, e210	2
279	High capacity and mobility in germanium sulfide/graphene (GeS/Gr) van der Waals heterostructure as anode materials for sodium ion batteries: A first-principles investigation. **2021**, 536, 147779	7
278	Thermal performance of aluminum vapor chamber for EV battery thermal management. **2021**, 185, 116337	6
277	Latent heat thermal energy storage: A bibliometric analysis explicating the paradigm from 2000 2019. **2021**, 33, 102027	7
276	Characterization and thermal properties of a shape-stable Na2CO3-K2CO3/coal fly ash/expanded graphite composite phase change materials for high-temperature thermal energy storage. **2021**, 33, 102123	17
275	A full-scale electrical-thermal-fluidic coupling model for li-ion battery energy storage systems. **2021**, 185, 116360	4
274	Structural design of a composite board/heat pipe based on the coupled electro-chemical-thermal model in battery thermal management system. **2021**, 216, 119234	14
273	Hybrid heat sinks for thermal management of passively cooled battery chargers. **2021**, 45, 6333-6349	0
272	Evaluation of fin intensified phase change material systems for thermal management of Li-ion battery modules. **2021**, 166, 120753	22

271	Thermal behavior of lithium-ion battery in microgrid application: Impact and management system. **2021**, 45, 4967-5005	2
270	Experiments and correlations of saturation boiling of hfe-7000 dielectric liquid on rough inclined copper surfaces. **2021**, 164, 120540	2
269	Numerical investigation on the usage of finned surface in lithium nickel manganese cobalt oxides batteries by using air cooling method. **2021**, 3, e216	2
268	A review of state of the art thermal diodes and their potential applications. **2021**, 164, 120607	22
267	Electric vehicles. **2021**, 13-49	0
266	Safer Lithium-Ion Batteries from the Separator Aspect: Development and Future Perspectives. **2021**, 4, 336-362	24
265	Investigation on the Transient Thermal Performance of a Mini-Channel Cold Plate for Battery Thermal Management. **2021**, 30, 914-925	6
264	Analysing the performance of liquid cooling designs in cylindrical lithium-ion batteries. **2021**, 33, 100913	20
263	Review of the Approaches and Modeling Methodology for Lithium-Ion Battery Thermal Management Systems in Electric Vehicles. **2021**, 75-109	2
262	Three-dimensional CFD study on heat dissipation in cylindrical lithium-ion battery module. **2021**, 46, 10964-10968	
261	Selection of an Ideal Coolant to Ward Off the Thermal Runaway of a Pouch Type Li-Ion Battery Module. **2021**, 18,	3
260	Applications of coupling thermosyphons with phase change materials: A review. **2021**, 233, 110690	4
259	Investigation of the Applicability of Helium-Based Cooling System for Li-Ion Batteries. **2021**, 2, 135-148	4
258	Future smart battery and management: Advanced sensing from external to embedded multi-dimensional measurement. **2021**, 489, 229462	67
257	Materials selection for hybrid and electric vehicle battery pack thermal management: A review. **2021**, 1126, 012072	
256	Effects of micro heat pipe arrays on thermal management performance enhancement of cylindrical lithium-ion battery cells. **2021**, 45, 11245-11257	1
255	Smart Adaptronic Thermal Management System Designs for The Li-ion Battery Packs. **2021**,	0
254	Simulation and analysis of air cooling configurations for a lithium-ion battery pack. **2021**, 35, 102270	20

253	Challenging Issues and Solutions on Battery Thermal Management for Electric Vehicles. **2021**, 535-553		2
252	Developments in battery thermal management systems for electric vehicles: A technical review. **2021**, 35, 102255		40
251	Development of hybrid thermal management techniques for battery packs. **2021**, 186, 116542		6
250	Experimental and Numerical Investigation of the Thermal Performance of a Hybrid Battery Thermal Management System for an Electric Van. **2021**, 7, 27		3
249	Spreading and Drying Dynamics of Water Drop on Hot Surface of Superwicking Ti-6Al-4V Alloy Material Fabricated by Femtosecond Laser. **2021**, 11,		2
248	A comprehensive review on thermal management systems for power lithium-ion batteries. *Renewable and Sustainable Energy Reviews*, **2021**, 139, 110685	16.2	30
247	Silver-Modified Carbon Fluoride as the Cathode Material for Pouch-Type Primary Lithium Batteries. **2021**, 50, 4075-4082		0
246	Development of electric construction machinery in China: a review of key technologies and future directions. **2021**, 22, 245-264		4
245	Experimental and numerical studies on an efficient transient heat transfer model for air-cooled battery thermal management systems. **2021**, 490, 229539		20
244	A Review on Thermal Energy Modelling for Optimal Microgrids Management. **2021**, 1, 63-76		1
243	A passive thermal management system of Li-ion batteries using PCM composites: Experimental and numerical investigations. **2021**, 169, 120894		33
242	Multi-Objective Optimization of Structural Parameters of Air-Cooled System for Lithium Battery Pack Based on Surrogate Model. **2021**, 18,		0
241	Efficient thermal management of the large-format pouch lithium-ion cell via the boiling-cooling system operated with intermittent flow. **2021**, 170, 121018		3
240	Optimization of charging strategy for lithium-ion battery packs based on complete battery pack model. **2021**, 37, 102466		7
239	Lightweight liquid cooling based thermal management to a prismatic hard-cased lithium-ion battery. **2021**, 170, 120998		12
238	Thermally conductive silicone composites modified by graphene-oxide aerogel beads loaded with phase change materials as efficient heat sinks. **2021**, 189, 116713		2
237	Internal short circuit mechanisms, experimental approaches and detection methods of lithium-ion batteries for electric vehicles: A review. *Renewable and Sustainable Energy Reviews*, **2021**, 141, 110790	16.2	23
236	A delayed cooling system coupling composite phase change material and nano phase change material emulsion. **2021**, 191, 116888		14

235	Experimental investigation of thermoelectric cooling for a new battery pack design in a copper holder. **2021**, 10, 100214	11
234	Experimental Comparison of Two Liquid Cooling Methods for Ultrafast Charging Lithium-Ion Battery Modules. **2021**,	0
233	Researching on the Sustainability of Transportation Industry Based on a Coupled Emergy and System Dynamics Model: A Case Study of Qinghai. **2021**, 13, 6804	2
232	Analysis of temperature uniformity of electric vehicle battery system with swirling flow strengthened heat transfer. **2021**, 193, 116995	4
231	Thermal management of a simulated battery with the compound use of phase change material and fins: Experimental and numerical investigations. **2021**, 165, 106945	14
230	Experimental study of a novel strategy to construct the battery thermal management module by using tubular phase change material units. **2021**, 39, 102585	11
229	Design of a Battery Cooling System for Hybrid Electric Aircraft. **2021**,	1
228	Comprehensive Investigation of a Slight Overcharge on Degradation and Thermal Runaway Behavior of Lithium-Ion Batteries. **2021**, 13, 35054-35068	10
227	A review of thermal management for Li-ion batteries: Prospects, challenges, and issues. **2021**, 39, 102518	23
226	Numerical study of combined air and phase change cooling for lithium-ion battery during dynamic cycles. **2021**, 165, 106968	14
225	Investigation of thermal management of lithium-ion battery based on micro heat pipe array. **2021**, 39, 102624	8
224	Modeling Approach of an Air-Based Battery Thermal Management System for an Electric Vehicle. **2021**, 11, 7089	5
223	A review of air-cooling battery thermal management systems for electric and hybrid electric vehicles. **2021**, 501, 230001	41
222	Mineral Oil Immersion Cooling of Lithium-Ion Batteries: An Experimental Investigation. **2022**, 19,	4
221	Effect of geometry and thermal mass of Direct-Metal-Laser-Sintered aluminium Heat Exchangers filled with phase change materials on Lithium-Ion cells passive cooling. **2021**, 195, 117151	1
220	Optimization of cooling strategies for an electric vehicle in high-temperature environment. **2021**, 195, 117088	8
219	Enhanced thermal conductivity of palmitic acid/copper foam composites with carbon nanotube as thermal energy storage materials. **2021**, 40, 102783	3
218	A cycle research methodology for thermo-chemical engines: From ideal cycle to case study. **2021**, 228, 120599	1

217	Simulation and analysis of heat dissipation performance of power battery based on phase change material enhanced heat transfer variable fin structure. 1-21		3
216	Electro-thermal model for lithium-ion battery simulations. **2021**, 21, 1530-1541		0
215	A hybrid thermal management system for high power lithium-ion capacitors combining heat pipe with phase change materials. **2021**, 7, e07773		13
214	Improving the Air-Cooling Performance for Battery Packs via Electrothermal Modeling and Particle Swarm Optimization. **2021**, 7, 1285-1302		1
213	CFD Analysis of a Prismatic Liquid Cooled Battery Pack to Optimize and Evaluate Pack Performance Under Variable Operating and Coolant Conditions.		
212	Role of wall-fluid interaction and rough morphology in heat and momentum exchange in nanochannel. **2021**, 298, 117183		2
211	Analysis of Heat Dissipation and Preheating Module for Vehicle Lithium Iron Phosphate Battery. **2021**, 14, 6196		1
210	Two-region semi-analytical solution for latent heat thermal energy storage systems.		
209	Battery thermal management systems (BTMs) based on phase change material (PCM): a comprehensive review. **2021**, 132741		35
208	Thermal uniformity performance of a hybrid battery thermal management system using phase change material and cooling plates arrayed in the manner of honeycomb. **2021**, 26, 101094		5
207	A numerical analysis on multi-stage Tesla valve based cold plate for cooling of pouch type Li-ion batteries. **2021**, 177, 121560		11
206	Review on battery thermal management systems for energy-efficient electric vehicles. *Renewable and Sustainable Energy Reviews*, **2021**, 151, 111611	16.2	9
205	Development in energy storage system for electric transportation: A comprehensive review. **2021**, 43, 103153		11
204	A 3D electrochemical-thermal coupled model for electrochemical and thermal analysis of pouch-type lithium-ion batteries. **2021**, 181, 121855		6
203	A new approach for battery thermal management system design based on Grey Relational Analysis and Latin Hypercube Sampling. **2021**, 28, 101452		3
202	Reversible kinetics and rapid tunnelling characteristics of silicon doped magnesium-titanium nanocomposites prepared by mechanical alloying route for nickel-metal hydride batteries. **2021**, 274, 125129		1
201	Advances in thermal management systems for next-generation power batteries. **2021**, 181, 121853		17
200	Experimental study on the thermal management performance of phase change material module for the large format prismatic lithium-ion battery. **2022**, 238, 122081		2

199	A review on thermal management of lithium-ion batteries for electric vehicles. **2022**, 238, 121652	46
198	Thermal Management System for High Performance Battery Based on an Innovative Dielectric Fluid. **2021**, 33-42	
197	Investigation of the thermal properties of phase change materials encapsulated in capped carbon nanotubes using molecular dynamics simulations.. **2021**, 11, 24594-24606	1
196	Thermal Property Measurements of a Large Prismatic Lithium-ion Battery for Electric Vehicles. **2021**, 30, 477-492	4
195	Design and Simulation of Air Cooled Battery Thermal Management System Using Thermoelectric for a Hybrid Electric Bus. **2013**, 463-473	1
194	Hierarchical macro-nanoporous metals for leakage-free high-thermal conductivity shape-stabilized phase change materials. **2020**, 269, 115088	23
193	Passive cooling of Li-Ion cells with direct-metal-laser-sintered aluminium heat exchangers filled with phase change materials. **2020**, 173, 115238	8
192	The influence of samarium (Sm) on the discharge and electrochemical behaviors of the magnesium alloy AZ80 as an anode for the Mg-air battery. **2020**, 348, 136315	31
191	A promising anode candidate for rechargeable nickel metal hydride power battery: An A5B19-type La-Sm-Nd-Mg-Ni-Al-based hydrogen storage alloy. **2020**, 465, 228236	6
190	Diffuson-driven ultralow thermal conductivity in amorphous Nb2O5 thin films. **2019**, 3,	15
189	Experimental Study of a Thermal Cooling Technique for Cylindrical Batteries. **2020**, 17,	3
188	Structure Optimization of Battery Module With a Parallel Multi-Channel Liquid Cooling Plate Based on Orthogonal Test. **2020**, 17,	4
187	Heat Transfer Efficiency Enhancement of Lithium-Ion Battery Packs by Using Novel Design of Herringbone Fins. **2020**, 17,	5
186	Technical Study of a Standalone Photovoltaic-Wind Energy Based Hybrid Power Supply Systems for Island Electrification in Malaysia. **2015**, 10, e0130678	10
185	Nitride MXenes as sulfur hosts for thermodynamic and kinetic suppression of polysulfide shuttling: a computational study.	4
184	Control as an Enabler for Electrified Mobility. **2022**, 5,	0
183	Thermal management of a high temperature sodium sulphur battery stack. **2021**, 181, 122025	1
182	Integrated Battery Management System. **2015**, 173-193	4

181	Application status and future of multi-scale numerical models for lithium ion battery. **2015**, 64, 210202		9
180	Optimierung von Hochvolt-Batterien f automobile Anwendungen mit Hilfe thermischer und elektrischer Modelle. **2017**, 193-210		
179	Optimization of operating conditions of heat pipes BTMS using response surface method. **2018**,		
178	Thermal Management of Electrical and Electronic Systems Using PCM. **2018**,		
177	Numerical Analysis of the Cooling Performance in a 7.2 kW Integrated Bidirectional OBC/LDC Module. **2020**, 10, 270		2
176	Innovative Fluid Allowing a New and Efficient Battery Thermal Management.		0
175	Simulation of a Set of Lithium-Ion Batteries With Composite Phase Change Materials and Heating Films Thermal Management System at Low Temperature. **2021**, 13,		2
174	High Voltage Battery (HVB) Durability Enhancement in Electric Mobility through 1D CAE.		
173	Thermal management evaluation of Li-ion battery employing multiple phase change materials integrated thin heat sinks for hybrid electric vehicles. **2021**, 516, 230680		6
172	Study of Cooling Characteristics of 18650 Li-ion Cell Module with Different Types of Phase Change Materials (PCMs). **2020**, 31, 622-629		
171	Recent advancement and enhanced battery performance using phase change materials based hybrid battery thermal management for electric vehicles. *Renewable and Sustainable Energy Reviews*, **2022**, 154, 111759	16.2	4
170	A Review on Crashworthiness and Cooling Models for Lithium-Ion Batteries in Electric Vehicles. **2020**, 75-84		
169	Pulsating Heat Pipe Automotive Application.		
168	Analysis of Heat Transfer Characteristics and Optimization of Cold Plate for Power Battery. **2021**,		
167	Simulation and Parametric Analysis of Battery Thermal Management System Using Phase Change Material.		
166	Emergence of elevated battery positioning in air cooled battery packs for temperature uniformity in ultra-fast dis/charging applications. **2021**, 45, 103516		3
165	Optimal Design of Liquid-Cooled Plates for Lithium-Ion Batteries Using Multi-Objective Topology Optimization. 1-10		2
164	Carbon/air secondary battery system and demonstration of its charge-discharge. **2021**, 516, 230681		0

163	Investigation of mixed convection of non-Newtonian fluid in the cooling process of lithium-ion battery with different outlet position. **2021**, 46, 103621	0
162	Study of the effect of the aspect ratio of a cylindrical lithium-ion battery enclosure in an air-cooled thermal management system. **2022**, 45, 103684	6
161	Multi-objective optimization of mini U-channel cold plate with SiO2 nanofluid by RSM and NSGA-II. **2022**, 242, 123039	5
160	Effect of using a solar hot air collector installed on the inclined roof of a building for cooling and heating system in the presence of polymeric PCM. **2022**, 50, 101852	4
159	A novel elastomeric copolymer-based phase change material with thermally induced flexible and shape-stable performance for prismatic battery module. **2022**, 174, 107435	1
158	An Analytical 2D Formulation for the Combined Cooling of PCM-Covered Cylindrical Battery Cells. **2022**, 148,	
157	Comparative Study and Development of Optimized Energy Efficient Battery Thermal Management System for Electric Vehicles in India. **2021**,	
156	Prediction and optimization of the design decisions of liquid cooling systems of battery modules using artificial neural networks.	1
155	Experimental and Numerical Study for a Novel Arrangement of a SuperCapacitors Stack to Improve Heat Transfer. **2022**, 12, 662	1
154	Resource Availability and Implications for the Development of Plug-In Electric Vehicles. **2022**, 14, 1665	2
153	Recent research progress on phase change materials for thermal management of lithium-ion batteries. **2022**, 45, 103694	8
152	Bifunctional CoO/CoS2 hierarchical nanospheres electrocatalyst for rechargeable Zn-Air battery. **2022**, 32, 100343	1
151	Study on the Influence of Flat Heat Pipe Structural Parameters in Battery Thermal Management System. **2022**, 9,	0
150	Connecting battery technologies for electric vehicles from battery materials to management.. **2022** , 25, 103744	6
149	Effect of nanoparticles shape on the cooling process of a lithium ion battery in geometry with capillary channels in the presence of phase change material. **2022**, 48, 103998	1
148	Cooling of a lithium-ion battery using microchannel heatsink with wavy microtubes in the presence of nanofluid. **2022**, 49, 104128	4
147	Numerical simulation of air outlet spacing change in thermal management lithium-ion battery pack with triangular arrangement for use in electric vehicles. **2022**, 49, 104117	1
146	A design methodology of large-scale metal hydride reactor based on schematization for hydrogen storage. **2022**, 49, 104047	0

145	A new battery thermal management system employing the mini-channel cold plate with pin fins. **2022**, 51, 101993		1
144	Advanced thermal management system driven by phase change materials for power lithium-ion batteries: A review. *Renewable and Sustainable Energy Reviews*, **2022**, 159, 112207	16.2	5
143	Thermal Characteristics of Refrigerant Flow Boiling in Two Mini-Channel Heat Sinks of Different Aspect Ratios for Battery Thermal Management.		
142	A Review on Different Technology Used in Battery Management System of Electric Vehicle. **2022**, 621-631		
141	Concept for thermal analysis of batteries using reduced order modeling. **2022**,		
140	Electrochemical Modeling of a Thermal Management System for Cylindrical Lithium-Ion Battery Pack Considering Battery Capacity Fade.		
139	Thermal Management of Electrified VehiclesA Review. **2022**, 15, 1326		2
138	Basics, properties, and thermal issues of EV battery and battery thermal management systems: Comprehensive review. 095440702210791		1
137	Lithium-ion battery module performance improvements by using nanodiamond-FE3O4 water/ethylene glycol hybrid nanofluid and fins. 1		1
136	Simulation and Control of Battery Thermal Management System for Electric Vehicle.		0
135	Performance Analysis of Electrical Vehicle Battery Thermal Management System.		0
134	Stationary Battery Thermal Management: Analysis of Active Cooling Designs. **2022**, 8, 23		0
133	Recent Developments of Thermal Management Strategies for Lithium-Ion Batteries: A State-of-The-Art Review. 2101135		0
132	Experimental Investigation on Pouch Lithium-ion Battery Thermal Management with Mini-Channels Cooling Plate Based on Heat Generation Characteristic. 1		0
131	Electrochemical modeling of a thermal management system for cylindrical lithium-ion battery pack considering battery capacity fade. **2022**, 32, 101878		1
130	Development of a hybrid cooling concept for cylindrical li-ion cells. **2022**, 50, 104214		0
129	The effect of the zigzag arrangement of lithium-ion batteries inside the air duct of an office building for heating and evaluation of the impact of the number of air outlets in different seasons of the year. **2022**, 50, 104204		2
128	Influence of the number of holes and two types of PCM in brick on the heat flux passing through the wall of a building on a sunny day in Medina, Saudi Arabia. **2022**, 50, 104215		0

127	Shape-stabilized phase change material with internal coolant channel coupled with phase change emulsion for power battery thermal management. **2022**, 438, 135648	2
126	Study of pressure drop and heat transfer in cooling of lithium-ion battery with rhombic arrangement with two different outlets and different inlet dimensions. **2022**, 50, 104255	1
125	Computational Fluid Dynamics (CFD) analysis of Graphene Nanoplatelets for the cooling of a multiple tier Li-ion battery pack. **2022**, 31, 101282	0
124	Thermal performance revival of composite PCM for hybrid BTMSs by architecture and formula integrated optimization. **2022**, 210, 118320	1
123	Thermal management systems based on heat pipes for batteries in EVs/HEVs. **2022**, 51, 104384	1
122	Effect of nano phase change materials on the cooling process of a triangular lithium battery pack. **2022**, 51, 104326	11
121	Investigation on fine water mist battery thermal management system for thermal runaway control. **2022**, 211, 118474	
120	Investigation of heat transfer, melting and solidification of phase change material in battery thermal management system based on blades height. **2022**, 51, 104429	0
119	Lithium-ion batteries investigation regarding different fins distribution associated electrochemical effects and various voltage types. **2022**, 51, 104383	0
118	Assessment of the effect of distance between lithium-ion batteries with a number of triangular blades, on the thermal management of the battery pack in a chamber full of phase change material. **2022**, 51, 104391	0
117	Potentials of porous materials for temperature control of lithium-ion batteries. **2022**, 51, 104457	0
116	Overview of batteries and battery management for electric vehicles. **2022**, 8, 4058-4084	9
115	Thermal Performance of a Cylindrical Lithium-Ion Battery Module Cooled by Two-Phase Refrigerant Circulation. **2021**, 14, 8094	
114	Numerical and Experimental Investigation on the Performance of Battery Thermal Management System Based on Micro Heat Pipe Array. 1	
113	F90Heat Transfer Phenomena of Copper-Graphene Nanocomposite Coated Aluminium Heat Spreaders: An Interferometric Study. **2022**, 118545	0
112	Comparison of Model-Based and Sensor-Based Detection of Thermal Runaway in Li-Ion Battery Modules for Automotive Application. **2022**, 8, 34	3
111	Battery thermal management systems based on nanofluids for electric vehicles. **2022**, 50, 104385	2
110	Numerical simulation of dimensions and arrangement of triangular fins mounted on cylindrical lithium-ion batteries in passive thermal management. **2022**, 50, 104392	0

109	Phase change material based thermal management of lithium ion batteries: A review on thermal performance of various thermal conductivity enhancers. **2022**, 50, 104606	1
108	Table_1.DOCX. **2019**,	
107	Optimization of the Battery Pack Heat Dissipation Structure of a Battery-Type Loader. **2022**, 12, 4518	
106	Thermal management system of lithium-ion battery packs for electric vehicles: An insight based on bibliometric study. **2022**, 52, 104723	2
105	High-performance solid-state supercapacitors integrated with thermal management systems based on phase change materials: All in one. **2022**, 446, 136787	1
104	Thermal Management of Various Battery array arrangement at various Environmental conditions for hybrid and electrical vehicles. **2022**, 2178, 012020	
103	CFD Analysis of Battery Thermal Management System. **2022**, 2178, 012035	
102	Determination of phase change temperature of materials from adiabatic scanning calorimetry data.	0
101	Optimization of an air-cooled battery module with novel cooling channels based on silica cooling plates. **2022**, 118650	0
100	Preparation of thermally conductive composite phase change materials and its application in lithium-ion batteries thermal management. **2022**, 52, 104857	2
99	Comprehensive Assessment of Electric Vehicle Development, Deployment, and Policy Initiatives to reduce GHG Emissions: Opportunities and Challenges. **2022**, 1-1	3
98	Effect of using a heatsink with nanofluid flow and phase change material on thermal management of plate lithium-ion battery. **2022**, 52, 104686	0
97	Effects of different phase change materials on battery thermal management system: A comprehensive review. **2022**,	
96	Maximum Fast-Charging Current Estimation Algorithm Considering Temperature of Lithium-ion Batteries in Electrical Vehicles. **2022**,	
95	Numerical study of lozenge, triangular and rectangular arrangements of lithium-ion batteries in their thermal management in a cooled-air cooling system. **2022**, 52, 104786	4
94	Thermal management of lithium-ion batteries with nanofluids and nano-phase change materials: a review. **2022**, 539, 231605	2
93	A Study on Forced-Air Thermal Dissipation in Lithium-Ion Batteries Using Numerical Method. **2022**, 1064-1079	
92	Zarf tipi Lityum iyon batarya h□releri i□in farkl□so□utma uygulamalar□□ say□sal incelenmesi.	

91	Towards Safer and Smarter Design for Lithium-Ion-Battery-Powered Electric Vehicles: A Comprehensive Review on Control Strategy Architecture of Battery Management System. **2022**, 15, 4227	1
90	Battery thermal management systems: Recent progress and challenges. **2022**, 100171	4
89	Advanced Thermal Management Systems for High-Power Lithium-Ion Capacitors: A Comprehensive Review. **2022**, 6, 53	1
88	Numerical study of two heat exchangers for the cooling of a battery pack for an electric vehicle. 2, 81	
87	Solid-liquid phase change materials for the battery thermal management systems in electric vehicles and hybrid electric vehicles A systematic review. **2022**, 52, 105026	0
86	Phase Change Materials Employment for Battery Thermal Management System in Electric and Hybrid Vehicles: A Review.	
85	Research on Energy Management Strategy of Fuel Cell Vehicle Based on Multi-Dimensional Dynamic Programming. **2022**, 15, 5190	3
84	Challenges and Opportunities for Future BEVs Adoption in Croatia. **2022**, 14, 8080	1
83	Thermal management modeling for cylindrical lithium-ion battery packs considering safety and lifespan. **2022**, 36, 3727-3733	
82	Electrically assisted pressure joining of thin bi-layer aluminum-clad aluminum sheets.	0
81	Advanced Engineering Materials for Enhancing Thermal Management and Thermal Safety of Lithium-Ion Batteries: A Review. 10,	0
80	Advances in the improvement of thermal-conductivity of phase change material-based lithium-ion battery thermal management systems: An updated review. **2022**, 53, 105195	0
79	Machine Learning-Based Hybrid Thermal Modeling and Diagnostic for Lithium-Ion Battery Enabled by Embedded Sensing. **2022**, 119059	0
78	Effect of Battery Thermal Management System on Temperature Distribution and Uniformity. **2022**, 148,	0
77	Safety Concerns for the Management of End-of-Life Lithium-Ion Batteries. 2200049	1
76	Fault Tolerance Optimization of a Lithium Battery Pack Having a Damaged Unit.	
75	Ameliorating discharge capability of Co-free flower-like spherical Ni(OH)2 by NiS coating. **2022**, 141074	1
74	Thermal management analysis of simulative power batteries using phase change material and flat heat pipe.	

73	Phase change materials for battery thermal management of electric and hybrid vehicles: A review. **2022**, 7, 100131	1
72	Experimental study in thermal expansion devices of phase-change material coupled to vapor chamber with gradient wettability wick. **2022**, 55, 105429	2
71	Helical carbon nanotubes filled phase change composites with reversible plasticity shape memory and photo-thermal conversion functions towards wide-temperature-range battery thermal management. **2022**, 162, 107139	2
70	Thermal characteristics of refrigerant flow boiling in two mini-channel heat sinks of different aspect ratios for battery thermal management. **2022**, 217, 119173	
69	A novel nanofluid cooling system for modular lithium-ion battery thermal management based on wavy/stair channels. **2022**, 182, 107823	0
68	Cooling performance of battery pack as affected by inlet position and inlet air velocity in electric vehicle. **2022**, 39, 102382	1
67	A coupled power battery cooling system based on phase change material and its influencing factors. **2022**, 326, 119917	0
66	Lattice Boltzmann simulation of the melting enhancement of composite phase change material with highly conductive additives - Effect of discrete particulate phase and continuous conductive network. **2022**, 217, 119211	0
65	Lityum iyon pillerin faz değiştirm maddesi ile soğutulmasında kanat kullanımının sayısal incelenmesi.	0
64	Key Technologies of BMS. **2023**, 33-51	0
63	Coupling Analysis on the Thermophysical Parameters and the Performance of Liquid Cooling-Based Thermal Management System for Lithium-Ion Batteries. **2022**, 15, 6865	0
62	Numerical Analysis of Novel Air-Based Li-Ion Battery Thermal Management. **2022**, 8, 128	1
61	A comprehensive review of battery thermal management systems for electric vehicles. 095440892211239	0
60	A review on electrical and mechanical performance parameters in lithium-ion battery packs. **2022**, 134381	0
59	Separate and integrated thermal management solutions for electric vehicles: A review. **2022**, 550, 232133	1
58	Progression of battery storage technology considering safe and sustainable stationary application. **2022**, 377, 134279	0
57	Chemistry of Li-air batteries. **2022**,	0
56	A Low-Cost and Lightweight Thermal Management System for Lithium-Ion Battery Modules Based on Composite PCM under Normal EV Operating Conditions. **2022**, 2350, 012003	0

55	Research on Closed-Loop Supply Chain Decision Making of Power Battery Considering Subsidy Transfer under EPR System. **2022**, 14, 12488	0
54	Towards intelligent and integrated architecture for hydrogen fuel cell system: challenges and approaches. **2022**,	0
53	Mitigation of Heat Propagation in a Battery Pack by Interstitial Graphite Nanoplatelet Layer: Coupled Electrochemical-Heat Transfer Model. **2022**, 6, 296	0
52	Experimental and Simulations Study of Thermal Performance of Cell-to-Pack Structure for a Li-ion Battery Pack. 1-9	0
51	Performance of organic Rankine cycle using waste heat from electric vehicle battery.	0
50	Thermal design analysis for SuperTruck II lithium-titanate battery pack. **2022**, 56, 105753	0
49	A review of thermal runaway prevention and mitigation strategies for lithium-ion batteries. **2022**, 16, 100310	0
48	A review on recent key technologies of lithium-ion battery thermal management: External cooling systems. **2022**, 16, 100703	1
47	A Review on lithium-ion battery thermal management system techniques: A control-oriented analysis. **2023**, 219, 119497	1
46	Numerical Modelling of Thermal Runaway for Li-Ion Battery Module For EV Applications. **2021**,	0
45	Smart Battery Management Technology in Electric Vehicle Applications: Analytical and Technical Assessment toward Emerging Future Directions. **2022**, 8, 219	1
44	A Review on Paraffin Phase Change Material-Based Thermal Management of Li-Ion Battery. **2023**, 149-160	0
43	Battery thermal management system with heat pipe considering battery aging effect. **2022**, 126116	1
42	A review on the active thermal management researches of epidermal electronic devices. **2022**, 12, 110701	0
41	Global Perspectives on and Research Challenges for Electric Vehicles. **2022**, 4, 1246-1276	1
40	Structural modifications of sinusoidal wavy minichannels cold plates applied in liquid cooling of lithium-ion batteries. **2023**, 57, 106208	0
39	Optimization of battery cooling system used in electric vehicles. **2023**, 58, 106299	0
38	Thermal analysis of modified Z-shaped air-cooled battery thermal management system for electric vehicles. **2023**, 58, 106356	3

37	Experimental and modeling investigation on thermal risk evaluation of tabs for pouch-type lithium-ion battery and the relevant heat rejection strategies. **2023**, 202, 123770	1
36	A novel phase change materials used for direct photothermal conversion and efficient thermal storage. **2023**, 251, 112142	0
35	Experimental Investigation of Air Cooling With/Out Tab Cooling in Cell and Module Levels for Thermal Uniformity in Battery Packs. **2023**, 145,	0
34	Importance of Thermal Transport for the Design of Solid-State Battery Materials. **2022**, 1,	0
33	In situ topotactic preparation of porous plate-like Li2ZnTi3O8 as the lithium-ion batteries anode for enhancing electrochemical reaction kinetics and Li+ storage. **2022**, 141758	0
32	Investigation on Li-ion Battery Pack Topologies for Optimum Thermal Management of Electric Vehicles.	0
31	Investigate the effect of a novel inlet header on the thermal and hydraulic performance of a liquid cold plate used for cooling the Li-ion battery cell of electric vehicles. 095440702211507	0
30	A review of thermal management methods for electric vehicle batteries based on heat pipes and PCM. **2023**, 45,	0
29	Performance management of EV battery coupled with latent heat jacket at cell level. **2023**, 558, 232618	0
28	A novel strategy of thermal management system for battery energy storage system based on supercritical CO2. **2023**, 277, 116676	0
27	Experimental study on phase change material based thermal management design with adjustable fins for lithium-ion battery. **2023**, 221, 119808	1
26	Dynamic compression and impact analyses of the lattice structures for battery safety. 095440702211498	0
25	A comprehensive review on heat pipe based battery thermal management systems. **2023**, 120070	1
24	A review on the performance of oscillating heat pipe used in battery cooling.	0
23	Effects of flow direction in mini U-channel cold plates on thermal performance of a prismatic LiMn2O4 battery.	0
22	Thermal Management Techniques for Lithium-Ion Batteries Based on Phase Change Materials: A Systematic Review and Prospective Recommendations. **2023**, 16, 876	0
21	Passive thermal management system of lithium-ion batteries employing metal foam/ pcm composite for the development of electric vehicles. **2023**, 45, 505-522	0
20	An improved hybrid thermal management system for prismatic Li-ion batteries integrated with mini-channel and phase change materials. **2023**, 334, 120643	1

19	Battery thermal management system for the cooling of Li-Ion batteries, used in electric vehicles. **2023**,	0
18	Impact of the number of tubes containing nanofluid flow on the melting and freezing of phase change materials in the thermal management of plate lithium-ion batteries. **2023**, 151, 464-472	0
17	Temperature field prediction of lithium-ion batteries using improved local tangent space alignment. **2023**, 209, 124126	0
16	The role of phase change materials in lithium-ion batteries: A brief review on current materials, thermal management systems, numerical methods, and experimental models. **2023**, 63, 107061	0
15	Battery thermal management systems. **2023**, 119-160	0
14	Carbon Nanotube/Hygroscopic Salt Nanocomposites with Dual-Functionality of Effective Cooling and Fire Resistance for Safe and Ultrahigh-Rate Operation of Practical Lithium-Ion Batteries. 2213846	0
13	Direct-spun CNT textiles for high-performance electromagnetic interference shielding in an ultra-wide bandwidth. **2023**, 206, 166-180	0
12	Numerical investigations on heat transfer enhancement and energy flow distribution for interlayer battery thermal management system using Tesla-valve mini-channel cooling. **2023**, 280, 116812	1
11	Experimental Investigation on Single-Phase Immersion Cooling of a Lithium-Ion Pouch-Type Battery under Various Operating Conditions. **2023**, 13, 2775	0
10	Thermal management and temperature uniformity enhancement of cylindrical lithium-ion battery pack based on liquid cooling equipped with twisted tapes. **2023**, 104671	0
9	Microencapsulation of polymeric phase change materials (MPCM) for thermal energy storage in industrial coating applications. **2023**,	0
8	Calorimetric methods and thermal management of lithium-ion batteries: A mini-review. **2023**, 2454, 012006	0
7	Evolution of heat transfer in phase change material. **2023**, 249-265	0
6	Recursive ARMAX-Based Global Battery SOC Estimation Model Design using Kalman Filter with Optimized Parameters by Radial Movement Optimization Method. 1-13	0
5	Review on Thermal Management of Lithium-Ion Batteries for Electric Vehicles: Advances, Challenges, and Outlook. **2023**, 37, 4835-4857	0
4	Investigation of the Effect of Air Inlet Position and Velocity on Battery Cooling Performance in Electric Vehicles. **2023**, 35, 116-124	0
3	Mathematical Modeling of the Evaporation of a Water Drop from a Heated Surface. **2023**, 39, 5041-5055	0
2	Effective Surface Modification of 2D MXene toward Thermal Energy Conversion and Management.	0

1	Thermal management system in electric vehicle batteries for environmental sustainability.	0