

Advances in lithium–sulfur batteries based on multif

Nature Energy

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DOI: [10.1038/nenergy.2016.132](https://doi.org/10.1038/nenergy.2016.132)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Life cycle assessment of lithium sulfur battery for electric vehicles. <i>Journal of Power Sources</i> , 2017, 343, 284-295.	4.0	164
2	Cubic Prussian blue crystals from a facile one-step synthesis as positive electrode material for superior potassium-ion capacitors. <i>Electrochimica Acta</i> , 2017, 232, 106-113.	2.6	103
3	Honeycomb-like Nitrogen and Sulfur Dual-Doped Hierarchical Porous Biomass-Derived Carbon for Lithium-Sulfur Batteries. <i>ChemSusChem</i> , 2017, 10, 1803-1812.	3.6	143
4	Magnesiumbatterien – ein Aufruf an Synthesechemiker: Elektrolyte und Kathoden dringend gesucht. <i>Angewandte Chemie</i> , 2017, 129, 12232-12253.	1.6	29
5	Fervent Hype behind Magnesium Batteries: An Open Call to Synthetic Chemists – Electrolytes and Cathodes Needed. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12064-12084.	7.2	212
6	Enabling effective polysulfide trapping and high sulfur loading via a pyrrole modified graphene foam host for advanced lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7309-7315.	5.2	52
7	Easily Accessible, Textile Fiber-Based Sulfurized Poly(acrylonitrile) as Li/S Cathode Material: Correlating Electrochemical Performance with Morphology and Structure. <i>ACS Energy Letters</i> , 2017, 2, 595-604.	8.8	116
8	Pyrrole as a promising electrolyte additive to trap polysulfides for lithium-sulfur batteries. <i>Journal of Power Sources</i> , 2017, 348, 175-182.	4.0	95
9	A Novel Ultrafast Rechargeable Multi-Ions Battery. <i>Advanced Materials</i> , 2017, 29, 1606349.	11.1	97
10	A pomegranate-structured sulfur cathode material with triple confinement of lithium polysulfides for high-performance lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11788-11793.	5.2	23
11	A high performance lithium-selenium battery using a microporous carbon confined selenium cathode and a compatible electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9350-9357.	5.2	94
12	Lithium Bis(fluorosulfonyl)imide/Poly(ethylene oxide) Polymer Electrolyte for All Solid-State Li-S Cell. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1956-1960.	2.1	166
13	Toward Practical High-Energy Batteries: A Modular-Assembled Oval-Like Carbon Microstructure for Thick Sulfur Electrodes. <i>Advanced Materials</i> , 2017, 29, 1700598.	11.1	110
14	Electrochemical energy storage by aluminum as a lightweight and cheap anode/charge carrier. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1246-1264.	2.5	63
15	A Quinonoid-Imine-Enriched Nanostructured Polymer Mediator for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2017, 29, 1606802.	11.1	127
16	Understanding Heterogeneous Electrocatalysis of Lithium Polysulfide Redox on Pt and WS ₂ Surfaces. <i>Journal of Physical Chemistry C</i> , 2017, 121, 12718-12725.	1.5	42
17	Tuning the Adsorption of Polysulfides in Lithium-Sulfur Batteries with Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2017, 29, 4932-4939.	3.2	98
18	Review on High-Loading and High-Energy Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700260.	10.2	1,307

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19	High-performance nitrogen-doped titania nanowire decorated carbon cloth electrode for lithium-polysulfide batteries. <i>Electrochimica Acta</i> , 2017, 242, 137-145.	2.6	22
20	Two-dimensional MXenes for energy storage and conversion applications. <i>Materials Today Energy</i> , 2017, 5, 22-36.	2.5	128
21	Pyrolyzed bacterial cellulose/graphene oxide sandwich interlayer for lithium-sulfur batteries. <i>Rare Metals</i> , 2017, 36, 418-424.	3.6	30
22	Inhibiting Polysulfide Shuttle in Lithium-Sulfur Batteries through Low-Coordination Pairing Salts and a Triflamide Solvent. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6192-6197.	7.2	109
23	Synergistically Assembled $\text{Li}_2\text{S}/\text{FWNTs}@$ Reduced Graphene Oxide Nanobundle Forest for Free-Standing High-Performance Li_2S Cathodes. <i>Advanced Functional Materials</i> , 2017, 27, 1700987.	7.8	67
24	Multifunctional Co_3S_4 @sulfur nanotubes for enhanced lithium-sulfur battery performance. <i>Nano Energy</i> , 2017, 37, 7-14.	8.2	335
25	Inhibiting Polysulfide Shuttle in Lithium-Sulfur Batteries through Low-Coordination Pairing Salts and a Triflamide Solvent. <i>Angewandte Chemie</i> , 2017, 129, 6288-6293.	1.6	82
26	An Improved LiSe_2 Battery with High Energy Density and Long Cycle Life. <i>Advanced Energy Materials</i> , 2017, 7, 1700281.	10.2	111
27	A nitrogen-doped 3D hierarchical carbon/sulfur composite for advanced lithium sulfur batteries. <i>Journal of Power Sources</i> , 2017, 355, 211-218.	4.0	52
28	Double-oxide sulfur host for advanced lithium-sulfur batteries. <i>Nano Energy</i> , 2017, 38, 12-18.	8.2	93
29	Balancing the chemisorption and charge transport properties of the interlayer in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12506-12512.	5.2	62
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31	Prussian Blue Nanocubes with an Open Framework Structure Coated with PEDOT as High-Capacity Cathodes for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2017, 29, 1700587.	11.1	170
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33	A $\text{rGO}@$ -CNT aerogel covalently bonded with a nitrogen-rich polymer as a polysulfide adsorptive cathode for high sulfur loading lithium sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14775-14782.	5.2	71
34	Electrocatalysis of polysulfide conversion by sulfur-deficient MoS_2 nanoflakes for lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1476-1486.	15.6	805
35	LiS batteries: Firing for compactness. <i>Nature Energy</i> , 2017, 2, .	19.8	30
36	A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. <i>Small Methods</i> , 2017, 1, 1700134.	4.6	230

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38	Inorganic-organic layer by layer hybrid membranes for lithium-sulfur batteries. Energy and Environmental Science, 2017, 10, 905-911.	15.6	43
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40	Insulative Microfiber 3D Matrix as a Host Material Minimizing Volume Change of the Anode of Li Metal Batteries. ACS Energy Letters, 2017, 2, 924-929.	8.8	95
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43	Ultrathin dendrimer-graphene oxide composite film for stable cycling lithium-sulfur batteries. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3578-3583.	3.3	90
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45	Inspired by the "tip effect" a novel structural design strategy for the cathode in advanced lithium-sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 3140-3144.	5.2	23
46	Mesoporous Carbon@Titanium Nitride Hollow Spheres as an Efficient SeS ₂ Host for Advanced Li-SeS ₂ Batteries. Angewandte Chemie - International Edition, 2017, 56, 16003-16007.	7.2	111
47	Mesoporous Carbon@Titanium Nitride Hollow Spheres as an Efficient SeS ₂ Host for Advanced Li-SeS ₂ Batteries. Angewandte Chemie, 2017, 129, 16219-16223.	1.6	19
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50	Precipitation-Microstructure Interactions in the Li-Sulfur Battery Electrode. Journal of Physical Chemistry C, 2017, 121, 26256-26264.	1.5	40
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56	Enabling Pyrochlore-Type Oxides as Highly Efficient Electrocatalysts for High-Capacity and Stable Na ⁺ /O ² Batteries: The Synergy of Electronic Structure and Morphology. <i>ACS Catalysis</i> , 2017, 7, 7688-7694.	5.5	18
57	Non-encapsulation approach for high-performance Li ⁺ /S batteries through controlled nucleation and growth. <i>Nature Energy</i> , 2017, 2, 813-820.	19.8	326
58	Ambient-Temperature Energy Storage with Polyvalent Metal-Sulfur Chemistry. <i>Small Methods</i> , 2017, 1, 1700217.	4.6	38
59	Heteroatoms-Doped Porous Carbon Derived from Tuna Bone for High Performance Li-S Batteries. <i>Electrochimica Acta</i> , 2017, 258, 80-89.	2.6	41
60	Three-Dimensionally Hierarchical Ni/Ni ₃ S ₂ /S Cathode for Lithium-Sulfur Battery. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38477-38485.	4.0	60
61	Interwoven NiCo ₂ O ₄ Nanosheet/Carbon Nanotube Composites as Highly Efficient Lithium-Sulfur Cathode Hosts. <i>ChemElectroChem</i> , 2017, 4, 2959-2965.	1.7	18
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63	In situ transmission electron microscopy study of individual nanostructures during lithiation and delithiation processes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20072-20094.	5.2	27
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65	Integration of Graphene, Nano Sulfur, and Conducting Polymer into Compact, Flexible Lithium-Sulfur Battery Cathodes with Ultrahigh Volumetric Capacity and Superior Cycling Stability for Foldable Devices. <i>Advanced Materials</i> , 2017, 29, 1703324.	11.1	167
66	Rational Design of High-Loading Sulfur Cathodes with a Poached-Egg-Shaped Architecture for Long-Cycle Lithium-Sulfur Batteries. <i>ACS Energy Letters</i> , 2017, 2, 2205-2211.	8.8	67
67	Bis(aryl) Tetrasulfides as Cathode Materials for Rechargeable Lithium Batteries. <i>Chemistry - A European Journal</i> , 2017, 23, 16941-16947.	1.7	56
68	Graphene-Coated Activated Carbon Fiber Cloth Positive Electrodes for Aluminum Rechargeable Batteries with a Chloroaluminate Room-Temperature Ionic Liquid. <i>Journal of the Electrochemical Society</i> , 2017, 164, A2468-A2473.	1.3	16
69	Synergistic Effect of Core-Shell Heterogeneous V ₂ O ₅ @MV ₆ O ₁₅ (M = Na, K) Nanoparticles for Enhanced Lithium Storage Performance. <i>Electrochimica Acta</i> , 2017, 254, 262-268.	2.6	12
70	Efficient sulfur host based on NiCo ₂ O ₄ hollow microtubes for advanced Li-S batteries. <i>Journal of Solid State Chemistry</i> , 2017, 256, 189-195.	1.4	21
71	Designing Artificial Solid-Electrolyte Interphases for Single-Ion and High-Efficiency Transport in Batteries. <i>Joule</i> , 2017, 1, 394-406.	11.7	202
72	Stabilizing the Garnet Solid-Electrolyte/Polysulfide Interface in Li ⁺ /S Batteries. <i>Chemistry of Materials</i> , 2017, 29, 8037-8041.	3.2	73

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73	Enhanced Cycling Stability of Sulfur Electrodes through Effective Binding of Pyridine-Functionalized Polymer. <i>ACS Energy Letters</i> , 2017, 2, 2454-2462.	8.8	23
74	First-Principles Investigation of Lithium Polysulfide Structure and Behavior in Solution. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21105-21117.	1.5	53
75	Probing Impedance and Microstructure Evolution in Lithium-Sulfur Battery Electrodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21206-21216.	1.5	34
76	Bio-inspired Self-Healing Electrolytes for Li-S Batteries. <i>CheM</i> , 2017, 3, 388-389.	5.8	13
77	A Freestanding Selenium Disulfide Cathode Based on Cobalt Disulfide-Decorated Multichannel Carbon Fibers with Enhanced Lithium Storage Performance. <i>Angewandte Chemie</i> , 2017, 129, 14295-14300.	1.6	21
78	A Freestanding Selenium Disulfide Cathode Based on Cobalt Disulfide-Decorated Multichannel Carbon Fibers with Enhanced Lithium Storage Performance. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14107-14112.	7.2	113
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84	Toward Safe Lithium Metal Anode in Rechargeable Batteries: A Review. <i>Chemical Reviews</i> , 2017, 117, 10403-10473.	23.0	4,365
85	A facile surface chemistry route to a stabilized lithium metal anode. <i>Nature Energy</i> , 2017, 2, .	19.8	864
86	Continuous Hydrothermal Synthesis of Inorganic Nanoparticles: Applications and Future Directions. <i>Chemical Reviews</i> , 2017, 117, 11125-11238.	23.0	382
87	Large-Scale Syntheses of Zinc Sulfide-(Diethylenetriamine) _{0.5} Hybrids as Precursors for Sulfur Nanocomposite Cathodes. <i>Angewandte Chemie</i> , 2017, 129, 11998-12002.	1.6	2
88	Large-Scale Syntheses of Zinc Sulfide-(Diethylenetriamine) _{0.5} Hybrids as Precursors for Sulfur Nanocomposite Cathodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11836-11840.	7.2	24
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90	A Flexible 3D Multifunctional MgO-Decorated Carbon Foam@CNTs Hybrid as Self-Supported Cathode for High-Performance Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1702573.	7.8	169

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91	A review of flexible lithium-sulfur and analogous alkali metal-chalcogen rechargeable batteries. <i>Chemical Society Reviews</i> , 2017, 46, 5237-5288.	18.7	572
92	Boundary Conditions for Electrochemical Interfaces. <i>Journal of the Electrochemical Society</i> , 2017, 164, E3671-E3685.	1.3	3
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94	A review of transition metal chalcogenide/graphene nanocomposites for energy storage and conversion. <i>Chinese Chemical Letters</i> , 2017, 28, 2180-2194.	4.8	176
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101	A Supramolecular Capsule for Reversible Polysulfide Storage/Delivery in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2017, 129, 16441-16445.	1.6	19
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103	Twinborn TiO ₂ -TiN heterostructures enabling smooth trapping-diffusion-conversion of polysulfides towards ultralong life lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1694-1703.	15.6	884
104	Molecularly Imprinted Polymer Enables High-Efficiency Recognition and Trapping Lithium Polysulfides for Stable Lithium Sulfur Battery. <i>Nano Letters</i> , 2017, 17, 5064-5070.	4.5	112
105	Unveiling the synergistic effect of polysulfide additive and MnO ₂ hollow spheres in evolving a stable cyclic performance in Li-S batteries. <i>Chemical Communications</i> , 2017, 53, 8782-8785.	2.2	26
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107	Review of nanostructured current collectors in lithium-sulfur batteries. <i>Nano Research</i> , 2017, 10, 4027-4054.	5.8	91
108	True performance metrics in beyond-intercalation batteries. <i>Nature Energy</i> , 2017, 2, .	19.8	73

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110	Better performing composite cathode encompassing graphene and magnesium aluminate for Li-S batteries. <i>Nano Structures Nano Objects</i> , 2017, 11, 46-55.	1.9	18
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112	Disordered mesoporous polyacenes/sulfur nanocomposites: Superior cathode materials for lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2017, 693, 1045-1051.	2.8	6
113	Molecular understanding of polyelectrolyte binders that actively regulate ion transport in sulfur cathodes. <i>Nature Communications</i> , 2017, 8, 2277.	5.8	117
114	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 5301-5305.	7.2	601
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129	Nitrogen doped yolk-shell carbon spheres as cathode host for lithium-sulfur battery. <i>Journal of Alloys and Compounds</i> , 2018, 747, 283-292.	2.8	23
130	Cabbage-like nitrogen-doped graphene/sulfur composite for lithium-sulfur batteries with enhanced rate performance. <i>Journal of Alloys and Compounds</i> , 2018, 753, 622-629.	2.8	32
131	Suppressing the Polysulfide Shuttle Effect by Heteroatom-Doping for High-Performance Lithium-Sulfur Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7545-7557.	3.2	70
132	Novel Conductive Metal-Organic Framework for a High-Performance Lithium-Sulfur Battery Host: 2D Cu-Benzenehexathial (BHT). <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15012-15020.	4.0	105
133	Porphyrin-Derived Graphene-Based Nanosheets Enabling Strong Polysulfide Chemisorption and Rapid Kinetics in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1800849.	10.2	211
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993	Self-Assembled Polyoxometalate Nanodots as Bidirectional Cluster Catalysts for Polysulfide/Sulfide Redox Conversion in Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2021, 15, 12222-12236.	7.3	77
994	Engineering Fe-N Coordination Structures for Fast Redox Conversion in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2021, 33, e2100171.	11.1	167
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996	Plastic waste residue-derived boron and nitrogen co-doped porous hybrid carbon for a modified separator of a lithium sulfur battery. <i>Electrochimica Acta</i> , 2021, 380, 138243.	2.6	21
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998	Recent progress of functional separators with catalytic effects for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2021, 84, 105928.	8.2	115
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1003	Promoting polysulfide redox kinetics by Co_9S_8 nanoparticle-embedded in N-doped carbon nanotube hollow polyhedron for lithium sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021, 869, 159306.	2.8	19
1004	Electrochemical investigation of Li-ion diffusion and absorbing polysulfide of hierarchically structured carbon for the quasi-solid lithium-sulfur batteries. <i>Ionics</i> , 2021, 27, 3895-3902.	1.2	5
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1006	Nanocellulose and Its Derivatives toward Advanced Lithium Sulfur Batteries. , 2021, 3, 1130-1142.		13
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1008	Nanoconfined Topochemical Conversion from MXene to Ultrathin Non-Layered TiN Nanomesh toward Superior Electrocatalysts for Lithium-Sulfur Batteries. <i>Small</i> , 2021, 17, e2101360.	5.2	25
1009	Electrolyte Design for Lithium Metal Anode-Based Batteries Toward Extreme Temperature Application. <i>Advanced Science</i> , 2021, 8, e2101051.	5.6	95

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1011	Self-Assembly of 2D Heterostructure Electrocatalyst from MOF and MXene for Boosted Lithium Polysulfide Conversion Reaction. <i>Advanced Materials</i> , 2021, 33, e2101204.	11.1	183
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1025	Synergistic regulation of polysulfides immobilization and conversion by MOF-derived CoP-HNC nanocages for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2021, 85, 106011.	8.2	68
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1027	DFT study of chemical reactivity parameters of lithium polysulfide molecules Li_2S_n http://www.w3.org/1998/Math/MathML altimg="si2.svg" < mml:mrow > < mml:mo stretchy="false" > (< /mml:mo > < mml:mn > 1 < /mml:mn > < mml:mo > % < /mml:mo > < mml:mi > Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	1.1	13

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1042	Steaming inspired 3D porous architecture for improving the capability and stability of sulfurized polyacrylonitrile cathode. <i>Materials Letters</i> , 2021, 296, 129933.	1.3	2
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1261	Visualized redox reaction guides polysulfide synthesis with electrochemical approach for long-cycle lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2022, 413, 140178.	2.6	2
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1265	VC@NCNTs: Bidirectional catalyst for fast charging Lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2022, 442, 135940.	6.6	13
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