

河南师范大学

学术学位授权点建设年度报告

(2022年)

授权学科 材料科学与工程 名称: 竹纤维科学与工程
(学院公章) 材料科学与工程代码: 080500

授权级别

博士

硕士

2022年12月28日

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1	High efficiency ternary organic solar cells via morphology regulation with asymmetric nonfused ring electron acceptor	CHEMICAL ENGINEERING JOURNAL	2022, 438, 135384	
2	Semi-planar non-fullerene molecules enhance the durability of flexible perovskite solar cells	ADVANCED SCIENCE	2022, 9(2105739), 1-8	
3	Flower-like open-structured polycrystalline copper with synergistic multi-crystal plane for efficient electrocatalytic reduction of nitrate to ammonia	NANO ENERGY	2022, 97, 107124	
4	Ammonium cobalt phosphate with asymmetric coordination sites for enhanced electrocatalytic water oxidation	CHINESE JOURNAL OF CATALYSIS	2022, 43(7), 1955-1962	
5	Novel 3D printed vortex-like flexible roller-compacted triboelectric nanogenerator for self-powered electrochemical degradation of organic contaminants	ACS APPLIED MATERIALS & INTERFACES	2022, 14(15), 17426-17433	
6	Improvements in efficiency and stability of perovskite solar cells using a cesium chloride additive	ACS APPLIED MATERIALS & INTERFACES	2022, 14 (23), 26866-26872	

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7	Interfacial engineering of heterostructured Co(OH) ₂ /NiP _x nanosheets for enhanced oxygen evolution reaction	ADVANCED FUNCTIONAL MATERIALS	2022, 32(40), 2206407	
8	Recycling of zinc-carbon batteries into MnO/ZnO/C to fabricate sustainable cathodes for rechargeable zinc-ion batteries	CHEMSUSCHEM	2022, 15 15 , e202200720	
9	A corrosion-etching strategy for fabricating RuO ₂ coupled with defective NiFeZn(OH) _x for a highly efficient hydrogen evolution reaction	JOURNAL OF MATERIALS CHEMISTRY A	2022, 10(38), 20453-20463	
10	Cotton-assisted dual rotor-stator triboelectric nanogenerator for real-time monitoring of crop growth environment	NANO ENERGY	2022, 101, 107578	
11	Mesoporous N-rich carbon with single-Ni atoms as a multifunctional sulfur host for Li-S batteries	ANGEWANDTE CHEMIE-INTERNATIONAL EDITION	2022, 61(47), 202212680	
12	π -Conjugated carbazole cations enable wet-stable quasi-2D perovskite photovoltaics	ACS ENERGY LETTERS	2022, 7(12), 4451–4458	
13	Self-sacrificial template synthesis of Fe, N co-doped porous carbon as efficient oxygen reduction electrocatalysts towards Zn-air battery application	CHINESE CHEMICAL LETTERS	2022, 33(4), 2171-2177	
14	Organic compound passivation for perovskite solar cells with improving stability and photoelectric performance	SOLAR ENERGY	2022, 1(231), 414-419	
15	Using fullerene as the third component to boosting the photovoltaic performances of pyran acceptor	DYES AND PIGMENTS	2022, 197, 109933	
16	Insight the difference of free charge generation in two small molecular acceptor organic solar cells	SOLAR ENERGY	2022, 235, 163–169	

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17	Fe ₃ S ₄ @reduced graphene oxide composites as novel anode materials for high performance alkaline secondary batteries	JOURNAL OF ALLOYS AND COMPOUNDS	2022, 895(1), 162593	
18	Gradient dynamic cross-linked photochromic multifunctional polyelectrolyte hydrogels for visual display and information storage application	POLYMER	2022, 243, 124642	
19	Two strategies to achieve color adjustment of Eu ²⁺ doped garnet Lu ₂ Mg ₂ Al ₂ Si ₂ O ₁₂ phosphors	JOURNAL OF LUMINESCENCE	2022, 243, 118651	
20	Favorable pore size distribution of biomass-derived N, S dual-doped carbon materials for advanced oxygen reduction reaction	INTERNATIONAL JOURNAL OF HYDROGEN ENERGY	2022, 47(26), 12964-12974	

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1			ZL201811465403.8	2022-04-12
2			ZL201811466224.6	2022-04-19
3			ZL201811467449.3	2022-11-22

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4			ZL201811466794.5	2022-11-22
5	/	g-C ₃ N ₄	ZL201910417006.1	2022-03-18
6			ZL201910366323.5	2022-02-08
7		Fe/Fe ₃ C	ZL202011482580.4	2022-11-11
8		Fe ₃ C	ZL202011502358.6	2022-07-29
9		3D	ZL202011477194.6	2022-06-27
10	/		ZL201810226733.5	2021-03-23

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		20_250004		54	3		6
		20_250005		54	3		
		20_250006		54	3		

	20_250007		54	3		/	12
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	20_250013		54	3		/	
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