David Pech

List of Publications by Year in descending order

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35 papers	4,896 citations	393982 19 h-index	433756 31 g-index
35 all docs	35 docs citations	35 times ranked	6461 citing authors

#	Article	IF	Citations
1	Highly porous scaffolds for Ru-based microsupercapacitor electrodes using hydrogen bubble templated electrodeposition. Energy Storage Materials, 2022, 47, 134-140.	9.5	10
2	Three-Dimensional TiO₂ Film Deposited by ALD on Porous Metallic Scaffold for 3D Li-Ion Micro-Batteries: A Road towards Ultra-High Capacity Electrode. Journal of the Electrochemical Society, 2022, 169, 040523.	1.3	2
3	High surface area TiO2 photocatalyst for H2 production through silicon micromachining. Applied Surface Science, 2022, 588, 152919.	3.1	12
4	Porous RuO_xN_yS_z Electrodes for Microsupercapacitors and Microbatteries with Enhanced Areal Performance. ACS Energy Letters, 2021, 6, 131-139.	8.8	19
5	Interaction of hydrogen with the bulk, surface and subsurface of crystalline RuO2 from first principles. Physics Open, 2021, 7, 100059.	0.7	3
6	Low Temperature Deposition of Highly Cyclable Porous Prussian Blue Cathode for Lithiumâ€Ion Microbattery. Small, 2021, 17, e2101615.	5.2	12
7	On the UVâ€“Visible Light Synergetic Mechanisms in Au/TiO₂ Hybrid Model Nanostructures Achieving Photoreduction of Water. Journal of Physical Chemistry C, 2020, 124, 25421-25430.	1.5	16
8	Rethinking Pseudocapacitance: A Way to Harness Charge Storage of Crystalline RuO₂. ACS Applied Energy Materials, 2020, 3, 4144-4148.	2.5	11
9	High Areal Capacity Porous Sn-Au Alloys with Long Cycle Life for Li-ion Microbatteries. Scientific Reports, 2020, 10, 10405.	1.6	9
10	Double Approach Towards 3D Electrodeposited RuOx Porous Structure for High Energy/High Power Micro-Supercapacitors. ECS Meeting Abstracts, 2020, MA2020-01, 2828-2828.	0.0	0
11	3D Microsupercapacitors: 3D Interdigitated Microsupercapacitors with Record Areal Cell Capacitance (Small 27/2019). Small, 2019, 15, 1970143.	5.2	0
12	3D Interdigitated Microsupercapacitors with Record Areal Cell Capacitance. Small, 2019, 15, 1901224.	5.2	27
13	Atypical Properties of FIB-Patterned RuO_x Nanosupercapacitors. ACS Energy Letters, 2017, 2, 1734-1739.	8.8	25
14	Microsupercapacitors as miniaturized energy-storage components for on-chip electronics. Nature Nanotechnology, 2017, 12, 7-15.	15.6	753
15	Potentialities of micro-supercapacitors as energy storage buffers in embedded micro-systems. , 2016, , .		0
16	3D RuO₂ Microsupercapacitors with Remarkable Areal Energy. Advanced Materials, 2015, 27, 6625-6629.	11.1	206
17	Electrophoretic deposition of Li₄Ti₅O₁₂ nanoparticles with a novel additive for Li-ion microbatteries. RSC Advances, 2015, 5, 61502-61507.	1.7	16
18	Realization of an Asymmetric Interdigitated Electrochemical Micro-Capacitor Based on Carbon Nanotubes and Manganese Oxide. Journal of the Electrochemical Society, 2015, 162, A2016-A2020.	1.3	23

#	Article	IF	Citations
19	High-resolution on-chip supercapacitors with ultra-high scan rate ability. Journal of Materials Chemistry A, 2014, 2, 7170-7174.	5.2	104
20	Hydrous RuO 2 /carbon nanowalls hierarchical structures for all-solid-state ultrahigh-energy-density micro-supercapacitors. Nano Energy, 2014, 10, 288-294.	8.2	176
21	On-chip micro-supercapacitors for operation in a wide temperature range. Electrochemistry Communications, 2013, 36, 53-56.	2.3	110
22	Micro-supercapacitors from carbide derived carbon (CDC) films on silicon chips. Journal of Power Sources, 2013, 225, 240-244.	4.0	129
23	Influence of the configuration in planar interdigitated electrochemical micro-capacitors. Journal of Power Sources, 2013, 230, 230-235.	4.0	88
24	Ruthenium Oxide Electrodeposition on Titanium Interdigitated Microarrays for Energy Storage. Materials Research Society Symposia Proceedings, 2013, 1494, 265-270.	0.1	0
25	High resolution electrochemical micro-capacitors based on oxidized multi-walled carbon nanotubes. Journal of Physics: Conference Series, 2013, 476, 012106.	0.3	10
26	Wafer-level fabrication process for fully encapsulated micro-supercapacitors with high specific energy. Microsystem Technologies, 2012, 18, 467-473.	1.2	64
27	Elaboration of a microstructured inkjet-printed carbon electrochemical capacitor. Journal of Power Sources, 2010, 195, 1266-1269.	4.0	421
28	Ultrahigh-power micrometre-sized supercapacitors based on onion-like carbon. Nature Nanotechnology, 2010, 5, 651-654.	15.6	2,451
29	EQCM study of electrodeposited PbO2: Investigation of the gel formation and discharge mechanisms. Electrochimica Acta, 2009, 54, 7382-7388.	2.6	32
30	Duplex SiCN/DLC coating as a solution to improve frettingâ€"Corrosion resistance of steel. Wear, 2009, 266, 832-838.	1.5	26
31	Influence of the nanostructuration of PVD hard TiN-based films on the durability of coated steel. Surface and Coatings Technology, 2008, 202, 2268-2277.	2.2	47
32	Electrochemical behaviour enhancement of stainless steels by a SiO2 PACVD coating. Corrosion Science, 2008, 50, 1492-1497.	3.0	22
33	Concept for Charge Storage in Electrochemical Capacitors with Functionalized Carbon Electrodes. Electrochemical and Solid-State Letters, 2008, 11, A202.	2.2	24
34	Study of the Si Chemical Bonding and the Semiconductive Behavior of SiCN Coatings and their Correlation with Anti-Corrosion Properties. Plasma Processes and Polymers, 2007, 4, 173-179.	1.6	12
35	Analysis of the corrosion protective ability of PACVD silica-based coatings deposited on steel. Surface and Coatings Technology, 2006, 201, 347-352.	2.2	36