Jayan Thomas

List of Publications by Year in descending order

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58	7,395	172457	144013
papers	citations	29 h-index	57 g-index

62	62	62	10508
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Supercapacitor electrode materials: nanostructures from 0 to 3 dimensions. Energy and Environmental Science, 2015, 8, 702-730.	30.8	2,096
2	Asymmetric Supercapacitor Electrodes and Devices. Advanced Materials, 2017, 29, 1605336.	21.0	1,021
3	Recent Advances in Two-Dimensional Nanomaterials for Supercapacitor Electrode Applications. ACS Energy Letters, 2018, 3, 482-495.	17.4	618
4	Highly Ordered MnO₂ Nanopillars for Enhanced Supercapacitor Performance. Advanced Materials, 2013, 25, 3302-3306.	21.0	455
5	Evolution of Nonlinear Optical Properties: From Gold Atomic Clusters to Plasmonic Nanocrystals. Nano Letters, 2012, 12, 4661-4667.	9.1	293
6	The Role of Graphene and Other 2D Materials in Solar Photovoltaics. Advanced Materials, 2019, 31, e1802722.	21.0	268
7	High-Performance One-Body Core/Shell Nanowire Supercapacitor Enabled by Conformal Growth of Capacitive 2D WS₂ Layers. ACS Nano, 2016, 10, 10726-10735.	14.6	209
8	Recent trends in transition metal dichalcogenide based supercapacitor electrodes. Nanoscale Horizons, 2019, 4, 840-858.	8.0	207
9	Energy Storing Electrical Cables: Integrating Energy Storage and Electrical Conduction. Advanced Materials, 2014, 26, 4279-4285.	21.0	195
10	Ultrasensitive and ultrathin phototransistors and photonic synapses using perovskite quantum dots grown from graphene lattice. Science Advances, 2020, 6, eaay5225.	10.3	178
11	Wearable energy-smart ribbons for synchronous energy harvest and storage. Nature Communications, 2016, 7, 13319.	12.8	147
12	Flexible, sandwich-like Ag-nanowire/PEDOT:PSS-nanopillar/MnO₂high performance supercapacitors. Journal of Materials Chemistry A, 2014, 2, 10923-10929.	10.3	123
13	Optical Power Limiting in Fluorinated Graphene Oxide: An Insight into the Nonlinear Optical Properties. Journal of Physical Chemistry C, 2012, 116, 25955-25961.	3.1	120
14	Functionalized graphene aerogel composites for high-performance asymmetric supercapacitors. Nano Energy, 2015, 11, 611-620.	16.0	120
15	Fiberâ€Type Solar Cells, Nanogenerators, Batteries, and Supercapacitors for Wearable Applications. Advanced Science, 2018, 5, 1800340.	11.2	108
16	Flexible supercapacitor electrodes using metalâ€“organic frameworks. Nanoscale, 2020, 12, 17649-17662.	5.6	95
17	2D TiS₂ Layers: A Superior Nonlinear Optical Limiting Material. Advanced Optical Materials, 2017, 5, 1700713.	7.3	84
18	New Method for the Synthesis of 2D Vanadium Nitride (MXene) and Its Application as a Supercapacitor Electrode. ACS Omega, 2020, 5, 17983-17992.	3.5	84

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19	Predictions and Strategies Learned from Machine Learning to Develop Highâ€Performing Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901891.	19.5	83
20	Novel mesoporous electrode materials for symmetric, asymmetric and hybrid supercapacitors. Nanotechnology, 2019, 30, 202001.	2.6	75
21	Symmetric, Asymmetric, and Batteryâ€Type Supercapacitors Using Twoâ€Dimensional Nanomaterials and Composites. Batteries and Supercaps, 2020, 3, 860-875.	4.7	72
22	Coil-Type Asymmetric Supercapacitor Electrical Cables. Small, 2015, 11, 5289-5295.	10.0	71
23	Vertically Aligned Grapheneâ€“Carbon Fiber Hybrid Electrodes with Superlong Cycling Stability for Flexible Supercapacitors. Small, 2019, 15, e1902606.	10.0	58
24	A PCBM-assisted perovskite growth process to fabricate high efficiency semitransparent solar cells. Journal of Materials Chemistry A, 2016, 4, 11648-11655.	10.3	49
25	Two-Dimensional Mn₃O₄Nanowalls Grown on Carbon Fibers as Electrodes for Flexible Supercapacitors. ACS Omega, 2019, 4, 4472-4480.	3.5	47
26	Enhanced optical limiting in nanosized mixed zinc ferrites. Applied Physics Letters, 2012, 100, .	3.3	42
27	Enhanced Magnetism in Highly Ordered Magnetite Nanoparticleâ€Filled Nanohole Arrays. Small, 2014, 10, 2840-2848.	10.0	40
28	Ordered conjugated polymer nano- and microstructures: Structure control for improved performance of organic electronics. Nano Today, 2014, 9, 705-721.	11.9	37
29	High Throughput Printing of Nanostructured Carbon Electrodes for Supercapacitors. Advanced Materials Interfaces, 2014, 1, 1300014.	3.7	34
30	High Voltage Asymmetric Supercapacitors Developed by Engineering Electrode Work Functions. ACS Energy Letters, 2021, 6, 3590-3599.	17.4	31
31	Investigating 2D WS₂ supercapacitor electrode performance by Kelvin probe force microscopy. Journal of Materials Chemistry A, 2020, 8, 12699-12704.	10.3	29
32	High-performance flexible asymmetric supercapacitor based on rGO anode and WO₃/WS₂ core/shell nanowire cathode. Nanotechnology, 2020, 31, 435405.	2.6	29
33	Growing Perovskite Quantum Dots on Carbon Nanotubes for Neuromorphic Optoelectronic Computing. Advanced Electronic Materials, 2021, 7, .	5.1	29
34	Nanoimprinting by Melt Processing: An Easy Technique to Fabricate Versatile Nanostructures. Advanced Materials, 2011, 23, 4782-4787.	21.0	24
35	Simultaneous optical and photoacoustic measurement of nonlinear absorption. Applied Physics Letters, 2013, 102, .	3.3	23
36	Fabrication, electrical and optical properties of silver, indium tin oxide (<scp>ITO</scp>), and indium zinc oxide (<scp>IZO</scp>) nanostructure arrays. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 831-838.	1.8	20

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37	Photorefractive performances of a graphene-doped PATPD/7-DCST/ECZ composite. Journal of Materials Chemistry C, 2014, 2, 7639-7647.	5.5	20
38	Printed Sub-100 nm Polymer-Derived Ceramic Structures. ACS Applied Materials & Interfaces, 2013, 5, 3894-3899.	8.0	19
39	Energized Composites for Electric Vehicles: A Dual Function Energyâ€Storing Supercapacitorâ€Based Carbon Fiber Composite for the Body Panels. Small, 2022, 18, e2107053.	10.0	17
40	Quantum dots of two-dimensional Ruddlesdenâ€“Popper organicâ€“inorganic hybrid perovskite with high optical limiting properties. AIP Advances, 2020, 10, .	1.3	16
41	Coupling Enhancement and Giant Rabi-Splitting in Large Arrays of Tunable Plexcitonic Substrates. Journal of Physical Chemistry C, 2014, 118, 23954-23962.	3.1	13
42	Spectroscopic ellipsometry on metal and metal-oxide multilayer hybrid plasmonic nanostructures. Optics Letters, 2013, 38, 3969.	3.3	12
43	Reflux pretreatment-mediated sonication: A new universal route to obtain 2D quantum dots. Materials Today, 2019, 22, 17-24.	14.2	12
44	Perovskite Quantum Dot-Reduced Graphene Oxide Superstructure for Efficient Photodetection. ACS Applied Materials & Interfaces, 2020, 12, 45165-45173.	8.0	11
45	Investigation of nonlinear optical properties of exfoliated MoS2 using Photoacoustic Zscan. MRS Advances, 2016, 1, 3215-3221.	0.9	10
46	Synthesis of air-stable two-dimensional nanoplatelets of Ruddlesdenâ€“Popper organicâ€“inorganic hybrid perovskites. Nanoscale, 2020, 12, 10072-10081.	5.6	10
47	Rapid Nanofabrication of Nanostructured Interdigitated Electrodes (nIDEs) for Long-Term In Vitro Analysis of Human Induced Pluripotent Stem Cell Differentiated Cardiomyocytes. Biosensors, 2018, 8, 88.	4.7	9
48	2D Materials: The Role of Graphene and Other 2D Materials in Solar Photovoltaics (Adv. Mater. 1/2019). Advanced Materials, 2019, 31, 1970006.	21.0	8
49	Effect of modular diffraction gratings on absorption in P3HT:PCBM layers. Applied Optics, 2013, 52, 1025.	1.8	4
50	Wearable Devices: Fiberâ€Type Solar Cells, Nanogenerators, Batteries, and Supercapacitors for Wearable Applications (Adv. Sci. 9/2018). Advanced Science, 2018, 5, 1870057.	11.2	3
51	Investigation of the Enhanced Sensitivity of Interdigitated Electrodes for Cellular Biosensing With Geometric, Nanostructured Surface Area, and Surface Plasmon Resonance Modes. Journal of Microelectromechanical Systems, 2020, 29, 1109-1111.	2.5	3
52	Multiwall carbon nanotubes grown by thermocatalytic carbonization of polyacrylonitrile. Carbon, 2012, 50, 4754-4757.	10.3	2
53	Energy Storage: Highly Ordered MnO2Nanopillars for Enhanced Supercapacitor Performance (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlo	21.0	2
54	Supercapacitors: Asymmetric Supercapacitor Electrodes and Devices (Adv. Mater. 21/2017). Advanced Materials, 2017, 29, .	21.0	2

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55	Applications of Oxide Nanomaterials in Nonlinear Optics. Materials Research Society Symposia Proceedings, 2012, 1454, 255-259.	0.1	1
56	Energy Storage: Energy Storing Electrical Cables: Integrating Energy Storage and Electrical Conduction (Adv. Mater. 25/2014). Advanced Materials, 2014, 26, 4400-4400.	21.0	1
57	Optical Properties of Nanostructured Electrodes. Materials Research Society Symposia Proceedings, 2013, 1552, 119-124.	0.1	0
58	High-Throughput of Polymer Derived Carbon Nanopillar Arrays for Enhanced Energy Storage Performance. Materials Research Society Symposia Proceedings, 2015, 1761, 1.	0.1	0