

Chandramouli Subramaniam

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

1,735
citations

331670

21
h-index

276875

41
g-index

48
all docs

48
docs citations

48
times ranked

2135
citing authors

#	ARTICLE	IF	CITATIONS
1	One hundred fold increase in current carrying capacity in a carbon nanotube-copper composite. Nature Communications, 2013, 4, 2202.	12.8	422
2	Growth of Gold Nanoparticles in Human Cells. Langmuir, 2005, 21, 11562-11567.	3.5	158
3	Carbon nanotube-copper exhibiting metal-like thermal conductivity and silicon-like thermal expansion for efficient cooling of electronics. Nanoscale, 2014, 6, 2669-2674.	5.6	128
4	On the formation of protected gold nanoparticles from AuCl ₄ ⁻ by the reduction using aromatic amines. Journal of Nanoparticle Research, 2005, 7, 209-217.	1.9	99
5	Compositional Control as the Key for Achieving Highly Efficient OER Electrocatalysis with Cobalt Phosphates Decorated Nanocarbon Florets. Small, 2020, 16, e1903334.	10.0	66
6	Nano-scale, planar and multi-tiered current pathways from a carbon nanotube-copper composite with high conductivity, ampacity and stability. Nanoscale, 2016, 8, 3888-3894.	5.6	65
7	Influence of matching solubility parameter of polymer matrix and CNT on electrical conductivity of CNT/rubber composite. Scientific Reports, 2014, 4, 7232.	3.3	53
8	Silver Soret Nanoparticles for Femtomolar Sensing of Glutathione in a Surface Plasmon-Coupled Emission Platform. ACS Applied Nano Materials, 2020, 3, 4329-4341.	5.0	46
9	Scalable Approach to Highly Efficient and Rapid Capacitive Deionization with CNT-Thread As Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 39907-39915.	8.0	45
10	Novel ZnO nanostructures over gold and silver nanoparticle assemblies. Chemical Physics Letters, 2006, 423, 240-246.	2.6	40
11	Visible Fluorescence Induced by the Metal Semiconductor Transition in Composites of Carbon Nanotubes with Noble Metal Nanoparticles. Physical Review Letters, 2007, 99, 167404.	7.8	34
12	Interwoven Carbon Nanotube Wires for High-Performing, Mechanically Robust, Washable, and Wearable Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 18285-18294.	8.0	33
13	Photoplasmonic assembly of dielectric-metal, Nd ₂ O ₃ -Gold soret nanointerfaces for dequenching the luminophore emission. Nanophotonics, 2021, 10, 3417-3431.	6.0	33
14	Multifunctional hybrid soret nanoarchitectures for mobile phone-based picomolar Cu ²⁺ ion sensing and dye degradation applications. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 132, 114764.	2.7	32
15	Point-of-Care, Cable-Type Electrochemical Zn ²⁺ Sensor with Ultrahigh Sensitivity and Wide Detection Range for Soil and Sweat Analysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 14569-14579.	6.7	31
16	Xenobiotic Contamination of Water by Plastics and Pesticides Revealed through Real-Time, Ultrasensitive, and Reliable Surface-Enhanced Raman Scattering. ACS Sustainable Chemistry and Engineering, 2020, 8, 7639-7648.	6.7	31
17	Exceptional Capacitance Enhancement of a Non-Conducting COF through Potential-Driven Chemical Modulation by Redox Electrolyte. Advanced Energy Materials, 2021, 11, 2003626.	19.5	30
18	Surface-enhanced Raman scattering platform operating over wide pH range with minimal chemical enhancement effects: Test case of tyrosine. Journal of Raman Spectroscopy, 2019, 50, 826-836.	2.5	29

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19	Hierarchically Engineered Nanocarbon Florets as Bifunctional Electrode Materials for Adsorptive and Intercalative Energy Storage. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 42669-42677.	8.0	29
20	Highly Thermally Conductive Yet Flexible Composite of Carbon Fiber, Carbon Nanotube, and Rubber Obtained by Decreasing the Thermal Resistivity at the Interface between Carbon Fiber and Carbon Nanotube. <i>Advanced Engineering Materials</i> , 2017, 19, 1600596.	3.5	28
21	Performance evaluation of an open thermochemical energy storage system integrated with flat plate solar collector. <i>Applied Thermal Engineering</i> , 2020, 173, 115218.	6.0	27
22	Nanostructured Carbon Florets as Scavenger of As ³⁺ , Cr ⁶⁺ , Cd ²⁺ , and Hg ²⁺ for Water Remediation. <i>ACS Applied Nano Materials</i> , 2020, 3, 468-478.	5.0	21
23	Room Temperature, Multiphasic Detection of Explosives, and Volatile Organic Compounds Using Thermodiffusion Driven Soret Colloids. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 9470-9479.	6.7	20
24	Flow-Induced Transverse Electrical Potential across an Assembly of Gold Nanoparticles. <i>Physical Review Letters</i> , 2005, 95, 164501.	7.8	18
25	Scalable, solvent-less de-bundling of single-wall carbon nanotube into elastomers for high conductive functionality. <i>Polymer</i> , 2014, 55, 5276-5283.	3.8	18
26	Assessment of open thermochemical energy storage system performance for low temperature heating applications. <i>Applied Thermal Engineering</i> , 2019, 156, 453-470.	6.0	17
27	All Solid-State Coaxial Supercapacitor with Ultrahigh Scan Rate Operability of 250,000 mV/s by Thermal Engineering of the Electrode-Electrolyte Interface. <i>ACS Applied Energy Materials</i> , 2020, 3, 3454-3464.	5.1	17
28	Premagnetized Carbon-Catalyst Interface Delivering 650% Enhancement in Electrocatalytic Kinetics of Hydrogen Evolution Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7792-7802.	6.7	17
29	The mechanistic role of a support-catalyst interface in electrocatalytic water reduction by Co ₃ O ₄ supported nanocarbon florets. <i>Nanoscale</i> , 2019, 11, 13532-13540.	5.6	16
30	Real-Time, Wearable, Biomechanical Movement Capture of Both Humans and Robots with Metal-Free Electrodes. <i>ACS Omega</i> , 2017, 2, 4132-4142.	3.5	15
31	Ultra-sensitive gas phase detection of 2,4,6-trinitrotoluene by non-covalently functionalized graphene field effect transistors. <i>Analyst</i> , 2020, 145, 917-928.	3.5	13
32	Origami of Solid-State Supercapacitive Microjunctions Operable at 3 V with High Specific Energy Density for Wearable Electronics. <i>ACS Applied Electronic Materials</i> , 2020, 2, 659-669.	4.3	13
33	Performance enhancement of tapered helical coil receiver using novel nanostructured carbon florets coating. <i>Applied Thermal Engineering</i> , 2021, 194, 117065.	6.0	12
34	Design Principles for Manipulating Electrochemical Interfaces in Solid-State Supercapacitors for Wearable Applications. <i>ACS Omega</i> , 2021, 6, 7970-7978.	3.5	11
35	Electrochemical, top-down nanostructured pseudocapacitive electrodes for enhanced specific capacitance and cycling efficiency. <i>Nanoscale</i> , 2018, 10, 3663-3672.	5.6	10
36	Lanthanide complexes as molecular dopants for realizing air-stable n-type graphene logic inverters with symmetric transconductance. <i>Materials Horizons</i> , 2019, 6, 743-750.	12.2	9

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37	Non-Stoichiometry Induced Exsolution of Metal Oxide Nanoparticles via Formation of Wavy Surfaces and their Enhanced Electrocatalytic Activity: Case of Misfit Calcium Cobalt Oxide. ACS Applied Materials & Interfaces, 2021, 13, 9897-9907.	8.0	8
38	Exceptional photoconductivity of poly(3-hexylthiophene) fibers through <i>in situ</i> encapsulation of molybdenum disulfide quantum dots. Nanoscale, 2018, 10, 10395-10402.	5.6	7
39	Joule Heating-Driven Transformation of Hard-Carbons to Onion-like Carbon Monoliths for Efficient Capture of Volatile Organic Compounds. ACS Materials Au, 2022, 2, 154-162.	6.0	7
40	Nanoparticles-chemistry, new synthetic approaches, gas phase clustering and novel applications. Pramana - Journal of Physics, 2005, 65, 631-640.	1.8	6
41	Transverse Electrokinetic Effect: Experiments and Theory. Journal of Physical Chemistry C, 2007, 111, 19103-19110.	3.1	6
42	Performance evaluation of a seasonal residential space heating system based on thermochemical energy storage. Applied Thermal Engineering, 2021, 194, 117059.	6.0	4
43	Scalable approach towards specific and ultrasensitive cation sensing under harsh environmental conditions by engineering the analyte-transducer interface. Nanoscale Advances, 2021, 3, 3752-3761.	4.6	3
44	Electric-Field-Induced Solid-Gas Interfacial Chemical Reaction in Carbon Nanotube Ensembles: Route toward Ultra-sensitive Gas Detectors. ACS Applied Materials & Interfaces, 2022, 14, 13271-13279.	8.0	3
45	Multi-cationic ionic liquid combination enabling 86-fold enhancement in frequency response and superior energy density in all-solid-state supercapacitors. Journal of Energy Storage, 2022, 53, 105164.	8.1	3
46	Mechanochemically controlling the van der Waals gap in molybdenum disulfide nanosheets. Physical Review Materials, 2019, 3, .	2.4	2
47	Thermochemically nanostructured off-stoichiometric Ti _{0.2} Al _{1.8} C ₄ O ₅ nanowires as robust electrocatalysts for hydrogen evolution from corrosive acidic electrolyte. Catalysis Today, 2021, 370, 26-35.	4.4	0
48	Characterization of microsupercapacitors. , 2022, , 117-162.		0