

# 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	Characterization of microsupercapacitors. , 2022, , 117-162.		0
2	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
3	Electric-Field-Induced Solidâ€“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
4	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
5	Scalable approach towards specific and ultrasensitive cation sensing under harsh environmental conditions by engineering the analyteâ€“transducer interface. Nanoscale Advances, 2021, 3, 3752-3761.	4.6	3
6	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
7	Exceptional Capacitance Enhancement of a Nonâ€“Conducting COF through Potentialâ€“Driven Chemical Modulation by Redox Electrolyte. Advanced Energy Materials, 2021, 11, 2003626.	19.5	30
8	Design Principles for Manipulating Electrochemical Interfaces in Solid-State Supercapacitors for Wearable Applications. ACS Omega, 2021, 6, 7970-7978.	3.5	11
9	Thermochemically nanostructured off-stoichiometric Ti <sub>0.2</sub> Al <sub>1.8</sub> C <sub>4</sub> O <sub>5</sub> nanowires as robust electrocatalysts for hydrogen evolution from corrosive acidic electrolyte. Catalysis Today, 2021, 370, 26-35.	4.4	0
10	Premagnetized Carbon-Catalyst Interface Delivering 650% Enhancement in Electrocatalytic Kinetics of Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2021, 9, 7792-7802.	6.7	17
11	Performance evaluation of a seasonal residential space heating system based on thermochemical energy storage. Applied Thermal Engineering, 2021, 194, 117059.	6.0	4
12	Performance enhancement of tapered helical coil receiver using novel nanostructured carbon florets coating. Applied Thermal Engineering, 2021, 194, 117065.	6.0	12
13	Multifunctional hybrid soret nanoarchitectures for mobile phone-based picomolar Cu <sup>2+</sup> ion sensing and dye degradation applications. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 132, 114764.	2.7	32
14	Photoplasmonic assembly of dielectric-metal, Nd <sub>2</sub> O <sub>3</sub> -Gold soret nanointerfaces for dequenching the luminophore emission. Nanophotonics, 2021, 10, 3417-3431.	6.0	33
15	Compositional Control as the Key for Achieving Highly Efficient OER Electrocatalysis with Cobalt Phosphates Decorated Nanocarbon Florets. Small, 2020, 16, e1903334.	10.0	66
16	Nanostructured Carbon Florets as Scavenger of As <sup>3+</sup> , Cr <sup>6+</sup> , Cd <sup>2+</sup> , and Hg <sup>2+</sup> for Water Remediation. ACS Applied Nano Materials, 2020, 3, 468-478.	5.0	21
17	Ultra-sensitive gas phase detection of 2,4,6-trinitrotoluene by non-covalently functionalized graphene field effect transistors. Analyst, The, 2020, 145, 917-928.	3.5	13
18	Hierarchically Engineered Nanocarbon Florets as Bifunctional Electrode Materials for Adsorptive and Intercalative Energy Storage. ACS Applied Materials & Interfaces, 2020, 12, 42669-42677.	8.0	29

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19	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
20	All Solid-State Coaxial Supercapacitor with Ultrahigh Scan Rate Operability of 250â€000 mV/s by Thermal Engineering of the Electrodeâ€Electrolyte Interface. ACS Applied Energy Materials, 2020, 3, 3454-3464.	5.1	17
21	Performance evaluation of an open thermochemical energy storage system integrated with flat plate solar collector. Applied Thermal Engineering, 2020, 173, 115218.	6.0	27
22	Origami of Solid-State Supercapacitive Microjunctions Operable at 3 V with High Specific Energy Density for Wearable Electronics. ACS Applied Electronic Materials, 2020, 2, 659-669.	4.3	13
23	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
24	Point-of-Care, Cable-Type Electrochemical Zn <sup>2+</sup> 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
25	Lanthanide complexes as molecular dopants for realizing air-stable n-type graphene logic inverters with symmetric transconductance. Materials Horizons, 2019, 6, 743-750.	12.2	9
26	The mechanistic role of a supportâ€catalyst interface in electrocatalytic water reduction by Co <sub>3</sub> O <sub>4</sub> supported nanocarbon florets. Nanoscale, 2019, 11, 13532-13540.	5.6	16
27	Assessment of open thermochemical energy storage system performance for low temperature heating applications. Applied Thermal Engineering, 2019, 156, 453-470.	6.0	17
28	Interwoven Carbon Nanotube Wires for High-Performing, Mechanically Robust, Washable, and Wearable Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 18285-18294.	8.0	33
29	Surfaceâ€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
30	Mechanochemically controlling the van der Waals gap in molybdenum disulfide nanosheets. Physical Review Materials, 2019, 3, .	2.4	2
31	Electrochemical, top-down nanostructured pseudocapacitive electrodes for enhanced specific capacitance and cycling efficiency. Nanoscale, 2018, 10, 3663-3672.	5.6	10
32	Room Temperature, Multiphasic Detection of Explosives, and Volatile Organic Compounds Using Thermodiffusion Driven Soret Colloids. ACS Sustainable Chemistry and Engineering, 2018, 6, 9470-9479.	6.7	20
33	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
34	Real-Time, Wearable, Biomechanical Movement Capture of Both Humans and Robots with Metal-Free Electrodes. ACS Omega, 2017, 2, 4132-4142.	3.5	15
35	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
36	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. Advanced Engineering Materials, 2017, 19, 1600596.	3.5	28

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37	Nano-scale, planar and multi-tiered current pathways from a carbon nanotubeâ€“copper composite with high conductivity, ampacity and stability. <i>Nanoscale</i> , 2016, 8, 3888-3894.	5.6	65
38	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
39	Carbon nanotube-copper exhibiting metal-like thermal conductivity and silicon-like thermal expansion for efficient cooling of electronics. <i>Nanoscale</i> , 2014, 6, 2669-2674.	5.6	128
40	Influence of matching solubility parameter of polymer matrix and CNT on electrical conductivity of CNT/rubber composite. <i>Scientific Reports</i> , 2014, 4, 7232.	3.3	53
41	One hundred fold increase in current carrying capacity in a carbon nanotubeâ€“copper composite. <i>Nature Communications</i> , 2013, 4, 2202.	12.8	422
42	Visible Fluorescence Induced by the Metal Semiconductor Transition in Composites of Carbon Nanotubes with Noble Metal Nanoparticles. <i>Physical Review Letters</i> , 2007, 99, 167404.	7.8	34
43	Transverse Electrokinetic Effect:â€“ Experiments and Theory. <i>Journal of Physical Chemistry C</i> , 2007, 111, 19103-19110.	3.1	6
44	Novel ZnO nanostructures over gold and silver nanoparticle assemblies. <i>Chemical Physics Letters</i> , 2006, 423, 240-246.	2.6	40
45	Nanoparticles-chemistry, new synthetic approaches, gas phase clustering and novel applications. <i>Pramana - Journal of Physics</i> , 2005, 65, 631-640.	1.8	6
46	On the formation of protected gold nanoparticles from AuCl <sub>4</sub> <sup>-</sup> by the reduction using aromatic amines. <i>Journal of Nanoparticle Research</i> , 2005, 7, 209-217.	1.9	99
47	Flow-Induced Transverse Electrical Potential across an Assembly of Gold Nanoparticles. <i>Physical Review Letters</i> , 2005, 95, 164501.	7.8	18
48	Growth of Gold Nanoparticles in Human Cells. <i>Langmuir</i> , 2005, 21, 11562-11567.	3.5	158