Jacques Lefebvre

List of Publications by Year
in descending order

34 papers	1,184 citations	394421 19 h-index	434195 31 g-index

34 all docs	34 docs citations	34 times ranked	1534 citing authors

#	Article	IF	Citations
1	Photoluminescence Imaging of Suspended Single-Walled Carbon Nanotubes. Nano Letters, 2006, 6, 1603-1608.	9.1	197
2	Enrichment of large-diameter semiconducting SWCNTs by polyfluorene extraction for high network density thin film transistors. Nanoscale, 2014, 6, 2328.	5.6	154
3	High-Purity Semiconducting Single-Walled Carbon Nanotubes: A Key Enabling Material in Emerging Electronics. Accounts of Chemical Research, 2017, 50, 2479-2486.	15.6	82
4	Excited Excitonic States in Single-Walled Carbon Nanotubes. Nano Letters, 2008, 8, 1890-1895.	9.1	72
5	Photoluminescence and FÃ¶rster Resonance Energy Transfer in Elemental Bundles of Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 7536-7540.	3.1	72
6	Raman microscopy mapping for the purity assessment of chirality enriched carbon nanotube networks in thin-film transistors. Nano Research, 2015, 8, 2179-2187.	10.4	50
7	Sorting of Semiconducting Single-Walled Carbon Nanotubes in Polar Solvents with an Amphiphilic Conjugated Polymer Provides General Guidelines for Enrichment. ACS Nano, 2018, 12, 1910-1919.	14.6	50
8	Fully R2Râ€Printed Carbonâ€Nanotubeâ€Based Limitless Length of Flexible Activeâ€Matrix for Electrophoretic Display Application. Advanced Electronic Materials, 2020, 6, 1901431.	5.1	49
9	A hybrid enrichment process combining conjugated polymer extraction and silica gel adsorption for high purity semiconducting single-walled carbon nanotubes (SWCNT). Nanoscale, 2015, 7, 15741-15747.	5.6	47
10	Surface effects on network formation of conjugated polymer wrapped semiconducting single walled carbon nanotubes and thin film transistor performance. Organic Electronics, 2015, 26, 15-19.	2.6	38
11	Direct printing of functional 3D objects using polymerization-induced phase separation. Nature Communications, 2021, 12, 55.	12.8	38
12	Decomposable sâ€Tetrazine Copolymer Enables Singleâ€Walled Carbon Nanotube Thin Film Transistors and Sensors with Improved Sensitivity. Advanced Functional Materials, 2018, 28, 1705568.	14.9	36
13	Phases of Carbon Nanotube Growth and Population Evolution from in Situ Raman Spectroscopy during Chemical Vapor Deposition. Journal of Physical Chemistry C, 2010, 114, 11018-11025.	3.1	32
14	Enrichment of Semiconducting Single-Walled Carbon Nanotubes with Indigo-Fluorene-Based Copolymers and Their Use in Printed Thin-Film Transistors and Carbon Dioxide Gas Sensors. ACS Sensors, 2020, 5, 2136-2145.	7.8	30
15	Polarized light microscopy and spectroscopy of individual single-walled carbon nanotubes. Nano Research, 2011, 4, 788-794.	10.4	26
16	Type- and Species-Selective Air Etching of Single-Walled Carbon Nanotubes Tracked with in Situ Raman Spectroscopy. ACS Nano, 2013, 7, 6507-6521.	14.6	22
17	InAs/InP quantum-dot pillar microcavities using SiO2/Ta2O5 Bragg reflectors with emission around 1.55â€Î¼m. Applied Physics Letters, 2004, 84, 3235-3237.	3.3	20
18	Charge contrast imaging of suspended nanotubes by scanning electron microscopy. Nanotechnology, 2008, 19, 335202.	2.6	20

#	Article	IF	Citations
19	Mechanistic Consideration of pH Effect on the Enrichment of Semiconducting SWCNTs by Conjugated Polymer Extraction. Journal of Physical Chemistry C, 2016, 120, 21946-21954.	3.1	20
20	The dynamics of the nucleation, growth and termination of single-walled carbon nanotubes from in situ Raman spectroscopy during chemical vapor deposition. Nano Research, 2009, 2, 783-792.	10.4	19
21	Photoinduced Band Gap Shift and Deep Levels in Luminescent Carbon Nanotubes. ACS Nano, 2012, 6, 1702-1714.	14.6	17
22	Thermodynamic and Energetic Effects on the Diameter and Defect Density in Single-Walled Carbon Nanotube Synthesis. Journal of Physical Chemistry C, 2013, 117, 3527-3536.	3.1	17
23	Cyanoethylated pullulan as a high-k solution processable polymer gate dielectric for SWCNT TFTs. Organic Electronics, 2017, 42, 329-336.	2.6	16
24	Phenanthroline Additives for Enhanced Semiconducting Carbon Nanotube Dispersion Stability and Transistor Performance. ACS Applied Nano Materials, 2020, 3, 12314-12324.	5.0	16
25	Real Time Hyperspectroscopy for Dynamical Study of Carbon Nanotubes. ACS Nano, 2016, 10, 9602-9607.	14.6	12
26	Dopant-Modulated Conjugated Polymer Enrichment of Semiconducting SWCNTs. ACS Omega, 2018, 3, 3413-3419.	3.5	9
27	Carbon Nanotube Transistors as Gas Sensors: Response Differentiation Using Polymer Gate Dielectrics. ACS Applied Polymer Materials, 2019, 1, 3269-3278.	4.4	8
28	Polymer Encapsulants for Threshold Voltage Control in Carbon Nanotube Transistors. ACS Applied Materials & Interfaces, 2019, 11, 36027-36034.	8.0	7
29	Visible iridescence from self-assembled periodic rippling in vertically aligned carbon nanotube forests. Applied Physics Letters, 2010, 97, 101901.	3.3	6
30	Excitonic imaging spectroscopy of singleâ€walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2008, 245, 2247-2250.	1.5	1
31	Decoration of suspended single-walled carbon nanotubes with soft-landed size-selected metal nanoparticles. Thin Solid Films, 2020, 699, 137907.	1.8	1
32	Study of self-assembled InAs quantum dots on InP nano-templates by low voltage scanning electron microscopy cathodoluminescence. Microscopy and Microanalysis, 2002, 8, 712-713.	0.4	0
33	Dielectrics & Electrostatics: Their Effect on Carbon Nanotube Network Field-Effect Transistors and Gas Sensors. ECS Meeting Abstracts, 2018, , .	0.0	0
34	(Invited) Challenges in Quantifying the Purity of Semiconducting Single-Walled Carbon Nanotubes. ECS Meeting Abstracts, 2020, MA2020-01, 756-756.	0.0	0