

Jean-Charles Arnault

List of Publications by Year in descending order

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44
papers

1,878
citations

236925

25
h-index

289244

40
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46
all docs

46
docs citations

46
times ranked

2702
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical Vapor Deposition Single-Crystal Diamond: A Review. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022, 16, 2100354.	2.4	36
2	Nanodiamonds: From synthesis to applications. , 2021, , 209-246.		0
3	Dislocation density reduction using overgrowth on hole arrays made in heteroepitaxial diamond substrates. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	16
4	Impact of Nitrogen, Boron and Phosphorus Impurities on the Electronic Structure of Diamond Probed by X-ray Spectroscopies. <i>Journal of Carbon Research</i> , 2021, 7, 28.	2.7	1
5	(Invited) Nanodiamonds and Bioapplications. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 504-504.	0.0	0
6	New Insights into the Reactivity of Detonation Nanodiamonds during the First Stages of Graphitization. <i>Nanomaterials</i> , 2021, 11, 2671.	4.1	5
7	Hydrogen plasma treated nanodiamonds lead to an overproduction of hydroxyl radicals and solvated electrons in solution under ionizing radiation. <i>Carbon</i> , 2020, 162, 510-518.	10.3	21
8	Delivery of siRNA to Ewing Sarcoma Tumor Xenografted on Mice, Using Hydrogenated Detonation Nanodiamonds: Treatment Efficacy and Tissue Distribution. <i>Nanomaterials</i> , 2020, 10, 553.	4.1	20
9	Fluorescence and Physico-Chemical Properties of Hydrogenated Detonation Nanodiamonds. <i>Journal of Carbon Research</i> , 2020, 6, 7.	2.7	8
10	Using hydrogen isotope incorporation as a tool to unravel the surfaces of hydrogen-treated nanodiamonds. <i>Nanoscale</i> , 2019, 11, 8027-8036.	5.6	12
11	Combining nanostructuration with boron doping to alter sub band gap acceptor states in diamond materials. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16645-16654.	10.3	14
12	Raman spectroscopy study of detonation nanodiamond. <i>Diamond and Related Materials</i> , 2018, 87, 248-260.	3.9	73
13	Hydroxyl radical production induced by plasma hydrogenated nanodiamonds under X-ray irradiation. <i>Chemical Communications</i> , 2017, 53, 1237-1240.	4.1	25
14	Unusual Water Hydrogen Bond Network around Hydrogenated Nanodiamonds. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5185-5194.	3.1	104
15	Synchrotron Bragg diffraction imaging characterization of synthetic diamond crystals for optical and electronic power device applications. <i>Journal of Applied Crystallography</i> , 2017, 50, 561-569.	4.5	39
16	Electrostatic Self-Assembly of Diamond Nanoparticles onto Al- and N-Polar Sputtered Aluminum Nitride Surfaces. <i>Nanomaterials</i> , 2016, 6, 217.	4.1	10
17	Surface Area of Carbon Nanoparticles: A Dose Metric for a More Realistic Ecotoxicological Assessment. <i>Nano Letters</i> , 2016, 16, 3514-3518.	9.1	39
18	Photoluminescence of nanodiamonds influenced by charge transfer from silicon and metal substrates. <i>Diamond and Related Materials</i> , 2016, 63, 91-96.	3.9	9

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19	Visible Light Photodiodes and Photovoltages from Detonation Nanodiamonds. <i>MRS Advances</i> , 2016, 1, 971-975.	0.9	0
20	Epitaxy of iridium on SrTiO ₃ /Si (001): A promising scalable substrate for diamond heteroepitaxy. <i>Diamond and Related Materials</i> , 2016, 66, 67-76.	3.9	26
21	Impairing the radioresistance of cancer cells by hydrogenated nanodiamonds. <i>Biomaterials</i> , 2015, 61, 290-298.	11.4	62
22	Plasma hydrogenated cationic detonation nanodiamonds efficiently deliver to human cells in culture functional siRNA targeting the Ewing sarcoma junction oncogene. <i>Biomaterials</i> , 2015, 45, 93-98.	11.4	49
23	Surface graphitization of ozone-treated detonation nanodiamonds. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 2739-2743.	1.8	9
24	Electronic and physico-chemical properties of nanometric boron delta-doped diamond structures. <i>Journal of Applied Physics</i> , 2014, 116, 083702.	2.5	26
25	Surface Modifications of Detonation Nanodiamonds Probed by Multiwavelength Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23415-23425.	3.1	46
26	Surface potential of diamond and gold nanoparticles can be locally switched by surrounding materials or applied voltage. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	10
27	Large-area high-quality single crystal diamond. <i>MRS Bulletin</i> , 2014, 39, 504-510.	3.5	88
28	Tritium labeling of detonation nanodiamonds. <i>Chemical Communications</i> , 2014, 50, 2916-2918.	4.1	29
29	Diamond electrodes for trace alpha pollutant sequestration via covalent grafting of nitrilotriacetic acid (NTA) ligand. <i>Electrochimica Acta</i> , 2014, 136, 430-434.	5.2	7
30	Surface transfer doping can mediate both colloidal stability and self-assembly of nanodiamonds. <i>Nanoscale</i> , 2013, 5, 8958.	5.6	65
31	Nanoparticles Assume Electrical Potential According to Substrate, Size, and Surface Termination. <i>Langmuir</i> , 2013, 29, 1634-1641.	3.5	41
32	Etching mechanism of diamond by Ni nanoparticles for fabrication of nanopores. <i>Carbon</i> , 2013, 59, 448-456.	10.3	55
33	Encapsulated nanodiamonds in smart microgels toward self-assembled diamond nanoarrays. <i>Diamond and Related Materials</i> , 2013, 33, 32-37.	3.9	8
34	Switching polarity of oxidized detonation diamond nanoparticles on substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 2095-2099.	1.8	0
35	Oxygen hole doping of nanodiamond. <i>Nanoscale</i> , 2012, 4, 6792.	5.6	61
36	Laser heating versus phonon confinement effect in the Raman spectra of diamond nanoparticles. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	30

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37	Surface properties of hydrogenated nanodiamonds: a chemical investigation. Physical Chemistry Chemical Physics, 2011, 13, 11517.	2.8	116
38	Early stages of surface graphitization on nanodiamond probed by x-ray photoelectron spectroscopy. Physical Review B, 2011, 84, .	3.2	116
39	Surface chemical modifications and surface reactivity of nanodiamonds hydrogenated by CVD plasma. Physical Chemistry Chemical Physics, 2011, 13, 11481.	2.8	71
40	XPS study of ruthenium tris-bipyridine electrografted from diazonium salt derivative on microcrystalline boron doped diamond. Physical Chemistry Chemical Physics, 2009, 11, 11647.	2.8	85
41	Photoluminescent Diamond Nanoparticles for Cell Labeling: Study of the Uptake Mechanism in Mammalian Cells. ACS Nano, 2009, 3, 3955-3962.	14.6	306
42	Electrostatic Grafting of Diamond Nanoparticles: A Versatile Route to Nanocrystalline Diamond Thin Films. ACS Applied Materials & Interfaces, 2009, 1, 2738-2746.	8.0	96
43	Surface Science Contribution to the BEN Control on Si(100) and 3C-SiC(100): Towards Ultrathin Nanocrystalline Diamond Films. Chemical Vapor Deposition, 2008, 14, 187-195.	1.3	17
44	HIGHLY ORIENTED DIAMOND FILMS ON HETEROSUBSTRATES: CURRENT STATE OF THE ART AND REMAINING CHALLENGES. Surface Review and Letters, 2003, 10, 127-146.	1.1	27