Maurizio Angelone

List of Publications by Year
in descending order

71	1,014	430874	501196
papers	citations	18 h-index	28 g-index

71	71	71	990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Extreme ultraviolet single-crystal diamond detectors by chemical vapor deposition. Applied Physics Letters, 2005, 86, 193509.	3.3	127
2	High performance Li6F-diamond thermal neutron detectors. Applied Physics Letters, 2006, 89, 143509.	3.3	61
3	Extreme UV photodetectors based on CVD single crystal diamond in a p-type/intrinsic/metal configuration. Diamond and Related Materials, 2009, 18, 101-105.	3.9	41
4	Properties of para-Terphenyl as a Detector for <formula formulatype="inline"><tex Notation="TeX">$alpha $</tex></formula>, <formula formulatype="inline"><tex Notation="TeX">$eta $</tex></formula> and <formula formulatype="inline"><tex Notation="TeX">$gamma $</tex></formula> Radiation. IEEE Transactions on Nuclear Science, 2014, 61, 1483-1487.	2.0	35
5	Single crystal CVD diamonds as neutron detectors at JET. Fusion Engineering and Design, 2009, 84, 1156-1159.	1.9	33
6	Neutronics experiment on a helium cooled pebble bed (HCPB) breeder blanket mock-up. Fusion Engineering and Design, 2007, 82, 2095-2104.	1.9	32
7	Systematic study of the normal and pumped state of high efficiency diamond particle detectors grown by chemical vapor deposition. Journal of Applied Physics, 2001, 89, 1430-1435.	2.5	31
8	Synthetic single crystal diamond as a fission reactor neutron flux monitor. Applied Physics Letters, 2007, 90, 183509.	3.3	31
9	Neutronics experiments on HCPB and HCLL TBM mock-ups in preparation of nuclear measurements in ITER. Fusion Engineering and Design, 2010, 85, 1675-1680.	1.9	30
10	14 MeV Neutrons for 99Mo/99mTc Production: Experiments, Simulations and Perspectives. Molecules, 2018, 23, 1872.	3.8	30
11	Development of a mobile and repetitive plasma focus. Plasma Sources Science and Technology, 2004, 13, 272-277.	3.1	27
12	Synthesis and characterization of a single-crystal chemical-vapor-deposition diamond particle detector. Applied Physics Letters, 2005, 86, 213507.	3.3	27
13	Neutron Detectors Based Upon Artificial Single Crystal Diamond. IEEE Transactions on Nuclear Science, 2009, 56, 2275-2279.	2.0	25
14	Development of self-powered neutron detectors for neutron flux monitoring in HCLL and HCPB ITER-TBM. Fusion Engineering and Design, 2014, 89, 2194-2198.	1.9	22
15	Spectrometric Performances of Monocrystalline Artificial Diamond Detectors Operated at High Temperature. IEEE Transactions on Nuclear Science, 2012, 59, 2416-2423.	2.0	20
16	A Novel Microdosimeter Based Upon Artificial Single Crystal Diamond. IEEE Transactions on Nuclear Science, 2012, 59, 2409-2415.	2.0	20
17	Design and validation of a photon insensitive multidetector neutron spectrometer based on Dysprosium activation foils. Radiation Measurements, 2011, 46, 1712-1715.	1.4	19
18	Response of LaBr3(Ce) scintillators to 2.5 MeV fusion neutrons. Review of Scientific Instruments, 2013, 84, 123505.	1.3	19

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19	Extreme UV single crystal diamond Schottky photodiode in planar and transverse configuration. Diamond and Related Materials, 2010, 19, 78-82.	3.9	18
20	Sensitivity and uncertainty analyses of the tritium production in the HCPB breeder blanket mock-up experiment. Fusion Engineering and Design, 2007, 82, 2406-2412.	1.9	15
21	Properties of Diamond-Based Neutron Detectors Operated in Harsh Environments. Journal of Nuclear Engineering, 2021, 2, 422-470.	1.6	15
22	ITER relevant developments in neutron diagnostics during the JET Trace Tritium campaign. Fusion Engineering and Design, 2005, 74, 835-839.	1.9	14
23	Growth and characterization of single crystal CVD diamond film based nuclear detectors. Diamond and Related Materials, 2006, 15, 292-295.	3.9	14
24	Neutron detection at jet using artificial diamond detectors. Fusion Engineering and Design, 2007, 82, 1174-1178.	1.9	14
25	Comparing active and passive Bonner Sphere Spectrometers in the 2.5ÂMeV quasi mono-energetic neutron field of the ENEA Frascati Neutron Generator (FNG). Radiation Measurements, 2011, 46, 1757-1760.	1.4	14
26	X-Ray Detection by Using CVD Single Crystal Diamond Detector. IEEE Transactions on Nuclear Science, 2009, 56, 849-852.	2.0	13
27	Performance test of radiation detectors developed for ITER-TBM. Fusion Engineering and Design, 2018, 136, 1386-1390.	1.9	13
28	New developments in the diagnostics for the fusion products on JET in preparation for ITER (invited). Review of Scientific Instruments, 2010, 81, 10E136.	1.3	12
29	Thermal and fast neutron dosimetry using artificial single crystal diamond detectors. Radiation Measurements, 2011, 46, 1686-1689.	1.4	12
30	Development and application of CVD diamond detectors to 14 MeV neutron flux monitoring. Radiation Protection Dosimetry, 2004, 110, 233-236.	0.8	11
31	Neutronics analysis and nuclear heating measurement up to the TFC in a mock-up of the ITER inboard shield. Fusion Engineering and Design, 2012, 87, 910-915.	1.9	11
32	Feasibility study of an intense Dâ€“T fusion source: â€œThe New Sorgentinaâ€• Fusion Engineering and Design, 2014, 89, 2141-2144.	1.9	11
33	The F4E programme on nuclear data validation and nuclear instrumentation techniques for TBM in ITER. Fusion Engineering and Design, 2014, 89, 2169-2173.	1.9	10
34	Neutronics experiments, radiation detectors and nuclear techniques development in the EU in support of the TBM design for ITER. Fusion Engineering and Design, 2015, 96-97, 2-7.	1.9	10
35	Calibration of the neutron yield measurement system on FTU tokamak. Review of Scientific Instruments, 1990, 61, 3536-3539.	1.3	9
36	Analysis of traps in high quality CVD diamond films through the temperature dependence of carrier dynamics. Diamond and Related Materials, 2003, 12, 1733-1737.	3.9	9

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37	Neutronics design and supporting experimental activities in the EU. Fusion Engineering and Design, 2006, 81, 1169-1181.	1.9	9
38	Thermal neutron dosimeter by synthetic single crystal diamond devices. Applied Radiation and Isotopes, 2009, 67, S183-S185.	1.5	9
39	A plan of fusion neutron benchmark experiments using the Frascati neutron generator (FNG). Fusion Engineering and Design, 1991, 18, 293-296.	1.9	8
40	X-ray beam monitor made by thin-film CVD single-crystal diamond. Journal of Synchrotron Radiation, 2012, 19, 1015-1020.	2.4	8
41	Design optimization and performances of New Sorgentina Fusion Source (NSFS) supporting materials research. Fusion Engineering and Design, 2015, 96-97, 236-239.	1.9	8
42	Experimental and numerical calibration of the neutron activation system on the FTU tokamak. Review of Scientific Instruments, 1990, 61, 3157-3159.	1.3	7
43	Calibration of the Neutron Activation System on the Frascati Tokamak Upgrade: Comparison between Measured and Calculated Activation Response Coefficients. Fusion Science and Technology, 1991, 19, 431-439.	0.6	7
44	Trappingâ€“detrapping behavior in CVD diamond particle detectors. Diamond and Related Materials, 2001, 10, 645-649.	3.9	7
45	Measurement and analysis of neutron and gamma-ray flux spectra in SiC. Fusion Engineering and Design, 2003, 69, 379-383.	1.9	7
46	Sensitivity and uncertainty analyses of 14 MeV neutron benchmark experiment on silicon carbide. Fusion Engineering and Design, 2003, 69, 437-442.	1.9	7
47	New developments in JET neutron, Î³-ray and particle diagnostics with relevance to ITER. Nuclear Fusion, 2005, 45, S195-S202.	3.5	7
48	Experimental determination of electron and hole mean drift distance: Application to chemical vapor deposition diamond. Applied Physics Letters, 2003, 82, 4723-4725.	3.3	6
49	A dose rate experiment at JET for benchmarking the calculation direct one step method. Fusion Engineering and Design, 2007, 82, 2805-2811.	1.9	6
50	Title is missing!. Journal of Radioanalytical and Nuclear Chemistry, 2000, 244, 441-445.	1.5	5
51	Thermal detrapping analysis of pumping-related defects in diamond. Applied Physics Letters, 2003, 83, 3707-3709.	3.3	5
52	Separate measurement of electron and hole mean drift distance in CVD diamond. Diamond and Related Materials, 2004, 13, 929-933.	3.9	5
53	High collection efficiency in chemical vapor deposited diamond particle detectors. Diamond and Related Materials, 2000, 9, 998-1002.	3.9	4
54	Measurements of decay heat and validation of the European activation code system for fusion power plant applications. Fusion Engineering and Design, 2002, 63-64, 101-106.	1.9	4

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55	Neutron detection and dosimetry using polycrystalline CVD diamond detectors with high collection efficiency. Radiation Protection Dosimetry, 2006, 120, 345-348.	0.8	4
56	Multistrip synthetic single-crystal-diamond photodiode based on a p-type/intrinsic/Schottky metal transverse configuration. Europhysics Letters, 2011, 94, 28004.	2.0	4
57	Sensitivity and uncertainty analysis of the HCLL breeder blanket experiment in the frame of the EU fusion technology programme. Nuclear Engineering and Design, 2011, 241, 1243-1247.	1.7	4
58	Status and verification strategy for ITER neutronics. Fusion Engineering and Design, 2014, 89, 1865-1869.	1.9	4
59	Development of an high resolution neutron spectroscopy system using a diamond detector and a remote digital acquisition methodology. Fusion Engineering and Design, 2014, 89, 2184-2188.	1.9	4
60	Growth of detector grade CVD diamond films and microscopic interpretation of their efficiency and charge collection distance in the normal and pumped states. Diamond and Related Materials, 2001, 10, 1783-1787.	3.9	3
61	Analysis of traps in CVD diamond films through thermal depumping of nuclear detectors. Physica Status Solidi A, 2004, 201, 2542-2547.	1.7	3
62	Development of the DT${_}$GEM: A Gas Electron Multiplier Detector for Neutron Diagnostics in Controlled Thermonuclear Fusion. IEEE Transactions on Nuclear Science, 2009, 56, 1102-1107.	2.0	3
63	Mixed nâ€“Î³ fields dosimetry at low doses by means of different solid state dosimeters. Radiation Measurements, 2011, 46, 1737-1740.	1.4	3
64	Results of an integration study of a diagnostics port plug in ITER. Fusion Engineering and Design, 2013, 88, 602-606.	1.9	3
65	In phantom Dosimetric response of tooth enamel to neutrons. Radiation Protection Dosimetry, 2004, 110, 559-563.	0.8	2
66	Unconventional plasma focus devices. IEEE Transactions on Plasma Science, 2006, 34, 36-54.	1.3	1
67	Neutron Spectroscopy by Means of Artificial Diamond Detectors Using a Remote Read Out Scheme. IEEE Transactions on Nuclear Science, 2010, , .	2.0	1
68	Instrumentation for Neutron Flux and Tritium Production Rate Monitoring in the European TBM in ITER. IEEE Transactions on Plasma Science, 2014, 42, 3441-3444.	1.3	1
69	Neutronics experiment for the validation of activation properties of DEMO materials using real DT neutron spectrum at JET. Fusion Engineering and Design, 2006, 81, 1485-1490.	1.9	0
70	Progress in neutron diagnostics at JET. European Physical Journal D, 2006, 56, B118-B124.	0.4	0
71	Integral Benchmark Experiments on a Large Copper Block Using the GELINA Accelerator to Validate natCu Neutron Cross Sections From Different Neutron Cross-Sectional Databases. IEEE Transactions on Plasma Science, 2019, 47, 2943-2949.	1.3	0