Masataka Komori

List of Publications by Year
in descending order

53 papers	1,244 citations	361413 20 h-index	377865 34 g-index
54 all docs	54 docs citations	54 times ranked	896 citing authors

#	Article	IF	Citations
1	Influence of fragment reaction of relativistic heavy charged particles on heavy-ion radiotherapy. Physics in Medicine and Biology, 2003, 48, 1605-1623.	3.0	138
2	Irradiation System for HIMAC. Journal of Radiation Research, 2007, 48, A15-A25.	1.6	107
3	Spatial fragment distribution from a therapeutic pencil-like carbon beam in water. Physics in Medicine and Biology, 2005, 50, 3393-3403.	3.0	81
4	Luminescence imaging of water during protonâ€beam irradiation for range estimation. Medical Physics, 2015, 42, 6498-6506.	3.0	74
5	Luminescence imaging of water during carbon-ion irradiation for range estimation. Medical Physics, 2016, 43, 2455-2463.	3.0	66
6	Three-dimensional printer-generated patient-specific phantom for artificial in vivo dosimetry in radiotherapy quality assurance. Physica Medica, 2017, 44, 205-211.	0.7	66
7	New Accelerator Facility for Carbon-Ion Cancer-Therapy. Journal of Radiation Research, 2007, 48, A43-A54.	1.6	65
8	Luminescence imaging of water during alpha particle irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 6-13.	1.6	48
9	Luminescence imaging of water during irradiation of X-ray photons lower energy than Cerenkov-light threshold. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 832, 264-270.	1.6	42
10	Commissioning of a conformal irradiation system for heavy-ion radiotherapy using a layer-stacking method. Medical Physics, 2006, 33, 2989-2997.	3.0	38
11	Evaluation of beam wobbling methods for heavyâ€ion radiotherapy. Medical Physics, 2008, 35, 927-938.	3.0	35
12	Source of luminescence of water lower energy than the Cerenkov-light threshold during irradiation of carbon-ion. Journal of Physics Communications, 2018, 2, 065010.	1.2	30
13	Estimation and correction of produced light from prompt gamma photons on luminescence imaging of water for proton therapy dosimetry. Physics in Medicine and Biology, 2018, 63, 04NT02.	3.0	29
14	Dose contributions from large-angle scattered particles in therapeutic carbon beams. Medical Physics, 2006, 34, 193-198.	3.0	28
15	Fieldâ€size dependence of doses of therapeutic carbon beams. Medical Physics, 2007, 34, 4016-4022.	3.0	28
16	Validation of accuracy in image co-registration with computed tomography and magnetic resonance imaging in Gamma Knife radiosurgery. Journal of Radiation Research, 2014, 55, 924-933.	1.6	28
17	A patientâ€specific aperture system with an energy absorber for spot scanning proton beams: Verification for clinical application. Medical Physics, 2015, 42, 6999-7010.	3.0	28
18	Dynamic splitting of Gaussian pencil beams in heterogeneity-correction algorithms for radiotherapy with heavy charged particles. Physics in Medicine and Biology, 2009, 54, 2015-2027.	3.0	26

#	Article	IF	Citations
19	Addition of luminescence process in Monte Carlo simulation to precisely estimate the light emitted from water during proton and carbon-ion irradiation. Physics in Medicine and Biology, 2018, 63, 125019.	3.0	25
20	Monitoring of positron using high-energy gamma camera for proton therapy. Annals of Nuclear Medicine, 2015, 29, 268-275.	2.2	20
21	Optimization of Spiral-Wobbler System for Heavy-Ion Radiotherapy. Japanese Journal of Applied Physics, 2004, 43, 6463-6467.	1.5	19
22	High resolution Cerenkov light imaging of induced positron distribution in proton therapy. Medical Physics, 2014, 41, 111913.	3.0	18
23	Stability and linearity of luminescence imaging of water during irradiation of proton-beams and X-ray photons lower energy than the Cerenkov light threshold. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 883, 48-56.	1.6	17
24	Precise measurement of the cross section ofHe3(He3,2p)He4by usingHe3doubly charged beam. Physical Review C, 2004, 69, .	2.9	16
25	Geometric accuracy of 3D coordinates of the Leksell stereotactic skull frame in 1.5 Tesla- and 3.0 Tesla-magnetic resonance imaging: a comparison of three different fixation screw materials. Journal of Radiation Research, 2014, 55, 1184-1191.	1.6	12
26	Simulational study of a dosimetric comparison between a Gamma Knife treatment plan and an intensity-modulated radiotherapy plan for skull base tumors. Journal of Radiation Research, 2014, 55, 518-526.	1.6	12
27	Dosimetric comparison of absolute and relative dose distributions between tissue maximum ratio and convolution algorithms for acoustic neurinoma plans in Gamma Knife radiosurgery. Acta Neurochirurgica, 2014, 156, 1483-1489.	1.7	12
28	Responses of a diamond detector to high-LET charged particles. Physics in Medicine and Biology, 2005, 50, 2275-2289.	3.0	11
29	Scintillation imaging of air during proton and carbon-ion beam irradiations. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 833, 149-155.	1.6	11
30	Measurements of Dose-Averaged Linear Energy Transfer Distributions in Water Using CR-39 Plastic Nuclear Track Detector for Therapeutic Carbon Ion Beams. Japanese Journal of Applied Physics, 2005, 44, 8722-8726.	1.5	10
31	Effect of skull contours on dose calculations in Gamma Knife Perfexion stereotactic radiosurgery. Journal of Applied Clinical Medical Physics, 2014, 15, 28-38.	1.9	10
32	Efficacy of magnetic resonance imaging at 3ÂT compared with 1.5ÂT in small pituitary tumors for stereotactic radiosurgery planning. Japanese Journal of Radiology, 2014, 32, 22-29.	2.4	9
33	Estimation of the optical errors on the luminescence imaging of water for proton beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 888, 163-168.	1.6	9
34	Three-dimensional (3D) dose distribution measurements of proton beam using a glass plate. Biomedical Physics and Engineering Express, 2019, 5, 045033.	1.2	9
35	Assessment of spatial uncertainty in computed tomography-based Gamma Knife stereotactic radiosurgery process with automated positioning system. Acta Neurochirurgica, 2014, 156, 1929-1935.	1.7	7
36	Geometric accuracy in three-dimensional coordinates of Leksell stereotactic skull frame with wide-bore 1.5-T MRI compared with conventional 1.5-T MRI. Journal of Medical Imaging and Radiation Oncology, 2014, 58, 595-600.	1.8	7

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37	High brightness 3He ion source and plasma target for nuclear astrophysical applications. Review of Scientific Instruments, 1998, 69, 1032-1034.	1.3	6
38	Estimation of the three-dimensional (3D) dose distribution of electron beams from medical linear accelerator (LINAC) using plastic scintillator plate. Radiation Measurements, 2019, 124, 103-108.	1.4	6
39	The basic study of a bi-material range compensator for improving dose uniformity for proton therapy. Physics in Medicine and Biology, 2008, 53, 5555-5569.	3.0	5
40	Development of an irradiation method with lateral modulation of SOBP width using a coneâ€type filter for carbon ion beams. Medical Physics, 2009, 36, 2222-2227.	3.0	5
41	Luminescence imaging of biological subjects during X-ray irradiations lower energy than Cerenkov-light threshold. Optical Review, 2017, 24, 428-435.	2.0	5
42	Luminescence imaging of water during uniform-field irradiation by spot scanning proton beams. Physics in Medicine and Biology, 2018, 63, 11NT01.	3.0	5
43	Effective usage of a clearance check to avoid a collision in Gamma Knife Perfexion radiosurgery with the Leksell skull frame. Journal of Radiation Research, 2014, 55, 1192-1198.	1.6	4
44	Development of a prototype Open-close positron emission tomography system. Review of Scientific Instruments, 2015, 86, 084301.	1.3	4
45	MEASUREMENT OF INTERNAL RADIATION DOSE DISTRIBUTION IN CT EXAMINATIONS USING POLYETHYLENE TEREPHTHALATE RESIN. Radiation Protection Dosimetry, 2018, 181, 303-309.	0.8	3
46	Imaging of fragment particles in water by nuclear spallation during carbon-ion irradiation. Physics in Medicine and Biology, 2019, 64, 13NT01.	3.0	2
47	Measurements of temporal response of luminescence of water at lower energy than Cerenkov-light threshold during carbon-ion irradiation. Biomedical Physics and Engineering Express, 2020, 6, 045002.	1.2	2
48	Radioluminescence by synchrotron radiation with lower energy than the Cherenkov light threshold in water. Journal of Physics Communications, 2020, 4, 075002.	1.2	2
49	Compact carbon-therapy facility and next-generation irradiation scheme. Radiation Physics and Chemistry, 2008, 77, 1148-1152.	2.8	1
50	Microdosimetric calculation of penumbra for biological dose in wobbled carbon-ion beams with Monte Carlo Method. Radiological Physics and Technology, 2013, 6, 415-422.	1.9	1
51	Status of a Carbon-Ion Therapy Facility and Development for Advanced Treatment. Journal of the Korean Physical Society, 2008, 53, 3709-3713.	0.7	1
52	Development of an x-ray-opaque-marker system for quantitative phantom positioning in patient-specific quality assurance. Physica Medica, 2021, 91, 121-130.	0.7	1
53	OPTIMIZATION OF AN ADDITIONAL COLLIMATOR IN A BEAM DELIVERY SYSTEM FOR REDUCTION OF THE SECONDARY NEUTRON EXPOSURE IN PASSIVE CARBON-ION THERAPY. Radiation Protection Dosimetry, 2019, 184, 28-35.	0.8	0