

Ikurou Umezu

List of Publications by Year in descending order

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35
papers

508
citations

933447

10
h-index

642732

23
g-index

35
all docs

35
docs citations

35
times ranked

422
citing authors

#	ARTICLE	IF	CITATIONS
1	Expansion of laser-induced plume after the passage of a counter shock wave through a background gas. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	2
2	Effect of counter shock wave on the expanding plume. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	3
3	Numerical Analysis of Behavior on Opposing Unsteady Supersonic Jets in a Flow Field with Shields. Materials Science Forum, 2018, 910, 96-101.	0.3	4
4	e-beam irradiation effects on IR absorption bands in single-walled carbon nanotubes. Solid State Communications, 2017, 250, 119-122.	1.9	4
5	Pulsed-laser-deposited TiO ₂ nanocrystalline films supporting Au nanoparticles for visible-light-operating plasmonic photocatalysts. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	3
6	Dynamics of colliding laser ablation plumes in background gas. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	4
7	Correlation between crystallinity and mid-infrared optical absorption spectra of silicon supersaturated with sulfur. Materials Research Society Symposia Proceedings, 2015, 1738, 1.	0.1	0
8	Pulsed laser irradiation-induced microstructures in the Mn ion implanted Si. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 110-113.	1.4	2
9	Hyperdoping of silicon with deep-level impurities by pulsed YAG laser melting. Applied Physics A: Materials Science and Processing, 2014, 117, 155-159.	2.3	12
10	Structural properties of TiO ₂ nanocrystallites condensed in vapor-phase for photocatalyst applications. Applied Physics A: Materials Science and Processing, 2014, 117, 223-227.	2.3	4
11	Effects of collision between two plumes on plume expansion dynamics during pulsed laser ablation in background gas. Applied Physics A: Materials Science and Processing, 2013, 110, 629-632.	2.3	8
12	Hierarchical pattern structure in TiO ₂ nano-aggregates prepared by pulsed laser ablation in background gas. , 2013, , .		0
13	Non-equilibrium Growth Processes of Porous TiO ₂ Nanocrystal-films during Pulsed Laser Ablation. Materials Research Society Symposia Proceedings, 2013, 1497, 1.	0.1	0
14	Emergence of very broad infrared absorption band by hyperdoping of silicon with chalcogens. Journal of Applied Physics, 2013, 113, .	2.5	70
15	Synthesis of GaN nanocrystallites by pulsed laser ablation in pure nitrogen background gases. Applied Physics A: Materials Science and Processing, 2011, 104, 907-911.	2.3	7
16	Effect of Non-equilibrium Pulsed Ejection of Si Species into Background Gas on the Formation of Si Nanocrystallite and Nanocrystal-film. Materials Research Society Symposia Proceedings, 2011, 1305, 1.	0.1	0
17	Emission induced by collision of two plumes during pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2010, 101, 133-136.	2.3	9
18	Fabrication and subband gap optical properties of silicon supersaturated with chalcogens by ion implantation and pulsed laser melting. Journal of Applied Physics, 2010, 107, .	2.5	96

#	ARTICLE	IF	CITATIONS
19	Formation of core-shell structured silicon nanoparticles during pulsed laser ablation. Journal of Applied Physics, 2010, 107, 094318.	2.5	11
20	Formation of surface stabilized Si nanocrystal by pulsed laser ablation in hydrogen gas. Applied Physics A: Materials Science and Processing, 2008, 93, 717-720.	2.3	5
21	InTaO ₄ -based nanostructures synthesized by reactive pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2008, 93, 961-966.	2.3	7
22	Oxidation processes of surface hydrogenated silicon nanocrystallites prepared by pulsed laser ablation and their effects on the photoluminescence wavelength. Journal of Applied Physics, 2008, 103, 024305.	2.5	16
23	Surface hydrogenation of silicon nanocrystallites during pulsed laser ablation of silicon target in hydrogen background gas. Journal of Applied Physics, 2008, 103, 114309.	2.5	14
24	Formation of nanoscale fine-structured silicon by pulsed laser ablation in hydrogen background gas. Physical Review B, 2007, 76, .	3.2	43
25	Fractal Growth Of Silicon Nanocrystallites During Pulsed Laser Ablation. AIP Conference Proceedings, 2007, , .	0.4	0
26	Effect of Surface Oxidation on Optical Absorption of Silicon Nanocrystallites. AIP Conference Proceedings, 2007, , .	0.4	0
27	Correlation between electronic structure and chemical bond on the surface of hydrogenated silicon nanocrystallites. AIP Conference Proceedings, 2005, , .	0.4	0
28	Correlation between PL emission band and growth of oxide layer on surface of silicon nanocrystallites. AIP Conference Proceedings, 2005, , .	0.4	0
29	Preparation of surface controlled silicon nanocrystallites by pulsed laser ablation. AIP Conference Proceedings, 2005, , .	0.4	0
30	Structural and optical properties of surface-hydrogenated silicon nanocrystallites prepared by reactive pulsed laser ablation. Journal Physics D: Applied Physics, 2005, 38, 3507-3511.	2.8	17
31	Reaction between nitrogen gas and silicon species during pulsed laser ablation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1680-1682.	2.1	6
32	Effect of gas pressure on reactive pulsed laser ablation of a silicon target. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 84-86.	2.1	8
33	Effect of structure on radiative recombination processes in amorphous silicon suboxide prepared by rf sputtering. Journal of Applied Physics, 2002, 92, 5936-5941.	2.5	15
34	Mechanisms of Visible Photoluminescence from Size-Controlled Silicon Nanoparticles. Materials Research Society Symposia Proceedings, 2002, 737, 325.	0.1	0
35	Optical Properties of Silicon Nanocrystallites Prepared by Excimer Laser Ablation in Inert Gas. Japanese Journal of Applied Physics, 1996, 35, 1361-1365.	1.5	138