Frank Joseph Cherne Iii

List of Publications by Year
in descending order

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29	797	687363 13	677142 22
papers	citations	h-index	g-index

29	29	29	327
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Examining the high-pressure response and shock melting in cerium using optical pyrometry. Physical Review B, 2020, 102, .	3.2	13
2	Dynamic experiments to study the Î±â˜Îµ phase transition in cerium. Journal of Applied Physics, 2020, 127, 095901.	2.5	10
3	A numerical study of bubble and spike velocities in shock-driven liquid metals. Journal of Applied Physics, 2018, 123, .	2.5	20
4	Ejecta Production from Second Shock: Numerical Simulations and Experiments. Journal of Dynamic Behavior of Materials, 2017, 3, 265-279.	1.7	16
5	A Source Model for Ejecta. Journal of Dynamic Behavior of Materials, 2017, 3, 316-320.	1.7	23
6	Dynamical and transport properties of liquid gallium at high pressures. Physical Review E, 2015, 91, 063101.	2.1	7
7	Jet formation in cerium metal to examine material strength. Journal of Applied Physics, 2015, 118, .	2.5	41
8	On shock driven jetting of liquid from non-sinusoidal surfaces into a vacuum. Journal of Applied Physics, 2015, 118, .	2.5	67
9	Explosively driven two-shockwave tools with applications. Journal of Physics: Conference Series, 2014, 500, 112014.	0.4	10
10	Second shock ejecta measurements with an explosively driven two-shockwave drive. Journal of Applied Physics, 2014, 116, .	2.5	46
11	Enhancing impact velocity with shock interactions in a restricting die. Journal of Physics: Conference Series, 2014, 500, 142001.	0.4	0
12	Ejecta source model based on the nonlinear Richtmyer-Meshkov instability. Journal of Applied Physics, 2013, 113, .	2.5	105
13	Unstable Richtmyerâ€“Meshkov growth of solid and liquid metals in vacuum. Journal of Fluid Mechanics, 2012, 703, 60-84.	3.4	208
14	Dynamic compression of cerium in the low-pressure Î³ â˜ Î± region of the phase diagram. Journal of Applied Physics, 2012, 112, .	2.5	20
15	Measurement of the sound velocities behind the shock wave front in tin. Combustion, Explosion and Shock Waves, 2012, 48, 112-118.	0.8	6
16	Study of cerium phase transitions in shock wave experiments. Journal of Experimental and Theoretical Physics, 2011, 112, 212-219.	0.9	7
17	Phase states of dynamically compressed cerium. Physical Review B, 2011, 84, .	3.2	16
18	Use of the Richtmyer-Meshkov Instability to Infer Yield Stress at High-Energy Densities. Physical Review Letters, 2011, 107, 264502.	7.8	90

#	Article	IF	Citations
19	Shock melting of cerium. Physical Review B, 2010, 81, .	3.2	41
20	IMPLEMENTATION OF A COMPLEX MULTI-PHASE EQUATION OF STATE FOR CERIUM AND ITS CORRELATION WITH EXPERIMENT. , 2009, , .		1
21	MEASUREMENT OF SOUND VELOCITIES IN SHOCK-COMPRESSED TIN UNDER PRESSURES UP TO 150 GPa. , 2009, , .		0
22	Predictions from the equation of state of cerium yield interesting insights into experimental results. , 2009, , .		0
23	STUDY OF PHASE TRANSITIONS IN CERIUM BY PVDF GAUGE. , 2008, , .		0
24	MEASUREMENT OF SOUND VELOCITIES AND SHEAR STRENGTH OF CERIUM UNDER SHOCK COMPRESSION. , 2008, , .		0
25	Measurement of sound velocities and shear strength of cerium under shock compression. Journal of Physics: Conference Series, 2008, 121, 072003.	0.4	4
26	EXAMINATION OF THE SPALLATION BEHAVIOR OF CERIUM METAL. , 2008, , .		0
27	Dynamic Compression of Iron Single Crystals. AIP Conference Proceedings, 2006, , .	0.4	12
28	Non-classical nucleation in supercooled nickel. Modelling and Simulation in Materials Science and Engineering, 2004, 12, 1063-1068.	2.0	33
29	Electronic and atomic structure of liquid potassium via path integral molecular dynamics with non-local quantum exchange. Modelling and Simulation in Materials Science and Engineering, 1996, 4, 137-150.	2.0	1