Eeuwe S Zijlstra

List of Publications by Year
in descending order

27 papers	602 citations	567281 15 h-index	580821 25 g-index
28 all docs	28 docs citations	28 times ranked	561 citing authors

#	Article	IF	Citations
1	Laser-induced phonon-phonon interactions in bismuth. Physical Review B, 2006, 74, .	3.2	84
2	Anharmonic Noninertial Lattice Dynamics during Ultrafast Nonthermal Melting of InSb. Physical Review Letters, 2008, 101, 135701.	7.8	66
3	Fractional Diffusion in Silicon. Advanced Materials, 2013, 25, 5605-5608.	21.0	50
4	Squeezed Thermal Phonons Precurse Nonthermal Melting of Silicon as a Function of Fluence. Physical Review X, 2013, 3, .	8.9	46
5	Coherent and incoherent structural dynamics in laser-excited antimony. Physical Review B, 2017, 95, .	3.2	35
6	Ultrafast Evolution of the Excited-State Potential Energy Surface of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>TiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Single Crystals Induced by Carrier Cooling. Physical Review Letters, 2013, 110, 067402.	7.8	32
7	Femtosecond-laser-induced bond breaking and structural modifications in silicon, TiO $$_2$$ 2 , and defective graphene: an ab initio molecular dynamics study. Applied Physics A: Materials Science and Processing, 2014, 114, 1-9.	2.3	32
8	Laser-induced solidâ€"solid phase transition in As under pressure: a theoretical prediction. New Journal of Physics, 2008, 10, 033010.	2.9	31
9	Signatures of nonthermal melting. Structural Dynamics, 2015, 2, 054101.	2.3	28
10	Optimized Gaussian basis sets for Goedeckerâ€"Teterâ€"Hutter pseudopotentials. Modelling and Simulation in Materials Science and Engineering, 2009, 17, 015009.	2.0	25
11	Silicon before the bonds break. Applied Physics A: Materials Science and Processing, 2014, 117, 1-5.	2.3	21
12	Quasimomentum-Space Image for Ultrafast Melting of Silicon. Physical Review Letters, 2016, 116, 153901.	7.8	20
13	Modeling of material properties after ultrashort laser and XUV excitation. Applied Physics A: Materials Science and Processing, 2013, 110, 519-528.	2.3	18
14	Ultrafast structural phenomena: theory of phonon frequency changes and simulations with code for highly excited valence electron systems. Journal of the Optical Society of America B: Optical Physics, 2014, 31, C22.	2.1	18
15	Self-Learning Method for Construction of Analytical Interatomic Potentials to Describe Laser-Excited Materials. Physical Review Letters, 2020, 124, 085501.	7.8	16
16	Comment on â€œDirectly Observing Squeezed Phonon States with Femtosecond X-Ray Diffractionâ€. Physical Review Letters, 2010, 104, 029601; author reply 029602.	7.8	14
17	Electronic origin of bond softening and hardening in femtosecond-laser-excited magnesium. New Journal of Physics, 2014, 16, 013002.	2.9	14
18	Isostructural elemental crystals in the presence of hot carriers. Physical Review B, 2015, 91, .	3.2	12

#	Article	IF	Citations
19	Simulations of laser-induced dynamics in free-standing thin silicon films. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	8
20	Nonequilibrium dynamics of the phonon gas in ultrafast-excited antimony. Physical Review Materials, 2017, 1, .	2.4	6
21	Mechanical properties of boron-nitride nanotubes after intense femtosecond-laser excitation. Nanotechnology, 2014, 25, 145701.	2.6	5
22	Molecular dynamics simulations of a femtosecond-laser-induced solid-to-solid transition in antimony. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	5
23	Melting of Al Induced by Laser Excitation of 2p Holes. Materials Research Letters, 2015, 3, 149-155.	8.7	4
24	Controlling Three Laser-Excited Coherent Phonon Modes in Boron Nitride Nanotubes To Produce Ultrashort Shaped Terahertz Pulses: Implications for Memory Devices. ACS Applied Nano Materials, 2018, 1, 6932-6937.	5.0	4
25	Ab initio molecular dynamics simulations of femtosecond-laser-induced anti-Peierls transition in antimony. Proceedings of SPIE, 2016, , .	0.8	3
26	Femtosecond-laser-induced destruction of boron-nitride nanotubes and boron-nitride doped graphene. , 2013, , .		0
27	Simulations of Highly-Excited Silicon. Silicon, 2018, 10, 567-568.	3.3	0