

Errata

Erratum: Numerical studies of femtosecond carrier dynamics in GaAs [Phys. Rev. B 42, 3423 (1990)]

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The energy scales in Figs. 7(b)–7(d) should read from 0.0 to 0.3 eV, not from 0.0 to 0.6 eV. The scales on Fig. 7(a) are correct.

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Erratum: Role of forms of exchange and correlation used in generating pseudopotentials [Phys. Rev. B 42, 5057 (1990)]

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Regarding the details of the calculations by Müller and co-workers (cited in Ref. 27 of our paper), they used core polarizabilities obtained theoretically, though we erroneously stated they were from experiment. Also, they performed full-core rather than pseudopotential valence calculations, whereas we indicated the latter. There were also typographical errors in the headings in Table II. Therefore we repeat the table here with the corrected headings. The numbers remain unchanged.

TABLE II. Atom and dimer properties of silicon. Electron affinity (EA) and various s - p transfer energies and ionization potentials (IP) for atomic silicon and bond length R_e (Å), dissociative energy D_e (eV) and vibrational frequency ω_e (cm^{-1}) of the silicon dimer according to experiment (Ref. 39 for affinity; Ref. 38 for other atomic properties; Ref. 41 for molecule), and LDAX, LDAX-SIC, and LDA (Ref. 31) pseudo-Hamiltonian DMC calculations. DMC uncertainties in energies were $\lesssim 0.1$ eV, in the bond length 0.02 Å, in the frequency about 30 cm^{-1} . Zero-point motion effects on D_e were included.

	Atomic properties						
	EA	$E_{sp^3} - E_{s^2p^2}$	1st IP	$E_{sp^2} - E_{s^2p}$	2nd IP	$E_{sp} - E_{s^2}$	3rd IP
Experimental	1.39	4.13	8.15	5.47	16.34	6.53	33.46
LDAX	1.28	3.86	7.97	5.41	16.37	6.49	33.33
LDAX-SIC	1.42	3.92	8.12	5.10	16.29	6.45	33.33
LDA	1.39	3.80	8.18	5.08	16.48	6.34	33.62
Dimer properties							
	R_e	D_e	ω_e				
Experimental	4.244	3.25	511				
LDAX	4.27	3.49	596				
LDAX-SIC	4.35	3.09	550				
LDA	4.33	3.19	480				