

PHYSICAL REVIEW B

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1098-0121)

PERIODICALS
Postmaster send address changes to:
APS Subscription Services
Suite 1N01
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 79, NUMBER 4

CONTENTS

JANUARY 2009-15(II)

RAPID COMMUNICATIONS

Electronic structure: wide-band, narrow-band, and strongly correlated systems

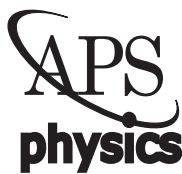
- Directive emission from high- Q photonic crystal cavities through band folding (*4 pages*) 041101(R)
Nguyen-Vi-Quynh Tran, Sylvain Combri , and Alfredo De Rossi
- All-electron Bethe-Salpeter calculations for shallow-core x-ray absorption near-edge structures (*4 pages*) 041102(R)
W. Olovsson, I. Tanaka, T. Mizoguchi, P. Puschnig, and C. Ambrosch-Draxl

Semiconductors II: surfaces, interfaces, microstructures, and related topics

- Photoluminescence dynamics and reduced Auger recombination in $\text{Si}_{1-x}\text{Ge}_x/\text{Si}$ superlattices under high-density photoexcitation (*4 pages*) 041301(R)
Takeshi Tayagaki, Susumu Fukatsu, and Yoshihiko Kanemitsu
- Strong magnetic coupling between an electronic spin qubit and a mechanical resonator (*4 pages*) 041302(R)
P. Rabl, P. Cappellaro, M. V. Gurudev Dutt, L. Jiang, J. R. Maze, and M. D. Lukin
- Giant frictional drag in strongly interacting bilayers near filling factor one (*4 pages*) 041303(R)
E. Tutuc, R. Pillarisetty, and M. Shayegan
- Numerical evidence for non-Abelian quantum liquids in the lowest Landau level (*4 pages*) 041304(R)
Arkadiusz W js
- Density imbalance effect on the Coulomb drag upturn in an undoped electron-hole bilayer (*4 pages*) 041305(R)
Christian P. Morath, John A. Seamons, John L. Reno, and Michael P. Lilly
- Impact of hydrogen on indium incorporation at m -plane and c -plane $\text{In}_{0.25}\text{Ga}_{0.75}\text{N}$ surfaces: First-principles calculations (*4 pages*) 041306(R)
John E. Northrup
- Spin filtering through a single impurity in a GaAs/AlAs/GaAs resonant tunneling device (*4 pages*) 041307(R)
B. Jouault, M. Gryglas, M. Baj, A. Cavanna, U. Gennser, G. Faini, and D. K. Maude
- Renormalization factor and effective mass of the two-dimensional electron gas (*4 pages*) 041308(R)
Markus Holzmann, Bernard Bernu, Valerio Olevano, Richard M. Martin, and David M. Ceperley

Surface physics, nanoscale physics, low-dimensional systems

- High-resolution surface plasmon imaging of gold nanoparticles by energy-filtered transmission electron microscopy (*4 pages*) 041401(R)
Bernhard Schaffer, Ulrich Hohenester, Andreas Tr gler, and Ferdinand Hofer



Copyright 2009 by The American Physical Society



1098-0121(20090115)79:4;1-0

(Continued)

Selected for a Viewpoint in *Physics*. Please visit <http://physics.aps.org/>.

The editors and referees of PRB find these papers to be of particular interest, importance, or clarity. Please see our Announcement Phys. Rev. B 77, 130001 (2008).