Collect. Czech. Chem. Commun.
2005, *70*, 539–549

The Site of Action of General Anesthetics – A Chemical Approach

Camille Sandorfy

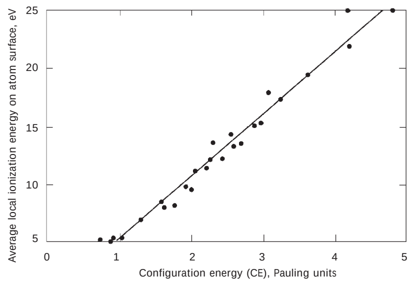
C–H···X

in protein–carbohydrate interactions

Collect. Czech. Chem. Commun.
2005, *70*, 550–558

Electronegativity and Average Local Ionization Energy

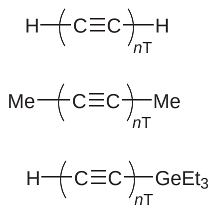
Peter Politzer, Jane S. Murray and M. Edward Grice



Collect. Czech. Chem. Commun.
2005, *70*, 559–578

Electronic Spectra of Conjugated Polyynes, Cumulenes and Related Systems: A Theoretical Study

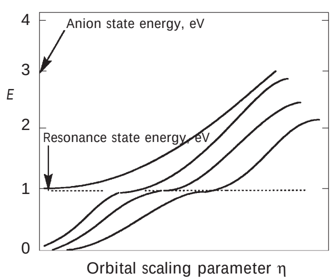
Rudolf Zahradník, Martin Srnec and Zdeněk Havlas



Collect. Czech. Chem. Commun.
2005, *70*, 579–604

Equations of Motion Theory for Electron Affinities

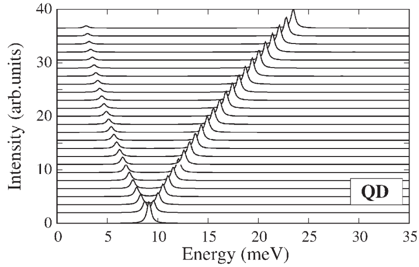
Jack Simons



Collect. Czech. Chem. Commun.
2005, *70*, 605–620

Far-Infrared Absorption of Self-Assembled Semiconductor Rings

Josep Planelles and Juan I. Climente



Collect. Czech. Chem. Commun.
2005, *70*, 621–637

Quantum Mechanics Needs No Interpretation

Lubomír Skála and Vojtěch Kapsa

$$-\sum_{j=1}^{N} \frac{\hbar^2}{2m_j}\Delta_j \psi = i\hbar \frac{\partial \psi}{\partial t}$$

$$\frac{\partial S}{\partial t} + \sum_{j=1}^{N} \frac{(\nabla_j S)^2}{2m_j} = 0 .$$

Collect. Czech. Chem. Commun.
2005, *70*, 638–656

On the Size Consistency of Multireference CEPA Methods

Paul J. A. Ruttink

$$\langle \Phi_I^{\mathrm{P}} | \hat{H} - E | \Psi \rangle = \langle \Phi_I^{\mathrm{P}} | \hat{H} - E_0 - E_{\mathrm{C}} | \Psi \rangle = 0$$

$$\langle \Phi_J^{\mathrm{Q}} | \hat{H} - E + K_J | \Psi \rangle = \langle \Phi_J^{\mathrm{Q}} | \hat{H} - E_0 - E_{\mathrm{C}} | \Psi \rangle + K_J c_J = 0$$

Collect. Czech. Chem. Commun.
2005, *70*, 657–676

Permutational Symmetry and Molecular Structure Calculations

Brian Sutcliffe

$$\mathrm{H}'(\mathbf{t})\Psi_{\mathbf{n}}(\mathbf{t}) = E_{\mathbf{n}}\Psi_{\mathbf{n}}(\mathbf{t})$$

Collect. Czech. Chem. Commun.
2005, *70*, 677–688

Infinite-Order Regular Approximation by the Metric Perturbation

Andrzej J. Sadlej

$$\mathbf{H}_0 \boldsymbol{\Psi} = E\boldsymbol{\Psi}$$

$$\boldsymbol{\Psi} = \begin{pmatrix} \boldsymbol{\Psi}_{\mathrm{L}} \\ \boldsymbol{\Psi}_{\mathrm{S}} \end{pmatrix}$$

$$\mathbf{H}_0 = c\boldsymbol{\alpha}\boldsymbol{p} + \beta c^2 + (V - c^2)I =$$

$$= \begin{pmatrix} V\mathbf{1} & c\boldsymbol{\sigma}\boldsymbol{p} \\ c\boldsymbol{\sigma}\boldsymbol{p} & (V - 2c^2)\mathbf{1} \end{pmatrix}$$