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Abstract:Magneto-oscillations of the electric dipole moment are predicted and analyzed for a single-electron nanoscale ring pierced by a magnetic flux (an Aharonov-Bohm ring) and subjected to an electric field in the ring's plane.These oscillations are accompanied by periodic changes in the selection rules for inter-level optical transitions in the ring allowing control of polarization properties of the associated terahertz radiation. (© 2012 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim).
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