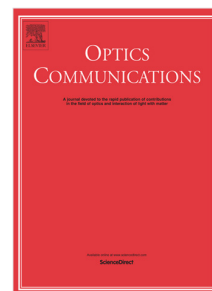


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Longitudinal magneto-optical Kerr effect in two-dimensional orderly nanocorrugation made from magnetic quadrilayer films

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1 Longitudinal magneto-optical Kerr effect in two-dimensional orderly
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3 nanocorrugation made from magnetic quadrilayer films
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23 ABSTRACT
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25 In this report, it shows the results of a joint experimental and theoretical
26
27 investigation focused on magneto-optical properties of two-dimensional orderly
28
29 nanocorrugation made from quadrilayer films. Our results show the optical and
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31 magneto-optical anisotropies in the large-area of two-dimensional orderly
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33 nanocorrugation film. Enhancement of the magneto-optical signal in the nanostructure
34
35 is clearly observed with respect to the surface plasmon resonance and cavity effect,
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37 which varies with the azimuthal angle of incident plane. It is noteworthy that the
38
39 magneto-optical Kerr reversal of the system can be manipulated significantly by the
40
41 coupling between surface plasmon resonance and cavity effect.
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50 *Keywords*: Magneto-optical materials; Surface plasmons; Kerr effect.
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