

G"@ ö - Ñ ¼ î í + L 6 2 5 œ - Ñ ¼ î
G È å ± Û p\$!\$x"@ ö"@#.%Ê'2 Ð!! - Ñ ¼ î

Novel two-dimensional electron systems at the surface of transition-metal oxides

1n OE \$QGUpV) 6DQWDQGHU 6\UR
&6160 8QLYHUVLWp625U±VU6R\GKLPD 8QLYHU
¥ ì ° v ¥>&!F>' >8
d #. Û%Ê'2&É & 1ÿ

7UDQVLWLRQ PHWDQ RPHGHUNDEOM ISUKFSGHUW LHWDCQGDWU G V H
VXFK DV KLJK WHPSHUDWXUH VXSHUFRUODGXFLWLLYRQX R7UKHPH
WZR GLPHQVLRQDO HOHFWURQ JDVHDUQH VWLQQ WKZV IXQFFW
WKHVH PDWHULDOR IRU IXWXUH DSSORLFDUW MKQHV S\$GGLFALLOR
QHZ SK\VLV HPHUJLQJ IURP WKH FRIDELVQLRQGHQWIDHQFGVORRZIO
FRQILQHPHQW

,Q WKLW WDN , ZLOO ILUVW(*LVQWDURGXIFOLR)SIO\GDWBRKYHHU\X
YDULRXV LQVXODWLQJ 782QWXPFSDDVD@OMFKMLUQWRURQW2FSX
.7D2 > @ RU WKH SKRWRTKBDQDQ\ZWOOLZKRZ KRZ WKH FK
WHUPLQDWLRQ DOORZV WDLORULQWUMKM RDMFKMURIQLF*WW
WKH ZD\ IRU WKH TXHVW RI WRSROR)XIFDQHVWBRWHV ,LQLOR
VWXGLHV RI PDJQHWLVP LQ WKH '(LHQWVSKH@LZXLUQDFOIRI,
GHVFULEH RXU UHFHQW GHYHORSPHIQWURLIFDWHPSORHIXQLY(
RWKHU R[LGHV VXFK DV VZKHFIKIDLOFORQZHFPHULVX% DQU2LWV V
±DQG LV WKXV SURPLVLQJ IRU WKH UHDOL]DWLRQ RI R[LGH

- > @ \$) 6DQWQGHUWUR
- > @ \$) 6DQWQGHUV6\SHRY % 5
- > @ 7 &et 5|GKQV 5HY % 5
- > @ & %DUH6DIOH5HS
- > @ 7 &et 5|GKQ\V 5HY \$SSOLHG
- > @ 7 7DQLXDKL &RPPXQ GRL 1&2006
- > @ 7 &et 5|SBO 0DWHU GRL DGPD

%Ê'2&É 1 - Ñ ¼ î b1 &É% [M
,\>8 R#ã ' M>& : U œ&É Û%Ê'2 - å ± î>' í Æ)z



a0ö Ç
9x ? *> J-& Æ >' Ž5 &ñ M>& Æ >
Ç § J-& Æ >' OE § Û µ>& Æ >
" _ x h>& Æ >
É , \
' É>& Æ >

