

substance: V₂O₃

property: characteristic peak energies in optical spectra

(RT values)

<i>E</i>	0.48 eV	thermoreflectance		71S
	0.95 eV	thermo reflectance	assignment acc. to [76S]: plasmon	76S
	1.45 eV	reflectance	$e_{\pi} \rightarrow a_1$	71V
	1.4 eV	thermoreflectance, $E \perp c$		76S
	1.4 eV	electroreflectance		71V
	1.1 eV	SXS	SXS: soft X-ray spectrum	69F
	1.9 eV	reflectance	$e_{\pi} \rightarrow e_{\pi}^*$	71V
	1.9 eV	thermoreflectance, $E \parallel c$		76S
	2.0 eV	electroreflectance	shoulder	71V
	1.9 eV	SXS		69F
	2.3...2.7 eV	reflectance	$e_{\pi} \rightarrow a_1^*$	71V
	2.2 eV	thermoreflectance,- $E \perp c$		76S
	2.98 eV	thermoreflectance	$e_{\pi} \rightarrow e_{\sigma}$	71S
	2.9 eV	electroreflectance		71V
	2.9 eV	SXS		69F
	3.4 eV	thermoreflectance, unpolarized	O2p \rightarrow 3d $_{\pi}$	76S
	4.0 eV	electroreflectance		71V
	3.5 eV	SXS		69F
	4.6 eV	reflectance	O2p \rightarrow a ₁ , a ₁ [*]	71V
	4.9 eV	thermoreflectance, unpolarized		76S
	4.5 eV	electroreflectance		71V
	5.6 eV	reflectance	O2p \rightarrow a ₁ , a ₁ [*]	71V
	5.5 eV	thermoreflectance, unpolarized		76S
	5.5 eV	electroreflectance	shoulder	71V
	5.5(1.0) eV	EELS	assignment: O2p \rightarrow V3d	74S
	10.4(1) eV	EELS	surface plasmon	
	22.1(1) eV	EELS	volume plasmon	
	32.3(2) eV	EELS	volume and surface plasmon	
	40.2(5) eV	EELS	VM _{2,3} (V:valence orbitals, M _i : 3s, 3p core levels)	
	49.8(1) eV	EELS	localized interband transition	
	68.5(5)	EELS	VM ₁	

References:

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