



Measured Value	Method/Apparatus	Temperature °C	Material/Sample Size in mm/ml	Additional Information	Contact	Institute	e-mail	WWW
thermal conductivity	plate apparatus	-20 ... 50	solids 250 x 250 thickness: < 70		Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	plate apparatus	300 ... 1450	solids 300 x 300 thickness: < 120		Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	plate apparatus	300 ... 1650	solids 400 x 400 thickness: < 110		Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	radial heat flow apparatus	400 ... 1450	solids outer Ø: 60 inner Ø: 12 ... 16 h: 180	various inert atmospheres	Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	radial heat flow apparatus	100 ... 1200	packed beds	various atmospheres	Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	guarded heat flow meter	30 ... 60	solids Ø: 6 l: 35		Dr. Rhena Wulf	TU Bergakademie Freiberg	Rhena.Wulf@iwtt.tu-freiberg.de	www.tu-freiberg.de
thermal conductivity	plate apparatus	10 ... 40	solids A: min. 300 x 300 thickness: < 80		Stephan Vidi	ZAE Bayern	stephan.vidi@zae-bayern.de	www.zae-bayern.de
thermal conductivity	plate apparatus	-190 ... 200	solids 2x, Ø: 280 thickness: 1 ... 19	various atmospheres	Stephan Vidi	ZAE Bayern	stephan.vidi@zae-bayern.de	www.zae-bayern.de
thermal conductivity	plate apparatus	-190 ... 400	solids 2x, Ø: 200 thickness: 1 ... 28	various atmospheres	Stephan Vidi	ZAE Bayern	stephan.vidi@zae-bayern.de	www.zae-bayern.de
thermal conductivity	plate apparatus	-190 ... 700	solids 2x, A: 300 x 300 thickness: 1 ... 70	various atmospheres	Stephan Vidi	ZAE Bayern	stephan.vidi@zae-bayern.de	www.zae-bayern.de
thermal conductivity	hot-wire method	-40 ... 1500	gases, liquids, solids 100 x 40 x 20	various atmospheres, vacuum up to 100 bar	Frank Hemberger	ZAE Bayern	frank.hemberger@zae-bayern.de	www.zae-bayern.de
thermal conductivity	thermoscan	RT	foils, fibres, thickness: 0.1 ... 4 l/th: ≥10		Stephan Vidi	ZAE Bayern	stephan.vidi@zae-bayern.de	www.zae-bayern.de
thermal conductivity	guarded hot parallel plate apparatus	0 ... 100	liquids 70	athmosperic pressure	Prof. Dr. Stephan Kabelac	HSU Hamburg	kabelac@hsu-hh.de	www.hsu-hh.de/ thermodynamik
thermal conductivity	guarded hot parallel plate apparatus	-20 ... 150	solids Ø: 100 h: 10	athmosperic pressure	Prof. Dr. Stephan Kabelac	HSU Hamburg	kabelac@hsu-hh.de	www.hsu-hh.de/ thermodynamik



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thermal conductivity	comparative stationary method	RT ... 500	solids Ø: 25 h: 25		Dr. Erhard Kaschnitz	Österreichisches Gießerei-Institut	erhard.kaschnitz@ogi.at	www.ogi.at
thermal conductivity	TCT416 - thermal conductivity tester	RT	solids/cross section 5 x 5 or Ø: 6 l: 25 (<5W/mK), 35 (>5W/mK)		Dr. Tim Gestrich	Fraunhofer IKTS Dresden	Tim.Gestrich@ikts.fraunhofer.de	www.ikts.fraunhofer.de
thermal conductivity	comparative method	0 ... 950	solids, powders, pastes, Ø: 25, 50 h: ~ 10 ... 30	atmosphere: air, inert gas, vacuum	Marc Linder Dr. Rudi Kulenovic	IKE Universität Stuttgart	marc.linder@ike.uni-stuttgart.de / rudi.kulenovic@ike.uni-stuttgart.de	www.ike.uni-stuttgart.de
thermal conductivity	guarded hot plate	0 ... 650	solids 2x Ø: 200 thickness: ~ 5 ... 50	atmosphere: air, inert gas, vacuum	Marc Linder Dr. Rudi Kulenovic	IKE Universität Stuttgart	marc.linder@ike.uni-stuttgart.de / rudi.kulenovic@ike.uni-stuttgart.de	www.ike.uni-stuttgart.de
thermal conductivity	four-probe method	RT ... 1200	metals (solid/molten) Ø: 5 l: 100	indirect determination of thermal conductivity based on measured electrical conductivity	Marc Linder Dr. Rudi Kulenovic	IKE Universität Stuttgart	marc.linder@ike.uni-stuttgart.de / rudi.kulenovic@ike.uni-stuttgart.de	www.ike.uni-stuttgart.de
thermal conductivity	guarded hot plate	30 ... 190	gases, liquids 300		Dr. Ulf Hammerschmidt	PTB Braunschweig		www.ptb.de
thermal conductivity	guarded hot plate	-70 ... 190	solids Ø: 100 h: 5 ... 25		Dr. Ulf Hammerschmidt	PTB Braunschweig		www.ptb.de
thermal conductivity	transient hot wire	15 ... 200	gases, liquids 250		Dr. Ulf Hammerschmidt	PTB Braunschweig		www.ptb.de
thermal conductivity	transient hot bridge	-70 ... 220	liquids 250		Dr. Ulf Hammerschmidt	PTB Braunschweig		www.ptb.de
thermal conductivity	transient hot bridge	-70 ... 220	solids, powders, pastes, fibres, ...	solids: two samples halves, multiple sizes	Dr. Ulf Hammerschmidt	PTB Braunschweig		www.ptb.de
thermal conductivity	3-omega method	-90K ... 600K	thin films and solids	various atmospheres	Jan König	Fraunhofer IPM	jan.koenig@ipm.fraunhofer.de	www.ipm.fraunhofer.de
thermal conductivity	TDTR method	RT ... 150	thin films		Jan König	Fraunhofer IPM	jan.koenig@ipm.fraunhofer.de	www.ipm.fraunhofer.de
thermal conductivity	stationary cylinder method gap	-40° ... 90°	liquids	up to 30 bar	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ilkdresden.de	www.ilkdresden.de
thermal conductivity	ring-gap apparatus	-40° ... 80°	liquids 50 ml	pressure 0..100 bar http://pdf.aiaa.org/jaPreview/JTHT/2011/PVJA54343.pdf	Dr. Steffen Feja	ILK Dresden gGmbH	steffen.feja@ilkdresden.de	www.ilkdresden.de
thermal conductivity	two-plate method	-265 ... 50	solids Ø60 x 5 or similar	vacuum conditions varying materials and/or methods possible	Dr. Matthias Schneider	ILK Dresden gGmbH	matthias.schneider@ilkdresden.de	www.ilkdresden.de



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thermal conductivity	transient hot bridge	-20 ... 200	solids in various dimensions, powders, pasts, melts, liquids		Dr.-Ing. Wolfgang Hohenauer	AIT Austrian Institute of Technology	wolfgang.hohenauer@ait.ac.at	www.ait.ac.at
thermal conductivity	transient hot bridge	-20 ... 200	solids in various dimensions, powders, pasts, melts, liquids		DI (FH) Daniel Lager MSc	AIT Austrian Institute of Technology	daniel.lager@ait.ac.at	www.ait.ac.at