Metadata Appendix I

Appendix to the Licentiate Thesis ”Treatment oriented waste characterization”, ISBN 978-91-7790-269-0, available at urn:nbn:se:ltu:diva-71570

Title: The title of the article in which the data is found

Author: The author(s) of the article in which the data is found

Year: The year the article is published

Search string: The search string used in scopus to find the data

Temperature (°C): The temperature of the observed reaction

Redox environment: A short description of the redox environment observed

Pressure (kPa): The reported pressure during the observed reaction

Reaction time (minutes): The observed reaction time

Substrate: A short description of the substrate used

Material reduction: The reduction of solids after the treatment (compared to before treatment)

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	164	Purged with Steam	670	34	Partially thickened secondary sewage sludge	37%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	164	0.5 H2O2 of stochiometric need	830	34	Partially thickened secondary sewage sludge	41%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	151	Purged with Steam	440	28	Partially thickened secondary sewage sludge	28%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	151	0.1 H2O2 of stochiometric need	490	28	Partially thickened secondary sewage sludge	43%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	138	Purged with Steam	290	34	Partially thickened secondary sewage sludge	22%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	138	0.9 H2O2 of stochiometric need	750	34	Partially thickened secondary sewage sludge	29%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	125	Purged with Steam	160	28	Partially thickened secondary sewage sludge	17%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	125	0.5 H2O2 of stochiometric need	520	28	Partially thickened secondary sewage sludge	41%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	112	Purged with Steam	110	34	Partially thickened secondary sewage sludge	13%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	112	0.1 H2O2 of stochiometric need	110	34	Partially thickened secondary sewage sludge	25%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	99	Purged with Steam	110	28	Partially thickened secondary sewage sludge	10%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	99	0.9 H2O2 of stochiometric need	230	28	Partially thickened secondary sewage sludge	65%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	86	Purged with Steam	110	21	Partially thickened secondary sewage sludge	14%
Advanced Thermal Hydrolysis of secondary sewage sludge A novel process combining thermal hydrolysis and hydrogen peroxide addition	Abelleira et al	2012	waste "thermal hydrolysis"	86	0.5 H2O2 of stochiometric need	110	21	Partially thickened secondary sewage sludge	42%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Slow and pressurized co-pyrolysis of coal and agricultural residue	Aboyade et al	2013	pyrolysis AND waste AND pressure AND NOT review	600	Nitrogen	2600	nd	Coal	21%
Slow and pressurized co-pyrolysis of coal and agricultural residue	Aboyade et al	2013	pyrolysis AND waste AND pressure AND NOT review	600	Nitrogen	2600	nd	Sugarcane bagasse	73%
Slow and pressurized co-pyrolysis of coal and agricultural residue	Aboyade et al	2013	pyrolysis AND waste AND pressure AND NOT review	600	Nitrogen	2600	nd	Corn cobs	70%
Slow and pressurized co-pyrolysis of coal and agricultural residue	Aboyade et al	2013	pyrolysis AND waste AND pressure AND NOT review	600	Nitrogen	2600	nd	Corn stover	83%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	100	30	aspen	23%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	500	30	aspen	26%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	1000	30	aspen	28%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	30	aspen	31%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	14	aspen	25%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	100	30	beech	23%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	500	30	beech	28%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	1000	30	beech	28%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	30	beech	33%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	100	30	beech cylinder, inner	18%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	500	30	beech cylinder, inner	20%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	1000	30	beech cylinder, inner	23%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	30	beech cylinder, inner	29%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	100	30	beech cylinder, inner	18%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	500	30	beech cylinder, inner	20%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	1000	30	beech cylinder, inner	23%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	30	beech cylinder, inner	29%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	100	30	pine	22%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	280	N2	2100	30	pine	29%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	240	N2	100	30	aspen	8%
Influence of Elevated Pressure on the Torrefaction of Wooc	Agar et al	2016	pressurized AND torrefaction	240	N2	2100	30	aspen	13%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	300	N2	8587.9	0	Cornelian cherry stone	68%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	300	N2	8587.9	15	Cornelian cherry stone	68%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	300	N2	8587.9	30	Cornelian cherry stone	68%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	250	N2	3976.2	0	Cornelian cherry stone	61%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	250	N2	3976.2	15	Cornelian cherry stone	64%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	250	N2	3976.2	30	Cornelian cherry stone	66%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	200	N2	1554.9	0	Cornelian cherry stone	57%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	200	N2	1554.9	15	Cornelian cherry stone	58%
Hydrothermal liquefaction of cornelian cherry stones for bio-oil productior	Akalin et al	2012	"hydrothermal Liquefaction" waste	200	N2	1554.9	30	Cornelian cherry stone	58%
Mild pyrolysis of manually pressed and liquid nitrogen treated de-lipid cake of Nannochloropsis oculata for bioenergy utilisatior	Ali & Watson	2018	vacuum AND torrefaction	300	Vacuum	50.66	30	Nannochloropsis oculata de-lipid press cake	33%
Mild pyrolysis of manually pressed and liquid nitrogen treated de-lipid cake of Nannochloropsis oculata for bioenergy utilisatior	Ali & Watson	2018	vacuum AND torrefaction	300	Vacuum	50.66	30	Nannochloropsis oculata de-lipid press cake	34%
Mild pyrolysis of manually pressed and liquid nitrogen treated de-lipid cake of Nannochloropsis oculata for bioenergy utilisatior	Ali & Watson	2018	vacuum AND torrefaction	200	Vacuum	50.66	30	Nannochloropsis oculata de-lipid press cake	13%
Mild pyrolysis of manually pressed and liquid nitrogen treated de-lipid cake of Nannochloropsis oculata for bioenergy utilisatior	Ali & Watson	2018	vacuum AND torrefaction	200	Vacuum	50.66	30	Nannochloropsis oculata de-lipid press cake	12%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	805	Supercritical water	28000	0	Cornstarch	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	805	Supercritical water	28000	0	Sawdust	99%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	805	Supercritical water	28000	0	Sawdust	97%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	790	Supercritical water	28000	0	Sawdust cornstarch mix	101%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	790	Supercritical water	28000	0	Sawdust cornstarch mix	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	790	Supercritical water	28000	0	Sawdust	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	790	Supercritical water	28000	0	Sawdust	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	780	Supercritical water	28000	0	Sawdust cornstarch mix	95%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	760	Supercritical water	28000	0	Potato startch	102%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	758	Supercritical water	28000	0	Glycerol	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	758	Supercritical water	28000	0	Glycerol	98%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	757	Supercritical water	28000	0	Kraft ligning/corcstarch	NA
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	756	Supercritical water	28000	0	Avicel/cornstarch	102%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	756	Supercritical water	28000	0	Glycerol	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	750	Supercritical water	28000	0	Potato startch	99%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	750	Supercritical water	28000	0	Potato startch	107%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	750	Supercritical water	28000	0	Potato startch	102%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	748	Supercritical water	28000	0	Glycerol	104%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	746	Supercritical water	28000	0	Glycerol	94%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	745	Supercritical water	28000	0	Cornstarch	106%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	745	Supercritical water	28000	0	Cornstarch	106%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	745	Supercritical water	28000	0	Cornstarch	106%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	745	Supercritical water	28000	0	Glucose	103%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	744	Supercritical water	28000	0	Glycerol	98%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	739	Supercritical water	28000	0	Sawdust cornstarch mix	100%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	719	Supercritical water	28000	0	Potato waste	97%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	715	Supercritical water	28000	0	Cornstarch	101%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	714	Supercritical water	28000	0	Potato startch	101%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	713	Supercritical water	28000	0	Cornstarch	102%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	711	Supercritical water	28000	0	Cornstarch	101%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	705	Supercritical water	28000	0	Potato waste	98%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	700	Supercritical water	28000	0	Potato startch	97%
Biomass Gasification in Supercritical Water	Antal Jr	2000	waste AND gasification AND pressure AND thermal	690	Supercritical water	28000	0	Cornstarch	101%
Hydrothermal Carbonization of Municipal Waste Streams	Berge et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	Paper	71%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal Carbonization of Municipal Waste Streams	Berge et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	Food	56%
Hydrothermal Carbonization of Municipal Waste Streams	Berge et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	Mixed MSW	37%
Hydrothermal Carbonization of Municipal Waste Streams	Berge et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	AD waste	53%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	431	Ar	2887.62	60	Olive husks	66%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	406	Ar	3140.92	60	Olive husks	57%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	403	Ar	2786.3	60	Olive husks	62%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	403	Ar	2583.66	60	Tomatoe peels	70%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	282	Ar	1874.42	60	Tomatoe peels	29%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	277	Ar	1671.78	60	Olive husks	56%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	277	Ar	1773.1	60	Olive husks	59%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	277	Ar	1215.84	60	Tomatoe peels	26%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	275	Ar	2634.32	60	Olive husks	65%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	255	Ar	1570.46	60	Olive husks	25%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	248	Ar	101.32	60	Olive husks	29%
Pressurized Steam Torrefaction of Biomass: Focus on Solid, Liquid, and Gas Phase Distributions	Brachi et al	2017	pressurized AND torrefaction	248	Ar	101.32	60	Tomatoe peels	24%
Vacuum pyrolysis of electric cable wastes	Chaala et al	1998	vacuum AND pyrolysis	450	nd	20	30	Electric cable	79%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	N2	101.32	60	Oil palm fiber	56%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Oil palm fiber	57%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Oil palm fiber	69%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Oil palm fiber	83%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Oil palm fiber	86%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	N2	101.32	60	Coconut fiber	58%

Title	Author [V]	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Coconut fiber	63%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Coconut fiber	77%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Coconut fiber	89%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Coconut fiber	94%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	N2	101.32	60	Eucalyptus	57%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Eucalyptus	58%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Eucalyptus	63%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Eucalyptus	70%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Eucalyptus	75%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	N2	101.32	60	Cryptomeria japonica	65%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Cryptomeria japonica	64%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Cryptomeria japonica	67%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Cryptomeria japonica	77%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	350	Air	101.32	60	Cryptomeria japonica	75%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	320	N2	11284	0	algal biomass	24%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	320	N2	11284	30	algal biomass	28%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	320	N2	11284	60	algal biomass	31%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	320	N2	11284	90	algal biomass	33%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	N2	101.32	60	Oil palm fiber	48%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Oil palm fiber	50%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Oil palm fiber	58%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Oil palm fiber	70%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Oil palm fiber	77%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	N2	101.32	60	Coconut fiber	53%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Coconut fiber	58%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Coconut fiber	70%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Coconut fiber	82%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Coconut fiber	88%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	N2	101.32	60	Eucalyptus	42%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Eucalyptus	49%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Eucalyptus	53%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Eucalyptus	56%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Eucalyptus	58%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	N2	101.32	60	Cryptomeria japonica	57%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Cryptomeria japonica	58%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Cryptomeria japonica	60%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Cryptomeria japonica	67%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	300	Air	101.32	60	Cryptomeria japonica	73%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	300	N2	8587.9	0	algal biomass	25%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	300	N2	8587.9	30	algal biomass	26%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	300	N2	8587.9	60	algal biomass	39%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	300	N2	8587.9	90	algal biomass	52%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	280	N2	6416.6	0	algal biomass	27%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	280	N2	6416.6	30	algal biomass	47%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	280	N2	6416.6	60	algal biomass	22%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	280	N2	6416.6	90	algal biomass	49%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	260	N2	4692.3	0	algal biomass	24%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	260	N2	4692.3	30	algal biomass	49%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	260	N2	4692.3	60	algal biomass	45%
Hydrothermal liquefaction of mixed-culture algal biomass from wastewater treatment system into bio-crude oil	Chen et al	2014	"hydrothermal Liquefaction" waste	260	N2	4692.3	90	algal biomass	34%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	N2	101.32	60	Oil palm fiber	25%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Oil palm fiber	38%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Oil palm fiber	51%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Oil palm fiber	57%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Oil palm fiber	63%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	N2	101.32	60	Coconut fiber	29%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Coconut fiber	53%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Coconut fiber	63%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Coconut fiber	68%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Coconut fiber	75%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	N2	101.32	60	Eucalyptus	16%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Eucalyptus	23%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Eucalyptus	27%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Eucalyptus	29%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Eucalyptus	30%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	N2	101.32	60	Cryptomeria japonica	25%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Cryptomeria japonica	39%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Cryptomeria japonica	45%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Cryptomeria japonica	62%
Biomass torrefaction characteristics in inert and oxidative atmospheres at various superficial velocities	Chen et al	2013	"oxidative torrefaction"	250	Air	101.32	60	Cryptomeria japonica	66%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	1000	Steam-Oxygen	101.32	nd	Karanja press seed cake	99%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	1000	Steam-Oxygen	101.32	nd	Rice husk	100%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	1000	Steam-Oxygen	101.32	nd	Saw dust	97%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	1000	Steam-Oxygen	101.32	nd	Sunflower husk	98%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	900	Steam-Oxygen	101.32	nd	Karanja press seed cake	97%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	900	Steam-Oxygen	101.32	nd	Rice husk	98%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	900	Steam-Oxygen	101.32	nd	Saw dust	95%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	900	Steam-Oxygen	101.32	nd	Sunflower husk	96%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	800	Steam-Oxygen	101.32	nd	Karanja press seed cake	90%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	800	Steam-Oxygen	101.32	nd	Rice husk	91%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	800	Steam-Oxygen	101.32	nd	Saw dust	88%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	800	Steam-Oxygen	101.32	nd	Sunflower husk	89%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	700	Steam-Oxygen	101.32	nd	Karanja press seed cake	69%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	700	Steam-Oxygen	101.32	nd	Rice husk	70%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	700	Steam-Oxygen	101.32	nd	Saw dust	69%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	700	Steam-Oxygen	101.32	nd	Sunflower husk	70%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	600	Steam-Oxygen	101.32	nd	Karanja press seed cake	53%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	600	Steam-Oxygen	101.32	nd	Rice husk	53%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	600	Steam-Oxygen	101.32	nd	Saw dust	52%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	600	Steam-Oxygen	101.32	nd	Sunflower husk	53%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	500	Steam-Oxygen	101.32	nd	Karanja press seed cake	43%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	500	Steam-Oxygen	101.32	nd	Rice husk	43%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	500	Steam-Oxygen	101.32	nd	Saw dust	42%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	500	Steam-Oxygen	101.32	nd	Sunflower husk	43%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	400	Steam-Oxygen	101.32	nd	Karanja press seed cake	40%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	400	Steam-Oxygen	101.32	nd	Rice husk	41%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	400	Steam-Oxygen	101.32	nd	Saw dust	39%
Oxygen–Steam Gasification of Karanja Press Seed Cake: Fixed Bed Experiments, ASPEN Plus Process Model Development and Benchmarking with Saw Dust, Rice Husk and Sunflower Husk	Dhanavath et al	2018	oxygen-steam AND gasification	400	Steam-Oxygen	101.32	nd	Sunflower husk	40%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	300	Reaction gases	0.01333	120	elephant grass cellulose	35%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	300	Reaction gases	0.01333	120	elephant grass cellulose	36%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	260	Reaction gases	0.01333	120	elephant grass cellulose	20%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	260	Reaction gases	0.01333	120	elephant grass cellulose	21%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	230	Reaction gases	0.01333	120	elephant grass cellulose	18%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	230	Reaction gases	0.01333	120	elephant grass cellulose	19%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	200	Reaction gases	0.01333	120	elephant grass cellulose	16%
Moderately high temperature pyrolysis of lignocellulose under vacuum conditions	Ekwenchi et al	1988	200 vacuum AND pyrolysis	200	Reaction gases	0.01333	120	elephant grass cellulose	18%
The reuse of spent mushroom compost and coal tailings for energy recovery: Comparison of thermal treatment technologies	Finney et al	2009	(thermal AND waste AND treatment AND low AND temperature AND NOT review) AND (incineration	500	Nitrogen	101.32	nd	SMC substrate	57%
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	250	nd	3976.2	4320	Wood	44%
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	225	nd	2549.7	180	Cellulose	37%
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	225	nd	2549.7	18	Peat Bog	64%
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	200	nd	1554.9	3000	Cellulose	51%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	200	nd	1554.9	600	Peat Bog	55%
Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering	Funke and Ziegler	2010	"hydrothermal carbonization" waste	200	nd	1554.9	4320	Wood	34%
Pyrolysis process for the treatment of scrap tyres:preliminary experimental results	Galvagno et al	2002	(thermal AND solid AND waste AND treatment) AND NOT (review	680	Reaction gases	104.267	40	Tires	51%
Pyrolysis process for the treatment of scrap tyres:preliminary experimental results	Galvagno et al	2002	(thermal AND solid AND waste AND treatment) AND NOT (review	600	Reaction gases	104.267	40	Tires	53%
Pyrolysis process for the treatment of scrap tyres:preliminary experimental results	Galvagno et al	2002	(thermal AND solid AND waste AND treatment) AND NOT (review	550	Reaction gases	104.267	40	Tires	51%
Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavio	He et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	240	Dewatered Sewage sludge	46%
Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavio	He et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	360	Dewatered Sewage sludge	41%
Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavio	He et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	480	Dewatered Sewage sludge	40%
Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavio	He et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	600	Dewatered Sewage sludge	40%
Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavio	He et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	720	Dewatered Sewage sludge	40%
Mineralogy and leachability of gasified sewage sludge solid residue	Hernandez et al	2011	oxidative AND gasification AND waste	900	Steam	101.32	30	Sewage sludge	68%
Mineralogy and leachability of gasified sewage sludge solid residue	Hernandez et al	2011	oxidative AND gasification AND waste	900	Air/steam 1mol:1mol	101.32	30	Sewage sludge	70%
Mineralogy and leachability of gasified sewage sludge solid residue	Hernandez et al	2011	oxidative AND gasification AND waste	900	Air/steam 1mol:1mol	101.32	270	Sewage sludge	73%
Mineralogy and leachability of gasified sewage sludge solid residue	Hernandez et al	2011	oxidative AND gasification AND waste	900	Steam	101.32	270	Sewage sludge	70%
Mineralogy and leachability of gasified sewage sludge solid residue	Hernandez et al	2011	oxidative AND gasification AND waste	700	Steam	101.32	30	Sewage sludge	59%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Batch Retort Pyrolysis of Solid Municipal Wastes	Hoffman & Fitz	1968	pyrolysis AND incineration AND waste AND solid AND temperature AND NOT review	927	Purged with He	101.32	nd	Combustable household waste (Paper, Yard trimmings, Wood, Rags, Rubber, Plastic, Garbage)	82%
Batch Retort Pyrolysis of Solid Municipal Wastes	Hoffman & Fitz	1968	pyrolysis AND incineration AND waste AND solid AND temperature AND NOT review	816	Purged with He	101.32	nd	Combustable household waste (Paper, Yard trimmings, Wood, Rags, Rubber, Plastic, Garbage)	83%
Batch Retort Pyrolysis of Solid Municipal Wastes	Hoffman & Fitz	1968	pyrolysis AND incineration AND waste AND solid AND temperature AND NOT review	649	Purged with He	101.32	nd	Combustable household waste (Paper, Yard trimmings, Wood, Rags, Rubber, Plastic, Garbage)	78%
Batch Retort Pyrolysis of Solid Municipal Wastes	Hoffman & Fitz	1968	pyrolysis AND incineration AND waste AND solid AND temperature AND NOT review	482	Purged with He	101.32	nd	Combustable household waste (Paper, Yard trimmings, Wood, Rags, Rubber, Plastic, Garbage)	75%
Pyrolysis of Wood and Bark in an Auger Reactor: Physical Properties and Chemical Analysis of the Produced Bio-oils	Ingram et al	2009	vacuum AND pyrolysis	450	Reaction gases	101.32	0.5	pine wood	81%
Pyrolysis of Wood and Bark in an Auger Reactor: Physical Properties and Chemical Analysis of the Produced Bio-oils	Ingram et al	2009	vacuum AND pyrolysis	450	Reaction gases	101.32	0.5	oak wood	81%
Pyrolysis of Wood and Bark in an Auger Reactor: Physical Properties and Chemical Analysis of the Produced Bio-oils	Ingram et al	2009	vacuum AND pyrolysis	450	Reaction gases	101.32	0.5	pine bark	84%
Pyrolysis of Wood and Bark in an Auger Reactor: Physical Properties and Chemical Analysis of the Produced Bio-oils	Ingram et al	2009	vacuum AND pyrolysis	450	Reaction gases	101.32	0.5	oak bark	75%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	700	he	101.32	nd	Olive pomace	59%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	700	He:O2 9:1	101.32	nd	Olive pomace	89%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	700	He:O2 4:1	101.32	nd	Olive pomace	85%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	600	he	101.32	nd	Olive pomace	58%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	600	He:O2 9:1	101.32	nd	Olive pomace	88%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	600	He:O2 4:1	101.32	nd	Olive pomace	84%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	500	he	101.32	nd	Olive pomace	56%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	500	He:O2 9:1	101.32	nd	Olive pomace	85%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	500	He:O2 4:1	101.32	nd	Olive pomace	82%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	400	He	101.32	nd	Olive pomace	49%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	400	He:O2 9:1	101.32	nd	Olive pomace	53%
Kinetics of the pyrolysis and combustion of olive oil solid waste	Jauhiainen et al	2004	oxidative AND gasification	400	He:O2 4:1	101.32	nd	Olive pomace	53%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	525	Reaction gases	0.13	180	Pure cellulose	90%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	425	Reaction gases	0.13	180	Pure cellulose	89%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	375	Reaction gases	0.13	180	Pure cellulose	87%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	325	Reaction gases	0.13	180	Pure cellulose	79%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	300	Reaction gases	0.13	180	Pure cellulose	55%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	280	Reaction gases	0.13	180	Pure cellulose	22%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	240	Reaction gases	0.13	180	Pure cellulose	7%
Vacuum pyrolysis of cellulose: Fourier transform infrared characterization of solid residues, product distribution and correlations	Julien et al	1991	vacuum AND pyrolysis 300	210	Reaction gases	0.13	180	Pure cellulose	3%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	280	Nitrogen	6366.5	15	Sawdust	58%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	280	Nitrogen	6366.5	60	Sawdust	59%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	280	Nitrogen	6366.5	15	Sawdust	57%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	250	Nitrogen	3904.1	15	Sawdust	57%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	250	Nitrogen	3904.1	60	Sawdust	56%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	180	Nitrogen	1002.7	15	Sawdust	27%
Low-Temperature Hydrothermal Treatment of Biomass:Effect of Reaction Parameters on Products and BoilingPoint Distributions	Karagöz et al	2004	(thermal AND solid AND waste AND treatment) AND NOT (review	180	Nitrogen	1002.7	60	Sawdust	31%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	800	Reaction gases	0.5	180	Rice husks	67%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	700	Reaction gases	0.5	180	Rice husks	67%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	600	Reaction gases	0.5	180	Rice husks	66%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	500	Reaction gases	0.5	180	Rice husks	65%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	400	Reaction gases	0.5	180	Rice husks	61%
Oil adsorbent produced by the carbonization of rice husks	Kumagai et al	2007	pyrolysis AND waste AND vacuum AND NOT review	300	Reaction gases	0.5	180	Rice husks	43%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formation	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	840	Air	500	0	Peat	84%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formation	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	835	Air	500	0	Peat	91%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formation	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	831	Air	700	0	Peat	86%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formation	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	830	Air	700	0	Brown coal	95%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	828	Air	500	0	Peat	83%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	828	Air	500	0	Peat	85%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	825	Air	500	0	Peat	84%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	824	Air	500	0	Brown coal	96%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	822	Air	1000	0	Peat	84%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	819	Air	500	0	Peat	93%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	819	Air	500	0	Brown coal	81%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	815	Air	400	0	Peat	95%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	815	Air	500	0	Brown coal	92%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	814	Air	400	0	Sawdust	96%
Air gasification of peat, wood and brown coal in a pressurized fluidized-bed reactor. I. Carbon conversion, gas yields and tar formatior	Kurkela, Ståhlberg	1992	pressurized AND fluidized AND bed AND ash AND carbon	775	Air	400	0	Sawdust	95%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysi	Libra et al	2011	"hydrothermal carbonization" waste	360	nd	18666	240	Wood	67%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysi	Libra et al	2011	"hydrothermal carbonization" waste	340	nd	14601	4320	Cellulose	65%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysi	Libra et al	2011	"hydrothermal carbonization" waste	340	nd	14601	180	Cellulose	61%

Title	Author[V]	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	280	nd	6416.6	4320	Wood	60%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	275	nd	5946.4	180	Cellulose	53%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	275	nd	5946.4	180	Cellulose	59%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	4320	Wood	49%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	Swine manure	40%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	250	nd	3976.2	1200	Chicken litter	40%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	225	nd	2549.7	30240	Wood	38%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	225	nd	2549.7	180	Cellulose	37%
Hydrothermal carbonization of biomass residuals: A comparative review of the chemistry, processes and applications of wet and dry pyrolysis	Libra et al	2011	"hydrothermal carbonization" waste	200	nd	1554.9	4320	Wood	34%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	375	nd	21814	30	Coconut fibre	66%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	375	nd	21814	30	Eucalyptus leaves	72%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	360	nd	18666	30	Coconut fibre	64%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	360	nd	18666	30	Eucalyptus leaves	71%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	350	nd	16529	30	Coconut fibre	64%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	350	nd	16529	30	Eucalyptus leaves	69%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	340	nd	14601	30	Eucalyptus leaves	68%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	330	nd	12858	30	Coconut fibre	62%

Title	Author ᵛ	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	320	nd	11284	30	Coconut fibre	61%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	320	nd	11284	30	Eucalyptus leaves	66%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	310	nd	9865.1	30	Eucalyptus leaves	64%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	300	nd	8587.9	30	Coconut fibre	60%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	300	nd	8587.9	30	Eucalyptus leaves	60%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	250	nd	3976.2	30	Coconut fibre	55%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	250	nd	3976.2	30	Eucalyptus leaves	54%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	220	nd	2319.6	30	Coconut fibre	43%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	220	nd	2319.6	30	Eucalyptus leaves	48%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	30	Coconut fibre	31%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	200	nd	1554.9	30	Eucalyptus leaves	35%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	180	nd	1002.8	30	Coconut fibre	23%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	180	nd	1002.8	30	Eucalyptus leaves	26%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	160	nd	618.23	30	Eucalyptus leaves	16%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	150	nd	476.16	30	Coconut fibre	9%
Production of solid biochar fuel from waste biomass by hydrothermal carbonization	Liu et al	2013	"hydrothermal carbonization" waste	150	nd	476.16	30	Eucalyptus leaves	9%
Using vacuum pyrolysis and mechanical processing for recycling waste printed circuit boards	Long et al	2010	vacuum AND pyrolysis AND waste	550	Vacuum	20	120	Waste printed circuit boards	25%
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	500	N2	101.32	nd	Waste tires	66%
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	500	N2	50.66	nd	Waste tires	66%
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	500	N2	25.33	nd	Waste tires	66%
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	425	N2	101.32	nd	Waste tires	66%

Title	Author $^{\vee}$	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	425	N2	50.66	nd	Waste tires	66%
Waste tyre pyrolysis in a conical spouted bed reactor under vacuum conditions	Lopez et al	2010	vacuum AND pyrolysis	425	N2	25.33	nd	Waste tires	66%
By-products from sludge treatment by subcritical and supercritical water oxidation	Luck et al	1995	subcritical AND wet AND air AND oxidation	430	50-50 N2 O2	22064	60	Sewage sludge	95%
By-products from sludge treatment by subcritical and supercritical water oxidation	Luck et al	1995	subcritical AND wet AND air AND oxidation	383	50-50 N2 O2	22064	60	Sewage sludge	94%
By-products from sludge treatment by subcritical and supercritical water oxidation	Luck et al	1995	subcritical AND wet AND air AND oxidation	310	50-50 N2 O2	9863	60	Sewage sludge	87%
By-products from sludge treatment by subcritical and supercritical water oxidation	Luck et al	1995	subcritical AND wet AND air AND oxidation	235	50-50 N2 O2	3062	60	Sewage sludge	70%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + No catalyst	42000	60	Tobacco stalk	88%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Trona	36500	60	Tobacco stalk	89%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Dolomite	36800	60	Tobacco stalk	88%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Borax	37200	60	Tobacco stalk	90%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + No catalyst	38500	60	Cotton stalk	80%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Trona	36200	60	Cotton stalk	82%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Dolomite	35200	60	Cotton stalk	81%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	600	N2 + Borax	36700	60	Cotton stalk	83%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + No catalyst	31000	60	Tobacco stalk	79%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Trona	32000	60	Tobacco stalk	84%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Dolomite	30200	60	Tobacco stalk	84%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Borax	29600	60	Tobacco stalk	84%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + No catalyst	29500	60	Cotton stalk	77%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Trona	30300	60	Cotton stalk	82%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Dolomite	32200	60	Cotton stalk	75%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	500	N2 + Borax	29000	60	Cotton stalk	78%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + No catalalyst	21500	60	Tobacco stalk	73%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Trona	22000	60	Tobacco stalk	75%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Dolomite	21000	60	Tobacco stalk	78%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Borax	21000	60	Tobacco stalk	78%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + No catalalyst	22000	60	Cotton stalk	73%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Trona	22000	60	Cotton stalk	70%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Dolomite	23000	60	Cotton stalk	74%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	400	N2 + Borax	21000	60	Cotton stalk	75%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + No catalalyst	10300	60	Tobacco stalk	61%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Trona	8700	60	Tobacco stalk	70%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Dolomite	8500	60	Tobacco stalk	65%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Borax	8000	60	Tobacco stalk	68%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + No catalalyst	11000	60	Cotton stalk	58%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Trona	9800	60	Cotton stalk	64%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Dolomite	9000	60	Cotton stalk	61%
Hydrogen production from some agricultural residues by catalytic subcritica and supercritical water gasification	Madenoglu et al	2012	waste AND gasification AND subcritical	300	N2 + Borax	8500	60	Cotton stalk	66%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	550	Nitrogen	1500	286	two-phase olive mill wastes	75%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	550	Nitrogen	100	286	two-phase olive mill wastes	67%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	475	Nitrogen	800	271	two-phase olive mill wastes	64%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	475	Nitrogen	800	271	two-phase olive mill wastes	65%

Title	Author ᵛ	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	475	Nitrogen	800	271	two-phase olive mill wastes	64%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	400	Nitrogen	100	256	two-phase olive mill wastes	60%
TGA study examining the effect of pressure and peak temperature on biocharyield during pyrolysis of two-phase olive mill waste	Manyà et al	2013	pyrolysis AND waste AND pressure AND NOT review	400	Nitrogen	1500	256	two-phase olive mill wastes	65%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	300	N2	101.32	20	Corn stover	43%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	300	N2	101.32	10	Corn stover	42%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	300	N2	101.32	30	Corn stover	46%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	300	N2	101.32	20	Corn stover	44%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	10	Corn stover	13%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	30	Corn stover	16%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	20	Corn stover	14%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	20	Corn stover	15%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	20	Corn stover	17%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	20	Corn stover	17%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	20	Corn stover	17%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	10	Corn stover	20%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	250	N2	101.32	30	Corn stover	21%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	200	N2	101.32	20	Corn stover	3%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	200	N2	101.32	10	Corn stover	2%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	200	N2	101.32	30	Corn stover	2%
Effects of torrefaction process parameters on biomass feedstock upgrading	Medic et al	2012	torrefaction AND waste	200	N2	101.32	20	Corn stover	9%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	Assumed 101.32	0	Paper mill waste materials	0%

Title	Author ᵛ	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	75%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	75%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	52%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	50%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	32%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	27%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	101.32	58	Paper mill waste materials	31%
Characterization and pyrolysis behaviour of different paper mill waste materials	Méndez et al	2009	(thermal AND solid AND waste AND treatment) AND NOT (review	600	nitrogen	102.32	58	Paper mill waste materials	42%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	520	N2/reaction gases	2	nd	PVC powder	91%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	360	N2/reaction gases	2	nd	PVC powder	64%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	320	N2/reaction gases	2	nd	PVC powder	62%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	260	N2/reaction gases	2	nd	PVC powder	49%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	250	N2/reaction gases	2	nd	PVC powder	47%
Vacuum pyrolysis of PVC I. Kinetic study	Miranda et al	1999	200 250 vacuum AND pyrolysis	225	N2/reaction gases	2	nd	PVC powder	45%
Supercritical Water Oxidation of a Model Municipal Solid Waste	Mizuno et al	2000	(thermal AND solid AND waste AND treatment) AND NOT (review	449.84	Hydrogen peroxide	28000	0	Dog food	100%
Evaluation of energy consumption in different drying methods	Motevali et al	2011	200 250 vacuum AND (LIMIT-TO (SUBJAREA , "ENER")	<90	0	0	0	0	0%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Glucose	100%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Glutamic acid	100%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Sunflower oil	43%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Mixed food waste	79%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Molasses	99%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Rice bran	94%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Whey powder	100%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Chicken soup	92%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Tropical fruit	99%
Reactions of different food classes during subcritical water gasification for hydrogen gas production	Muangrat et al	2012	waste AND gasification AND subcritical	330	1.5 wt % H2O2	13500	120	Cat food	94%
Effect of pressure on thermal degradation of polyethylene	Murata et al	2004	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	440	Reaction gases	100	240	Polyetylene	100%
Effect of pressure on thermal degradation of polyethylene	Murata et al	2004	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	440	Reaction gases	800	240	Polyetylene	100%
Effect of pressure on thermal degradation of polyethylene	Murata et al	2004	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	410	Reaction gases	100	240	Polyetylene	100%
Effect of pressure on thermal degradation of polyethylene	Murata et al	2004	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	410	Reaction gases	800	240	Polyetylene	100%
Hot acid hydrolysis as a potential treatment of thickened sewage sludge	Neyens et al	2003	waste "thermal hydrolysis"	155	In solution (sludge)	543.5	nd	Sewage sludge	62%
Hot acid hydrolysis as a potential treatment of thickened sewage sludge	Neyens et al	2003	waste "thermal hydrolysis"	140	In solution (sludge)	361.54	nd	Sewage sludge	53%
Alkaline thermal sludge hydrolysis	Neyens et al	2003	waste "thermal hydrolysis"	120	In solution (sludge)	198.67	nd	Sewage sludge	39%
Hot acid hydrolysis as a potential treatment of thickened sewage sludge	Neyens et al	2003	waste "thermal hydrolysis"	120	In solution (sludge)	198.67	nd	Sewage sludge	47%
Alkaline thermal sludge hydrolysis	Neyens et al	2003	waste "thermal hydrolysis"	100	In solution (sludge)	101.42	nd	Sewage sludge	37%
Hot acid hydrolysis as a potential treatment of thickened sewage sludge	Neyens et al	2003	waste "thermal hydrolysis"	100	In solution (sludge)	101.42	nd	Sewage sludge	21%

Title	Author [V]	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	101.32	35	Poplar wood	74%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	101.32	25	Poplar wood	63%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	101.32	15	Poplar wood	60%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	301.32	35	Poplar wood	49%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	301.32	25	Poplar wood	44%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	301.32	15	Poplar wood	38%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	501.32	35	Poplar wood	50%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	501.32	25	Poplar wood	45%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	501.32	15	Poplar wood	40%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	701.32	35	Poplar wood	51%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	701.32	25	Poplar wood	48%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	air	701.32	15	Poplar wood	41%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	101.32	35	Poplar wood	49%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	101.32	25	Poplar wood	46%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	101.32	15	Poplar wood	44%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	301.32	35	Poplar wood	43%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	301.32	25	Poplar wood	41%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	301.32	15	Poplar wood	38%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	501.32	35	Poplar wood	44%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	501.32	25	Poplar wood	43%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	501.32	15	Poplar wood	40%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	701.32	35	Poplar wood	44%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	701.32	25	Poplar wood	44%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	300	N2	701.32	15	Poplar wood	41%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	101.32	35	Poplar wood	46%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	101.32	25	Poplar wood	40%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	101.32	15	Poplar wood	29%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	301.32	35	Poplar wood	23%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	301.32	25	Poplar wood	20%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	301.32	15	Poplar wood	17%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	501.32	35	Poplar wood	23%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	501.32	25	Poplar wood	21%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	501.32	15	Poplar wood	19%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	701.32	35	Poplar wood	24%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	701.32	25	Poplar wood	22%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	air	701.32	15	Poplar wood	21%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	101.32	35	Poplar wood	25%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	101.32	25	Poplar wood	24%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	101.32	15	Poplar wood	22%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	301.32	35	Poplar wood	21%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	301.32	25	Poplar wood	18%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	301.32	15	Poplar wood	15%

Title	Author ^{v}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	501.32	35	Poplar wood	21%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	501.32	25	Poplar wood	20%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	501.32	15	Poplar wood	18%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	701.32	35	Poplar wood	22%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	701.32	25	Poplar wood	21%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	260	N2	701.32	15	Poplar wood	19%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	101.32	35	Poplar wood	18%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	101.32	25	Poplar wood	15%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	101.32	15	Poplar wood	11%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	301.32	35	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	301.32	25	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	301.32	15	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	501.32	35	Poplar wood	13%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	501.32	25	Poplar wood	11%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	501.32	15	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	701.32	35	Poplar wood	14%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	701.32	25	Poplar wood	12%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	air	701.32	15	Poplar wood	11%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	101.32	35	Poplar wood	14%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	101.32	25	Poplar wood	13%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	101.32	15	Poplar wood	11%

Title	Author [V]	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	301.32	35	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	301.32	25	Poplar wood	9%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	301.32	15	Poplar wood	8%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	501.32	35	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	501.32	25	Poplar wood	9%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	501.32	15	Poplar wood	8%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	701.32	35	Poplar wood	11%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	701.32	25	Poplar wood	10%
Experimental Investigation of Mildly Pressurized Torrefaction in Air and Nitrogen	Nhuchhen & Basu	2014	pressurized AND torrefaction	220	N2	701.32	15	Poplar wood	8%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Pig slurry	92%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	9% H2O2	22064	60	Pig slurry	96%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Diesel oil	99%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Diesel oil	99%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Diesel oil	100%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Household leachate	100%
Hydrothermal gasification and oxidation as effective flameless conversion technologies for organic wastes	Onwudili & Williams	2008	oxidative AND gasification	380	6% H2O2	22064	60	Industrial leachate	100%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	450	nd	31000	0	Crude glycerol	99%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	450	nd	31000	0	Pure glycerol	91%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	415	nd	25750	0	Crude glycerol	99%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	400	nd	23500	0	Crude glycerol	99%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	400	nd	23500	0	Pure glycerol	93%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	380	nd	20500	0	Crude glycerol	99%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	350	nd	16000	0	Crude glycerol	99%
Hydrothermal reforming of bio-diesel plant waste: Products distribution and characterization	Onwudili & Williams	2010	waste AND gasification AND subcritical	300	nd	8500	0	Crude glycerol	99%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Softwood sawdust	84%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Softwood sawdust	85%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Softwood bark	72%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Softwood wet bark	90%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Softwood bark powder	70%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Hardwood bark	75%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Hardwood bark	76%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	525	Reaction gases	5.3	233	Hardwood wet bark	89%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	475	Reaction gases	5.3	233	Hardwood bark	72%
Phenolic Compounds from Vacuum Pyrolysis of Wood Waste	Pakdel et al	1997	pyrolysis AND waste AND vacuum AND NOT review	450	Reaction gases	5.3	233	Hardwood bark	71%
Effect of thermal and chemical treatments on carbon and silica contents in rice husk	Patel et al	1987	(thermal AND waste AND treatment AND low AND temperature AND NOT review) AND (oxidizing	600	Reaction gases	101.32	240	Rice husk	nd
Effect of thermal and chemical treatments on carbon and silica contents in rice husk	Patel et al	1987	(thermal AND waste AND treatment AND low AND temperature AND NOT review) AND (oxidizing	400	Reaction gases	101.32	300	Rice husk	nd
Effect of thermal and chemical treatments on carbon and silica contents in rice husk	Patel et al	1987	(thermal AND waste AND treatment AND low AND temperature AND NOT review) AND (oxidizing	200	Reaction gases	101.32	360	Rice husk	nd
Conversion of olive wastes to volatiles and carbon adsorbents	Petrov et al	2008	vacuum AND pyrolysis AND waste	800	Reaction gases	101.32	10	Olive stones	80%
Conversion of olive wastes to volatiles and carbon adsorbents	Petrov et al	2008	vacuum AND pyrolysis AND waste	800	Reaction gases	20	10	Olive stones	83%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Conversion of olive wastes to volatiles and carbon adsorbents	Petrov et al	2008	vacuum AND pyrolysis AND waste	800	Reaction gases	101.32	10	Olive pulp	77%
Conversion of olive wastes to volatiles and carbon adsorbents	Petrov et al	2008	vacuum AND pyrolysis AND waste	800	Reaction gases	20	10	Olive pulp	80%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Helium	1000	3.05	Eucalyptus saw dust	86%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Hydrogen	1000	3.05	Eucalyptus saw dust	91%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Carbon Dioxide	1000	3.05	Eucalyptus saw dust	91%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Steam-Helium	1000	3.05	Eucalyptus saw dust	90%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Helium	2000	3.05	Eucalyptus saw dust	94%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Hydrogen	2000	3.05	Eucalyptus saw dust	97%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Carbon Dioxide	2000	3.05	Eucalyptus saw dust	87%
Comparison of the pyrolysis and gasification of biomass: Effect of reacting gas atmosphere and pressure on Eucalyptus wood	Pindoria et al	1998	(pyrolysis AND waste AND pressure AND NOT review) AND (pressure	850	Steam-Helium	2000	3.05	Eucalyptus saw dust	97%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	600	Water filled	40000	120	Vanillin	99%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	570	Water filled	40000	120	Lignin	99%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	500	Water	33250	120	Straw	90%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	450	Water	33250	120	Straw	80%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	450	Water	33250	120	Wood	90%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	450	Water	33250	120	Sewage	55%
Hydrothermal gasification of biomass and organic wastes	Schmieder et al	2000	supercritical AND wet AND air AND oxidation	450	Water	33250	120	Sewage	85%

Title	Author ᐯ	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	101.32	nd	oil shale	17%
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	61.32	nd	oil shale	18%
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	41.32	nd	oil shale	18%
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	101.32	nd	oil shale	16%
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	61.32	nd	oil shale	16%
Oil shale pyrolysis in indirectly heated fixed bed with internals under reduced pressure	Siramard et al	2016	influence AND of AND vacuum AND pressure AND pyrolysis	800	0	41.32	nd	oil shale	16%
Evaluation of municipal sludge drying and dewatering with respect to sludge volume reduction	Smollen	1990	vacuum AND drying AND waste)	35	0	60	0	0	0%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	650	Ar	22000	2	Black liquor	81%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	650	Ar	30000	2	Black liquor	82%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	650	Ar	40000	2	Black liquor	78%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	500	Ar	22000	2	Black liquor	69%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	500	Ar	30000	2	Black liquor	68%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	500	Ar	40000	2	Black liquor	71%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	375	Ar	22000	2	Black liquor	67%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	375	Ar	30000	2	Black liquor	73%
Assessment of black liquor gasification in supercritical wate	Sricharoenchaikul	2009	supercritical AND water AND gasification	375	Ar	40000	2	Black liquor	77%
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	310	N2	101.32	8	Spruce chips	23%
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	310	N2	101.32	25	Spruce chips	54%
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	285	N2	101.32	16.5	Spruce chips	20%
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	285	N2	101.32	16.5	Spruce chips	20%
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	260	N2	101.32	8	Spruce chips	3%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Effects of temperature and residence time on continuous torrefaction of spruce wood	Strandberg et al	2015	Author last name "nordin" , Author first name "anders"	260	N2	101.32	25	Spruce chips	11%
Combined thermochemical and fermentative destruction of municipal biosolids: A comparison between thermal hydrolysis and wet oxidative pre-treatment	Strong et al	2011	waste "thermal hydrolysis"	220	100% O2	2000	120	belt-pressed waste activated sludge and a primary solids	83%
Combined thermochemical and fermentative destruction of municipal biosolids: A comparison between thermal hydrolysis and wet oxidative pre-treatment	Strong et al	2011	waste "thermal hydrolysis"	165	100% N2	2000	120	belt-pressed waste activated sludge and a primary solids	19%
Combined thermochemical and fermentative destruction of municipal biosolids: A comparison between thermal hydrolysis and wet oxidative pre-treatment	Strong et al	2011	waste "thermal hydrolysis"	140	100% N2	2000	120	belt-pressed waste activated sludge and a primary solids	6%
Anaerobic digestion of autoclaved and untreated food waste	Tampio et al	2014	waste "thermal hydrolysis"	160	n/a	620	nd	Source segregated domestic food waste	15%
Influence of vacuum pressure on the vacuum pyrolysis of plant oil asphalt tc pyrolytic biodiesel	Tang et al	2012	vacuum AND pyrolysis	400	Reaction gases	3	nd	Plant oil asphalt	88%
Influence of vacuum pressure on the vacuum pyrolysis of plant oil asphalt tc pyrolytic biodiesel	Tang et al	2012	vacuum AND pyrolysis	400	Reaction gases	20	nd	Plant oil asphalt	85%
Influence of vacuum pressure on the vacuum pyrolysis of plant oil asphalt tc pyrolytic biodiesel	Tang et al	2012	vacuum AND pyrolysis	400	Reaction gases	40	nd	Plant oil asphalt	81%
Influence of vacuum pressure on the vacuum pyrolysis of plant oil asphalt tc pyrolytic biodiesel	Tang et al	2012	vacuum AND pyrolysis	400	Reaction gases	60	nd	Plant oil asphalt	79%
Influence of vacuum pressure on the vacuum pyrolysis of plant oil asphalt tc pyrolytic biodiesel	Tang et al	2012	vacuum AND pyrolysis	400	Reaction gases	80	nd	Plant oil asphalt	74%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	320	nd	11284	nd	wastewater derived algae	71%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	300	nd	8587.9	0	wastewater derived algae	55%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	300	nd	8587.9	30	wastewater derived algae	54%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	300	nd	8587.9	60	wastewater derived algae	66%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	300	nd	8587.9	90	wastewater derived algae	68%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	300	nd	8587.9	nd	wastewater derived algae	66%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	280	nd	6416.6	nd	wastewater derived algae	58%
Chemical characterization and anaerobic biodegradability of hydrothermal liquefaction aqueous products from mixed-culture wastewater algae	Tommaso et al	2015	"hydrothermal Liquefaction" waste	260	nd	4692.3	nd	wastewater derived algae	65%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	300	100% N2	101.32	30	EFB	20%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	300	3% O2 97% N2	101.32	30	EFB	20%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	300	9% O2 91% N2	101.32	30	EFB	23%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	300	15% O2 85% N2	101.32	30	EFB	27%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	250	100% N2	101.32	30	EFB	11%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	250	3% O2 97% N2	101.32	30	EFB	11%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	250	9% O2 91% N2	101.32	30	EFB	12%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	250	15% O2 85% N2	101.32	30	EFB	19%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	220	100% N2	101.32	30	EFB	8%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	220	3% O2 97% N2	101.32	30	EFB	8%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	220	9% O2 91% N2	101.32	30	EFB	10%
Torrefaction of oil palm EFB in the presence of oxygen	Uemura et al	2013	"oxidative torrefaction"	220	15% O2 85% N2	101.32	30	EFB	11%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	Nitrogen/oxygen mix	nd (athmospheric?)	10 h	0	0%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	0% O2 100% N2	101.32	600	Sawdust	67%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	3% O2 100% N2	101.32	600	Sawdust	70%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	6% O2 100% N2	101.32	600	Sawdust	71%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	10% O2 100% N2	101.32	600	Sawdust	72%
Oxidative torrefaction of biomass residues and densification of torrefied sawdust to pellets	Wang et al	2013	"oxidative torrefaction"	280	21% O2 100% N2	101.32	600	Sawdust	74%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	1100	N2	100	0.083333	Black liqour	45%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	1100	N2	2000	0.083333	Black liqour	50%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	He	100	0.25	Black liqour	41%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	He	200	0.25	Black liqour	38%

Title	Author ^{V}	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	He	500	0.25	Black liqour	37%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	He	1000	0.25	Black liqour	34%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	He	2000	0.25	Black liqour	39%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	N2	100	0.083333	Black liqour	34%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	N2	200	0.083333	Black liqour	33%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	N2	500	0.083333	Black liqour	34%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	N2	1000	0.083333	Black liqour	36%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	900	N2	2000	0.083333	Black liqour	38%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	850	He	100	0.5	Black liqour	37%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	850	He	2000	0.5	Black liqour	36%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	750	He	100	0.5	Black liqour	31%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	750	He	200	0.5	Black liqour	31%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	750	He	500	0.5	Black liqour	32%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	750	He	1000	0.5	Black liqour	31%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	750	He	2000	0.5	Black liqour	32%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	700	He	100	0.25	Black liqour	28%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	700	He	2000	0.25	Black liqour	29%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	700	N2	100	0.083333	Black liqour	26%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	700	N2	2000	0.083333	Black liqour	28%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	650	He	100	0.5	Black liqour	30%
Influence of pressure on pyrolysis of black liquor: 2. Char yields and component release	Whitty et al	2008	waste "influence of pressure"	650	He	2000	0.5	Black liqour	32%

Title	Author [V]	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	120	Cellulose	93%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	0	Cellulose	92%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	120	Starch	93%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	0	Starch	94%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	0	Glucose	96%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	0	Cassava	94%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	380	N2	21814	120	Cassava	95%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	120	Cellulose	91%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	0	Cellulose	91%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	120	Starch	93%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	0	Starch	94%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	120	Glucose	97%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	374	N2	21814	0	Glucose	96%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	120	Cellulose	90%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	0	Cellulose	90%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	120	Starch	94%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	0	Starch	95%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	120	Glucose	97%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	0	Glucose	97%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	0	Cassava	96%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	350	N2	16529	120	Cassava	95%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	120	Cellulose	88%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	0	Cellulose	90%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	120	Starch	94%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	0	Starch	95%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	120	Glucose	96%
Subcritical and Supercritical Water Gasification of Cellulose, Starch, Glucose, and Biomass Waste	Williams and Onwudili	2006	waste AND gasification AND subcritical	330	N2	12858	0	Glucose	97%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	15	Swine manure	69%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	0	Swine manure	80%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	5	Swine manure	66%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	15	Swine manure	69%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	30	Swine manure	65%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	60	Swine manure	66%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	340	N2	14601	90	Swine manure	56%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	300	N2	8587.9	15	Swine manure	68%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	280	N2	6416.6	15	Swine manure	61%
Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oi	Xiu et al	2010	"hydrothermal Liquefaction" waste	260	N2	4692.3	15	Swine manure	53%

Title	Author ᐯ	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Partial oxidative gasification of municipal sludge in subcritical and supercritical water	Xu et al	2012	waste AND gasification AND subcritical	400	0.6321 mMol O/g	23500	30	Dewatered sewage sludge	32%
Partial oxidative gasification of municipal sludge in subcritical and supercritical water	Xu et al	2012	waste AND gasification AND subcritical	350	0.6321 mMol O/g	17500	30	Dewatered sewage sludge	36%
Mass and Energy Balances of Wet Torrefaction of Lignocellulosic Biomas	Yan et al	2013	"Wet torrefaction"	260	N2	4692.3	5	Loblolly Pine	37%
Mass and Energy Balances of Wet Torrefaction of Lignocellulosic Biomas	Yan et al	2012	"Wet torrefaction"	230	N2	2797.1	5	Loblolly Pine	25%
Mass and Energy Balances of Wet Torrefaction of Lignocellulosic Biomas	Yan et al	2011	"Wet torrefaction"	200	N2	1554.9	5	Loblolly Pine	17%
Investigation of combustion kinetics of treated and untreated waste wood samples with thermogravimetric analysis	Yorulmaz, et al	2009	thermal AND waste AND treatment AND low AND temperature AND NOT review	400	Air	101.32	nd	Pine	74%
Investigation of combustion kinetics of treated and untreated waste wood samples with thermogravimetric analysis	Yorulmaz, et al	2009	thermal AND waste AND treatment AND low AND temperature AND NOT review	400	Air	101.32	nd	MDF	67%
Investigation of combustion kinetics of treated and untreated waste wood samples with thermogravimetric analysis	Yorulmaz, et al	2009	thermal AND waste AND treatment AND low AND temperature AND NOT review	400	Air	101.32	nd	Particleboard	72%
Investigation of combustion kinetics of treated and untreated waste wood samples with thermogravimetric analysis	Yorulmaz, et al	2009	thermal AND waste AND treatment AND low AND temperature AND NOT review	400	Air	101.32	nd	Plywood	73%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	310	Air	12500	125	ABP (animal byproducts)	79%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	310	Air	12500	125	ABP (animal byproducts)	73%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	310	Air	12500	55	ABP (animal byproducts)	80%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	285	Air	12500	120	ABP (animal byproducts)	85%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	285	Air	12500	120	ABP (animal byproducts)	85%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	82%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	77%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	170	ABP (animal byproducts)	82%

Title	Author ˅	Year	Search string	Temperature (°C)	Redox environment	Pressure (kPa)	Reaction time (minutes)	Substrate	Material reduction
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	30	ABP (animal byproducts)	78%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	30	ABP (animal byproducts)	68%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	170	ABP (animal byproducts)	88%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	73%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	74%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	70%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	260	Air	12500	100	ABP (animal byproducts)	72%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	210	Air	12500	75	ABP (animal byproducts)	63%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	210	Air	12500	75	ABP (animal byproducts)	51%
Disposal of animal by-products by wet air oxidation: Performance optimization and kinetics	Zalouk et all	2009	subcritical AND wet AND air AND oxidation	210	Air	12500	145	ABP (animal byproducts)	50%
A synergistic combination of algal wastewater treatment and hydrothermal biofuel production maximized by nutrient and carbon recycling	Zhou et al	2013	"hydrothermal Liquefaction" waste	300	nd	11000	30	Algae from Pond	56%
A synergistic combination of algal wastewater treatment and hydrothermal biofuel production maximized by nutrient and carbon recycling	Zhou et al	2013	"hydrothermal Liquefaction" waste	300	nd	11000	30	Algae from Carboy vessel	94%
A synergistic combination of algal wastewater treatment and hydrothermal biofuel production maximized by nutrient and carbon recycling	Zhou et al	2013	"hydrothermal Liquefaction" waste	300	nd	11000	30	Algae from PBR	98%