Stephen J Lombardo

List of Publications by Year
in descending order

36	777	623734	501196
papers	citations	14 h-index	28 g-index

41	41	41	548
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review of theoretical models of adsorption, diffusion, desorption, and reaction of gases on metal surfaces. Surface Science Reports, 1991, 13, 3-72.	7.2	208
2	Strontium Zirconate and Strontium Titanate Ceramics for Highâ€Voltage Applications: Synthesis, Processing, and Dielectric Properties. Journal of the American Ceramic Society, 2001, 84, 1648-1650.	3.8	90
3	A monte carlo model for the simulation of temperature-programmed desorption spectra. Surface Science, 1988, 206, 101-123.	1.9	43
4	Fabrication and electrical properties of polymer-derived ceramic (PDC) thin films for high-temperature heat flux sensors. Sensors and Actuators A: Physical, 2011, 165, 250-255.	4.1	41
5	Role of Length Scale on Pressure Increase and Yield of Poly(vinyl butyral)â€“Barium Titanateâ€“Platinum Multilayer Ceramic Capacitors during Binder Burnout. Journal of the American Ceramic Society, 2000, 83, 2645-2653.	3.8	38
6	Monte Carlo simulations of the effect of pressure on isothermal and temperature-programmed desorption kinetics. Surface Science, 1991, 245, 213-224.	1.9	36
7	The role of thermal and transport properties on the binder burnout of injection-molded ceramic components. Chemical Engineering Journal, 1998, 71, 243-252.	12.7	32
8	Determination of Binder Decomposition Kinetics for Specifying Heating Parameters in Binder Burnout Cycles. Journal of the American Ceramic Society, 2002, 85, 780-786.	3.8	29
9	Pressure Distribution During Binder Burnout in Three-dimensional Porous Ceramic Bodies with Anisotropic Permeability. Journal of Materials Research, 2002, 17, 1434-1440.	2.6	28
10	Analytic method for the minimum time for binder removal from three-dimensional porous green bodies. Journal of Materials Research, 2003, 18, 2717-2723.	2.6	23
11	Monte carlo simulation of temperature-programmed desorption of coadsorbed species. Surface Science, 1989, 224, 451-475.	1.9	22
12	Modeling of the Pressure Distribution in Threeâ€Dimensional Porous Green Bodies during Binder Removal. Journal of the American Ceramic Society, 2003, 86, 234-240.	3.8	22
13	Supercritical extraction with carbon dioxide and ethylene of poly(vinyl butyral) and dioctyl phthalate from multilayer ceramic capacitors. Journal of Supercritical Fluids, 2002, 23, 153-162.	3.2	19
14	Fabrication using filler controlled pyrolysis and characterization of polysilazane PDC RTD arrays on quartz wafers. Sensors and Actuators A: Physical, 2012, 175, 53-59.	4.1	16
15	Effect of Decomposition Kinetics and Failure Criteria on Binder-Removal Cycles From Three-Dimensional Porous Green Bodies. Journal of the American Ceramic Society, 2006, 89, 176-183.	3.8	14
16	Determination of the Minimum Time for Binder Removal and Optimum Geometry for Threeâ€Dimensional Porous Green Bodies. Journal of the American Ceramic Society, 2003, 86, 2087-2092.	3.8	13
17	Effects of supercritical extraction on the plasticization of poly(vinyl butyral) and dioctyl phthalate films. Journal of Supercritical Fluids, 2004, 28, 113-120.	3.2	11
18	Minimum Time Heating Cycles for Diffusionâ€Controlled Binder Removal from Ceramic Green Bodies. Journal of the American Ceramic Society, 2015, 98, 57-65.	3.8	10

#	Article	IF	Citations
19	Heat Transfer in Porous Green Bodies During Binder Removal by Minimum Time Heating Cycles. Journal of the American Ceramic Society, 2006, 89, 1193-1199.	3.8	9
20	Permeability of Green Ceramic Tapes as a Function of Binder Loading. Journal of the American Ceramic Society, 2007, 90, 456-461.	3.8	9
21	Permeability of Laminated Green Ceramic Tapes as a Function of Binder Loading. Journal of the American Ceramic Society, 2008, 91, 1553-1558.	3.8	9
22	Title is missing!. Journal of Materials Science: Materials in Electronics, 2001, 12, 637-643.	2.2	8
23	The effect of plaster composition and binder concentration on strain mismatch and deformation of slip-cast green bodies. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 337, 297-305.	5.6	8
24	Effect of Solids Loading and Dispersant Concentration on Strain Mismatch and Deformation of Slipâ€Cast Green Bodies. Journal of the American Ceramic Society, 2001, 84, 2274-2280.	3.8	8
25	Effect of porosity on the electrical properties of Y2O3-doped SrTiO3 internal boundary layer capacitors. Journal of Applied Physics, 2004, 95, 4310-4315.	2.5	6
26	Defect Formation during Supercritical Extraction of Binder from Green Ceramic Components. Journal of the American Ceramic Society, 2004, 87, 1254-1258.	3.8	6
27	Analytic Model for the Diffusant Concentration in Ceramic Green Bodies During Diffusionâ€Controlled Thermal Binder Removal. Journal of the American Ceramic Society, 2013, 96, 2737-2744.	3.8	5
28	Strainâ€Induced Deformation in Magnesiaâ€“Alumina Layered Composites. Journal of the American Ceramic Society, 2005, 88, 2064-2070.	3.8	3
29	Pressure Distribution and Defect Formation in Green Ceramic Bodies During Supercritical Extraction of Binder. Journal of the American Ceramic Society, 2009, 92, 365-370.	3.8	3
30	A process control algorithm for reactionâ€diffusion minimum time heating cycles for binder removal from green bodies. Journal of the American Ceramic Society, 2019, 102, 1030-1040.	3.8	3
31	Minimum time heating cycles for diffusionâ€versus permeabilityâ€controlled binder removal from ceramic green bodies. Journal of the American Ceramic Society, 2017, 100, 529-538.	3.8	2
32	Effect of Processing on the Microstructure and Induced-Strain Mismatch in Magnesia-Alumina-Layered Composites. Journal of the American Ceramic Society, 2006, 89, 060612075903004-???.	3.8	1
33	Reactionâ€“permeability optimum time heating policy via process control for debinding green ceramic components. Advances in Applied Ceramics, 2020, 119, 150-157.	1.1	1
34	Scaling Analysis of the Effect of Binder Content and Binder Distribution on the Gas Permeability of Porous Green Ceramics. Journal of the American Ceramic Society, 2008, 91, 2150-2155.	3.8	0
35	Modeling of the Pressure in 1 -D Green Ceramic Bodies during Depressurization from Conditions of Supercritical Extraction of Binder. Ceramic Transactions, 2009, , 227-237.	0.1	0
36	Modeling, approximation, and time optimal temperature control for binder removal from ceramics. Discrete and Continuous Dynamical Systems - Series B, 2021, .	0.9	0