Brigitte Caussat

List of Publications by Year
in descending order

74 papers	1,553 citations	361045 20 h-index	329751 37 g-index
75 all docs	75 docs citations	75 times ranked	1706 citing authors

#	Article	IF	Citations
1	An innovative kinetic model allowing insight in the moderate temperature chemical vapor deposition of silicon oxynitride films from tris(dimethylsilyl)amine. Chemical Engineering Journal, 2022, 431, 133350.	6.6	4
2	Metalorganic chemical vapor deposition of aluminum oxides: A paradigm on the process-structure-properties relationship. , 2022, , 133-168.		0
3	Tunable SiO2 to SiOxCyH films by ozone assisted chemical vapor deposition from tetraethylorthosilicate and hexamethyldisilazane mixtures. Surface and Coatings Technology, 2021, 407, 126762.	2.2	8
4	An innovative GC-MS, NMR and ESR combined, gas-phase investigation during chemical vapor deposition of silicon oxynitrides films from tris(dimethylsilyl)amine. Physical Chemistry Chemical Physics, 2021, 23, 10560-10572.	1.3	3
5	Liquid antimony pentachloride as oxidant for robust oxidative chemical vapor deposition of poly(3,4-ethylenedioxythiophene) films. Applied Surface Science, 2021, 554, 149501.	3.1	9
6	Network hydration, ordering and composition interplay of chemical vapor deposited amorphous silica films from tetraethyl orthosilicate. Journal of Materials Research and Technology, 2021, 13, 534-547.	2.6	4
7	Beyond surface nanoindentation: Combining static and dynamic nanoindentation to assess intrinsic mechanical properties of chemical vapor deposition amorphous silicon oxide (SiOx) and silicon oxycarbide (SiOxCy) thin films. Thin Solid Films, 2021, 735, 138844.	0.8	1
8	Barrier properties and hydrothermal aging of amorphous alumina coatings applied on pharmaceutical vials. Surface and Coatings Technology, 2021, 425, 127711.	2.2	2
9	Large temperature range model for the atmospheric pressure chemical vapor deposition of silicon dioxide films on thermosensitive substrates. Chemical Engineering Research and Design, 2020, 161, 146-158.	2.7	9
10	An out of the box vision over oxidative chemical vapor deposition of PEDOT involving sublimed iron trichloride. Synthetic Metals, 2020, 266, 116419.	2.1	11
11	Investigation of the initial deposition steps and the interfacial layer of Atomic Layer Deposited (ALD) Al2O3 on Si. Applied Surface Science, 2019, 492, 245-254.	3.1	46
12	Î™n situ N2-NH3 plasma pre-treatment of silicon substrate enhances the initial growth and restricts the substrate oxidation during alumina ALD. Journal of Applied Physics, 2019, 126, 125305.	1.1	6
13	Investigation of the densification mechanisms and corrosion resistance of amorphous silica films. Journal of Non-Crystalline Solids, 2019, 515, 34-41.	1.5	25
14	Detailed investigation of the surface mechanisms and their interplay with transport phenomena in alumina atomic layer deposition from TMA and water. Chemical Engineering Science, 2019, 195, 399-412.	1.9	35
15	Computational Fluid Dynamics simulation of the ALD of alumina from TMA and H2O in a commercial reactor. Chemical Engineering Research and Design, 2018, 132, 795-811.	2.7	26
16	Largeâ€scale oxidation of multiâ€walled carbon nanotubes in fluidized bed from ozoneâ€containing gas mixtures. Canadian Journal of Chemical Engineering, 2018, 96, 688-695.	0.9	1
17	Development of a kinetic model for the moderate temperature chemical vapor deposition of SiO₂ films from tetraethyl orthosilicate and oxygen. AICHE Journal, 2018, 64, 3958-3966.	1.8	9
18	Effects of reducing the reactor diameter on the dense gasâ€“solid fluidization of very heavy particles: 3D numerical simulations. Chemical Engineering Research and Design, 2017, 117, 575-583.	2.7	8

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19	Fluidized bed chemical vapor deposition of copper nanoparticles on multi-walled carbon nanotubes. Surface and Coatings Technology, 2017, 331, 129-136.	2.2	12
20	Decoration of Carbon Nanotubes by Semiconducting or Metallic Nanoparticles using Fluidized Bed Chemical Vapour Deposition. KONA Powder and Particle Journal, 2016, 33, 322-332.	0.9	3
21	Amorphous Alumina Barrier Coatings on Glass: MOCVD Process and Hydrothermal Aging. Advanced Materials Interfaces, 2016, 3, 1600014.	1.9	5
22	A new route for the integration of a graphene/diazonium/PEDOT electrode towards antioxidant biomarker detection. Journal of Electroanalytical Chemistry, 2016, 771, 73-79.	1.9	7
23	Iron deposition on multi-walled carbon nanotubes by fluidized bed MOCVD for aeronautic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 861-868.	0.8	3
24	Fluidizedâ€Bed Chemical Vapor Deposition of Silicon on Very Dense Tungsten Powder. Chemical Engineering and Technology, 2015, 38, 1254-1260.	0.9	2
25	Silicon coating on very dense tungsten particles by fluidized bed CVD for nuclear application. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1599-1606.	0.8	4
26	Liquid and Solid Precursor Delivery Systems in Gas Phase Processes. Recent Patents on Materials Science, 2015, 8, 91-108.	0.5	13
27	Modeling a MOCVD process to apply alumina films on the inner surface of bottles. Surface and Coatings Technology, 2015, 275, 167-175.	2.2	7
28	Effects of reducing the reactor diameter on the fluidization of a very dense powder. Powder Technology, 2015, 277, 268-274.	2.1	21
29	Three dimensional graphene synthesis on nickel foam by chemical vapor deposition from ethylene. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 179, 12-16.	1.7	29
30	The Role of the Gas Phase in Graphene Formation by <scp>CVD</scp> on Copper. Chemical Vapor Deposition, 2014, 20, 51-58.	1.4	15
31	Synthesis of Multi-Walled Carbon Nanotubes by Fluidized-Bed Chemical Vapor Deposition over Co/Al₂O₃. Journal of Chemical Engineering of Japan, 2014, 47, 28-39.	0.3	3
32	High quality graphene synthesized by atmospheric pressure CVD on copper foil. Surface and Coatings Technology, 2013, 230, 87-92.	2.2	25
33	Fluidization and coating of very dense powders by Fluidized Bed Chemical Vapour Deposition. Chemical Engineering Research and Design, 2013, 91, 2477-2483.	2.7	15
34	Decorated carbon nanotubes by silicon deposition in fluidized bed for Li-ion battery anodes. Chemical Engineering Research and Design, 2013, 91, 2491-2496.	2.7	9
35	Alumina coatings on silica powders by Fluidized Bed Chemical Vapor Deposition from aluminium acetylacetonate. Chemical Engineering Journal, 2012, 211-212, 68-76.	6.6	22
36	Low temperature silicon oxide deposition on polymer powders in a fluidized bed coupled to a cold remote plasma. Surface and Coatings Technology, 2012, 206, 4814-4821.	2.2	6

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37	Alumina Coating on Dense Tungsten Powder by Fluidized Bed Metal Organic Chemical Vapour Deposition. Journal of Nanoscience and Nanotechnology, 2011, 11, 8083-8088.	0.9	6
38	Fluidized Bed Chemical Vapor Deposition of Silicon on Carbon Nanotubes for Li-Ion Batteries. Journal of Nanoscience and Nanotechnology, 2011, 11, 8392-8395.	0.9	2
39	Multi-scale modelling of silicon nanocrystal synthesis by Low Pressure Chemical Vapor Deposition. Thin Solid Films, 2011, 519, 7650-7658.	0.8	9
40	Local Kinetic Modeling of Aluminum Oxide Metalâ€Organic CVD From Aluminum Triâ€isopropoxide. Chemical Vapor Deposition, 2011, 17, 181-185.	1.4	15
41	Modeling of Silicon CVD into Agglomerates of Subâ€micrometerâ€size Particles in a Fluidized Bed. Chemical Vapor Deposition, 2011, 17, 305-311.	1.4	3
42	Fluidizedâ€Bed MOCVD of Bi₂O₃ Thin Films from Bismuth Triphenyl under Atmospheric Pressure. Chemical Vapor Deposition, 2010, 16, 123-126.	1.4	8
43	Chemical vapor deposition of silicon nanodots on TiO2 submicronic powders in vibrated fluidized bed. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 170, 41-50.	1.7	9
44	An original growth mode of MWCNTs on alumina supported iron catalysts. Journal of Catalysis, 2009, 263, 345-358.	3.1	55
45	Kinetic modeling study of carbon nanotubes synthesis by fluidized bed chemical vapor deposition. AICHE Journal, 2009, 55, 465-474.	1.8	15
46	Kinetic study of carbon nanotubes synthesis by fluidized bed chemical vapor deposition. AICHE Journal, 2009, 55, 450-464.	1.8	41
47	Multifluid Eulerian modelling of a silicon Fluidized Bed Chemical Vapor Deposition process: Analysis of various kinetic models. Chemical Engineering Journal, 2009, 148, 506-516.	6.6	26
48	Silicon Chemical Vapor Deposition on macro and submicron powders in a fluidized bed. Powder Technology, 2009, 190, 185-191.	2.1	25
49	Development of an original model for the synthesis of silicon nanodots by Low Pressure Chemical Vapor Deposition. Chemical Engineering Journal, 2008, 140, 600-608.	6.6	4
50	Multifluid Eulerian modeling of dense gasâ€“solids fluidized bed hydrodynamics: Influence of the dissipation parameters. Chemical Engineering Science, 2008, 63, 5540-5551.	1.9	128
51	Modeling of spray pyrolysisâ€”why are the synthesized Y₂O₃ microparticles hollow?. AICHE Journal, 2008, 54, 394-405.	1.8	12
52	Influence of the synthesis conditions of silicon nanodots in an industrial low pressure chemical vapor deposition reactor. Applied Surface Science, 2008, 254, 2927-2933.	3.1	1
53	Y2O3:Eu micronic particles synthesised by spray pyrolysis: Global modelling and optimisation of the evaporation stage. Chemical Engineering and Processing: Process Intensification, 2008, 47, 731-743.	1.8	8
54	High temperature annealing of micrometric Zn2SiO4:Mn phosphor powders in fluidized bed. Materials Research Bulletin, 2008, 43, 2751-2762.	2.7	20

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55	Properties of Membranes Containing Semi-dispersed Carbon Nanotubes. Environmental Engineering Science, 2008, 25, 565-576.	0.8	95
56	Catalytic Production of Carbon Nanotubes by Fluidizedâ€Bed CVD. Chemical Vapor Deposition, 2007, 13, 447-457.	1.4	76
57	CVD and Powders: A Great Potential to Create New Materials. Chemical Vapor Deposition, 2007, 13, 443-445.	1.4	20
58	Silicon CVD on powders in fluidized bed: Experimental and multifluid Eulerian modelling study. Surface and Coatings Technology, 2007, 201, 8919-8923.	2.2	29
59	Towards multiscale modeling of Si nanocrystals LPCVD deposition on SiO2: From ab initio calculations to reactor scale simulations. Surface and Coatings Technology, 2007, 201, 8854-8858.	2.2	4
60	A dimensionless study of the evaporation and drying stages in spray pyrolysis. Computers and Chemical Engineering, 2007, 31, 1088-1099.	2.0	10
61	A parametric study of the large scale production of multi-walled carbon nanotubes by fluidized bed catalytic chemical vapor deposition. Carbon, 2007, 45, 624-635.	5.4	78
62	Principles and applications of CVD powder technology. Materials Science and Engineering Reports, 2006, 53, 1-72.	14.8	147
63	Crystallization of microscopic Y2O3 powders by different techniques of fluidization at high temperature. Chemical Engineering Journal, 2006, 125, 25-33.	6.6	9
64	Experimental study on fluidization of micronic powders. Powder Technology, 2005, 157, 114-120.	2.1	46
65	Modelling of an industrial moving belt chemical vapour deposition reactor forming <mml:math altimg="si53.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/xml/common/dtd" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:cals="http://www.elsevier.com/xml/common/cals/dtd">	1.9	7
66	Influence of dopant concentration and type of substrate on the local organization of low-pressure chemical vapour deposition in situ boron doped silicon films from silane and boron trichloride. Thin Solid Films, 2004, 446, 218-226.	0.8	6
67	Carbon nanotubes produced by fluidized bed catalytic CVD: first approach of the process. Chemical Engineering Science, 2003, 58, 4475-4482.	1.9	139
68	LP-CVD Silicon-Based Film Formation in Submicrometer Trenches in Industrial Equipment: Experiments and Simulation. Chemical Vapor Deposition, 2002, 8, 213-219.	1.4	1
69	Low-Pressure Chemical Vapor Deposition of Semi-insulating Polycrystalline Silicon Thin Films: I. Experimental Study and Proposal of New Kinetic Laws. Journal of the Electrochemical Society, 2001, 148, C149.	1.3	4
70	Boron-Doped Polysilicon: Growth Kinetics and Structural Study of Low-Pressure Chemical Vapour Deposited Films in the Case of High Doping Levels. Solid State Phenomena, 2001, 80-81, 59-64.	0.3	1
71	Silicon deposition from silane or disilane in a fluidized bedâ€"Part I: Experimental study. Chemical Engineering Science, 1995, 50, 3615-3624.	1.9	59
72	Mechanical and Surface Properties of Chemical Vapor Deposited Protective Aluminium Oxide Films on TA6V Alloy. Advances in Science and Technology, 0, , .	0.2	4

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73	Amorphous Alumina Coatings on Glass Bottles Using Direct Liquid Injection MOCVD for Packaging Applications. Advances in Science and Technology, 0, , .	0.2	7
74	Critical Level of Nitrogen Incorporation in Silicon Oxynitride Films: Transition of Structure and Properties, toward Enhanced Anticorrosion Performance. ACS Applied Electronic Materials, 0, , .	2.0	2